Social Butterflies: How Social Media Influencers are the New Celebrity Endorsement

Kayleigh E. Burke

Thesis submitted to the faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

Master of Arts
In
Communication

James D. Ivory, Chair
John C. Tedesco
M. Cayce Myers

May 10, 2017
Blacksburg, VA

Keywords: Social Media Influencer; Influencer Marketing; Experiment; Instagram

Copyright, 2017 Kayleigh Burke
Social Butterflies- How Social Media Influencers are the New Celebrity Endorsement

Kayleigh Burke

ABSTRACT

The rapid growth of visual microblogging platforms, such as Instagram, has created new opportunities for brands to communicate with stakeholders. As these platforms evolve, brands have had to adapt in order to use the available social media platforms to gain visibility in the millennial audience. Recently brands have turned to online “celebrities” known as a social media influencer (SMI) to distribute information and influence consumers’ product perceptions. This specifically has become a common tactic in communication and marketing efforts with the fashion and beauty industry. Ample research is available on the effects of celebrity endorsements but currently there is a gap in research pertaining to the consumer’s perspective towards SMIs and SMIs effects on consumers. The online experiment completed in this thesis addressed how promotion of a product by a SMI affects perceptions of consumers on Instagram by measuring social comparison and self-congruity. This is accomplished by comparing participant’s product perception to promotional posts on Instagram by a SMI, brand, and unbranded retail source. A three-condition experiment (SMI, Brand, Control) compared effects of product perception, social comparison, and self-congruity. A questionnaire consisting of 48 questions pertaining to SMI, self-congruity, social comparison, and product perception was completed by 151 participants. Significant relationships were found between the source of the promotional post (SMI, Brand, Control) and product perception. There was also a correlation between self-congruity and social comparison towards the SMI as well as product perception. Results suggest that the post source influences product perception. Results also indicate consumers’ perception of the SMI effects
product perception. These results provide practical implications for communication practitioners who utilize social media.

*Keywords*: Social Media Influencer; Influencer Marketing; Experiment; Instagram
Social Butterflies- How Social Media Influencers are the New Celebrity Endorsement

Kayleigh Burke

GENERAL AUDIENCE ABSTRACT

As visual social media platforms, such as Instagram, continue to rapidly grow in popularity, brands have been obligated to quickly learn how to utilize these platforms in order to reach their target audiences. Brands typically use social media platforms in order to gain visibility in the college aged audience, but new platforms require new strategies. A new popular tactic is utilizing an online “celebrity” known as a social media influencer (SMI) in order to distribute information and influence consumers’ perceptions. Using SMIs in communication and marketing campaigns has grown in popularity in industries such as beauty/fashion, home/family, health/fitness, travel/lifestyle, food/beverage, business/tech and entertainment. In beauty and fashion, the use of SMIs to reach the millennial audience has become a part of regular practice for companies such as H&M, Madewell, Gucci and others. There is ample research on the effects of celebrity endorsements but currently there is a gap in research pertaining to SMIs and their effects on consumers. This online experiment completed in this thesis addressed how promotion of a product by a SMI affects perceptions of consumers by measuring their social comparison and self-congruity. This is accomplished by comparing participant’s product perception to posts by SMI, brands, and unbranded retail sources that promoted a product on Instagram. A three-condition experiment (SMI, Brand, Control) compared effects of product perception, social comparison, and self-congruity. A questionnaire consisting of 48 questions pertaining to SMI, self-congruity, social comparison and, product perception was completed by 151 participants. Significant relationships were found between the source of the post and product perception. Correlations were found between self-congruity and social comparison towards the SMI, as well
as product perception. Results suggest that where the source of the post influences product perception. Results also indicate that consumer’s perception of the SMI effects product perception. These results provide practical implications for communication and marketing professionals who are determining whether to use SMI and those who already use SMI.
TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION AND JUSTIFICATION 1

CHAPTER 2: LITERATURE REVIEW 6
TWO-STEP FLOW AND MULTI-STEP FLOW 6
SOCIAL MEDIA AND INFLUENCER MARKETING 8
SOCIAL INFLUENCE THEORIES 13
SOCIAL COMPARISON THEORY 15
SELF-CONGRUITY THEORY 18
A NEW LOOK INTO SMI EFFECTIVENESS 21

CHAPTER 3: RESEARCH QUESTIONS 22

CHAPTER 4: METHODS 23
RESEARCH SETTING 23
STUDY DESIGN 25
PARTICIPANTS 25
STIMULUS MATERIALS 27
DEPENDENT MEASURES 29
PROCEDURE 32
DATA ANALYSIS 33

CHAPTER 5: RESULTS 34
PRODUCT PERCEPTION BY PROMOTION 34
SOCIAL COMPARISON 34
SELF-CONGRUITY 34
DESCRIPTIVE STATISTICS 35

CHAPTER 6: DISCUSSION 35
PRACTICAL IMPLICATIONS 37
LIMITATIONS 39
FUTURE RESEARCH 39

CHAPTER 7: CONCLUSION 41
REFERENCES 43

APPENDIX A: SURVEY 61

APPENDIX B: IRB APPROVAL LETTER 73
CHAPTER 1: INTRODUCTION AND JUSTIFICATION

Internet and social media use is ubiquitous in today’s society and has changed the way people communicate and receive messages. By the end of 2016, 87 percent of Americans used the internet (Pew Research Center, 2016a) and of those Americans 69 percent used a social media platform. These numbers are expected to continue to grow (Pew Research Center, 2017). The increasing audience on these platforms has led organizations to employ social media as a communication tool and platform to market products to consumers. Social media platforms are used to dispense information, create communities, and encourage action (Lovejoy & Saxton, 2012). One way platforms dispense information is through word-of-mouth marketing.

Organizations use word-of-mouth (WOM) marketing online in order to communicate with potential consumers and to attract the audience’s attention through interaction and engagement. Offline WOM marketing is dispensed through opinion leaders, “individuals who exert an unequal amount of influence on the decisions of others … those individuals from whom others seek advice and information” (Rogers & Cartano, 1962, p. 435). The information provided by an opinion leader is considered by audiences to be more trustworthy than mass advertising (Stern & Gould, 1988) making them more valuable to consumers when making purchasing decisions. This phenomenon continues onto the internet and social media.

The evolution of social media has directed communication experts to a new type of opinion leader called the social media influencer (SMI). SMIs are online opinion leaders who use existing social media platforms, such as Instagram, to share posts with their followers about their personal information, products and services that they have used or tried (Freberg, Graham, McGaughey, & Freber, 2011). These third-party endorsers influence audience attitudes through blogs, tweets, and other social media platforms (Freberg et al., 2011). Similar to offline opinion
leaders, a SMI’s opinion is seen as credible and trustworthy; which in turn influences the perception of their followers. Anyone who participates on social media can have some influence over the people that follow them, but a SMI is different due to their large number of followers and the ability to elicit a response or action from their connections or followers. Defining characteristics of SMIs include good credibility, high activity, distinct brands, large followings, and great exposure (Ioanid, Militaru, & Mihai, 2015). Increasingly, brands are now incorporating SMIs as part of their social media strategy for reaching target audiences online (Kumar & Mirchandani, 2012). Influencers, who work with brands are, incentivized by receiving free products or pay for posts. One such example is the Swedish watchmaker Daniel Wellington, who collaborated with thousands of influencers on Instagram in order to promote the brand. Daniel Wellington distributed free watches to SMIs in order to receive online endorsements. The SMIs who received watches posted photos of themselves with the Daniel Wellington watch participating in various activities such as traveling, shopping, eating and playing with animals. In addition to the photo, SMIs wrote a caption that included a discount code for 15 percent off a purchase of a Daniel Wellington watch. This influencer marketing campaign proved to be successful by Daniel Wellington’s Instagram followers increasing by 1.2 million and increased his profits by 214 percent in one year (Parker, 2015). These types of endorsements from SMIs have been used successfully by brands including AirCanda (Hsu, 2015), StrongVolt (Nite, 2016), and American Express (Johnson, 2014).

The following figure helps to illustrate the concept of social media influencer:
Figure 1: Social Media Influencer Diagram

Literature states that celebrity endorsements have been considered a dependable source for information about products and services (Spry, Pappu, Bettina, & Cornwell, 2011) but there is currently a gap in research on alternative types of celebrities, such as SMIs (Jin & Phua, 2014). Previous research on SMIs has focused on how to leverage SMIs to shape corporate brand perceptions (Booth & Matic, 2011), how to identify effective SMIs (Freberg et al., 2011), and consumer behavior towards SMIs (Lu, Chang & Chang, 2014). There is less available research on how elements of SMIs sway users in terms of message effects. Specifically, this thesis focuses on how product perception is effected by post source, social comparison, and self-congruity toward the SMI.

Available literature on SMIs focus on platforms such as Facebook and YouTube but this thesis focuses on Instagram because of its popularity in the fashion industry and its expected growth with both audience and businesses. Instagram is the fastest growing photo sharing social media site (Sheldon & Bryant, 2016). It provides people with the ability to take photos, alter photos, and share photos with friends, family, and strangers. Instagram has more than 600
million active users who post 95 million photos and videos every day (Instagram, 2016c). Past literature has focused on Facebook and its effectiveness because its active users per month shadows every other social media platform, but Instagram has a higher per-follower engagement rating than any other social media platform, at 4.21 percent (Elliott, 2014). Thus, this means that average users on Instagram engage with brands eight times more than Facebook, LinkedIn, Twitter, or Pinterest (Burney, 2016). Instagram’s user base is growing faster than the growth rate of general social network usage. In 2016, Instagram grew 15.1 percent, while social media use overall only grew by 3.1 percent. Instagram is expected to grow 26.9 million users in the next four years, exceeding projections for any other social media platform (eMarketer, 2016). The large and expanding audience on Instagram has led many brands to the new visual platform (eMarketer, 2015a). It provides a location to tailor messages for products and services to a specific potential consumer (Vizard, 2015). The engagement rate has led more than 500,000 brands to incorporate Instagram into its marketing strategy (Instagram, 2016b), and as it continues to grow and provide businesses with more success, the site has been labeled as the “King of Social Engagement” (Elliot, 2014, p.1).

The internet and social media sites have allowed WOM advertising to move from exclusively being available in a physical person to person interaction to being available at any time online through (eWOM) electronic word of mouth (Rizqia & Hudrasyah, 2015). eWOM is provided by SMIs in order to help consumers obtain information about products and services. SMIs are being utilized by brands on all social media websites, such as Instagram, and individual cases have shown success (Roy, 2015). In a study by Annalect, a marketing company that focuses on data driven solution, and Twitter 40 percent of people said they bought a product because they saw a SMI on a social media website with the product (Karp, 2016). eWOM on
Instagram has become an effective and popular information source because of its continuous growth and mobile accessibility (Thoumrungroje, 2014). With the rapid growth of Instagram, more research on Instagram is necessary in order to understand how to utilize the platform.

Instagram’s continued growth shows researchers and organizations that this social media platform needs more research. eMarketer found that in 2015 more than 32 percent of United States companies utilized Instagram, and by 2017 more than 70 percent of U.S. companies plan to market on Instagram. Furthermore, 96 percent of fashion brands in the U.S. already use Instagram, indicating fashion is a popular genre on Instagram (Williamson, 2016). In order to reach targeted audiences, fashion brands are using SMIs to disseminate information. In 2015, 60 percent of fashion and beauty brands worked with SMIs, while an estimated 21 percent planned to invest in this strategy by the end of 2016 (Fashion & Beauty Monitor, 2015). Fashion brands of all calibers such as Madewell, Payless Shoe Source, NY and Company, American Eagle, and Michael Kors have used SMIs on Instagram. SMIs are “the most powerful force in the fashion marketplace” (Wiedmann, Hennigs, & Langer, 2010, p. 142). This is particularly important for fashion brands because fashion and clothing is a way a consumer expresses their economic status, social status, and self-identity (O’Cass, 2004; Phau & Lo, 2004). By following SMIs that displays an identity similar to the consumer they are able to find products and recommendations that suit the individual’s style and identity.

This thesis investigates how post source (SMI, brand, control) effects product perception, and how social comparison and self-congruity to a SMI correlates with product perception. This study fills a gap in research by on the user’s experience with SMIs and social media rather than corporate perception of SMIs. This thesis contains six chapters. Chapter One introduced the topic and addressed the current research gap regarding SMI. It also outlined the research objectives
and justification. Chapter Two covers the existing literature with a specific focus on two-step flow, consumer behavior and social influence theories. Chapter Three outlines the research questions. Chapter Four shows the overview of the methodology. Chapter Five outlines the data analysis and answers the research questions, and Chapter Six provides discussion, implications, limitations and suggestions for future study.

CHAPTER 2: LITERATURE REVIEW

The purpose of this thesis is to quantitatively examine the influence of SMIIs elements through the individual’s perspective rather than the organization’s perspective. The literature review compiles prior research on online opinion leaders (SMI), influencer marketing, social comparison theory, and self-congruity theory. This research seeks to quantify the product perception based on the source of the posts, as well as determine if there is a correlation between social comparison and self-congruity toward a SMI on an individual’s product perception.

Two-Step Flow and Multi-Step Flow

The concept of SMIIs originate from the two-step and multi-step flow theory. Two-step flow is one of the earliest communication theories. It has been revitalized in the social media age since two-step and multi-step flow are observed through social media platforms and affordances. SMIIs are considered online opinion leaders, a concept that has roots in two-step flow theory. Two-step flow proposes that messages distributed via mass media first reach opinion leaders, who then pass on what they read and heard to less active members of the population (Katz, 1957). Opinion leaders use interpersonal communication to influence inactive or slightly active publics for a specific issue (Lazarsfeld, Berelson & Gaudet, 1944). Studies testing the two-step flow theory on the internet indicate that information tends to move in a multi-step flow method with many different directions and interactions (Burt, 1999; Harik, 1971). Multi-step flow
extends the theory to individuals beyond mass media and opinion leaders. It increases the number of potential directions information can flow, including cases of direct chains or longer chains of flow (Weimann, 1982). It also incorporates other segments of the network such as “marginal,” or people outside of the sphere of influence (Weimann, 1982). The internet provides limitless amounts of information to anyone with a computer or smartphone, but this much information at people’s fingertips has created the need for trusted sources to shift through the information and advice audiences.

Similar to opinion leaders, the SMI phenomenon can be explained by these theories. Two-step flow theory is illustrated when SMIs distribute messages to the less active audience on the internet. The multi-step flow theory shows how the less active groups of the population also disseminate the SMIs information to others (Stransberry, 2012). Instead of using traditional mass media such as television, magazines, and radio, web users can gather and distribute information from a multitude of sources. The information can come from sources such as social media, websites, online articles, and SMIs. The two-step flow theory and multi-step flow theory are extended in this thesis to an online communication platform. These theories assimilated to online communication explain the origin of the SMI phenomenon, explain how SMIs influence their audience, and how SMIs effect message distribution.
Influencer marketing is a strategy that concentrates on using strategic leaders to push brand messages to a larger group of consumers (Keller & Berry, 2003). Fashion companies such as H&M, Express, and Frye work with SMIs to receive virtual word of mouth endorsements (Wood, 2016) in order to disseminate information about their brand and reach consumers (Tapinfluence, 2016a). A recent study from Twitter and Annalect found, 49 percent of consumers said they rely on SMIs when making a purchase decision (Swant, 2016). SMIs are an important part of online information on multiple platforms such as Facebook and YouTube, but recently influencer marketing has earned more attention on Instagram from brands due to the connection people feel to the SMI on the visual based platform through identification (Bevins, 2014).

Influencer marketing originated because of the inability to advertise on social media platforms such as Instagram (Woods, 2016). Even though it is now possible to advertise on social media, influencers are still being used because of their trustworthy reputation. The SMI endorsements are seen as earned instead of paid media because influencers are considered trusted.
and authentic sources to consumers (Karp, 2016). Influencer marketing creates 11 times more return on investment than traditional advertising yearly (Tapinfluence, 2016b). Consumers are purchasing, engaging, and sharing content posted by SMIs on social media (Swant, 2016).

SMIs are third party endorsers who influence a large audience through blogs, tweets, and other social media platforms (Freberg et al., 2011). Defining characteristics of SMIs include good credibility, high social media activity, distinct brands, large followings, and great exposure (Ioanid, Militaru, & Petruta, 2015). Lucy Hart, head of influence and advocacy at Mischief PR, explains the reason consumers are drawn to SMIs, "Consumers feel as though they are friends with these influencers. Their videos, their snaps and their open-door policy make consumers feel like they’re accessing authentic advice, tips, and recommendation from one of their peers" (Harrington, 2016, p. 9). SMIs are the online friends who recommend a product they tried instead of the salesman trying to sell their product on their doorstep. Comparable to offline opinion leaders, information is received by the audience from a SMI (a.k.a. the online opinion leader) through what the audience perceives as interpersonal communication, rather than directly from the mass media.

In the literature on online opinion leaders, the terms “brand ambassadors” and “social media influencers” are often used interchangeably; however, there are distinctions between the two concepts. A brand ambassador is a paid individual who represents a brand’s identity (Sussman, 2015). They are compensated by brands and work together in a long-term relationship; similar to a job where they may complete tasks but it does not necessarily have to align with their interests (Mavrck, 2015). A brand ambassador is similar to a communication practioners that has to promote a product they do not have experience with. For example, a brand ambassador is like a communication practioner that promoted an aquatic product line but had no
actual experience with the product. A brand ambassador can also be compared to celebrity endorsement, because just like a celebrity endorsement when a celebrity endorses a product in a commercial the audience doesn’t always believe the celebrity uses the product they are promoting.

SMIs, on the other hand, can be compensated by brands, but they differ from brand ambassadors because they advocate for a product or service out of support and belief (Sussman, 2015). When a SMI posts about a product, in their area of expertise, they have tried the product and recommend it, like a friend not a sales pitch. The audience trusts the opinion of the SMI and uses that information to make purchase decisions, like with offline opinion leaders (Swant, 2016). Despite the differences, brand ambassadors and SMIs are both hired because of their “large networks, which companies use to connect with wider public and enhance their visibility, brand awareness, and sales,” (Tapinfluence, 2016a).

**Brands and Social Media Influencers.**

Brands work with SMIs in order to reach targeted consumers, promote products, educate consumers about product launches and create content (eMarketer, 2015). In the pursuit of an influencer marketing campaign, brands have to consider which SMI they want to work with and how to engage the SMI. Uzunoglu and Kip (2014) conducted in-depth interviews with public relations practitioners to identify strategies that encourage SMIs to work with their brands. In order to engage with a SMI, the practitioners interviewed indicated they sent product samples, organized invitation-only events, and provided products to the SMI to give away as prizes to their followers. Finding the correct SMI for a brand is critical because the image of the SMI is paralleled to the brand and the relationship between the SMI and follower increases the consumer’s purchase intention (Howland, 2016; Mediakix, 2016).
Previous research on SMIs focused on how consumer behavior is affected by SMIs (Lu, Chang & Chang, 2014) and how to identify effective SMIs (Booth & Matic, 2011; Freberg et al., 2011). As stated previously, promotions by SMIs are comprehended as earned media instead of paid media (Karp, 2016) but concerns by the public and the FTC have risen about compensation of SMI not being disclosed resulting in “false advertisement.” The FTC published guidelines on the use of social media for promotional use in 2013, that stated the FTC has the ability to regulate promotions with false advertisement. False advertising is an advertisement that is misleading, this can include claims made by the advertisement or by what the advertisement does not reveal (FTC, 2017; & Myers, 2016). False advertisement and SMI were addressed by the FTC in two large cases: Sony and Lord & Taylor in 2015. Both companies utilized SMI to promote products without the SMI stating that it was a paid promotion (Federal Trade Commission, 2016; Federal Trade Commission, 2015). In 2017, the FTC reviewed celebrities, athletes and SMIs Instagram pages which led to 90 letters to influencers and marketers educating them on that discloser is mandatory. This is the first attempt by the FTC to specifically educate SMIs (Steigard, 2017).

These guidelines have been created to help ensure consumers are not mislead by SMI posts. The FTC disclosure guidelines is led by the notion that content creators should be transparent with all information (Myers, 2016). While this continues to be a problem, in a study by Lu, Chang, and Chang (2014) they found that there was no substantial effect on consumers’ stances on SMIs when their posts were marked as sponsored. Indicating even when the audience recognizes posts are paid advertising, the audience still trusted the SMI’s recommendation of the product. The study also found that if the post was not labeled as sponsored when posted and later was revealed as sponsored, consumers felt betrayed by the SMI which caused them to lose trust.
Government regulations mandate that all sponsored SMI posts must be marked as sponsored indicating that even with this new mandate SMI posts are still useful (FTC, 2017). This demonstrates that sponsoring posts does not lose the effectiveness of the message.

In order to identify SMIs, Freberg et al. (2011) searched for distinguishable characteristics. They found that SMIs were outspoken, smart, ambitious, productive, and poised. SMIs were least likely to be self-pitying or indecisive. Keller and Berry (2003) found that SMIs are the main meaning-makers in online interest-based communities, even above mass media sources such as television, newspapers, and radio. For example, when a brand provides a sample product to a SMI, in a multi-step flow a SMI creates social media post featuring the sample for followers to see as information or recommendation and the information is shared to others. As a result of this practice, Bapna and Umyarov (2015) found that when a friend uses a product there is a 60 percent increase in adoption rate due to peer influence from friends or SMIs.

Just like a person would seek out a friend before making a purchase, consumers actively seek out SMIs to find reliable information prior to making a purchase decisions (People Pattern, 2016). Consumers trust SMIs more than the typical celebrity endorsement (Howland, 2016). A survey conducted by Variety showed that 62 percent of people between the ages of 18 and 24 would buy a product endorsed by a YouTube influencer over a product endorsed by a celebrity (Mediakix, 2016).

Research has revealed various ways to identify effective SMIs through the points of view of practitioners and audiences. Through in-depth interviews with top-level public relations practitioners, Gilliiin (2008) found that practitioners believed participation level, post frequency by followers, and name recognition were the top three traits of an effective SMI. Freberg et al. (2011) examined the audience’s perception of SMIs and found that consumers thought effective
SMIs were talkative, smart, ambitious, productive, and poised. According to Booth and Matic (2011) the number of followers and relevance of connections with followers determines the value of the SMI. Uzunoglu and Kip (2014) found that online authority and expertise made online users a SMI.

SMIs provide access to targeted consumers that brands may not have been able to previously engage. By determining whether posts from SMIs are more effective then posts from brands, this research can provide organizations the information need to better decide if SMI marketing is worth the investment.

Social Influence Theories

Consumer buying behavior is influenced by social, personal, and psychological factors that have to be considered in order to effectively market to consumers (Brosekhan, Velayutham, & Phil, 2014; Dahl, 2013). By applying consumers’ social and psychological influences to the internet and social media, brand managers can better understand how these factors influence online consumer product perception. Rashotte (2011) defines social influence as a “change in an individual’s thoughts, feelings, attitudes, or behaviors that results from interaction with another individual or a group” (p. 562). This results from consumers’ motives to either be in line or in conflict with social norms (Asch, 1952). This causes individuals to change their attitudes and behaviors because of the opinions of the majority or from an interaction with someone that they see as similar, desirable, or an expert (Rashotte, 2011). Consumers tend to trust experts for specific topics. For example, an individual could seek out a SMI in fashion to see an “expert” opinion and receive advice on clothing brands, products, and style.

Understanding how social influence impacts a consumers’ decision-making process and product perception involves examining the social meanings that consumers attribute to products
and services, and the origins of their meanings. Solomon (1983) proposed that products were not just purchased for practical reasons, but also for their potential social meaning. The meaning or image the product displays is a source of value (Richins, 1994). Social meanings attributed to brands frequently originate from the opinions of people around consumers, which influences product perception and purchase intention (Wood & Hayes, 2012). Social influence changes the definition and meaning of an object (Asch, 1940). Opinions and beliefs of others affect consumers’ understanding or feelings about a product or service. According to the theory of symbolic purchasing behavior the meaning of a product is socially associated with the product and the product can be used to express a consumer’s social role (Leigh & Gabel, 1992).

Accordingly, when purchasing an object such as a watch, it is more than a functional object for the individual to tell time with, it is also a symbol of their social status.

Kelman (1961) suggested that social influence functions through internalization, identification, and compliance. Internalization influence derives from accepting information from individuals who appear to be experts and continues as long as the source is still relevant. The expert improves the individual’s knowledge and aids in the ability to handle the situation or create a purchase decision. The consumer adopts the beliefs and behaviors of individuals who are influential to the consumer (Kelman, 1961). According to Burnkrant and Cousineau (1975), internalization can be classified as informational social influence because it adds information for individuals. An example of this is information from an expert, online review, or SMI (Baek, Saerom, Oh, & Ahn, 2015). Both compliance and identification can be classified as normative social influence because they are influenced by the opinions of external sources.

Identification influence occurs when there is a bond with a source through a particular behavior and continues as long as the source is still relevant (Kelman, 1961). When a consumer
admires a quality about an individual they will try to emulate them because they desire a relationship. This technique is used in celebrity endorsements, consumers purchase the product in order to be like the celebrity they admire (Zipporah & Mberia, 2014). An individual accepts the influence by demonstrating they are similar to the group they want to be a part of in order to enhance their social status (Berger & Heath, 2008; Deutsch & Gerard, 1955). As an individual who follows a SMI, they would buy a product to be more like the SMI.

Lastly, compliance refers to an individual’s reaction to a request in order to please a particular group’s expectation and to attain praise or avoid punishment (Cialdini & Goldstein, 2004; Kelman, 1961). This occurs when someone acts in a way that emulates other’s behaviors and opinions in order to gain someone’s approval and to receive feedback that they made the correct decision. These three functions can be classified into informational social influence and normative social influence.

Social comparison theory and self-congruity theory can be used in order to more fully understand how SMIs effect an individual’s product perception.

**Social Comparison Theory**

Festinger’s (1954) social comparison theory (SCT) assumes that people have a natural desire to compare themselves to others in order to see how their opinions and abilities measure up. Researchers have found that individuals compare themselves for accurate self-evaluation (Taylor, Wayment & Carrillo, 1996), self-enhancement (Wills, 1981), and self-improvement (Taylor & Lobel, 1989). SCT is viewed as a deliberate selection process where standards are considered and selected for comparison. Mussweiler and Epstude’s (2004) study found that comparison standards could be deliberate or spontaneous. When a consumer is tentative about an issue or product choice, the consumer will deliberately compare themselves with individuals who
they perceive as similar to confirm their choice and stabilize their self-evaluation. This is common for clothing and fashion purchases because it is a visual product, which makes it easy to compare to others (Kang & Park-Poaps, 2011). Spontaneous social comparison occurs unconsciously and shapes self-evaluation even when there was no specific goal.

Social comparison exists because people care about how others will react to or perceive their actions (Bearden & Rose, 1990). During comparisons, consumers select a person or group to act as a reference group (Khan & Khan, 2005). A reference group can be familiar or similar to the person in their ability such as a relative, friend or co-worker. They can also be superior to the person such as a celebrity (Schiffman & Kanuk, 2000). A reference group is used as an example when an individual evaluates abilities, attitudes, or beliefs (Escalas & Bettman, 2005). Roper (1940) presented reference groups by suggesting that an individual’s perception of themselves depends on where they stand in relationship to others.

Individuals compare themselves favorably and unfavorably to others (White, Langer, Yariv & Welch, 2006). An unfavorable comparison, or upward comparison, ensues when a person compares themselves to someone who outperforms them, which results in lowered self-esteem and the need to restore confidence (Brickman and Bullman, 1997; Shalev & Morwitz, 2012). For example, if a Freshman quarterback compares himself/herself to an NFL quarterback it will result in lowered self-esteem because the NFL quarterback plays significantly better than the Freshman. Upward social comparisons arise when a person compares themselves to someone they perceive as more successful and produce negative results such as lowered self-esteem and body dissatisfaction (Blechert, Nickert, Caffier, Tushen-Caffier, 2009; Myers, 2010). Upward comparisons do not solely create negative results, people can use comparisons to slightly superior individuals to obtain knowledge on how to improve oneself (Festinger, 1954; Schutz,
Paxton, & Wertheim, 2002). Favorable comparisons to others can be used for self-enhancement (Brickman & Bulman, 1997; Gruder, 1977) or self-compensation (Wood, Giordano-Beech, Taylor, Michela, & Gaus, 1994).

An favorable comparison, or downward comparison, occurs when a person compares himself or herself to someone who they outperform or perceive as less successful, which results in an increase in positive self-esteem. Downward comparisons produce positive results such as increased self-esteem (Collins, 1996; O’Brien, Caputi, Minto, Peoples, Hooper, Kell, & Sawley, 2009).

**Social Comparison Theory Online.**

SCT occurs in both the physical and virtual world (Wu & Lee, 2008). In the physical world, individuals derive information from reference groups such as friends or celebrities, but online these reference groups are generated from online communities, SMIs, or online celebrities. Tendency to social comparison online (TSCO) is “the degree to which an individual tends to compare his or her opinions with others, and be influenced by others, particularly when shopping online” (Shen, 2012, p. 201). TSCO occurs when consumers feel a bond with an online source and accepts the information they provide about a product. Research shows that people’s opinions and compliments affect consumer purchase behavior (Luo, 2005) and consumers can also be influenced when they are interacting online with others (Wu & Lee, 2008). When a consumer evaluates a product, they are unfamiliar with and cannot assess the product through direct observation and contact, the consumer will view the responses of other consumers in regard to the product and use that information to make a decision (Burnkrant & Cousineau, 1975). This information can be paralleled online through SMI recommendations, SMI posts, or consumer online reviews. According to Wu and Lee (2008), in both the online and physical
world, consumers have a higher purchase intention when the product was purchased when social comparison was used. Research indicates that social comparison can increase consumers’ willingness to buy a product (Bearden & Rose, 1990; Burnkrant & Cousineau, 1975; Chan & Prendrgast, 2008; Luo, 2005; Mandel, Petrova, & Cialdini, 2006; Wu & Lee, 2008). Their study indicated that consumers in online and off-line social groups had a stronger motivation to buy than when reference groups were used. These findings illustrate the potential effects social comparison toward SMIs can have on online purchase behavior.

Although much of the research previously reviewed here does not focus on the characteristics users search for when following a SMI, the research shows that individuals seek others to compare themselves to, in order to improve self-esteem or for self-improvement (Knobloch-Westerwick, 2014). Similar to offline interactions, it can be assumed individuals would follow SMIs with common similarities or characteristics to themselves with either a proportional or higher social status in order to provide a feeling that improvement in their life is possible (Schiffman & Kanuk, 2000). This research will provide brands with the information needed to find a SMI who are comparable to their audience.

**Self-Congruity Theory.**

Self-congruity theory suggests that a consumer’s perception of a brand comes from the practical value it offers as well as the symbolic meaning it communicates (Sirgy, 1982). Self-congruity theory is “the match between the product’s value-expressive attributes (product-user image) and the audience’s self-concept” (Johar & Sirgy, 1991, p. 24). In other words, self-congruity, in relation to brands, is the level of congruency between a person’s opinion of a brand or product and the opinion they have of themselves (Sirgy, 1980). For example, the freshman quarterback purchased Nike tennis shoes because he thinks the shoes display that he is strong,
athletic, and ready to play.

Product image interacts with consumer’s self-concept by creating a self-image/product image comparison (Sirgy, 1985). A self-concept is the “totality of the individual’s thoughts and feelings having reference to himself as an object” (Rosenberg, 1979, p. 7). Self-congruity asserts that the more alike the two perceptions are, the higher the preference for that brand or product becomes, because the brand’s symbolic characteristics support the person’s self-concept (Swann, Stein-Seroussi & Giesler, 1992). A person’s self-concept effects consumers in a way that leads to the purchase of a product (Johar & Sirgy, 1989).

**Self-concept.**

A self-concept can be broken down into actual self-image, ideal self-image, social-self, and ideal social self-image (Johar & Sirgy, 1991; Johar & Sirgy, 1989; Sirgy, 1982). Actual self-image is who an individual believes they are, while ideal self-image is who an individual wants to be (Sirgy, 1982). Ideal self-congruity comes from the demand for self-extension (Huber, Vollhardt, Matthes, & Vogel, 2010), because people want to look like their ideal self, so they can potentially extend their true self (Wang, Hsu, Huang, & Chen, 2015). Social self-image is how an individual thinks others view them, while ideal social-image is how an individual wishes others would view them (Johar & Sirgy, 1989). The association created between the self and the brand comes from self-image congruity, meaning people purchase products and brands that are self-relevant and presents a certain identity (Schau & Gilly, 2003).
<table>
<thead>
<tr>
<th>Actual Self-Image</th>
<th>Who an individual believes they are.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideal Self-Image</td>
<td>Who an individual wants to be.</td>
</tr>
<tr>
<td>Social Self-Image</td>
<td>How an individual thinks others view them.</td>
</tr>
<tr>
<td>Ideal Social Self-Image</td>
<td>How an individual wishes others would view them.</td>
</tr>
</tbody>
</table>

**Figure 3: Self-Image**

People purchase brands that reflect their self-image. Product-user image is the image associated with the expected user (Klipfel, Barclay, & Bockorny, 2014). For example, a certain brand of designer watches may have a product-user image as fashionable, outgoing, and youthful and prospective consumers may consider themselves as possessing the same three assets resulting in congruence between the product-user image and actual self-image of the consumer. If a consumer desires to have those qualities, there is a congruency between brand image and self-image. Congruence between social self-image and the brand image occurs when the symbolic characteristics of the brand correspond with how the consumer believes people see them. Lastly, ideal social self-image congruency occurs when the consumer wants to display the qualities associated with the brand image of the watch to convince others to see them the way they want to be seen (Klipfel, Barclay, & Bockorny, 2014).

Consumers look for congruency between product-user and self-concept in order to satisfy self-esteem, self-consistency, and social approval (Sirgy & Johar, 1992). The feeling of self-congruity comes from the need for self-consistency (Sirgy, 1982; Wang, Hsu, Huang, & Chen, 2015), which is a self-perception motivation, that influences people to act in ways that are consistent with how they see themselves (Sirgy, Lee, Johar & Tidwell, 2007).
Self-congruity provides brand managers with knowledge of consumers to better position products in ways that attract the consumer. Being able to develop a congruence model with a SMI for the targeted audience will allow brand managers to develop an image that is congruent with the target audience (Johar & Sirgy, 1989). It seems likely that Instagram users would seek SMIs that are compatible with consumer self-images. By determining if self-congruity is correlated with SMIs and product perception this research could provide organizations the information needed to better target SMIs that will elicit a desired product perception.

**Consumer Behavior.**

The context for this study focuses on SMI posts’ effectiveness to induce product perceptions. Before the internet created the ability to congregate people from a large geographical area, opinion leaders would influence their immediate environment by moving information about their area of expertise from the media to their followers (Burt, 1999; Watts & Dodds, 2007). These recommendations from friends and family have long influenced consumer purchase intention (Aquino, 2013), but with the help of social media, consumer recommendations have more influential power than ever before (Booth & Matic, 2011). By utilizing online opinion leaders or SMIs, brands can reach audiences through the relationship of a friend rather than an advertisement (Harrington, 2016). SMI recommendations provide consumers with a sense of authenticity and inclusivity (Abidin, 2015), which may create the same purchase intention from opinion leaders.

**A New Look into SMI Effectiveness**

This research examines the dynamic relationship between SMIs and consumers, and how it affects product perception. After drawing upon these articles, it is important to examine SMIs and branding from the consumer’s perspective. This research examines what dimensions effect
product perception, how social comparison of a SMI correlates to product perception, and if self-congruity with a SMI effects product perception.

CHAPTER 3: RESEARCH QUESTIONS

Opinion leaders are people who influence others in their immediate environment because of their social status and perceived expertise (Grewal, Mehta, & Kardes, 2000). Technological advances have eliminated the need for physical proximity in opinion leader influence and created the opportunity for online opinion leaders or SMIs (Uzunolge & Kip, 2014). SMIs act as opinion leaders by providing consumers with trustworthy advice and information on products and services to help influence product perception and purchase decisions (Rogers & Cartano, 1962; Stern & Gould, 1988). Consumers actively seek out trustworthy SMIs to find recommendations before making purchase decisions (People Pattern, 2016). Consumers have a higher purchase intention when social comparison was used (Wu & Lee, 2008). Research indicates that social comparison can increase consumers’ willingness to buy a product (Wu & Lee, 2008). This study aims to discover if social comparison to a SMI is correlated with product perception.

Self-congruity claims that the more alike the consumer’s perception of oneself is to the perception of the brand, the more a consumer will want the brand or product (Swann, Stein-Seroussi & Giesler, 1992). This occurs because the product’s symbolic characteristics support the consumer’s self-concept. Just like a brand, SMIs have characteristics that create a symbolic image to consumers. This thesis looks at whether self-congruity of an individual with a SMI correlates with product perception.

RQ1: Does the source of the product promotion affect a consumer’s perception of a product?
RQ2: How do social comparisons toward the promoter correlate with consumers’ perception of a product?

RQ3: How does self-congruity of Instagram users to the promoter correlate with the users’ perception of a product?

CHAPTER 4: METHODS

This chapter addresses the research methodology. First the research setting is discussed, then the study design is detailed. After the procedures are explained, participants and the research variables are discussed. Finally, the measures are operationalized. This thesis sets out to answer the broad question from the consumer’s perspective whether SMI posts are more effective than posts by brands. Essentially, the goal is to determine which posts types effects product perception. Specifically, this study examined the effects of SMI on product perception on females between ages of 18 and 25.

Research Setting

The focus of this study is on the consumer’s perspective on SMIs. It examines how social comparison and self-congruity affect consumers’ product perception. The researcher obtained approval from the Institutional Review Board (IRB) prior to the beginning of data collection (See Appendix B).

Instagram.

Instagram is a social media site that allows users to take, edit, and share photos to followers. Since its launch in October 2010, it has attracted more than 600 million active users (Instagram, 2016a). Compared to other social media platforms such as Facebook and Twitter, Instagram focuses on the visual aspect of social media such as pictures with short captions. Instagram has a stronger social amplification rate than any other social media platform, meaning
that the average number of shares on Instagram per post is more than any other platform (eMarketer, 2015). It also has more active monthly viewers then Twitter (Kharpal, 2015) and a better engagement rate than Facebook (Cohen, 2015). Organizations are beginning to use influencer marketing on Instagram due to its visually engaging platform, high social amplification rate, and high engagement rate. As a result, many organizations have moved their influencer marketing campaigns to Instagram.

**Fashion.**

This research focuses on SMIs who specialize in fashion on Instagram. SMIs were selected as the stimuli material for this thesis for several reasons. First, fashion brands are already on Instagram. The latest data shows that, 96 percent of U.S. fashion brands are on Instagram (eMarketer, 2015). According to a study by L2, a for profit organization that analyzes data to increase their clients’ digital performance, fashion brands receive more engagement from users on Instagram than any other platform (Pathak, 2015). Additionally, 50 percent of Instagram users follow brands that they are interested in, regardless of the industry (Mander, 2015). Clothing brands Victoria Secret, Nike, Chanel, Louis Vuitton, Prada, Dolce & Gabbana, Dior, Gucci, and H&M each has between 10 to 65 million followers. A report on New York Fashion Week by L2 found that Instagram had better engagement than any other platform. During fashion week, there were 13 million total interactions on social media, 97 percent of interactions were on Instagram, 2 percent on Facebook, and 1 percent on Twitter (L2, 2016). Second, fashion is a way for people to express themselves (Solomon, 2006; Toth, 2014). Everyday clothing create emotional and societal responses in person and on Instagram. For example, when someone interacts with a person wearing fashionable clothes they perceive the person positively and positive evaluation of fashion enhance sociability (Workman & Johnson, 1993). Third, fashion is
a visual industry and Instagram is a visual platform, making Instagram a useful platform for fashion and beauty products.

Handbags were chosen as the stimuli for this research project because users perceive purses as self-expressive and a purses’ aesthetic appeal is considered more important than its functional quality (Auty & Elliot, 2016). In 2016, handbags had estimated sales of 411 billion dollars in the U.S. alone (Statsitica, 2016a), with the average American woman buying three new handbags each year (Bev & Zolenski, 2011). Handbags have symbolic value for consumers (Hung, Chen, Peng, & Tiwsakul, 2011) and can be used to exhibit wealth, affluence, and success (Mamat, Noor & Noor, 2016).

Study Design

This study used a one-factor, three condition, design to investigate the effects of a SMI on participants’ product perception compared to a branded post and to determine whether social comparison and self-congruity towards a SMI influence a participant’s product perception. An experimental design was used to examine how the participants perceived SMIs through social comparison and social influence theory.

Participants

A total of 170 participants completed the study. Of those 170 participants, seven sets of data were removed because participants indicated they were male in the questionnaire. Only answers from participants who indicated they were female were analyzed because this study targeted female participants and the products used in the stimuli were female oriented, making men’s responses unnecessary. Additionally, females are the largest demographic on Instagram (Pew Research Center, 2016b). Females are also more likely to be active users of social media in general, specifically on Instagram (Sheldon & Bryant, 2016). Finally, the products used in the
stimulus were female oriented, making responses from men unnecessary. Data for 12 participants were removed because the participants did not provide ample answers, resulting in a final sample of 151 female participants. Participants were undergraduate students enrolled in at least one communication course at Virginia Polytechnic Institute and State University. Participants were recruited through the Department of Communication’s SONA system, which allows for students in the participant pool to complete research projects in exchange for some form of course credit. The online experiment was distributed via the Qualtrics online survey platform.

The mean age of participants was 19.550 years ($SD = 1.315$), with 39.735% ($n = 60$) indicating they were freshman, 35.099% sophomores ($n = 53$), 14.570% juniors ($n = 22$), and 10.600% seniors ($n = 16$). Additionally, 74.834% ($n = 113$) of participants identified as Caucasian, 12.667% ($n = 19$) identified as Asian American, 7.333% ($n = 11$) identified as African American, 2.667% ($n = 4$) identified as Hispanic/Latino, 2% ($n = 3$) identified as other, and .667% ($n=1$) did not provide an answer for ethnicity. Focusing on college aged participants was appropriate for this study because 59% of Instagram users are between the ages of 18 and 29 (Pew Research Center, 2016a) and college aged individuals are a realistic target audience for fashion marketing (Bakewell & Mitchell, 2004).

**Instagram Usage.**

Given the focus on Instagram use in this study, participants were asked about their daily Instagram use. Nearly all participants used Instagram ($n = 144, 95.264\%$) and only 4.736% ($n = 7$) of participants did not use Instagram. Participants who used Instagram reported spending an average of 59.785 minutes on Instagram per day ($SD = 66.393$). According to a study in 2015, college students spend on average eight to ten hours daily on their cell phones with 94.6 minutes a day texting, 48.5 minutes sending emails, 38.6 minutes checking Facebook, 34.4 minutes
surfing the internet, and 26.9 minutes listening to music (Wood, 2015). In 2015 a study on tween and teen use of social media by Common Sense Media, a nonprofit organization dedicated to research media and technology trends in order to help children thrive in the new age, found that heavy users were considered teens who used social media for more than two hours a day (Rideout, 2015). According to Mediakix, on average people spend 15 minutes on Instagram per day (Asano, 2017), indication the participants in this study were heavy users of Instagram.

**Stimulus Materials**

Participants were randomly assigned to view one of nine versions of a manipulated Instagram post: three featured a SMI as the promoting source, three featured the product’s brand as the promoting source, and three featured a third-party retailer as the promoting source. The three versions of the post for each condition were used to employ stimulus sampling, but were combined into three source conditions for analysis. The posts had two sentences of equal length that indicated the significance of the post that was used as a stimulus. Three photos were used from Instagram SMIs @CHIRARAFERRAGNI, @SONGOFSTYLE, and @BLAIREADIEBEE. The images in the Instagram photos were unaltered. The right side of the image which includes the description, who posted the image, and the comments in white were altered to display the desired origin of the message. These changes were used to indicate that the posts were promoted by either a brand, SMI, or from unbranded third-party retailer (See Appendix A). The images were derived from actual fashion influencer posts with images of handbags within a premium core (between $1,500 and $5,000), accessible core (between $300 and $1500) and affordable luxury (between $100 and $300) (Rambourg, 2014) price range. These price ranges were determined by the Rambourg’s brand pyramid of luxury brand accessibility. The luxury power ranking shows a list of brands that are categorized by everyday
luxuries, such as a coffee from Starbucks or an imported beer, to ultra-high end luxury items, such as custom clothing from Bespoke.

SMIs were chosen from a list of the 20 most Influential Fashion Bloggers on Instagram by Fashionista (Indvik, 2016), a fashion news resource with more than 2.5 million monthly readers. From the list of 20 SMIs, SMIs who displayed handbags in either the premium core, accessible core, or affordable luxury range from the Rambourg brand pyramid were chosen (Rambourg, 2014). @CHIRARAFERRAGNI, @SONGOFSTYLE, and @BLAIREADIEBEE were chosen from the list for fitting the Rambourg ranges. SMI @CHIARAFERRAGNI was chosen for having a photo with a Chanel bag, which ranges between $1,500 and $5,000. SMI @SONGOFSTYLE was chosen for having a photo with a Louis Vuitton bag, which ranges between $300 and $1,500. Finally, SMI @BLAIREADIEBEE was chosen for having a photo with a Kate Spade bag, which ranges between $100 and $300.

SMI @CHIARAFERRAGNI is Chiara Ferragni a 30-year-old ex-law student from a small town in Milan who has made blogging her career. She started her blog, The Blonde Salad, in 2009 documenting her lifestyle and wardrobe (Cochrane, 2016). In just eight years she has grown her following on social media to include and now she has more than 9.5 million followers on Instagram, 1.2 million likes on Facebook and has more than 14 million page views per month on her website. She used her popularity to begin a fashion collection selling items from luggage to shoes. She has been in Forbes 30 under 30 (Adams, 2015; Daniel, 2016) list in 2015 and 2016, on the cover of 55 magazine covers, and her success was the subject of a study at Harvard (Keinan, Maslauskaite, Crener, & Dessain, 2015).

SMI @SONGOFSTYLE is Aimee Song a 30-year-old Interior Architect from Los Angelos, California who has made blogging into a career. Aimee blog and posts about fashion
and interior design. She also uses YouTube to post videos on fashion, design and DIY (Song, 2017). Aimee started her blog, Song of Style, in 2008 documenting her lifestyle, interior design and wardrobe. In just nine years she has grown her following on social media to include more than 4.6 million followers on Instagram, 900,000 likes on Facebook and has more than 2 million page views per month on her website. She has used her popularity to launch her brand in small jewelry and apparel brand with her sister. She was a Forbes 30 under 30 (Adams, Blankfeld, & Solomon, 2016) in 2016 and has been featured in publications such as The New York Times. She has also worked with major brands such as True Religion and Levi’s (Business of Fashion, 2017).

SMI @BLAIREADIEBEE is Blaire Eadie a 30 year old fashion blogger from California. Eadie launched her website Atlantic-Pacific in 2010, a blog about her thoughts on fashion, brands and trends. Since the launch she has worked with brands such as Sephora, Cover Girl, Nordstrom, Gucci and Target (Sadick, 2015). She has also been in magazines such as Elle and Vogue. Her website generates 2.5 million visits a month (Merryweather, 2015), her Facebook has more than 200,000 likes, and her Instagram has more than 1 million followers.

**Dependent Measures**

**Self-Congruity.**

Self-congruity was measured using a 20-item index (See Appendix A for all questionnaire measures) adapted from Bokesberger, Dolnicar, Laessar, and Randle (2011) personality test that captured the rational and emotional dimensions of personality. The study addressed the self-assessment of the participant’s personality and evaluations of the SMI personality in order to determine congruity. Participants were asked to respond to the following statements with a 5-point Likert scale (1 = strongly disagree, 2=agree, 3= neither agree not
disagree, 4=disagree, and 5=strongly agree): “The woman can be characterized as/ I consider myself to be (1) reliable, (2) of high spirit, (3) authentic, (4) passionate, (5) honest, (6) imaginative, (7) down to earth, (8) cheerful, (9) successful, (10) adventurous.” While the original study measured the congruity between the tourist and destination (Bokesberger et al., 2011), this was adapted to analyze the congruity between the Instagram user and the SMI. Reliability assessments of the SMI (Cronbach’s α = .792) and the participant (Cronbach’s α = .823) were strong.

**Actual Self-Congruity.**

Actual Self-Congruity was measured using a 4-item questionnaire adapted from Sirgy and Su (2000). Participants were asked with a 5-point Likert scale (1 = strongly disagree, 2=agree, 3= neither agree not disagree, 4=disagree, and 5=strongly agree): “The image of the typical customer of this handbag is similar to how I am,” “The image of the typical customer for this handbag is similar to how I see myself,” “The image of the typical customer of this handbag is similar to how others believe that I am,” and “The image of the typical customer of this handbag is similar to how others see me.” The actual self-congruity scale results in a Cronbach’s α of .927, which is considered a very strong reliability.

**Ideal Self-Congruity.**

Ideal Self-Congruity was measured using a 4-item construct adapted from Sirgy and Su (2000). Participants were asked with a 5-point Likert scale (1 = strongly disagree, 2=agree, 3= neither agree not disagree, 4=disagree, and 5=strongly agree): “The image of the typical customer of this handbag is similar to how I would like to be,” “The image of the typical customer of this handbag is similar to how I would like to see myself,” “The image of the typical customer of this handbag is similar to how I would like others to see me,” and “The image of the
typical customer of this handbag is similar to how I ideally like to be seen by others.” The ideal self-congruity scale resulted in a Cronbach’s $\alpha$ of .958, which is considered a very strong reliability.

**Social Self-Congruity.**

Social Self-congruity was measured using a 1-item variable adapted from Han and Hyun (2012). In a 5-point Likert Scale (1 = strongly disagree, 2=agree, 3= neither agree not disagree, 4=disagree, and 5=strongly agree) participants were asked: “The image of the typical customer of this handbag is similar to how I am.”

**Ideal Social Self-Congruity.**

Ideal Social Self-Congruity was measured using a 3-item questionnaire adapted from Han and Hyun (2012). In a 5-point Likert Scale (1 = strongly disagree, 2=agree, 3= neither agree not disagree, 4=disagree, and 5=strongly agree) participants were asked: “The typical owner of this handbag has personality characteristics similar to mine as perceived by others,” “The typical owner of this handbag has an image similar to how I would like other people to see me,” and “The typical owner of this handbag is very much the kind of person I would like other people see me as.” The ideal social self-congruity scaled resulted in a Cronbach’s $\alpha$ of .835, which is considered a strong reliability.

**Social Comparison.**

Social comparison was measured using a 4-item construct adapted from Chan (2008). In a 5-point Likert scale (1 = strongly disagree, 2=agree, 3= neither agree not disagree, 4=disagree, and 5=strongly agree) participants were asked: “I want to be as stylish as the woman appearing in the post,” “I want to be as trendy as the woman in the post, “I want to be as successful as the woman appearing in the post,” and “I do not aspire to the lifestyle of the woman in the post.
(reverse coded).” The social comparison scaled resulted in a Cronbach’s \( \alpha \) of .864 which is considered a strong reliability.

**Product Perception.**

Product perception was measured using a 3-item index adapted from Harben and Kim (2008). In a 5-point Likert scale (1 = strongly disagree, 2=agree, 3= neither agree not disagree, 4=disagree and 5=strongly agree) participants were asked: “The product in this Instagram post is stylish,” “The product in this Instagram post is attractive,” and “Overall, I like the product in the Instagram post.” The product perception scale resulted in a Cronbach’s \( \alpha \) of .934 which is considered a very strong reliability.

**Other Measures.**

Demographic questions included age, education, and ethnicity. An open text box was provided for age while gender, education, and ethnicity questions provided predetermined responses. A single-item measure asked participants’ biological sex. For education level respondents were prompted to indicate whether they were freshman, sophomore, junior, or senior. Six options were provided for ethnicity: African American, Asian American, Caucasian, Native American, Hispanic/Latino, Pacific Islander, and other.

An Instagram following pattern question was asked regarding whether or not the participants would follow the shown Instagram account. The likelihood that the user would follow the Instagram account was measured on a 5-point Likert scale items (1 = definitely would follow. 2=would follow, 3= maybe would follow, 4=would not follow, and 5=definitely would not follow).

**Procedure**
Participants were recruited by an email sent out to students enrolled for course credit in the Virginia Tech Department of Communication’s SONA research participation system. Participants signed up electronically, provided consent, and then completed a questionnaire using the Qualtrics survey platform, which allows the researcher to embed the stimuli.

Qualtrics randomly assigned participants one of nine images representing the three stimulus conditions. Above the photo, participants were prompted to take time to look at the photo before answering the post-exposure questions. Participants were prompted to answer four questions about actual self-congruity, four questions about ideal-self congruity, one question about social self-congruity, and three questions about ideal social self-congruity. Next, ten questions were asked to rank the perceived characteristics of the SMI followed by four social comparison questions. Participants were then prompted to answer ten questions about their perceived personal characteristics. After completing the first 36 questions, participants moved onto a second page where they completed three manipulation checks asking: if the participant knew the SMI, if they recognized the purse, and if they knew how much the purse costs. Participants were also asked if they would follow the Instagram account that they were shown. Lastly, they were asked demographic questions.

Data Analysis

Data were analyzed using the JMP statistical program. Pearson’s $r$ correlations were used to examine relationships between continuous questionnaire measures, and one-way ANOVA tests were used to examine effects of the source manipulation on outcome measures. A critical alpha of .05 was used for all tests.
CHAPTER 5: RESULTS

Product Perception by Promotion

Research Question 1 explored how a participant’s perception of a product is affected when a product is promoted by either a SMI or a brand. A one-way ANOVA with the source of the Instagram posts as the independent variable and product perception as the dependent variable revealed a significant main effect, \( F(2,148) = 4.43, p = .0134 \). Post-hoc comparisons using Tukey’s HSD method indicated that the product perception was correlated significantly more to the Brand (\( M=1.813, SD=.143 \)) than the Control (\( M = 2.409, SD = .139 \)). SMI (\( M = 2.139, SD = .146 \)) was not significantly different from the Control (\( M = 2.409, SD = .139 \)) or Brand (\( M=1.813, SD=.143 \)) in relation to product perception.

Social Comparison

Research Question 2 explored how a participant’s perception of a product correlated with their social comparison toward the SMI. There was a significant correlation between social comparison toward the SMI and product perception \( r(148) = .518, p < .0001 \). A correlation of .518 is considered a moderate relationship.

<table>
<thead>
<tr>
<th>Item</th>
<th>( N )</th>
<th>( p )</th>
<th>Correlation</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Comparison</td>
<td>150</td>
<td>&lt;.0001</td>
<td>( r(148) = .518 )</td>
<td>“Strong”</td>
</tr>
</tbody>
</table>

Figure 4: Research Question 2 Social Comparison Results

Self-Congruity

Research Question 3 explored how an Instagram user’s self-congruity with the SMI affected the user’s perception of the product. There was a significant correlation between self-congruity of oneself and self-congruity with the SMI, \( r(148) = .264, p = .0011 \). There was a significant correlation between actual self-congruity and product perception, \( r(149) = .301, p = \)
There was a significant correlation between ideal self-congruity and product perception, $r(149) = .448, p < .0001$. There was a significant correlation between social self-congruity and product perception, $r(149) = .337, p < .0001$. There was a significant correlation between ideal social self-congruity and product perception, $r(149) = .386, p < .0001$.

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>P</th>
<th>Correlation</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Self-Congruity</td>
<td>151</td>
<td>.0002</td>
<td>$r(149) = .301$</td>
<td>“Strong”</td>
</tr>
<tr>
<td>Ideal Self-Congruity</td>
<td>151</td>
<td>&lt;.0001</td>
<td>$r(149) = .448$</td>
<td>“Strong”</td>
</tr>
<tr>
<td>Social Self-Congruity</td>
<td>151</td>
<td>&lt;.0001</td>
<td>$r(149) = .337$</td>
<td>“Strong”</td>
</tr>
<tr>
<td>Ideal Social Self-Congruity</td>
<td>151</td>
<td>&lt;.0001</td>
<td>$r(149) = .386$</td>
<td>“Strong”</td>
</tr>
</tbody>
</table>

**Figure 5: Research Question 3 Self-Congruity Results**

**Descriptive Statistics**

Respondents were asked if they knew the SMI in the photo. Almost all participants, 94.667% ($n = 142$), indicated they did not know the SMI, 3.333% said they maybe knew the SMI, and 2% ($n = 3$) said they knew the SMI.

Participants were asked if they had seen the purse in the image before. The large majority, 78.881% ($n = 119$), said they had never seen the purse before, while 11.921% ($n = 18$) said they had seen the purse before, and 9.272% ($n = 14$) said they maybe had seen the purse before.

**CHAPTER 6: DISCUSSION**

This chapter presents the results found in the analysis of the primary data as well as in relation to previous research and existing literature. This study sought to examine the effects of SMIs on product perception through self-congruity and social comparison theory. Despite the
increased use of SMIs in many communication plans, limited research has been conducted concerning the comparative effectiveness of SMIs posts. SMIs have quickly become valuable parts of communication plans for organizations in order to access consumers in recent campaign efforts, yet there is limited literature regarding the effectiveness of SMIs. This study sought to fill the gap in literature and better understand SMIs by conducting an experiment to test the effectiveness of SMIs verse other types of messaging.

**Summary of Findings.**

Research Question 1 asked if participants’ product perception changed based on the source of the message. Findings for Research Question 1 confirmed that the source of the message does effect the individual’s product perception. While there was a correlation between promotion source and product perception, SMI did not have the highest correlation. Results showed that posts that originated from brands were most related to product perception. SMI had the second highest relationship to product perception with the control measure being the most insignificant relation of the stimuli. While SMI posts did not have the most significant relationship, these results indicate that the source of product promotions is related to and important to product perception.

Research Question 2 and Research Question 3 provided more insight into what influences product perception in posts with SMIs. Research Question 2 asked if social comparison toward a SMI is correlated with product perception. Research Question 2 confirmed that social comparison is correlated with product perception. These results show that how someone compares themselves to the person in the post correlates with how they feel about the product. Social Comparison influence has been found true in studies on celebrity endorsements (Chan & Prendergast, 2007) because material possessions are used as an extension of what a person thinks
of themselves (Belk, 1988). Social comparison of goods is used by individuals as a way to evaluate their social standing. This value of social face incites individuals to purchase products that will symbolically make them appear higher in the social hierarchy (Wong & Ahuvia, 1998). Research Question 2 results reaffirm social comparison is related to product perception and this concept transfers to SMIs. Results also confirm that SMIs effect product perception.

Finally, Research Question 3 also supports the idea that promotion source effects product perception. This is supported because actual self-congruity, ideal self-congruity, social self-congruity, and ideal social self-congruity all are correlated to product perception. As stated in the literature review, self-congruity in consumer research refers to the purchase, display and use of goods in order for an individual to show meaning to others and enhance their self-concept. This study reaffirms that product perception is related to self-congruity and that this concept transfers to SMIs.

**Practical Implications.**

This study has practical implications that can be used within the communication field in order to find effective strategies to connect with target audiences on social media. First, in a field where the platform to reach targeted audiences is constantly changing, this study reveals where an organization should focus time and energy. Research has shown that endorsements from celebrities and experts work (Biswas, Biswas, & Das, 2013; Misra, 1990). In the context of SMIs, they are considered experts within their field; this has shifted the availability of trustworthy experts to the internet and provides brands easy access to experts. While brands had a more statistically significant relationship than SMIs with product perception, the observed results show that SMIs are correlated to product perception. For example, social comparison and self-congruity toward a SMI is correlated with product perception. Because of this, SMIs can still
benefit organizations by being a reference for an organization’s or brand’s targeted audiences. Even though in this study SMIs were not consider the most significant influence on product evaluation they are still worthwhile to organizations to better understand and utilize.

Secondly, this study revealed that social comparison and self-congruity toward a SMI affects product perception. Previous research has shown that both social comparison and self-congruity alter purchase decisions (Sirgy, 1982). Findings from this study suggest that social comparison and self-congruity to SMIs also alter purchase decisions. SMIs can be used to help disseminate product information in an effective way for communication practitioners broadly, and advertising and marketing practitioners more specifically. For example, if a SMI posts a picture of a luxury handbag an individual could see that and purchase the bag in order to display to others that they are high on the social hierarchy.

Lastly, this study adds to existing literature by confirming that there is a correlation between social comparison and self-congruity with SMIs and product perception. This confirms that if an organization chooses to utilize SMIs they must choose a SMI that best exemplifies their ideal consumer. In order for social comparison and self-congruity to influence product perception in a positive light, the SMI must be the “best self” of an organization’s ideal consumer. For example, Daniel Wellington used outgoing and attractive young SMIs to display his watches in Wellington’s SMI Instagram campaign. Therefore, consumers who saw the post could use those SMIs as a reference group. The ultimate way for consumers to demonstrate their congruity with a SMI is through purchase of a Daniel Wellington watch.

As stated previously, research indicates that social comparison increases purchase intention (Chan & Prendrgast, 2008; Wu & Lee, 2008). Consumers have a stronger motivation to buy when reference groups were used. This with the results from RQ2 indicate that the SMI
effects the image of the product. This can guide organizations to strategically choose SMIs that are used as reference groups or upward comparisons for their target audience.

**Limitations**

The results of this experiment show there is room to alter the methodology for this experiment. Literature states that SMIs’ effects stem from the power of the relationship, comparison, and the connection to their followers. The followers perceive SMIs as friends and take their recommendations as such. Because SMIs are a part of a dynamic relationship with their followers this experiment was limited by its artificial design. This experiment was completed in an artificial environment where only 2% of respondents indicated they knew the SMI. In a real-world situation, individuals would see posts from SMIs that they already follow or with whom they already engage. By seeing information from their trusted “friends” or “aspirational” others, they would be more likely to have a more lasting product perception and it could change the results found in this study for Research Question 1.

While the price range of the products were constructed from Rambourg (2015), the range may not have been adequate for the participants due to their age. All participants were college students between the ages of 18 and 25 indicating that they may not be as aware of products in the range indicated in the Rambourg pyramid. Also the type of product may not have been adequate for participants. Handbags are used for aesthetic appel more than function (Auty & Elliot, 2016) there may have been products that better represented the participants such as clothing, watches, or shoes.

**Future Research**

By addressing the limitations of this study and the exposed gap in current research about SMIs multiple opportunities arise for future research. Future research can alter this experiment
into an organic experiment, extend the current experiment to address more questions in the research gap, and qualitatively assess specific case studies of SMIs. First, this study was limited by its inability to survey participants with stimuli of SMIs they knew or followed. SMIs gain their influence through the relationships they build with their followers; by moving the experiment from an artificial scenario to a more organic scenario a researcher would be able to have a better representation of SMIs' effects on product perception. Past research shows that the relationship built between the SMI and their followers gives SMIs their influence. By completing the experiment with participants that actively follow the SMI, results will more effectively reveal how a SMI affects product perception and if brand has the most significant relationship with product perception in an organic experiment. While the more natural experiment may produce more specific results, it would be difficult to recruit participants from a variety of SMI and to ensure the results given were reliable.

Secondly, this study provides the opportunity for a continuation to provide a more rounded effectiveness of SMIs. Future research could address purchase intention, a breakdown of social comparison categories and an attractiveness scale to determine why they follow the SMI. Continuing this experiment to cover more research questions would help fill the current research gap on SMIs and provide more information to organizations utilizing SMIs. By addressing purchase intention, organizations can better differentiate between product perception and product purchase. Since purchase intention is a foremost consideration for organizations, focus in purchase intent will provide quantitative numbers to help understand the effectiveness of the money put into the campaign versus the profit from the campaign. By adding the attractiveness scale to the study, a researcher could better understand what draws individuals to follow SMIs.
Finally, by analyzing results with a breakdown of social comparison into upward, downward and neutral comparisons, a researcher could understand comparison patterns in following a SMI.

This study could also include scales of homophily, contagion, credibility and attraction in order to better understand the relationship between follower and SMI. This could help organizations and brands strategically choose SMI and determine what is necessary to be considered a SMI.

Finally, this study also provides the opportunity to qualitatively analyze a case study of a SMI campaign. Campaigns with SMIs have been shown to be successful (i.e. Daniel Wellington, Lord & Taylor). By analyzing communication campaigns that use both SMIs and brand postings a researcher could better understand which posts generate more engagement and product purchases.

**CHAPTER 7: CONCLUSION**

The utilization of social media influencers in order to connect with target audiences has become a popular strategy in communication campaigns amongst many industries. This push to use the new online opinion leaders has called for a need in academic research. Much of the current literature on SMIs focuses on how to identify and utilize a SMI to promote products but this study provided a different perspective by focusing on the comparative differences between SMI posts and brand posts. This study successfully analyzed SMI effects on product perception through social comparison and self-congruity. By testing for the comparative differences in product perception generated by brands and SMIs, this study provided insight into how to create product perception and the necessity to better examine the effectiveness of SMIs. By examining social comparison and self-congruity with SMIs it is better understood that choosing the correct
SMI is needed in communication campaigns. The findings offer ample implications and future research in SMIs in communication and marketing campaigns on social media.
REFERENCES


Federal Trade Commission (2016). Lord & Taylor Settles FTC Charges It Deceived Consumers


doi:10.1016/j.chb.2015.12.059


doi:10.1108/03090561111119958


Stransberry, K. (2012). One-Step, Two-Step, or Multi-Step Flow: The Role of Influencers In Information Processing and Dissemination In Online, Interest-Based Publics. *University of Oregon*.


APPENDIX A: SURVEY

Photos:
SMI 1
This is Chiara Ferragni a U.S. fashion influencer. She has 8.5 million followers on Instagram.

Brand 1
In this picture a luxury pink leather handbag is displayed. It is a Chanel handbag.

Control 1
This picture shows a pink leather handbag sold at Shubag.
SMI 2
This is Blaire Eadie a U.S. fashion influencer. She has 1 million followers on Instagram.

Brand 2:
In this picture a luxury blue leather handbag is displayed. It is a Kate Spade handbag.

Control 2
This picture shows a blue leather handbag sold at Shubag.

SMI 3
This is Aimee Song a U.S. fashion influencer. She has 4.4 million followers on Instagram.
Brand 3
In this picture a luxury brown leather handbag is displayed. It is a Louis Vuitton handbag.

Control 3
This picture shows a brown leather handbag sold at Shubag.

Picture Questionnaire:

Below is a series of statements. Please indicate the extent to which you disagree or agree with each statement as it relates to the Instagram post, where a rating of 1 means
you strongly agree, 3 means you neither agree nor disagree, and 5 means that you strongly disagree.

The photo I viewed was:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>Neither Agree nor disagree</th>
<th>Somewhat disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The image of the typical customer of this handbag is similar to how I am.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>The image of the typical customer of this handbag is similar to how I see myself.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>The image of the typical customer of this handbag is similar to how others believe that I am.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>The image of the typical customer of this handbag is similar to how others see me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>The image of the typical customer of this handbag is similar to how I would like to be.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>The image of the typical customer of this handbag is similar to how I would like to see myself.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>The image of the typical customer of this handbag is similar to how I would like others to see me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>The image of the typical customer of this handbag is similar to how I ideally like to be seen by others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>The image of the typical customer of this handbag is similar to how I am.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>The typical owner of this handbag has personality characteristics similar to mine as perceived by others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>The typical owner of this handbag has an image similar to how I would like other people to see me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>The typical owner of this handbag is very much the kind of person I would like other people see me as.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
13. For the questions below, you will see two adjectives (i.e., high spirits/low spirits), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "low spirits."

![Sliding scale]

14. For the questions below, you will see two adjectives (i.e., reliable/unreliable), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "unreliable."

![Sliding scale]

15. For the questions below, you will see two adjectives (i.e., authentic/unauthentic), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "unauthentic."

![Sliding scale]

16. For the questions below, you will see two adjectives (i.e., passionate/apathetic), please indicate on the sliding scale which of those adjectives best describe the
woman in the photo. For example, a score closer to 7 means that you think the person is "apathetic."

17. For the questions below, you will see two adjectives (i.e., honest/dishonest), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "dishonest."

18. For the questions below, you will see two adjectives (i.e., imaginative/unimaginative), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "unimaginative."

19. For the questions below, you will see two adjectives (i.e., down to earth/idealistic), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "idealistic."
20. For the questions below, you will see two adjectives (i.e., cheerful/sad), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "sad."

![Sliding scale for cheerful/sad rating]

21. For the questions below, you will see two adjectives (i.e., successful/unsuccessful), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "unsuccessful."

![Sliding scale for successful/unsuccessful rating]

22. For the questions below, you will see two adjectives (i.e., adventurous/cautious), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "cautious."

![Sliding scale for adventurous/cautious rating]

Below is a series of statements. Please indicate the extent to which you disagree or agree with each statement as it relates to the person and their Instagram activity, where a rating of 1 means you strongly agree, 3 means you neither agree nor disagree, and 5 means that you strongly disagree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>Neither Agree nor disagree</th>
<th>Somewhat disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>
23. I want to be as stylish as the woman appearing in these posts.

24. I want to be as trendy as the woman in these posts.

25. I want to be as successful as the woman appearing in these posts.

26. I do not aspire to the lifestyle of the woman in the posts.

27. For the questions below, you will see two adjectives (i.e., high spirits/low spirits), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "low spirits."

28. For the questions below, you will see two adjectives (i.e., reliable/unreliable), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "unreliable."

29. For the questions below, you will see two adjectives (i.e., authentic/unauthentic), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "unauthentic."
30. For the questions below, you will see two adjectives (i.e., passionate/apathetic), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "apathetic."

31. For the questions below, you will see two adjectives (i.e., honest/dishonest), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "dishonest."

32. For the questions below, you will see two adjectives (i.e., imaginative/unimaginative), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "unimaginative."

33. For the questions below, you will see two adjectives (i.e., down to earth/idealistic), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "idealistic."
34. For the questions below, you will see two adjectives (i.e., cheerful/sad), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "sad."

35. For the questions below, you will see two adjectives (i.e., successful/unsuccessful), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "unsuccessful."

36. For the questions below, you will see two adjectives (i.e., adventurous/cautious), please indicate on the sliding scale which of those adjectives best describe the woman in the photo. For example, a score closer to 7 means that you think the person is "cautious."

Below is a series of statements. Please indicate the extent to which you disagree or agree with each statement as it relates to the person and their Instagram activity, where
a rating of 1 means you strongly agree, 3 means you neither agree nor disagree, and 5 means that you strongly disagree.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>Neither Agree nor disagree</th>
<th>Somewhat disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>37. I want to be as stylish as the woman appearing in these posts.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. I want to be as trendy as the woman in these posts.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39. I want to be as successful as the woman appearing in these posts.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40. I do not aspire to the lifestyle of the woman in the posts.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Below is a series of statements. Please indicate the extent to which you disagree or agree with each statement as it relates to the product, where a rating of 1 means you strongly agree, 3 means you neither agree nor disagree, and 5 means that you strongly disagree.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>Neither Agree nor disagree</th>
<th>Somewhat disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>41. The product in this Instagram post is stylish</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42. The product in this Instagram post is attractive.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43. Overall, I like the product in the Instagram post.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

44. Would you follow this Instagram account?
   A. Yes
   B. Maybe
   C. No
45. Do you know who this person is?
   A. Yes
   B. Maybe
   C. No

46. Have you ever seen this purse before?
   A. Yes
   B. Maybe
   C. No

47. Do you know how much this purse costs?
   A. Yes
   B. Maybe
   C. No

48. If yes, how much? ___________
APPENDIX B: IRB APPROVAL LETTER

MEMORANDUM

DATE: April 19, 2017

TO: James Dee Ivory, Kayleigh Elizabeth Burke

FROM: Virginia Tech Institutional Review Board (FWA0000572, expires January 29, 2021)

PROTOCOL TITLE: Perceptions of messages from social media influencers

IRB NUMBER: 17-416

Effective April 18, 2017, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the New Application request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at: http://www.irb.vt.edu/pages/responsibilities.htm

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As: Exempt, under 45 CFR 46.110 category(ies) 2
Protocol Approval Date: April 18, 2017
Protocol Expiration Date: N/A
Continuing Review Due Date*: N/A

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.
Figure 1: Social Media Influencer Diagram

Figure 2: Social Media Influencer- Multi-step flow theory

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Self-Image</td>
<td>Who an individual believes they are.</td>
</tr>
<tr>
<td>Ideal Self-Image</td>
<td>Who an individual wants to be.</td>
</tr>
<tr>
<td>Social Self-Image</td>
<td>How an individual thinks others view them.</td>
</tr>
<tr>
<td>Ideal Social Self-Image</td>
<td>How an individual wishes others would view.</td>
</tr>
</tbody>
</table>
Figure 3: Self-Image

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>P</th>
<th>Correlation</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Comparison</td>
<td>150</td>
<td>&lt;.0001</td>
<td>$r(148) = .518$</td>
<td>“Strong”</td>
</tr>
</tbody>
</table>

Figure 4: Research Question 2 Social Comparison Results

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>P</th>
<th>Correlation</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Self-Congruity</td>
<td>151</td>
<td>.0002</td>
<td>$r(149) = .301$</td>
<td>“Strong”</td>
</tr>
<tr>
<td>Ideal Self-Congruity</td>
<td>151</td>
<td>&lt;.0001</td>
<td>$r(149) = .448$</td>
<td>“Strong”</td>
</tr>
<tr>
<td>Social Self-Congruity</td>
<td>151</td>
<td>&lt;.0001</td>
<td>$r(149) = .337$</td>
<td>“Strong”</td>
</tr>
<tr>
<td>Ideal Social Self-Congruity</td>
<td>151</td>
<td>&lt;.0001</td>
<td>$r(149) = .386$</td>
<td>“Strong”</td>
</tr>
</tbody>
</table>

Figure 5: Research Question 3 Self-Congruity Results