Do You Believe in Magic?
Humans as Vehicles of Meaning Transfer

by

Victoria E. Taylor

A Thesis
presented to
The University of Guelph

In partial fulfillment
of the requirements for the degree of
Master of Science
in
Marketing and Consumer Studies

Guelph, Ontario, Canada

© Victoria E. Taylor, August, 2016
ABSTRACT

DO YOU BELIEVE IN MAGIC? HUMANS AS VEHICLES OF MEANING TRANSFER

Victoria E. Taylor
University of Guelph, 2016

Advisor: Dr. Scott Colwell

Research suggests that people seek consistency when processing strong, familiar stimuli, and that this cognitive process has been demonstrated when exposed to human faces. The use of human figures is a dominant theme in advertising imagery, with many brands using the same actors and models in their advertisements. What has yet to been investigated is the potential for one brand to transfer meaning to another by using the same actor or model in their advertisements. The underlying theory to this concept is the law of contagion, which posits that when two things come into direct or indirect contact, properties of one entity may be transferred to the other through their respective essence. The following study examines the moderating effect of model exposure on brand personality using print advertisements. Although results of the experiment were non-significant, suggestions for future research in this area are provided, along with several theoretical contributions. The following study serves as a novel example, with a vast potential for future practical implications.
Acknowledgements

I would first like to extend my gratitude to my advisor, Dr. Scott Colwell, and committee member, Dr. Theodore Noseworthy, for their relentless support. Their knowledge, patience and guidance provided the motivation necessary in successfully completing this project.

Second, I wish to thank the faculty and administrative staff of the Department of Marketing and Consumer Studies. Their genuine sense of care and dedication to their students is remarkable, and made the University of Guelph feel like my second home throughout my time as a M.Sc. student.

I would like to thank Dr. Brent McKenzie for being a fantastic mentor and friend. His level of passion toward his work is contagious and I feel privileged to have had the opportunity to work as his research assistant.

To my family, thank you for your unmatched support and belief in my potential. To my sister, Laura, you have served as my role model since day one. To my father, Dwight, “Black Team Forever”, and to my mother, Leslie, I have come a long way and hope that I have made you proud, thank you for never giving up on me.

I wish to bestow my gratitude to the most high-class establishment in Guelph, Trappers Alley, for bringing balance into my life as a master’s student. Those beers were worth every loonie.

Lastly, I would like to thank my partner, Dalton, for always being on my team and upholding my confidence. You’re my rock.

Without those mentioned above, my achievements would not have been possible – for this, I sincerely thank you.
# Table of Contents

**CHAPTER 1: INTRODUCTION** ........................................................................................................... 1

**CHAPTER 2: CONCEPTUAL DEVELOPMENT** ................................................................................. 5

  2.1 Celebrity Endorsements ........................................................................................................... 5

  2.2 Brand Personality ..................................................................................................................... 8

  2.3 Schematic Processing .............................................................................................................. 10

    2.3.1 Schema Congruity ........................................................................................................ 12

    2.3.2 Facial Memory ............................................................................................................... 14

  2.4 Contagion .............................................................................................................................. 15

  2.5 Overview of the Literature .................................................................................................... 18

**CHAPTER 3: STUDY 1** .................................................................................................................... 20

  3.1 Hypothesis ............................................................................................................................ 21

  3.2 Methods ................................................................................................................................ 21

    3.2.1 Participants and Design ............................................................................................... 21

    3.2.2 Stimuli .......................................................................................................................... 22

    3.2.3 Pretests ......................................................................................................................... 25

      3.2.3.1 Pretest One: Model Selection ............................................................................... 25

      3.2.3.2 Pretest Two: Advertisement Manipulations ......................................................... 26

    3.2.4 Procedures ..................................................................................................................... 27

    3.2.5 Measures ....................................................................................................................... 28

  3.3 Data Analysis & Results ......................................................................................................... 31

    3.3.1 Manipulation Checks .................................................................................................... 32

      3.3.1.1 Model Exposure: Model Recall ............................................................................ 32

      3.3.1.2 Model Exposure: Content Recall ........................................................................... 33

      3.3.1.3 Brand Personality ................................................................................................. 34
List of Tables

Table 1. Manipulation Check: Model Exposure- Model Recall

Table 2. Manipulation Check: Model Exposure- Ad Content Recall

Table 3. Manipulation Check: Brand Personality

Table 4. Brand Personality
List of Figures

Figure 1. Exciting Advertisement Manipulation

Figure 2. Sincere Advertisement Manipulation

Figure 3. Neutral Advertisement Manipulation

Figure 4. Target Neutral Advertisement Manipulation

Figure 5. A histogram of exciting brand personality

Figure 6. A Q-Q plot of exciting brand personality

Figure 7. A histogram of sincere brand personality

Figure 8. A Q-Q plot of sincere brand personality

Figure 9. Interaction plot between model exposure and previous brand exposure on exciting brand personality

Figure 10. Interaction plot between model exposure and previous brand exposure on sincere brand personality
CHAPTER 1: INTRODUCTION

As the world becomes an increasingly cluttered media environment, firms must take extra precaution when deciding who will appear as the face of their brand in advertisements (Rosengren, 2008). It is common practice to use human figures in advertisements, whether they are models, actors, endorsers, or celebrities. It is important to understand the difference between a regular actor or model and an endorser. Models and actors simply appear in advertisements as anonymous figures, and offer meaning that reflects their demographic make-up, such as age, gender, status, etc. (McCracken, 1989). An endorsement on the other hand is defined as “any advertising message . . . that consumers are likely to believe reflects the opinions, beliefs, findings or experiences of a party other than the sponsoring advertiser” (Fed. Trade Comm’n v. Garvey, 383 F.3d 891, 9th Cir, 2004). Much research has been conducted on the use of celebrity endorsers in advertising, yet little research has investigated the use of non-celebrity actors and models in advertising, whose names are unknown, but whose faces may be recognizable. For the interest of this thesis, focus will be placed on non-celebrities who are unknown to the public eye. For the remainder of this thesis, these non-celebrities will be referred to as “unknown” models/actors.

Question may be raised as to why the use of human figures is such a dominant theme in advertising imagery. A study conducted by Masse and Rosenblum (1988) found that 75% of all ads in men’s and women’s magazines featured humans (Masse and Rosenblum, 1988, pg. 129). That number was even higher in a study conducted on television commercials, where 87% of advertisements aired through both morning and evening television networks featured humans (Bretl and Cantor, 1988, pg. 600). Over time, scholars have argued that the use of the human
figures in advertising dates back to times of personal face-to-face contact between the buyer and the seller, and that the inclusion of humans in advertising acts as a modern reverberation from preindustrial times (Ciarlo, 2011, pg.150). Additionally, it is believed that the inclusion of a human figure in an advertisement has the ability to increase the viewer’s trust, and can add personalization to the brand (Ciarlo, 2011, pg.150). With focus on unknown figures, findings suggest that including a non-famous human figure in an advertisement allows the message to be communicated through the ‘common man’ approach. Famous American advertising executive Leo Burnett is known for advocating the ‘common man’ approach, and states that through the approach, the viewer is likely to associate the human figure with the typical “neighbor next door” (Saxena, 2009). This concept of the “neighbor next door” relates to an increase in a viewer’s ability to relate to the human shown in the ad, which may lead to increased trust and believability of the ad claims.

Typically, actors and models are represented by an advertising agency. In the context of this research, an advertising agency is an independent organization that specializes in developing advertisements, advertising plans and many other promotional tools for their clients (Gamble, 1970, pg.4). Additionally, actors can either be members of a union or non-members. There is the Screen Actors Guild-American Federation of Television and Radio Artists (SAG-AFTRA), which is the American labour union, and the Alliance of Canadian Cinema, Television and Radio Artists (ACTRA), which represents the Canadian labour union. These unions negotiate, administer and enforce collective agreements, offering talent equitable compensation, health benefits and safe working conditions (ACTRA.ca, 2015).

It is not uncommon for the same actors or models to appear in multiple brands’ advertisements. This popularity and industry success typically occurs when actors and models
are able to create a reputation for themselves within the industry, and are known to represent a specific persona. The image and reliability of these talent figures then popularizes their identities within the network (e.g. firms, producers and agencies), which typically results in them landing more contracts. For example, Canadian actor Geoff Gustafson is known as slightly odd, affable and occasionally “dumb as a post”, and has appeared in numerous brands’ advertisements including Visa, Future Shop and Volkswagen (Krashinsky, 2012). However, even though the public may have seen him in multiple advertisements, the chances of people knowing his name are slim to none. This is because actors and models such as Geoff do not enjoy public recognition outside of advertisements, and therefore do not generally come charged with any meaning other than what is seen in the ad.

On the other end of the spectrum, using celebrities in advertisements is another very popular strategy among those who can afford it. A lack of predictability exists when using celebrities in advertising due to the variability of meaning that celebrities represent. The unpredictability associated with using celebrities is related to their multidimensionality. A firm may choose to have a certain celebrity appear in their product’s advertisement because they believe that they represent a certain image that is synergistic to that of their brand. However, variability arises as there is no way to account for the viewers who have alternate perceptions of the celebrity. These differing perceptions may be related to factors such as personal preference, exposure to the celebrity (i.e. what movies they’ve seen them in), or media exposure (i.e. News segments covering aspects of the celebrity’s personal life). Furthermore, whether the image of the brand will be affected the way that the firm had originally intended it to be is difficult to anticipate and requires a large amount of research. Considering the cost associated with hiring them, and the unpredictability associated with their use, it is fair to
assume that using celebrities in advertisements comes with a significant risk factor.

Grant McCracken (1989) once argued that ‘anonymous’ models and actors offer demographic information such as age, gender and status, whereas celebrities offer precise and powerful meanings such as lifestyle and personality, which the ‘anonymous’ model cannot provide. Furthermore, McCracken (1989) argued that models and actors are “merely borrowing or acting out the meaning they bring to the ad” (McCracken, 1989, pg. 315). As many actors and models pose as the face of multiple brands’ advertisements, it can therefore be argued that a possibility exists where meaning associated with one brand (e.g. brand personality) may be transferred to a model/actor who appears in their ad, and when that same model/actor appears in another brand’s ad, they may have the ability to represent meaning captivated from the previous brand they appeared with. For example, if an actor appears in a commercial for Apple; a company that is considered youthful (Aaker, 1997), creative (Fitzsimons et al. 2008) and exciting (Maehle et al. 2011), and then that same actor appears in a commercial for a new, unknown brand, it may be possible for traits associated with Apple’s brand image to be transferred to the new brand through contamination of the re-appearing actor. This idea illustrates a carryover effect in the actor/model’s next appearance, where the viewer has acquired previous knowledge of the actor/model. McCracken’s (1989) Meaning Transfer Model suggests that in its middle stage, meaning is transferred from the human to the brand. However, Gwinner and Eaton (1991) later argued that it is possible for the model to change direction when the image of the brand is stronger than that of the source (human), in which case, a brand would transfer meaning to the human. This supports the concept proposed above, where an actor or model could become contaminated by a brand and transfer the acquired meaning to a second brand through appearing in multiple advertisements.
The following research study will investigate the potential for brands to contaminate models in advertisements, and further, if those models have the potential to transfer meaning from one brand to another. A study will be conducted that will have participants view multiple print advertisements, with the same model appearing in more than one ad. Upon seeing each advertisement, participants will rate the brands’ personalities. If the desired effect is found upon completion of this study, there will be numerous managerial implications. If unknown models have the ability to transfer meaning from one brand to another, the process of casting for advertisements, contract boundaries between clients and talent, and overall branding strategies, would all become susceptible to change and strategic ability.

CHAPTER 2: CONCEPTUAL DEVELOPMENT

2.1 CELEBRITY ENDORSEMENTS

According to McCracken’s (1989) definition, “a celebrity endorser is a person who enjoys the public recognition and who uses this recognition in the name of goods while appearing with one in advertising” (McCracken, 1989, p.310). A general consensus exists that when certain variables are favourable, associating a brand with a desirable person, or event, can transfer positive and powerful meaning to a brand. The issue with celebrities is the variability of their perceived essence. In advertisements, celebrities are generally not perceived as experts, however, their credibility may increase if their schema is related to that of the brand (Sternthal & Craig, 1982). For example, consumers would be more likely to be persuaded by an advertising message for Adidas if the figure in the ad was a well-known, star athlete, than if the
ad figure was a television host for a program on The Food Network. This example is reflective of the Match-Up Hypothesis proposed by Kahle and Homer (1985), which claims that message effectiveness is dependent on the congruence, or level of “fit”, between the endorsement figure and the brand.

Additional benefits accompany the use of celebrities in advertisements. Firstly, due to a higher profile, and previous exposure, celebrities can help advertising messages break through media clutter, and attract the attention of viewers who otherwise may not have processed the information presented in the advertisement (Rosengren, 2008). Furthermore, since celebrities tend to be perceived as credible if their schemas are related to that of the brand, viewers of the advertisement are less likely to retrieve their own existing thoughts in memory (Sternthal & Craig, 1982). This may add value if a firm’s goal is to reposition the brand, if the brand has previously attracted negative publicity, or for any personal reasons the consumer may have to possess negative thoughts toward the brand. Controversy, if the consumer possesses positive memories and thoughts toward the brand, then the restriction of memory retrieval may have negative, and even damaging, effects on brand image. This is because instead of rehearsing an existing, positive schema, and strengthening it, a new perception may arise, leading to the creation of a negative brand association. This result may be dependent on the acceptance of new information that triggers negative perceptions, or due to a lack of personal admiration for the celebrity (Sternthal & Craig, 1982).

There are also potentially negative aspects of using celebrities in advertisements. It is possible for celebrity figures to disappear or “drop-out” from the media spotlight before the contract between the celebrity and the firm has elapsed (Baker, Erdogan & Tagg, 2001). For example, if an NHL hockey player was on a hot-streak, and started receiving a large amount of
attention from the media, but then all of a sudden started playing poorly, leading to negative publicity, a brand using this player as an advertising figure may then be negatively affected by the change of the player’s image. Furthermore, due to the attention from the public eye, a situation may arise where celebrities act unethically and are caught by “paparazzi”, which would not only lead to negative public attention, but could also reflect the brand that was using the celebrity as a representative symbol (Wilson, 1998). Finally, and maybe the most influential downside to using celebrities as ad figures, is the cost. It is widely known that in order to hire a celebrity to appear in a brand’s advertisement, the company doing so must have ample financial resources.

Although using unknown figures in advertisements may seem less exciting, numerous benefits exist. Firstly, being virtually unknown to the public eye and media, unknown figures are perceived as less credible, which motivates viewers to retrieve their existing schemas and perceptions of the brand. This can be beneficial if the viewer already possesses a positive brand schema, as rehearsal will strengthen the associations and increase the chance of information reception (Rosengren, 2008). This would be beneficial for a brand that is established in the market. Secondly, because unknown figures do not come charged with very precise, and powerful cultural meaning, it is likely that the figure will not have a schema that is significantly different than that of the brand being advertised, reducing the chance of miscommunication (McCracken, 1989). Lastly, and perhaps most importantly, hiring unknown figures is much less expensive than hiring celebrities. This offers much less monetary risk as opposed to using celebrities.

As previously mentioned, the restriction/promotion of information retrieval can either have a positive or negative effect on brand perception. If the viewer possesses a negative brand
schema, then the advertising message communicated may not have any effect, and rehearsal may strengthen the negative brand associations (Sternthal & Craig, 1982). Another potential downside to using unknown figures is the inability to break through media clutter. If the viewer is not actively processing the information presented in the advertisement, then chances of message retention and persuasion are low (Rosengren, 2008). Furthermore, although unknown figures can communicate demographic information such as age, gender, status, etc., they may not reflect meaning that is strong, or precise enough to influence the brands’ personality (McCracken, 1989).

### 2.2 BRAND PERSONALITY

Brand personality is a set of human-like characteristics and traits that are linked to a brand (Aaker, 1997). The concept of brand personality has been widely accepted by both practitioners (e.g. Ogilvy, 1983; Plummer, 2000) and academics (e.g. Martineau, 1958; Keller, 1998) as an important factor in creating brand equity (Yoon, 2004). Ogilvy states that ‘products, like people, have personalities, and they can make them or break them in the market place’ (Ogilvy, 1983, p. 14). Personality is part of a human’s, and a brand’s cultural foundation, and according to McCracken (1989), it can be created, influenced, and transferred. There are countless ways that brands can acquire meaning and build their image, whether it be through symbols, employees, price or brand associations (Batra and Homer, 2004). A brand generates its personality traits through either direct or indirect contact with the consumer. A direct way for brands to build their personality is through different types of user imagery, including the CEO, employees, and/or endorsers, who have the ability to transfer meaning to the brand (Aaker, 1997). For example, if a coffee shop allows their baristas to showcase abnormal hair styles, face piercings or tattoos, the
brand personality of the coffee shop may be perceived as more “edgy”, creative, rebellious or individualistic. The indirect way for a brand to acquire personality traits is through product-category associations, product-related attributes, advertising style, brand name, symbols, logos, distribution, price, etc. (Aaker, 1997). As the focus of this thesis is on human figures in advertising, a direct user imagery form of personality generation is being investigated.

It is important that a brand has a strong and positive personality, as it is seen as a key determinant of success in the market, leads to differentiation from other competing brands, and also creates preference and loyalty among consumers (Aaker, 1997). Furthermore, brand image is extremely important to firms as it contributes to a consumer’s preference, personal value, and self-expressive symbols toward the brand (Batra and Homer, 2004). This process is a foundation for the consumer’s impression management, which refers to the act of controlling incoming information with the objective of persuading others’ opinions in reflection of one’s personal goals (Dunn, 2010). A subset of impression management is self-presentation, which explains why consumers purchase brands in order to acquire the meaning that they believe the brands project (McCracken, 1989).

Consumer research has a long history of using personality traits to describe intangible characteristics of brand image (Keller and Lehmann, 2006). In 1884, Galton proposed the Big Five model using lexical hypothesis to describe personalities, which is the most well-known personality measurement theory in psychology. In 1993, Keller claimed that brand does not only characterize self-expression, but it is also the ability of self-expression. Based on this belief, another brand personality framework based on the original Big Five model was developed by Aaker (1997). Aaker’s (1997) model translated 42 characteristics into five single dimensions. The five dimensions of the model consist of: Sincerity (wholesome, honest, down-to-earth, etc.),
Of the five personality traits highlighted in Aaker’s (1997) model, the traits sincerity and excitement have attracted the most attention from the marketing landscape (Aaker, 2004). This is due to the fact that these two traits have been essential in capturing variance in the ratings of brand personality (Aaker 1997; Caprara, Barbaranelli, and Guido 2001), and comprise the fundamental principals in intimate personal associations (Fletcher et al. 1999). Examples of sincere brands include Ford, Coca-Cola and Hallmark, with brands such as MTV, Yahoo and Virgin being perceived as more exciting (Aaker et al. 2004). Research has shown that brands that differ in sincerity and excitement are perceived to be eminently different from one another (Aaker et al. 2004). This is due to the fact that the traits are inherently opposing in nature, which supports the finding that consumers have the tendency to develop strong, long-lasting and trusting relations with sincere brands, while having the tendency to build weaker and more short-term relations with exciting brands (Aaker, 1997; Aaker et al. 2004). For the interest of this thesis, focus will be placed on these two traits, as the highly contrasting consumer associations of sincerity and excitement will aid in capturing variance when investigating changes in brand personality.

2.3 SCHEMATIC PROCESSING

The underlying meaning of the terms ‘schema’ or ‘schemata’ may lack clarity due to the fact that the terms are used extensively in a wide variety of contexts and subject areas (Wagoner,
Within psychological literature, both terms are used frequently in conjunction with other terms, which may further add to the lack of clarity. It is essential that for the focus of this thesis that the frame be set for these terms. The origin of the term ‘schema’ dates back to Kant (1787), who proposed the concept that human experiences are compiled in one’s memory, and that these collections of experiences are defined by common elements that represent specific categories. In other words, a schema is a cluster of knowledge or information that describes the representative properties of a certain concept. This is possible through the use of a number of human senses that are used as modalities in creating cognitive structures (i.e. auditory, visual, olfactory, emotional and contextual experiences). This process illustrates the framework of how humans integrate information and encounter new experiences (Bartlett, 1932).

The concept of schemata has branched out to many areas of psychology, adopting different meanings within each respective area. With focus on personality, each variation and type of personality is defined by relative schemata. For instance, sincerity as a personality type is commonly associated with descriptors such as wholesome, honest and down-to-earth (Aaker, 1997). However, schemas are individualistic in the sense that each person develops their own schemas based on their own experiences. One person may define sincerity differently from another based on their own personal experience relative to the concept of sincerity. However, although variations in schemata exist, there are highly common associations such as how the act of smiling reflects the emotional state of being happy.

Personalities are defined by schemas, and the same phenomenon holds for brands. Brand schemas are built upon clusters of knowledge, information and experience generated through interaction with a brand. Extant research suggests that consumers’ memories tend to hold intricate and sophisticated schemas for familiar brands (Heckler and Childers, 1992; Kent and Allen, 1994;
Low and Lamb, 2000). As consumers become more familiar with a brand, it becomes easier to process information about the brand, and add multiple brand associations to their existing brand schemas. However, when a consumer interacts with an unfamiliar brand, it becomes more difficult for brand associations to be processed, as there is no existing schema in memory (Low and Lamb, 2000). Thus, when it comes to advertising, if consumers are exposed to an ad for an unfamiliar brand, they will be more likely to focus on execution elements in the ad than on the message and information being presented (Chattopadhyay, 1998).

2.3.1 Schema Congruity

In relation to the marketing literature, Mandler’s (1982) schema congruity hypothesis has been a popular area of exploration among researchers (Aggarwal and McGill 2007; Campbell and Goodstein 2001; Jhang et al. 2012; Maoz and Tybout 2002; Meyers-Levy, Louie, and Curren 1994; Meyers Levy and Tybout 1989; Noseworthy, Finlay, and Islam 2010; Noseworthy et al. 2011; Noseworthy and Trudel 2011; Noseworthy et al. 2014; Peracchio and Tybout 1996; Stayman et al. 1992). The Mandler hypothesis, which is also commonly referred to as the schema congruity effect or the moderate incongruity effect, posits that one’s evaluations of an object is influenced by the degree of congruity between an object and its associated schema (Cohen and Basu 1987; Fiske 1982; Mandler 1982; Meyers-Levy and Tybout 1989; Srull 1981; Sujan 1985). Meyers-Levy and Tybout 1989). The moderate incongruity effect is defined by the notion that an incongruent relationship can result in more positive evaluations than a congruent relationship, due to the fact that when processing objects, people find enjoyment in connecting links and resolving incongruences, prompting a sense of psychological arousal (Mandler, 1982). When a person is able to successfully resolve the incongruity between and object and its schema, it is referred to as accommodation (Mandler, 1982). This engagement in an act of
discovery causes physiological arousal, leading to more positive product evaluations. The correlation between arousal and affective judgment is based on an inverted-U relationship, such that positive affect derived from an incongruent relationship is only achievable when there is no fundamental shift in schematic expectation, which is caused by an extreme level of incongruity (Mandler, 1982). Extreme incongruity between an object and its associated schema can lead to negative evaluations, as individuals are unable to connect the links required to resolve the incongruity, and are therefore driven to dramatically alter their perceived schema of the object, or create an entirely new schema (Meyers Levy and Tybout 1989). When a person fails to make the connection and resolve the incongruity (i.e. when the level of incongruity is high), negative evaluations may arise due to the extreme level of physiological arousal (Meyers-Levy and Tybout 1989; Peracchio and Tybout 1996; Srull, Lichtenstein, and Rothbart 1985; Stayman et al. 1992).

Since its inception, the moderate incongruity effect has been replicated by many researchers, who have further identified numerous mediating factors such as perceived risk (Campbell and Goodstein 2001), prior category affect/processing goals (Goodstein 1993), taste (Stayman et al. 1992), dogmatism (Meyers-Levy and Tybout 1989), prior knowledge (Peracchio and Tybout 1996), involvement (Maoz and Tybout 2002), thematic processing (Noseworthy, Finlay, and Islam 2010), experiential processing (Noseworthy and Trudel 2011), gender (Noseworthy et al. 2011), and arousal (Noseworthy et al. 2014). In relation to the current research, as people seek consistency when processing schemas (Perrachio & Tybout, 1996), it is presumed that a familiar visual cue (i.e. A face), will prompt the cognitive process whereby a person attempts to find the link between the familiar stimuli (i.e. in which context it was last seen). However, if the person is unable to successfully connect the origin of the reappearing
face, is it assumed that no carryover effect will occur.

**2.3.2 Facial Memory**

An eye-movements study conducted by Althoff and Cohen (1999) found that eye-movements to familiar faces were statistically different to those to unfamiliar faces, suggesting a reprocessing effect of re-engaging with a familiar visual pattern. This finding reflects the cognitive process whereby people are motivated to connect links between common stimuli (Meyers-Levy and Tybout 1989). As the amount of exposures to a stimuli increases, so does the number of times that the stimuli has been processed and encoded, therefore expectations are created on a repetitive basis, and processing becomes automatic and unconscious. It can therefore be assumed that exposure to a familiar face will motivate an individual to reconcile where last they saw that face.

Over the past 30 years, research focusing on visual recognition of human faces has experienced enormous expansion (Bruce, 2009). The recognition of the human face depends on the pattern of the entire face, or in other words, the schema (Rakover and Cahlon, 2001). Humans have developed the ability to recognize and decipher between faces (Goffaux et al. 2009), and can remember up to 10,000 of them (Restak, 2006). It is argued that the human face is the strongest and most essential piece of information in identification (Aggarwal & McGill 2006), whereas other elements such as physique, gait and clothing are much less important in the recognition process (Bruce, 2009; Burton et al. 1999).

Social cognition research argues that one of the most important tasks humans are exposed to on a daily bases is making sense of other people, which includes interpreting people’s dialogue, behavior and motives (Rangel and Keller, 2011). While interacting, people tend to form judgements and attribute meaning to people in reference to their underlying essence
This describes psychological essentialism, which is defined as the tendency to ‘‘[ascribe] a fixed, underlying nature to members of a category, which is understood to determine their identity, explain their observable properties, render them functionally alike, and allow many inferences to be drawn about them’’ (Haslam et al. 2006 p. 64). Findings suggest that a link exists between essentialist beliefs and the tendency to assign stereotypical attributes to members of perceived social categories (Prentice and Miller, 2007). For example, one would be thinking essentialistically toward personality if they observed an aggressive person, and assumed that the person must therefore be high-energy as well. Personality theorists frequently discuss the concept of essence laterally to traits, as personality traits are described as deeply rooted and substantially fixed (Haslam et al. 2004).

2.4 CONTAGION

Contagion is a key component in the concept of sympathetic magic. The laws of sympathetic magic were proposed most clearly in the early work of Frazer (1890/1922/1959) and Mauss (1902/1972), and were conceptualized in order to address magical belief systems. There are two laws of sympathetic magic; Similarity and contagion. The law of similarity holds that “the image equals the object”, in that things that resemble each other will manifest one another and share fundamental properties (Frazer, 1922; Nemeroff and Rozin, 2000). Rozin, Millman and Nemeroff (1986) demonstrate this law in a study by presenting acceptable food in the shape of revolting objects such as dog feces, where the essence of the disgusting object leads to rejection of the generally admirable food items (Rozin et al. 1986). The second law of sympathetic magic, and of interest to this particular research, is contagion. The law of
contagion posits that “once in contact, always in contact” (Rozin et al. 1986). That is, when two things (i.e. People, objects, etc.) come into direct or indirect contact with one another, properties of one entity may be transferred to the other entity through their respective essence (Rozin and Nemeroff, 1990). This meaning transfer can be permanent, as the effect may remain even after the interaction has ended (Rozin et al. 1986). For example, a jersey worn by a famous professional athlete in gameplay may be worth more to a fan than an identical jersey that had not been worn by the athlete. This is due to the fact that the jersey has been contaminated by the player through contact with their body (i.e. Sweat), allowing their essence to manifest the jersey. This effect may be permanent, however, if the jersey were to be washed, it may be perceived that the essence of the athlete has been washed away and depleted.

In the marketing literature, the majority contamination research has focused on negative contamination, such that when contamination occurs, the perceived value of an object is diminished (Argo et al. 2006; Argo, Dahl, and Morales 2008; Morales and Fitzsimons 2007). A common theme among negative contamination research is the concept of disgust. Furthermore, it is believed that disgust has evolved specifically for the purpose of evoking the act of avoidance (Rozin, Haidt, & McCauley, 1993). This effect can transpire in response to either perceived or actual contact with the contaminating object (Argo et al. 2006). For example, one concept that has been explored is how dirty money can affect consumption behaviour (Di Muro & Noseworthy, 2013; Noseworthy & Galoni, 2014; Yang et al., 2013). Research conducted by Noseworthy and Galoni (2013) found that not only do consumers increase their spending with dirty money, but further demonstrates that this effect only prevails when the dirty money also lowers the consumer’s product evaluations. The authors conclude that product evaluations may be responsible for the motivation of increased spending, in contrast to the prior belief that
consumers merely want to rid themselves of the dirty money due to the avoidance factor related to disgust (Di Muro & Noseworthy, 2013; Noseworthy & Galoni, 2014; Rozin, Haidt, & McCauley, 1993). What is particularly interesting about this finding is that it infers contamination without perceived or actual contact. This associative form of contagion is what will be investigated in the current research.

For the purpose of this thesis, it is of interest to investigate the potential for contagion to transpire between a brand and a model. There are five possible models of contagion: A physical germ model, a physical residue model, a symbolic interaction model, an associative model, and a spiritual essence model (Rozin & Nemeroff, 2002). The form of contagion of interest in the current research is reflective of a nonphysical, associative model. An associative model of contagion posits that the key to the effect rests in the reminding value of an object (Rozin & Nemeroff, 2002). It is assumed that if a brand encompasses an established brand personality, and the unknown model only represents demographic meaning, then it is likely that the brand will act as the source, and transfer properties to the model (i.e. the target). This assumption is a reflection of Gwinner and Eaton’s (1991) findings that suggest it is possible for the meaning transfer model to change direction when the image of the brand is stronger than that of the source (human). Furthermore, as the effect of contagion maintains even after the interaction has ended, it is possible for a second round of contagion to occur between the same model and a second brand, where in this scenario, the model has previously been manifested with an essence, and may act as the source of property transfer.
2.5 OVERVIEW OF THE LITERATURE

The concepts and theories discussed above are all linked to one another. This link is represented by the human need for information. Schemas are the underlying structure of both human and brand personality, and schemas can influence one another through forms of meaning transfer and contamination. The instinctive motivation to ‘fill-in-the-blanks’ and assign meaning lies in the essentialistic nature of our psychological processes. In relation to advertising, brands are given the opportunity to create, maintain and manipulate the schemas held in the minds of consumers. Advertisement factors such as typography, colour schemes, product claims and source selection are all choices made by the advertiser that could have a significant impact on the perceived brand schema. This thesis is interested in the choice of human figures in advertisements, and more specifically, their ability to contaminate brands.

Exposure effects have received a considerable amount of attention in marketing research, presumably due to the fact that they relate to consumers' affective and evaluative responses to advertisements and brands (Obermiller, 1985). When consumers are exposed to an ad for an unfamiliar brand, they will be more likely to focus on execution elements in the ad than on the message and information being presented (Chattopadhyay, 1998). Furthermore, when exposed to unknown brands, consumers tend to rely solely on peripheral cues (Smith, 1993; Tripp et al. 1994). However, it is argued by most contributors that as interaction with a stimuli increases and more experience is gained, that the organizing mechanism of schemata will continually develop (Goldstein and Chance, 1980). This allows schema organization to transform from one central association to a wider range of associations. This suggests that by using a common element in an advertisement (i.e. a previously seen model), that it allows
more associations with the ad to be made, as the participant has previously interacted with the stimuli. Based on the relevant literature, the following assumptions are warranted: 1) Displaying the same model in two ads will yield a higher rate of model recollection than when participants are exposed to two different models, and 2) displaying the same model in two ads will yield a higher rate of ad content recollection than when participants are exposed to two different models.

A gap in the literature exists in that the potential for unknown figures to transfer meaning from one brand to another through contamination has not been investigated. What is known is; 1) human faces are one of the strongest human schemas (Aggarwal & McGill 2006), 2) people seek consistency when processing strong schemas (Perrachio & Tybout 1996) 3) the law of contagion posits that when two things come into direct or indirect contact with one another, properties of one entity may be transferred to the other entity through their respective essence (Rozin and Nemeroff, 1990), and that the effect may remain even after the interaction has ended (Rozin et al. 1986). It can therefore be presumed that when a person is exposed to a familiar face that they will be motivated to connect the link and reconcile where they previously saw the face. During this process, if the person’s memory is able to connect the face to its previous exposure, they will also be connecting the context of the previous exposure to the context of the current exposure, in which case, one brand will become susceptible to the contamination of another brand’s essence. Although theory suggests its potential, no known studies have investigated if unknown figures have the ability to be contaminated by appearing as the face of a brand’s advertisement. If a brand does in fact have the ability to contaminate a figure in an advertisement, it is unknown whether or not that model would be able to contaminate a second entity, such as another brand.
There are multiple reasons why investigating this research gap is important. Grant McCracken (1989) once argued that ‘anonymous’ models and actors offer demographic information such as age, gender and status, whereas celebrities offer precise and powerful meanings such as lifestyle and personality, which the ‘anonymous’ model cannot provide. If unknown figures do have the potential to transfer meaning beyond their demographic makeup, then advertisers may have the opportunity to manipulate brand schema through the use of unknown models and actors. In relation to Grant McCracken’s (1989) argument, this would suggest that although it may not be to the same caliber or precision, but that like celebrities, ‘anonymous’, unknown figures may in fact have the ability to offer meanings such as lifestyle and personality to a brand.

CHAPTER 3: STUDY

The purpose of this study is to investigate whether or not the presence of an unknown model in print advertisements has the ability to transfer meaning between two brands through contagion. This meaning transfer will comprise of two stages; Firstly, a strong brand will act as the source, and transfer meaning to the unknown model (the target), and secondly, in a second exposure, the same unknown model will then act as the source, and transfer meaning to a target brand. This sequence reflects a treatment condition, where in the control condition, advertisements will contain different models, and therefore no meaning transfer is expected to occur.
3.1 HYPOTHESIS

Hi: There will be a significant interaction between prior brand personality exposure and model exposure such that a fictitious brand will be perceived as more exciting (sincere) if associated with an unknown model that was previously affiliated with an exciting (sincere) brand.

3.2 METHODS

3.2.1 PARTICIPANTS AND DESIGN

Certification from the Research Ethics Board at The University of Guelph was attained on January 13th, 2016, which approves the ethical acceptability of research involving human participants (see Appendix A). Using G*Power 3.1, an a priori power analysis calculation was conducted. An a priori power analysis accounts for (a) sample size, (b) significance criteria (alpha level), and (c) population effect size in order to determine sample size. The calculation revealed that in order to obtain a medium effect (Cohen’s $f = .25$) and adequate statistical
power for social sciences ($\beta - 1 = .80$), that study one required the participation of 158 participants. A total of 216 participants (74 females, 35%) were recruited, with ages ranging from 18-55+ years old.

All participants were recruited through Reddit, in a subreddit group titled “Participants”, which is designed for people who want to participate in research or volunteer, and people who need participants for their projects or charities. Through Reddit, readers were invited to participate in the study through a link to a Qualtrics survey. The title of the study was “Consumer Opinions Survey: Print Advertisements”. In the study description, the participants were told that the purpose of the study was to investigate consumer attitudes and beliefs toward print advertisements. The vague nature of the study description was used in order to avoid any experimental demand characteristics. Experimental demand characteristics can be described as the potential for participants to generate ideas about the scope and purpose of the study before actually participating, which may ultimately influence their behaviour in order to fit those ideas (Staats, 1969). Upon opening the survey, participants were randomly assigned to a $3 \times 2$ (previous brand personality exposure: sincere vs. exciting vs. neutral) × (model exposure: previously seen vs. previously unseen) between-subjects design using a question randomizing function in Qualtrics (the online survey software).

3.2.2 STIMULI

A total of four advertisements were created for the study (see Figures 1 - 4, Appendix B; adapted from Sundar and Noseworthy, 2016). The first advertisement seen by participants was for the fictitious brand; BUNOP. The BUNOP brand was designed to act as a source of
contamination, and was manipulated to have either have a sincere personality, an exciting personality or a neutral personality. The advertisement created as the target for contamination (the second advertisement to be seen by participants) depicted the fictitious brand; VAZEN. The VAZEN advertisement was manipulated to have a neutral personality. Strong brands (those manipulated to have a personality) and weak brands (those manipulated to have a neutral personality) were chosen for the study because according to Gwinner and Eaton (1991), in order for meaning transfer to take place, the image of the brand must be stronger than the image of the source. For the purpose of this study, the unknown model will have a weaker image than that of the strong brand, but after being contaminated by the strong brand, it is assumed that in their second exposure, the unknown model will hold a stronger image than that of the weak brand, allowing the unknown model to then act as the source of contamination.

In order to operationalize an exciting personality, the fictitious brand BUNOP was depicted in an advertisement that included colours; red and green, a font; Jester, specific content; a picture of a person rock-climbing, and a tag line; “Because Life is Too Exciting to Let You Pass It By!” (Aaker, et al. 2004; Sundar and Noseworthy, 2016). In order to operationalize a sincere personality, the fictitious brand BUNOP was depicted in an advertisement that included colours; orange and yellow, a font; Comic Sans, specific content; a picture depicting a family picnic, and a tag line; “Because Life Is Too Meaningful to Let You Pass It By” (Aaker et al. 2004; Sundar and Noseworthy, 2016). When manipulating neutral personality, the BUNOP and VAZEN advertisements included non-exciting and non-sincere colours, neutral fonts, no accompanying pictures, and no tag line (Sundar and Noseworthy, 2016).
Excitement and sincerity are two personality types that have received increased attention in the marketing landscape. Excitement and sincerity capture the majority of variance in brands’ personality ratings (Aaker 1997; Caprara, Barbaranelli, and Guido 2001). Research has shown that brands that differ in sincerity and excitement are perceived to be eminently different from one another based on consumers’ global personality perceptions (Aaker et al. 2004; Sundar and Noseworthy, 2016). As such, consumers have the tendency to develop strong, loyal relationships with sincere brands, yet their relationships with exciting brands tend to be short-lived (Aaker et al. 2004). For the interest of this research study, focus will be placed on these two traits, as the highly contrasting consumer associations of sincerity and excitement will allow a more vivid effect to prevail when investigating variance in brand personality.

Two unknown models were placed in the brands’ advertisements. The images of the unknown models were downloaded from the stock photo company Photospin. Model #1 appeared in each manipulation of the BUNOP advertisements (exciting, sincere and neutral), and Model #2 also appeared in an additional series of each BUNOP manipulation (exciting, sincere and neutral). However, for the neutral manipulation of the VAZEN advertisement shown at a later point in the study, only Model #1 would be shown in the advertisement. The images of the models selected were comprised of middle-aged women, and both depicted frontal head-shots of smiling individuals making full eye-contact with the camera. Smiling models were selected in effort to minimize the differences in facial expressions.
3.2.3 PRETESTS

3.2.3.1 PRETEST ONE: MODEL SELECTION

A pretest was conducted using 55 participants (29 female, 26 male) from North America using Amazon’s Mechanical Turk (MTurk), in order to ensure that none of the chosen models were perceived as significantly exciting or sincere. It was essential that the models did not come pre-charged with personalities strong enough to influence the results of the study. Participants were exposed a series of four models, which appeared in a randomized order. After being exposed to an image of each model, participants were asked to rate the models on a validated brand personality scale for excitement and sincerity (Aaker et al. 2004). Participants were able to view each model while rating each of their personalities. Participants were asked to rate the degree to which each model reflected traits of sincerity (“sincere, wholesome, family-oriented”; 1 = not at all descriptive, 5 = extremely descriptive; $\alpha = .81$) and traits of excitement (“exciting, unique, trendy”; 1 = not at all descriptive, 5 = extremely descriptive; $\alpha = .92$). A total of 11 sincerity traits, and 11 exciting traits were used to measure the constructs; sincere and exciting, and all items appeared in a randomized order. Results of the pretest concluded that Model #3 was rated significantly exciting ($M = 3.42, SD = .76, p < .001$), as well as significantly sincere ($M = 3.3, SD = .80, p < .05$). Additionally, Model #4 was rated significantly exciting ($M = 3.55, SD = .83, p < .001$), and significantly sincere ($M = 3.43, SD = .79, p < .001$). The remaining two models were not rated as significantly exciting (Model #1: $M = 3.02, SD = .74, p = .836$, Model #2: $M = 3.02, SD = .72, p = .818$), or significantly sincere (Model #1: $M = 3.19, SD = .83, p = .157$, Model #2: $M = 3.13, SD = .80$, .80).
26

Based on the results of the study, Model #3 and Model #4 were discarded from the study, and Models #1 and #2 were included (see Appendix C).

### 3.2.3.2 PRETEST TWO: ADVERTISEMENT MANIPULATIONS

A second pretest using 124 participants (65 male, 59 female) from North America using Amazon’s Mechanical Turk (MTurk), was conducted to evaluate the success of the four advertisement manipulations. Using adapted methods inspired from Aaker et al. 2004, one brand; BUNOP, was manipulated to reflect an exciting personality, a sincere personality, and a neutral personality and a second brand; VAZEN, was manipulated to reflect neutral personality (Sundar and Noseworthy 2016).

Participants were randomly assigned to be exposed to one of the four advertisement manipulations, and were asked to rate the personality of each brand. Participants were able to view the advertisement while rating each brand. Participants were asked to rate the brands on the Aaker et al. (2004) validated brand personality scale for excitement and sincerity. Participants were asked to rate the degree to which each brand reflected traits of sincerity (“sincere, wholesome, family-oriented”; 1 = not at all descriptive, 5 = extremely descriptive; $\alpha = .81$) and traits of excitement (“exciting, unique, trendy”; 1 = not at all descriptive, 5 = extremely descriptive; $\alpha = .92$). A total of 11 sincerity traits, and 11 exciting traits were used to measure the constructs; sincere and exciting, and all items appeared in a randomized order.

The pretest concluded that the exciting brand manipulation was successful ($M = 3.46$, $SD = .75$, $p < .001$), and the sincere brand manipulation was also successful ($M = 3.39$, $SD = .73$, $p < .001$). Additionally, both neutral brand manipulations were successful, as they were
not significantly exciting or sincere; BUNOP: Excitement: $M = 2.89$, $SD = .9$, $p = .358$,
Sincerity: $M = 3.04$, $SD = .74$, $p = .677$, VAZEN: Excitement: $M = 2.98$, $SD = .97$, $p = .855$,
Sincerity: $M = 2.91$, $SD = .66$, $p = .540$.

3.2.4 PROCEDURES

The participants were able to complete the study online through the Qualtrics survey software. Upon opening the survey, participants were directed to a consent form, which they were required to identify that they had read, understood, and accepted prior to continuing with the study. Once consent to participate was given, participants were then directed to the beginning of the survey, which explained that they would be exposed to a series of advertisements, each followed by a short series of questions. Additionally, participants were advised that they would have access to the advertisement while completing the related questionnaire. Each participant was then randomly assigned to one of six conditions, and was exposed to a series of two advertisements, while rating the brand personality of each advertisement within each ad exposure. Note that in each of the six conditions, the participant would first see a manipulation of the BUNOP ad, complete a non-related task, and then be exposed by the neutral VAZEN ad, in which Model #1 would always appear. The non-related task used in the study was a word-fragmented completion task, whereby participants were asked to generate the names of cities when given the first three letters. After viewing both advertisements, participants then completed a demographics (i.e. age and gender) questionnaire, a free recall test on the models that appeared in the ads, and a cued recall test on the products seen in the ads. Once all participants completed the study, the participants were
thanked for their participation and were granted their respective course credit.

<table>
<thead>
<tr>
<th>Model Exposure</th>
<th>Previous Brand Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EXCITING MODEL #1</td>
</tr>
<tr>
<td></td>
<td>SINCERE MODEL #1</td>
</tr>
<tr>
<td></td>
<td>CONTROL MODEL #1</td>
</tr>
<tr>
<td>EXCITING</td>
<td>EXCITING MODEL #2</td>
</tr>
<tr>
<td>SINCERE</td>
<td>SINCERE MODEL #2</td>
</tr>
<tr>
<td>CONTROL</td>
<td>CONTROL MODEL #2</td>
</tr>
</tbody>
</table>

**Conditions:**

1. EXCITING AD MODEL #1 | FILLER TASK | NEUTRAL TARGET AD MODEL #1
2. EXCITING AD MODEL #2 | FILLER TASK | NEUTRAL TARGET AD MODEL #1
3. SINCERE AD MODEL #1  | FILLER TASK | NEUTRAL TARGET AD MODEL #1
4. SINCERE AD MODEL #2  | FILLER TASK | NEUTRAL TARGET AD MODEL #1
5. CONTROL: NEUTRAL AD MODEL #1 | FILLER TASK | NEUTRAL TARGET AD MODEL #1
6. CONTROL: NEUTRAL AD MODEL #2 | FILLER TASK | NEUTRAL TARGET AD MODEL #1

**3.2.5 MEASURES**

**Demographics**

Participants were asked to complete a questionnaire that was designed to identify the participants’ age and gender.
Model Recall

At the end of the survey, participants completed a free recall task which required them to identify which models had appeared in the advertisements. This was done by showing the participants a series of four different models in a randomized order, and having them select the models that they recalled seeing in the advertisements. Note that roughly half of the participants would have only seen one model, while the other half had seen a different model in each ad.

Model recall was collected for the purpose of a manipulation check of the model exposure condition. Cognitive processing research suggests that as interaction with a stimuli increases, and more experience is gained, that encoding and categorizing information will become quick and instinctive (Goldstein and Chance, 1980). This is supported by the finding that the processing of known faces is statistically different to that of unfamiliar faces (Althoff and Cohen, 1999). Based on relevant research, it is anticipated that displaying the same model in both ads will yield a higher model recollection than when participants are exposed to two different models. It is imperative that the model exposure manipulation is met, as the associative model of contagion posits that the key to the effect rests in the reminding value of an object (Rozin & Nemeroff, 2002). The reminding object in this particular study is the re-appearing model, therefore if the participant is unable to recall the object, it is presumed that the stage will not be set for contagion.

Recall of Ad Content

At the end of the survey, participants completed a cued recall task which required them to identify which type of products appeared in the ads. This was done by giving the participants the names of both brands in a randomized order, asking them to indicate which
type of product was advertised in the respective advertisements (i.e. board game or moisturizer).

Content recall was collected for the purpose of a secondary manipulation check of the model exposure condition. Based on cognitive processing research (Goldstein and Chance, 1980), which suggests that as interaction with a stimuli increases, schema organization is able to transform from one central association to a wider range of associations, it is anticipated that displaying the same model in both ads will yield a higher ad content recollection than when participants are exposed to a different model in each ad. This is because interacting with a known stimuli allows the process of encoding and categorizing information to be quick and instinctive, which in turn allows the participant to shift their focus to secondary items such as execution elements in the ad (i.e. brand name, product information, etc.) (Chattopadhyay, 1998). It is assumed that this manipulation check on model exposure will only be met if there is a significant effect of model exposure on model recall.

**Brand Personality**

Jennifer Aaker’s (1997) highly validated brand personality scales were used to measure the perceived level of sincerity and excitement of the fictitious brand. The two scales were originally constructed as a part of a larger set of 42 items. These items were proposed for the measurement of five brand personality dimensions; Excitement, ruggedness, sincerity, competence, and sophistication (Aaker, 1997). The motivation for Aaker’s (1997) creation of the scales was due to the fact that extensive research had been done in order to conceptualize human personality, but no parallel research had been done for the conceptualization of brand personality. The sincerity scale rates the degree to which the brand reflects traits of sincerity (“down-to-earth, family-oriented, small-town, honest, sincere, real, wholesome, original,
cheerful, sentimental, friendly”; anchored: 1 = not at all descriptive, 5 = extremely descriptive; $\alpha = .93$). The excitement scale has participants rate the degree to which the brand reflects exciting traits (“daring, trendy, exciting, spirited, cool, young, imaginative, unique, up-to-date, independent, contemporary”; anchored: 1 = not at all descriptive, 5 = extremely descriptive; $\alpha = .95$.) (Aaker, 1997).

### 3.3 DATA ANALYSIS & RESULTS

The data analysis software used to analyze the current research was Statistical Package for the Social Sciences (SPSS) version 23. Tests of moderation were completed by using a factorial Analysis of Variance (ANOVA). The critical assumptions of ANOVA include normality, homogeneity of variance, and independence of observations. The assumption of normality implies that experimental errors in each cell are normally distributed. One benefit of ANOVA is that the F-test is robust against Type I error. The Shapiro-Wilk test is used to test normality. This test detects whether the data is significantly different from a normal distribution. The homogeneity of variance assumption implies that experimental errors have a common variance across all conditions. This assumption can be tested by simply plotting the residuals against the treatment means. Furthermore, homogeneity of variances is tested by employing Levene’s Test of Equality of Error Variances for a variable calculated for two or more groups. The assumption of independence of observations implies that random experimental errors are assumed to be independent. The most effective way to ensure the independence assumption is through randomization, where by subjects are randomly assigned to treatment groups.

The assumption of independence of observations was ensured by randomly assigning participants to one of the six conditions through the Qualtrics survey software. Levene’s Test of
Equality of Error Variances suggests that the homogeneity of variances was met for exciting brand personality, $F(1,208) = .432, p = .826$, and was also met for sincere brand personality, $F(1,208) = .835, p = .526$. The assumption of normality was tested through the Shapiro-Wilk test, which concluded that for exciting brand personality, the data was normally distributed, $W(208) = .99, p = .09$. For sincere brand personality, the Shapiro-Wilk test concluded that the data was significantly different from a normal distribution, $W(208) = .98, p < .05$. The Q-Q plots and histograms support these findings, as points plotting sincere brand personality are fairly deviated from the line, and further, the histogram for sincere brand personality does not reflect normally distributed data (see Figures 5 – 7, Appendix D).

### 3.3.1 MANIPULATION CHECKS

#### 3.3.1.1 Model Exposure: Model Recall

When analyzing the results of the study, participants who failed to select either one, or two of the correct models were coded as “0”, participants who were partially correct (selected one of the right models, and one non-appearing model) were coded as “1”, and finally, participants who correctly selected either the sole appearing model, or two appearing models, were coded as “2”.

The mean score for model recall was ($n=201$) $M = 1.31, SD = .70$, with 28 participants recalling neither model (12.8%), 82 participants recalling one of the correct models (37.4%), and 91 participants correctly identifying both models that appeared in the advertisements (41.6%). It was predicted that displaying the same model in both ads would yield a higher
model recollection than when participants were exposed to two different models. Results confirm this assumption as participants who received the same model condition had a higher model recollection ($M = 1.56$) than participants who were exposed to two different models ($M = 1.01$; $F(1, 201) = 25.04$, $p < .001$). As predicted, model exposure had a main effect on model recall, confirming the success of the model exposure manipulation.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Means, Standard Deviations, and Cell Counts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Same Model</td>
</tr>
<tr>
<td>Model Recall</td>
<td>1.56 (.70)</td>
</tr>
<tr>
<td>Cell Size</td>
<td>97</td>
</tr>
</tbody>
</table>

### 3.3.1.2 Model Exposure: Content Recall

When analyzing the results of the study, participants who failed to correctly identify either of the correct corresponding product types advertised were coded as “0”, participants who were partially correct (correctly identified one of the product types) were coded as “1”, and finally, participants who correctly identified both of the corresponding product types with the brand names, were coded as “2”.

The mean score for content recall was ($n=200$) $M = 1.42$, $SD = .70$, with 24 participants incorrectly identifying both product types (11.0%), 68 participants identifying one of the correct products (31.1%), and 108 participants correctly identifying both product types advertised by the respective brands (49.3%). It was hypothesized that displaying the same model in both ads would yield a higher ad content recollection than when participants were
exposed to two different models. Results reveal that this prediction was not confirmed, as
participants who received the different model condition had a higher content recollection score
\((M = 1.60)\) than participants who were exposed to the same models \((M = 1.23; F(1, 200) =
14.79, p < .001)\). Therefore, model exposure did have a main effect on content recall, however,
the effect was the opposite of what was hypothesized.

| TABLE 2 |
|-----------------|-----------------|
|                 | Same Model      | Different Model |
| Ad Content Recall | 1.23 (.70)      | 1.60 (.65)      |
| Cell Size       | 96              | 104             |

3.3.1.3 Brand Personality

It is essential to analyze the success of the manipulations of the three brand personality
manipulations of the study. Note that both the sincerity brand personality scale and the
excitement brand personality scale ratings were anchored: 1 = not at all descriptive, 5 =
extremely descriptive (Aaker, 1997). Pairwise comparisons revealed that the manipulation of
excitement brand personality was successful, with participants perceiving the exciting brand
advertisement as more exciting \((M = 3.09)\) than the neutral advertisement \((M = 2.75; F(1, 216)
= 5.32, p < .05)\), and the sincere advertisement \((M = 2.57; F(1, 216) = 15.23, p < .001)\). Additionally, the sincere brand personality manipulation was also successful, with participants
perceiving the sincere brand advertisement as more sincere \((M = 3.34)\) than the neutral
advertisement \((M = 2.60; F(1, 216) = 39.80, p < .001)\), and the exciting advertisement \((M =

34
3.3.2 BRAND PERSONALITY

A 2 × 3 factorial ANOVA was conducted to determine the effects of model exposure (previously seen vs. previously unseen) and previous brand exposure (exciting vs. sincere vs. neutral) on brand personality. Note that sincerity and excitement were isolated from the overall rating of brand personality. In terms of exciting brand personality, the previous brand exposure × model exposure interaction was non-significant, $F(1,208) = .284$, $p = .753$. Additionally, in measuring sincere personality, the previous brand exposure × model exposure interaction was also non-significant, $F(1,208) = .715$, $p = .490$ (see Figures 9 & 10, Appendix E).

The independent variable ‘Model Exposure’ (if the models in the advertisements were different or the same) did not have a significant main effect on exciting brand personality ($F(1,208) = .019$, $p = .891$), or on sincere brand personality ($F(1,208) = .595$, $p = .441$).

Additionally, the independent variable ‘Previous Brand Exposure’ (exciting, sincere, or neutral) did not have a significant main effect on exciting brand personality ($F(1,208) = .625$, $p = .536$), or on sincere brand personality ($F(1,208) = 1.343$, $p = .263$). No other main effects were significant, however in the ‘Different Model’ condition, participants who were previously

<table>
<thead>
<tr>
<th>Neutral Brand Personality (Control)</th>
<th>Exciting Brand Personality</th>
<th>Sincere Brand Personality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exciting Brand Personality</td>
<td>2.75 (.89)</td>
<td>3.09 (.87)</td>
</tr>
<tr>
<td>Sincere Brand Personality</td>
<td>2.60 (.72)</td>
<td>2.80 (.69)</td>
</tr>
<tr>
<td>Cell Size</td>
<td>75</td>
<td>71</td>
</tr>
</tbody>
</table>

TABLE 3
Means, Standard Deviations, and Cell Counts
exposed to a neutral brand perceived the target brand as more sincere ($M = 3.23$) than participants who were previously exposed to a sincere brand ($M = 2.90$), however this effect was only nearly significant ($p = .051$).

### 3.3.3 DISCUSSION

Analysis of the study data revealed that the manipulations of brand personality (neutral, sincere and exciting) were successful, and the manipulation of model exposure was successful in analyzing model recall. The secondary manipulation check on model exposure, whereby ad content recollection was measured, did not confirm the anticipated results. A significant alternative finding was found, such that participants who received the “different” model exposure condition had greater ad content recollection ($M = 1.60$) than those who received the “same” model exposure condition ($M = 1.23; F(1, 200) = 14.79, p < .001$).

The purpose of the study was to determine whether or not the presence of an unknown model in print advertisements had the ability to transfer meaning between two brands through
contagion. The 2 × 3 ANOVA revealed that the 2-way interaction hypothesized for the study was not supported in measuring sincere brand personality, $F(1,208) = .715, p = .490$, or in measuring exciting brand personality, $F(1,208) = .284, p = .753$. A number of potential reasons exist to explain why the effect was not found. Factors including sample demographic, procedure limitations, stimuli limitations, etc., may have impacted the reliability of the data collected during this study. Potential limitations will be discussed in detail within the Limitations and Future Research section of this thesis.

CHAPTER 4: GENERAL DISCUSSION

4.1 LIMITATIONS AND FUTURE DIRECTIONS

The limitations of this study are related to the composition of the sample, study procedures, limitations of stimuli, measures of contagion, and theoretical stipulations. In this section, each of these limitations will be discussed, and direction for future work in this area will be suggested.

In relation to the composition of the sample, in order to test the hypotheses in study one, participants were recruited online, and consisted of 65% male, and a unequal distribution of age range (16% 18-24, 43% 25-34, 28% 35-44, 9% 45-54, 5% 55+). Due to time limitations and lack of availability, a more equally dispersed participant population could not be recruited, which may have hindered the ability to achieve an accurate representation of the population. It would therefore be of interest to investigate if the results of the study would differ if age groups and sex were equally included in the study samples. It must further be noted that the pretests
conducted for the studies used participants from Amazon’s Mechanical Turk. The samples
tained for the pretests were gathered from a different source than those of the main study. By
not using the same sample composition among both the pretests and the main study, it is
possible that results will differ, as manipulations may not hold across different sample types. It
is suggested that for future research, sample composition is not only reflective of the
population, but is also consistent across the pretests, manipulation checks, and main studies.

The procedures used to collect data present a second area of limitation. A limitation of
the procedure was that for the pretests, manipulation checks, and main studies, all participants
completed the Qualtrics surveys online. This did not give the researcher the ability to supervise
participants while completing the surveys. With the absence of a controlled environment, it is
unknown whether participants were multitasking while completing the surveys, and the ability
to control the time of survey completion was limited. This limitation leads to the possibility of
participants being distracted and not entirely focused on the task at hand. It is suggested that for
future research, data collection be executed in a controlled environment whereby the researcher
is able to effectively supervise the participants and their activity.

Several factors related to the stimuli used in the studies may have presented limitations to
the current research. As previously mentioned, by not using the same sample composition
among both the pretests and the studies, it is likely that results will differ, and manipulations
may not hold across different sample types. This assumption was confirmed as the
manipulation of exciting brand personality for the BUNOP advertisement was unsuccessful,
despite its success in the pretest. Although the excitement rating of the exciting advertisement
manipulation was greater than that of the neutral and sincere ad manipulations, the
operationalization of excitement was not achieved (Model #1: \( M = 3.1, SD = .92, p = .522, \)
Model #2: \( M = 3.07, SD = .83, p = .603 \), which may have impacted the results of the study. It is therefore suggested that in future research, the sample composition remain constant across the presents, manipulation checks and main studies.

Brand personality was the sole outcome variable used to test the hypothesis in the current research. This presents a limitation, as the mechanism, contagion, was only measured on one level. Results of the study may have differed if multiple measures were used. It is suggested that for future research, multiple measures are used when investigating contagion.

Although opposite of what was hypothesized, a significant effect was revealed through the second manipulation check on model exposure, whereby ad content recollection was measured. Participants who received the “different” model exposure condition had greater ad content recollection \( (M = 1.60) \) than those who received the “same” model exposure condition \( (M = 1.23; F(1, 200) = 14.79, p < .001) \). It was anticipated that the opposite effect would be found based on cognitive processing research (Goldstein and Chance, 1980), which suggests that as interaction with a stimuli increases, schema organization is able to transform from one central association to a wider range of associations. This is because interacting with a known stimuli allows the process of encoding and categorizing information to be quick and instinctive, which in turn allows the participant to shift their focus to secondary items such as execution elements in the ad (i.e. brand name, product information, etc.) (Chattopadhyay, 1998).

However, what remains unknown to this area of research is how such an effect emerges across repetitions, and what number of previous exposures to a stimuli (i.e. a face) are essential for the effect to transpire (Althoff and Cohen, 1999). As such, the main effect of model exposure on content recall in the current research suggests that a single previous exposure is not sufficient in allowing a wider range of associations to be made in schema organization. As this variable
(number of previous exposures) may have ultimately hindered the ability for contagion to transpire, it is suggested that future research in this area investigate the effect of previous exposures as a variant.

The final limitation of the current research to acknowledge pertains to the theory of contagion. There are five possible models of contagion: A physical germ model, a physical residue model, a symbolic interaction model, an associative model, and a spiritual essence model (Rozin & Nemeroff, 2002). The form of contagion of interest in the current research is reflective of a nonphysical, associative model. An associative model of contagion posits that the key to the effect rests in the reminding value of an object (Rozin & Nemeroff, 2002). Rozin and Nemeroff (2002) acknowledge the problematic nature of the associative model due to its inability to capture the properties of contagion. The most distinguishing factor of the associative model is the fact that it does not rely on physical contact. Rozin and Nemeroff (2002) state that reminding cues tend to be less salient, thereby association is less potent than contagion. As the current research is based on an associative model of contagion, the lack of potency in the model may have limited the ability to induce contagion. It is suggested that further research in this area explore a model that employs physical contact. For instance, a model appearing in an advertisement may be wearing or holding the product being advertised, as opposed to merely appearing in the brand’s advertisement.

**4.2 THEORETICAL CONTRIBUTIONS**

The theoretical structure for this thesis is based on the human need for information. The instinctive motivation to ‘fill-in-the-blanks’ and assign meaning lies in the essentialistic nature
of our psychological processes. Schemas are the underlying structure of both human and brand personality, and schemas can influence one another through forms of meaning transfer and contamination. In relation to advertising, brands are given the opportunity to create, maintain and manipulate the schemas held in the minds of consumers.

The hypothesis proposed for this thesis was not supported, thus, contribution is limited. Nonetheless, several valuable insights are able to be drawn. As most of the results of this thesis were not significant, inferences may be made on the strength of the associative model of contagion. The inability to induce contagion between brands may be due to the absence of physical contact between the source and the target. Therefore, the notion exists that the associative model of contagion may not have the strength to transfer essence indirectly across entities. In addition to employing the element of physical contact, it is suggested that future research investigate the ability of the associative model in direct contamination. The current research only measured indirect contagion, whereby a vehicle (model) was used to transfer meaning from one entity to another. In order to measure direct contagion, the target (model) should be tested for contagion before acting as the source in a second exposure. This would allow the researcher to investigate whether direct contagion was successful, as indirect contagion is not possible if the vehicle is not first successfully contaminated.

Another noteworthy insight to be drawn from the current research is the possibility that by having a model appear in multiple brands’ advertisements, contagion across brands is not significant. However, it is suggested that further research be conducted, and additional measures be used to measure contagion. The current research employed a novel study, using multi-categorical independent variables in a moderation model. The current research may serve as an example for future researchers who are interested in exploring similar or related concepts.
4.3 MANAGERIAL IMPLICATIONS

The results of this study contribute minimally to managerial implications in terms of the effectiveness and strategic abilities of using the same unknown model across multiple brands’ advertisements. Much research has been conducted on the use of celebrity figures in advertising, yet little research has investigated the use of non-famous figures. It comes as no surprise that the inclusion of a human figure in an advertisement has the ability to increase the viewer’s trust, and can add personalization to the brand (Ciarlo, 2011, pg.150). However, firms must take extra precaution when deciding who will appear as the face of their brand in advertisements (Rosengren, 2008). The current research investigates an emergent trend, whereby actors and models appear across multiple brands’ advertisements. Literature relating to the areas of schema theory, sympathetic magic and psychological essentialism support the notion that having a model or actor appear across multiple brands’ advertisements may lead to contamination between brands. It is suggested that further research be conducted in order to investigate the hypothesized effects of the current research. Future research may lead to findings that can provide implications to advertising agencies, marketing managers, talent agencies, etc. Such implications may support the creation of new strategies in advertising related to brand schema development.
REFERENCES


ACTRA. (2015).


A recent content analysis and trends over 15 years. *Sex roles, 18*(9-10), 595-609.


Dickson, P. R., Burnkrant, R. E., Miniard, P. W., & Unnava, H. R. (1986). If it isn't a Duck then why did it Quack? Competing Explanations for an Observed Effect of Illustrations in an Advertisement. *Advances in Consumer Research, 13*(1).


Fed. Trade Comm’n v. Garvey, 383 F.3d 891, 9th Cir, 2004 - 16 C.F.R. § 255.0(b) 2009.


Heckler, S. E., & Childers, T. L. (1992). The role of expectancy and relevancy in memory for


Kant, I. (1787) Critique of Pure Reason (second edition)


Media Matters. (February, 15, 2007). “Our Rising Ad Dosage: It’s Not as Oppressive as Some Think”.


Evaluations through Physical Contact with ‘Disgusting’ Products,” *Journal of Marketing Research*, 44 (May), 272–83.


Postrel, V. (2003). The substance of style: How the rise of aesthetic value is remaking culture,
commerce, and consciousness.


Wilson, E. (1998). *From Monica to O.J., Celebrity ‘Endorsers’ can be Risky Business*


Appendix A: Research Ethics Board Certificate

RESEARCH ETHICS BOARDS
Certification of Ethical Acceptability of Research
Involving Human Participants

APPROVAL PERIOD: January 13, 2016
EXPIRY DATE: January 13, 2017
REB: G
REB NUMBER: 15DC014
TYPE OF REVIEW: Delegated Type 1
PRINCIPAL INVESTIGATOR: Colwell, Scott (scolwell@uoguelph.ca)
DEPARTMENT: Marketing & Consumer Studies
SPONSOR(S): N/A
TITLE OF PROJECT: Do You Believe in Magic? Using Humans as Vehicles of Meaning Transfer

The members of the University of Guelph Research Ethics Board have examined the protocol which describes the participation of the human participants in the above-named research project and considers the procedures, as described by the applicant, to conform to the University’s ethical standards and the Tri-Council Policy Statement, 2nd Edition.

The REB requires that researchers:
- Adhere to the protocol as last reviewed and approved by the REB.
- Receive approval from the REB for any modifications before they can be implemented.
- Report any change in the source of funding.
- Report unexpected events or incidental findings to the REB as soon as possible with an indication of how these events affect, in the view of the Principal Investigator, the safety of the participants, and the continuation of the protocol.
- Are responsible for ascertaining and complying with all applicable legal and regulatory requirements with respect to consent and the protection of privacy of participants in the jurisdiction of the research project.

The Principal Investigator must:
- Ensure that the ethical guidelines and approvals of facilities or institutions involved in the research are obtained and filed with the REB prior to the initiation of any research protocols.
- Submit a Status Report to the REB upon completion of the project. If the research is a multi-year project, a status report must be submitted annually prior to the expiry date. Failure to submit an annual status report will lead to your study being suspended and potentially terminated.

The approval for this protocol terminates on the EXPIRY DATE, or the term of your appointment or employment at the University of Guelph whichever comes first.

Signature: Date: January 13, 2016

L. Kuczynski
Chair, Research Ethics Board-General
Appendix B: Study One Advertisements

Fig. 1: Exciting Advertisement Manipulation

BUNOP
The Board Game

Because Life is Too Exciting to Let You Pass It By!
Fig. 2: Sincere Advertisement Manipulation

BUNOP
The Board Game

Because Life Is Too Meaningful to Let You Pass It By
Fig. 3: Neutral Advertisement Manipulation

BUNOP

The Board Game
Fig. 4: Neutral Target Advertisement Manipulation

Vazen

100% Natural
Hydrating Formula
for all skin types
Appendix C: Models

Model #1

Model #2

Model #3

Model #4
Appendix D: Study One ANOVA Assumptions

Fig. 5 & 6: A histogram and Q-Q plot of exciting brand personality
Fig. 7 & 8: A histogram and Q-Q plot of sincere brand personality
Appendix E: Two-Way Interaction

Fig. 9 & 10: Interaction plot between model exposure and previous brand exposure on exciting brand personality (above) and on sincere brand personality (below)