8-2020

How YouTube Health Vloggers Influence Viewer Compliance: The Interplay between Vlogger Characteristics, Parasocial Interaction, and Viewer Characteristics

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HOW YOUTUBE HEALTH VLOGGERS INFLUENCE VIEWER COMPLIANCE: THE INTERPLAY BETWEEN VLOGGER CHARACTERISTICS, PARASOCIAL INTERACTION, AND VIEWER CHARACTERISTICS

A Dissertation

by

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Submitted to the Graduate College of
The University of Texas Rio Grande Valley
In partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2020

Major Subject: Business Administration

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ABSTRACT

Sakib, Md. Nazmus, How YouTube Health Vloggers Influence Viewer Compliance: The Interplay Between Vlogger Characteristics, Parasocial Interaction, and Viewer Characteristics. Doctor of Philosophy (Ph.D.), August 2020, 91 pp., 4 tables, 4 figures, references, 48 titles.

Drawing on the notion of parasocial interaction (PSI) theory (Horton and Wohl, 1956), this dissertation provides a framework to demonstrate how YouTube health vloggers can influence viewer compliance intention toward a prescribed health behavior (i.e., weight-loss diet to lose weight). Initially, drawing on the discounting principles of attribution theory (Kelly, 1973), physical attractiveness stereotype (Eagly et al., 1991), and the black sheep effect (Marques and Yzerbyt, 1988), the interaction effects of three vlogger characteristics on viewer PSI experience were conceptualized and examined (Study 1). Then by using a scenario-based experiment, viewer PSI experience with the vlogger was manipulated (high vs. low) and drawing on social comparison theory (Festinger, 1954), PSI's effect on the core dependent variable of this research, compliance intention was tested (Study 2). In the process, this research also accounted for the mediating role of viewer readiness (role clarity, ability, and motivation), the moderating and the mediated moderating role of viewer health consciousness through viewer readiness in the PSI – compliance intention relationship. Overall, results indicated the dominance of vloggers' credibility over the other two vlogger characteristics – physical attractiveness and ethnic similarity in engendering PSI experience with the viewers. While no main or interaction effects of vloggers' physical attractiveness and ethnic similarity were found in generating viewers' PSI

experience with vloggers. The positive influence of PSI on compliance intention was found both as a direct effect and also through the mediating role of viewer readiness. While viewer health consciousness is found to have no moderating influence in the PSI – compliance relationship both in the direct effect and also in the indirect effect mediated through viewer readiness. The findings and their implications are discussed.

DEDICATION

I dedicate this dissertation to my loving parents Md. Anwar Hossain and Mrs. Shahida Akter, and my elder sister, Fatema Zohora who wholeheartedly inspired, motivated, and supported me to reach where I am. Also, I am deeply thankful to my wife, Lamia Nowshin, who has been immensely patient, caring, and supportive to me throughout the process and has made countless sacrifices to bring out the best in me which ultimately led me to achieve a milestone that I never thought was possible.

ACKNOWLEDGEMENTS

At the outset, I would like to offer my sincere gratitude and appreciation to my chair Dr. Reto Felix, and former chair, Dr. Mohammadali Zolfagharian. Without their invaluable advice, constructive criticisms, commitment, and patient encouragement this dissertation could not have been completed. They have watched over me since my initial days in the Ph.D. program and have played a very important role in shaping me as a scholar. I could not have hoped for better mentors.

I would like to thank my dissertation committee members, Dr. Atefeh Yazdanparast and Dr. Deniz Atik, for contributing to my knowledge and for their insightful suggestions which I strongly believe have improved the quality of this dissertation significantly. I am also thankful to my professors at UTRGV for enlightening me with their vast knowledge and for extending my horizons in academia and research.

Finally, I was blessed to have my wonderful colleagues in the Marketing department as well as from the other departments of the College of Business at UTRGV. Some of the people I met in graduate school are now among my closest friends. Without their support, my journey of Ph.D. would not have been so much blissful.

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CHAPTER I

INTRODUCTION

Background

In the current era of digitalization, the internet has become the first source of consumer health information (Pluye et al., 2019). The 'free of cost' health information available on the internet which enables individuals to understand their health and make health related decisions for themselves and for their families has gained an unprecedented demand from the online users (Anderson and Kelmm, 2008). Anderson and Perrin (2016) found that, in 2015 about 90 percent of the population in the US was connected to the internet and the internet penetration rate is similar in most other the developed countries (e.g., Canada, 87 percent). Moreover, the use of information from the internet is not limited to younger people only; for instance, 47% of the Quebec population aged 55 and older regularly uses internet and this proportion is rapidly increasing (CEFRIO, 2011). According to Powell, Inglis, Ronnie and Large (2011), the most frequent activity on the internet after emailing is searching for 'health information'.

There are numerous studies in the literature which have focused on health information available on the internet platform on different topics primarily in terms of accessibility, information needs, quality of information, and retrieval; however, the number of researches that examine the outcomes of such available information have been few (Case and Given, 2016; Case and O'Connor, 2016; Urquhart and Turner, 2016). As such, from a broader perspective, this dissertation intends to contribute to this research gap. To be more specific, the current research focuses on a specific kind of health information available on the internet (i.e., YouTube health

videos) and examines its impact on a key outcome variable in healthcare, which is 'compliance'. Compliance in healthcare warrants investigation because many of today's major health as well as societal problems such as unhealthy diets, lack of physical exercise, and smoking exist because of people's noncompliance with healthy behaviors or poor healthcare choices (Dellande, Gilly, and Graham, 2004). However, people's compliance to prescribed medical regimens are terribly low. In general, the adherence rates are only 50% for prescribed medications. While, the long-term success rate for lifestyle change prescriptions such as losing weight or stop smoking are lower than 10% (Haynes, McDonald, and Garg, 2002).

Consumer compliance is defined as the extent to which consumers follow or adopt the rules, necessities or recommendations provided by user guides, frontline employees or service providers (Bowman, Heilman, and Seetharaman, 2004; Dellande, Gilly, and Graham, 2004; Hausman, 2004; Kasabov, and Warlow, 2010). Consumer compliance has been theoretically and empirically examined by many scholars in various contexts such as professional high-contact services (e.g., doctors, consultants and lawyers; Lin and Hsieh, 2011; Wosinska, 2005), consumer products (e.g., in the case of user guides and instruction manuals; Bowman et al., 2004), and B2B sales and consumer services contexts (e.g., conformity to the service provider's advice and instruction; 1998; Hausman, 2004; Joshi and Arnold, 1997). In healthcare, an important sector in professional services, compliance is a key issue since most well-established health regimens are useless if a patient chooses not to comply (Dracup and Meleis, 1982), because it results in negative consequences for the service provider (i.e., healthcare professional), the receiver (i.e., patient), and the economy (Bansilal et al., 2016; Cutler et al., 2018).

At a national level, the annual cost of non-compliance to healthcare regimens/medications ranges from U.S. $100 billion to $290 billion in the U.S. (Hubbard and

McNeill, 2014), € 1.25 billion in Europe (Svarcaite, 2014), and approximately AUD $7 billion in Australia (AIHW, 2016). Moreover, poor or no compliance with healthcare prescriptions is estimated to cause 125,000 premature deaths only in the U.S. (Gandhi, McCue, and Cole, 2016). At an individual level, patients' noncompliance to doctors' prescriptions can result in lower perceived effectiveness of the prescription, and consequently decreased satisfaction with healthcare services (Caldarola et al., 2017). Non-compliance to diet and medication is common among patients with heart failure, which exacerbates their symptoms, causing frequent hospitalization, and eventually death (Fitzgerald et al., 2011). Moreover, in the U.S., 10% of hospitalizations of older adults is attributed to non-compliance with medications, and a typical non-compliant patient requires three extra medical visits per year, leading to an increase of $2000 in medical costs per annum (Iuga and McGuire, 2014). As such, peoples' non-compliance to healthcare regimens and/or medications is a critical medical as well as economic problem.

According to social cognitive theory (Bandura, 1986), factors which determine consumers' level of compliance in general can be broadly divided into two categories – i) factors controlled by the firm or service provider, such as front line employees' behavior and clarity of instructions to customers and ii) factors that cannot be controlled by the firm or service provider, such as consumers' personality, individual characteristics, and temper (Bandura, 1977; Yim, Chan and Lam, 2012). Since in the second category, the service providers cannot control the factors of consumer compliance, there will always be cases where consumers will not comply with the instructions of the service provider due to those factors (Dellande et al., 2004). In healthcare, instructions/recommendations provided directly by the health service providers are found to be the most effective factors for patient compliance (Bowman, Heilman and Seetharaman, 2002; Jayanti and Burns, 1998). However, health service providers' control over

their patients' compliance is being hindered due to the transactional (at arm's length) nature of service provider-consumer relationships and limitations caused by consumer privacy laws and other regulations (Wosinska, 2005). As such, it has become crucial for health service professionals and researchers to identify innovative as well as effective ways to gain consumers' compliance especially in situations which are beyond service providers' control (Boiso, Graffigna, and Scaratti, 2012; Graffigna et al., 2014; Foreyt and Poston, 1998), and identifying approaches to effectively reach, communicate, and educate consumers is important for both consumer welfare and healthcare industries.

Prior research in online health services have focused on different website and social networking site based health interventions in promoting positive changes related to general health behaviors (Bennett and Glasgow, 2009; Korda and Itani, 2013; Portnoy et al., 2008; Wantland et al., 2004;) or specific health-related issues such as reducing alcohol consumption (Chiauzzi, et al., 2005), smoking cessation (Brendryen and Kraft, 2008; Strecher, Shiffman, and West 2005), and promoting physical exercise/weight loss (McConnon et al., 2007; Williams et al., 2014). While, recent research in this area have investigated other relevant factors such as people's pattern of activities in social media platforms related to health information purposes (Benetoli, Chen, and Aslani, 2017), expert vs. common users' knowledge sharing motivations in online health communities (Zhang et al., 2017), people's trust issues toward the health information available in online health communities (Daraz et al., 2019; Fan and Lederman, 2018), and how people evaluate those health information (Walther, Jang, and Hanna Edwards, 2018). However, as indicated earlier, research examining the outcomes of such available health information in online as well as social media platforms from the consumers' viewpoint are scant in the literature (Case and Given, 2016; Case and O'Connor, 2016; Urquhart and Turner, 2016).

Therefore, in this dissertation, I focus on online social media-based health interventions to investigate their potential in getting consumers comply with the prescribed health behaviors. Research analyzing the effectiveness of online social media-based health interventions is important because as indicated earlier, the Internet has become the main source of health information among today's digital consumers (Korda and Itani, 2013; Pluye et al., 2019). Besides, consumers' reliance on the Internet as a health support has surged even more with the emergence of social media, and more specifically, the interactive communication features of Web 2.0 (Eysenbach, 2008). Social media has led physicians/experts to create health-related content (e.g., audio, graphic, text, or video) and share them through blogs, social networking sites, and video sharing sites such as YouTube, and patients can access experts' healthcare guidance, compare health care options, and evaluate their outcomes (Sarasohn-Kahn, 2008). Thus, social media-based health interventions have the potential to reach consumers with guidance and instructions directly from health experts, while overcoming the traditional barriers of doctor-patient relationships (i.e., availability at arm's length and consumer privacy).

The present research focuses on a specific social medium, namely YouTube, to explore pertinent factors that may influence consumers' compliance intention with healthy behaviors (e.g., weight-loss diets). I chose YouTube as the context of this study since this medium is gaining rapid popularity in health communications among online health service providers (Bennett, 2011; Van de Belt et al., 2012). YouTube is distinct from traditional communication media such as television, because the interactions in between the spokesperson with his/her viewers in YouTube go beyond traditional one-way opinion sharing, and the viewers can socialize with the spokesperson via subscribing, commenting, liking, and/or sharing his/her videos (Fernandez-Luque, Karlsen, and Melton, 2012).Furthermore, the spokesperson can also

send his/her reply or comments back to any specific viewer (Rasmussen, 2018). Weight-loss health videos are targeted in this research because in the U.S., obesity is accountable for much greater unhealthiness than any other condition, including smoking, drinking, or poverty (GBD 2015 Obesity Collaborators, 2017).

According to Salmon and Atkin (2003), spokespersons' characteristics have a powerful influence on viewer evaluation of persuasive health messages. Phua (2016) suggests that by taking viewers' expectations about source characteristics into consideration when designing public health campaigns, health organizations can engender greater compliance with health messages and positive behavioral change for health issues. Therefore, in this dissertation, I focus on the characteristics of YouTube health vloggers to explore their impact on consumer compliance intention to follow healthy weight-loss diets. After reviewing relevant literature in advertising and communication, three key source characteristics have been identified that appear to have significant influences on consumer persuasion and behavioral intentions: the sources' credibility, similarity with the audience, and physical attractiveness (Eagly and Chaiken, 1975; Eyal and Rubin, 2003; Hovland and Weiss, 1951; McCroskey and Teven, 1999). In regard to similarity, research indicate that, persuasive messages are more effective and more easily accepted when viewers perceive the spokesperson's personality and/or physical characteristics to be more congruent with their own (Dutta-Bergman, 2003; Hu and Sundar, 2010). To incorporate the source similarity effect, in this dissertation, I have manipulated vloggers' 'ethnic similarity' with the audience along with vloggers' physical attractiveness and credibility; while I controlled for the effect of vloggers' 'attitude similarity' with the audience.

Theoretical foundation of this dissertation is fundamentally based on parasocial interaction (PSI) theory (Horton and Wohl, 1956). PSI explains the development of viewer

relationships with media characters in platforms such as television, radio, and online. PSI is described as an illusionary experience, such that viewers feel as if they are directly interacting with the mediated personas (e.g., media presenters, celebrities). Viewers experiencing PSI believe that they are engaged in a direct two-way conversation, feeling as though a mediated character is talking directly to him or her (Houlberg, 1984; Levy, 1979; Rubin, Perse, and Powell, 1985). PSI relationships can develop to the point where consumers begin to view mediated others as "real friends" (Stern, Russell, and Russell 2007). Drawing on PSI, in this dissertation, I propose and demonstrate a psychological process on how consumer compliance intention can be influenced through the viewer's experience of PSI with the vlogger; which is ultimately contingent upon viewers' perception of the characteristics of the vlogger. To accomplish this goal, I incorporated two studies in this dissertation. In Study 1, I examined the interaction effects of three manipulated vlogger characteristics on viewer experience of PSI with the vlogger (see Figure 1). Then in Study 2, I manipulated the construct PSI itself and examined the effects of high vs. low PSI on viewer compliance intention to follow a prescribed weight-loss diet by the vlogger. In addition, Study 2 also examined for the mediating role of viewer readiness and for the moderating role of viewer health consciousness in the PSI – compliance intention relationship (see Figure 2).

Figure 1: Interaction effects of three vlogger characteristics on parasocial interaction (PSI) (Study 1)

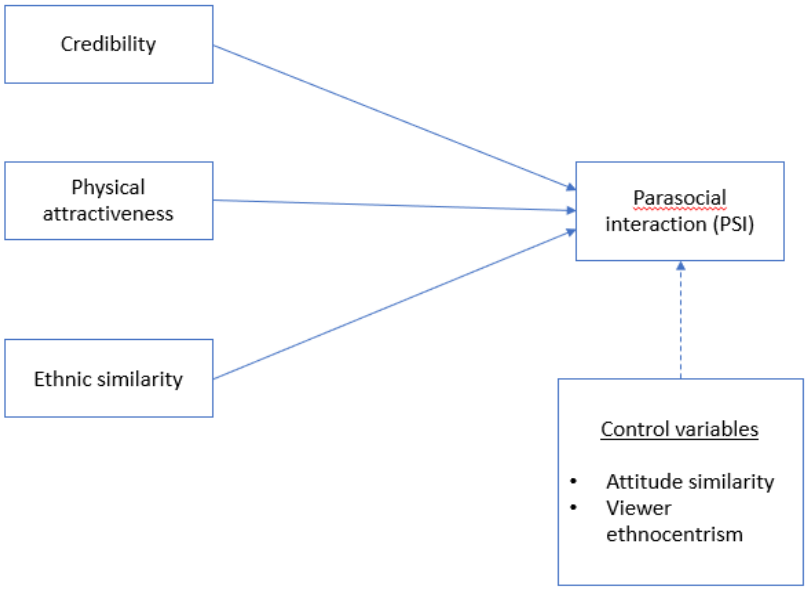
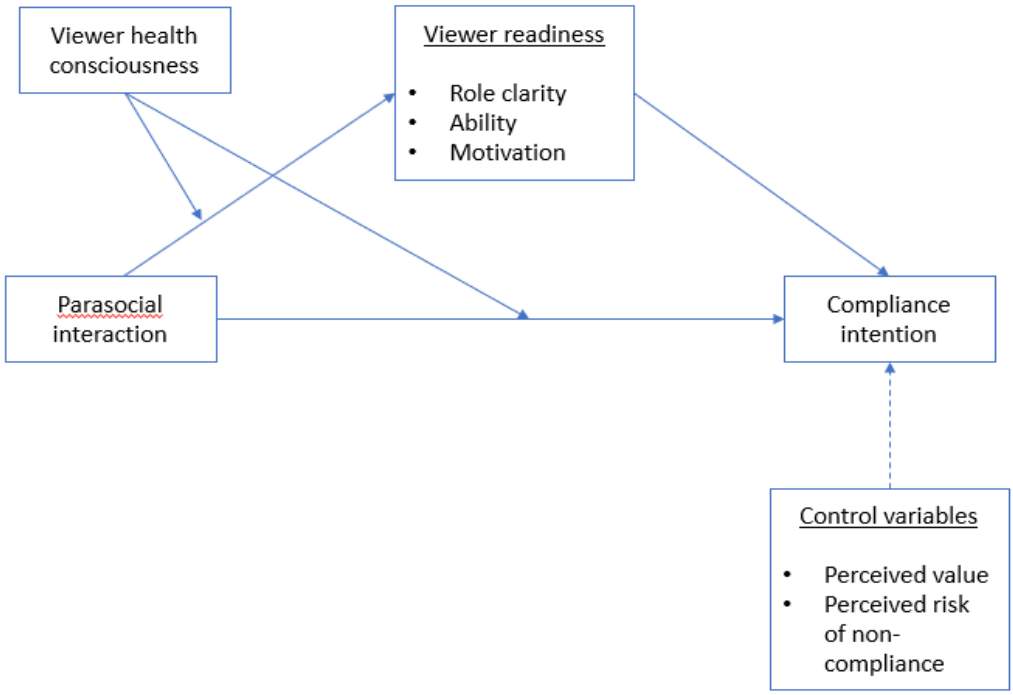


Figure 2: Influence of PSI, viewer readiness, and viewer health consciousness on compliance intention (Study 2)



Contributions of this Dissertation

This dissertation primarily contributes to healthcare marketing, especially in relation to social media-based health interventions, by providing theory driven mechanisms to investigate the effectiveness of YouTube health vlogs in gaining consumer compliance intention to adopt healthy behaviors (e.g., weight-loss diet). Thus, this research responds to the call made by Korda and Itani (2013) and Pluye et al., (2019) to develop theory driven and outcome-oriented health promotion programs in online social media platforms for successful health improvements and behavior changes.

First, drawing on the notion of parasocial interaction theory (PSI) (Horton and Wohl, 1956), this dissertation establishes viewer experience of parasocial interaction (PSI) with vloggers as the key explanatory factor via which a health vlogger can influence viewer compliance intention to follow a recommended health behavior. Here PSI explains the closeness and familiarity that the viewers feel with a vlogger via a seemingly interpersonal relationship developed through watching the videos (Brown and Basil, 2010; Lee and Watkins, 2016).

Second, Study 1 focuses on the three source/vlogger characteristics: credibility, physical attractiveness, and similarity – which are already established as the antecedents of PSI in the literature. However, this study extends the prior knowledge in this area by examining the interaction effects of these three vlogger characteristics on PSI. As such, this study examines whether one of the three source characteristics can compensate for the other, or if two, or if all the three source characteristics need to co-exist for viewer PSI experience to take place. The proposed interaction hypotheses of this study were formulated by drawing insights from the discounting principles of attribution theory (Kelly, 1973), physical attractiveness stereotype (Eagly et al., 1991), and the black sheep effect (Marques and Yzerbyt, 1988).

Third, to demonstrate the causal effect of PSI on viewer compliance intention, Study 2 employed a scenario-based experimental design to manipulate viewer PSI experience at two levels (high vs. low PSI). Drawing on social comparison theory (Festinger, 1954), I examine its effects on viewer compliance intention to follow a weight-loss diet suggested by the vlogger. Here, social comparison theory explains how the viewers feel motivated to follow the vlogger in their behavioral decisions (i.e., adopting weight-loss diet) by engaging in upward comparison with him/her (i.e., accepting the vlogger as a role model) (Festinger, 1954).

Fourth, in Study 2, along with examining the direct effect of PSI on viewer compliance intention, I tested for the mediating role of viewer readiness in the PSI-compliance intention relationship. Viewer readiness is a multidimensional construct which consists of role clarity, ability, and motivation (Meuter et al., 2005). While prior research has recognized the role of consumers' ability to follow behaviors prescribed by doctors to bring positive health outcomes or behavioral changes (Johnson et al., 2003; Rasmussen and Ewoldsen, 2016), the current study introduces viewer readiness as a mediator of the PSI-compliance intention relationship and thus extends prior literature by also accounting for the roles of consumer (i.e., viewer) role clarity and motivation in the health vlogger – viewer context.

Fifth, in Study 2, by including viewer health consciousness as a moderator of the PSI-compliance intention relationship, this study examines whether PSI influences viewers' compliance intention to follow healthy behaviors irrespective of their level of health consciousness. Thus, along with the source characteristics discussed above, this research also accounted for viewer characteristics (i.e., viewer readiness and health consciousness) in the process of influencing viewer compliance intention.

Finally, this dissertation offers valuable insights for managers including health service providers (e.g., physicians, nutritionists), public health organizations, and consumer welfare activists, who are interested in leveraging upon social media-based health interventions to deliver persuasive health messages and promoting positive health behaviors. By extending the focus on vlogger characteristics and individual and situational factors that impact consumer compliance intention, this research will guide managers on which characteristics of a vlogger to focus when selecting them, and under which conditions consumers will be more likely to comply.

In the forthcoming chapters of this dissertation, I have discussed the relevant literatures in relation to the focal constructs of this study (e.g., source characteristics and parasocial interaction), defined the main concepts, and presented the proposed conceptual framework (chapter two). Subsequently, chapter three and chapter four describes the methodologies and procedures of Study 1 and Study 2 respectively followed by the analysis of the results and discussions. I concluded this dissertation with a general discussion based on the findings of the two studies of this research, provided several managerial as well as social implications, discussed the limitations of this research, and contributed to the future research (chapter five).

CHAPTER II

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

This chapter 1) provides a background summary of the roles that social media play in health care with help of different social media based health interventions; 2) discusses pertinent literatures highlighting the significance of credibility, similarity, and physical attractiveness as source (i.e., vlogger) characteristics in consumer persuasion; 3) conceptualizes the interaction effects of source credibility, ethnic similarity, and physical attractiveness in generating viewer feeling of PSI with the vlogger; 4) discloses how viewer PSI experience with vloggers influence their compliance intention to follow health behaviors (e.g., weight-loss diet) prescribed by the vlogger along with the mediating role of viewer readiness and the moderating role of viewer health consciousness in the process; and 5) discusses the associated control variables of PSI and compliance intention which have potentials to provide alternative explanations against the hypothesized relationships.

Social Media and Healthcare

Social media have started to change the traditional touchpoints of doctor-patient relationships. In healthcare, social media enable information sharing and communication among consumers and health service providers (e.g., physicians and health organizations) about symptoms and treatment issues. In other words, they enhance consumers' overall knowledge regarding specific health problems which ultimately influence patients' outcome and consumer health behaviors (Bodenheimer, Lorig, Holman and Grumbach, 2002; Lau et al., 2013; Sarasohn-

Kahn, 2008; Webb, Joseph, Yardley and Mitchie, 2010). Moreover, users may benefit from receiving social support and motivation through social media (Dahl et al., 2016). Deloitte's 2010 survey on consumer healthcare indicates that, older consumers (e.g., seniors, baby boomers, Generation X-ers) and those with chronic health conditions are more likely to participate in online wellness programs in social media, while younger generations are more likely to engage in online social networks and blogs regardless of health conditions (Chou et al., 2009). As increasing number of health consumers are using social media to search for health information (Fox, 2011), traditional health communicators such as Mayo Clinic, NHS Choices, and PubMed, have begun to use social media platforms (e.g., Facebook and YouTube) to connect with their target consumers as well as spreading health contents (Lau et al., 2013).

Research focusing on the impact of social media on consumers' health-related knowledge, behavior, and outcomes shows that social media-based health interventions can be effective (Korda and Itani, 2013; Maher et al., 2014; Webb et al., 2010). Such interventions gained rapid popularity as they offer easy and cost-effective access to large numbers of consumers across geographic locations (Korda and Itani, 2013). For instance, delivering weight loss interventions via social media can help minimizing obstacles such as cost, time to deliver materials and access to hard-to-reach populations (Dahl et al., 2016). Besides, consumers seek support and accountability through their social networks (Pagoto et al., 2014) which can substitute for health-oriented group sessions, one-to-one counseling and other kind of health interventions (Davies et al., 2012; Hales, Davidson and Turner-McGrievy, 2014; Harvey-Berino et al., 2010). Social media platforms including Facebook (Merchant et al., 2014; Napolitano et al., 2012), Twitter (Turner-McGrievy, and Tate, 2011, 2013), and online support communities (Hwang et al., 2010) have been used to provide social support during weight loss interventions.

Furthermore, social media provide direct access to health service providers via chat or online text messages, which encourages interaction, increases involvement with health interventions, and challenges dysfunctional beliefs regarding the promoted behavioral changes (Webb et al., 2010). Moreover, receiving tailored prompts through regular contact with the counselor/health service provider compared to a lack of personal contact results in positive health outcomes in individuals (Fry and Neff 2009).

Overall, prior research has focused on social networking sites (e.g., Facebook, Twitter), blogs, online forums and videos (Dahl et al., 2016; Hawn, 2009; Korda and Itani, 2013; Maher et al., 2014; Moorhead et al., 2013; Pereira et al., 2016; Sarasohn-Kahn, 2008; Webb et al., 2010) in the healthcare context from a general perspective (i.e., knowledge benefits and empowering outcomes of social media). However, social media, like traditional health promotional media, require careful application and may not always achieve their desired outcomes (Korda and Itani, 2013). For instance, the inexpensive and broad reach nature of social media contents can quickly become information overload. Moreover, research indicate that, an oversupply of information burdens consumers' cognitive processing, thereby causing psychological anxiety and tension, a reduced attention span, difficulties in memorizing and remembering, and suboptimal decision making (Bone 2008; Lee and Cho 2005). Therefore, researchers have emphasized the role of developing theory driven health interventions (Evers et al., 2003; Korda and Itani, 2013; Webb et al., 2010) to measure the effectiveness of various forms of social media and thus to improve their odds of success. However, research conducted to evaluate different social network platforms in relation to health promotion and education is still emerging (Korda & Itani, 2013; Lau et al., 2013). Moreover, no extant research has identified the factors (situational and individual) that impact consumer compliance with health behaviors in social media-based health interventions.

As such, the limited understanding in this area has continued to confound a better understanding of the true potential of social media in promoting health.

Drawing on Parasocial Interaction (PSI) (Horton and Wohl, 1956) and three key source characteristics, the current dissertation addresses this research gap and offers two theoretical conceptualizations to examine the relative importance of three source characteristics: credibility, ethnic similarity, and physical attractiveness on viewer PSI experience with a vlogger (Study 1). Further, Study 2 suggests a detailed psychological mechanism (including viewer and situational factors) to examine how the viewer PSI experience with a vlogger influences viewer compliance intention toward a prescribed health behavior suggested by the vlogger.

YouTube is chosen as the context of this study since this medium has surpassed the boundaries of traditional communication media (e.g., television). That is, the interactions in YouTube between a spokesperson with his/her viewers go beyond the traditional one-way opinion sharing, and the viewers can actually engage in a two-way communication and socialize with the spokesperson via subscribing, commenting, liking, and/or sharing his/her videos. In healthcare, this medium is gaining rapid popularity among American and European healthcare providers not only as an effective tool for health education, but also as an instrument to socialize with their viewers to build trust (Bennett, 2011; Van de Belt et al., 2012). Moreover, this study focuses on weight loss videos on YouTube because obesity has become a more important health problem worldwide as compared to many other acute health or social problems such as smoking, drinking, or even poverty (GBD 2015 Obesity Collaborators, 2017). Further, weight loss is a commonly discussed health topic across different social media (e.g., Cavallo et al., 2014; Hales et al., 2014; Hwang et al., 2010; Merchant et al., 2014; Napolitano et al., 2012) in terms of health interventions. Compliance intention is targeted as the core outcome of this study since

extant knowledge lacks a comprehensive understanding of the factors (situational and individual) which influence the impact of social media-based health interventions from the compliance perspective, which is crucial to enhance the effectiveness of any health interventions (Dracup and Meleis, 1982).

Source Characteristics

Characteristics of information sources can influence the persuasiveness and impact of delivered communications on the receiver. The credibility of a source plays an important role in this process where celebrities and experts are commonly used to enhance message credibility following a source credibility model (which includes expertise and trustworthiness as it's dimensions) dating back to Hovaland and Weiss (1951). Apart from credibility, physical attractiveness is another key characteristic of a source where a physically attractive communicator is expected to be more persuasive than a communicator who is physically unattractive (Mills and Aronson, 1965). Moreover, a physically attractive communicator is also typically perceived to have other socially desirable characteristics (e.g., social competence, intelligence, or likeableness), which is also popularly known as the ''what-is-beautiful-is-good'' stereotype (Berscheid and Walster, 1974; Dion, Berscheid, and Walster, 1972). In addition, perceived similarity with a communicator also plays a critical role in persuasive communication (Berscheid 1966; Churchill, Collins, and Strang 1975; Gino, Shang, and Croson 2009) where the receiver of the message feels positive about a similar source primarily due to their correlated preferences (Hovaland et al., 1953) and mere similarities between themselves (e.g., ethnicity, education, or background) (Byrne, 1969).

Lastly, there is convergence among early learning theory paradigms that a communicator's influence is a function of his or her source characteristics, including credibility,

physical attractiveness, attractiveness, and perceived similarity between the communicator source and the audience (Kruglanski, 2005). Therefore, in this dissertation, I focus on these three key source characteristics to examine their influence on viewer PSI experience with the vlogger and ultimately the influence of PSI on viewer consumer compliance intention to follow a prescribed health behavior.

Credibility:

Credibility of a source refers to how believable a source of information is perceived to be (Alison et al., 2012). Credibility is usually measured in terms of a source's trustworthiness and expertise (Lombardi, Seyranian, and Synatra, 2014; Pornpitakpan, 2004). Trustworthiness accounts for a source's honesty, while expertise measures the source's knowledge and ability to provide accurate information. However, previous research (e.g., McCroskey and Teven, 1999) has added goodwill (caring) as the third dimension of credibility which influences social persuasion and attitude change

Credibility has been identified as a positive characteristic of a speaker (source) that influences the audiences' acceptance of persuasive messages in advertisements (Hovland and Weiss, 1951; McCroskey and Teven, 1999). In healthcare, research has linked credibility with the effectiveness of persuasive communication related to changing health related behaviors such as HIV/AIDs prevention (Major and Coleman, 2012), anti-smoking addiction (Byrne et al., 2012), obesity prevention (Berry and Shields, 2013; Jones et al., 2003; Kozak et al., 2013), online health information search (Dutta-Bergman, 2003; Hu and Sundar, 2010; Spence et al., 2013), and online social support (Wright and Rains, 2013). Kelman (1961) affirmed that, an expert's opinion is more credible and reliable than the opinion of non-experts. In general, people

tend to agree more with an expert and are more likely to change their behaviors following an expert's opinion compared to a non-expert (Eyal and Rubin, 2003).

Homophily/ Similarity:

Homophily is defined as "the degree to which people who interact are similar in ethnicity, beliefs, education, social status, and the like" (Rogers and Bhowmik, 1970, p.526). Individuals are also considered as 'homophilous' when they hold similar attitudes (Byrne, Baskett, and Hodges, 1971; Conzales, et al., 1983; Sunnafrank, 1983). Based on the fundamental principle of interpersonal communication in social psychology, the exchange of messages most frequently takes place between a source and a receiver who are alike, similar, and homophilous (Rogers and Bhowmik, 1970) because interpersonal attraction and friendship are easily developed among them (Berscheid, Snyder, and Omoto, 1989; Byrne,Clore, and Smeaton, 1986).

When a greater degree of similarity prevails between the members of a communication (e.g., between a doctor and his patient), they are more likely to decode the common meanings of the messages they exchange (Rogers et al., 1970). Gotileb and Sarel (1992) posit that when a listener finds a source to be like him/her, he/she is more likely to listen attentively to the source. Also, the sense of familiarity resulting from the perceived similarity between the interacting entities can impact the strength of the source's influence on the audience (Byrne et al., 1986; Hays, 1985; Kelman, 1961; Lascu and Zinkhan, 1999). In technology-mediated communications (e.g., television, online), the more the viewers perceive similarities between them and a media personality, the higher is the likelihood that they will develop more positive attitudes toward the message (Kahle and Homer, 1985; Kamins, 1990) and the more likely it is that viewers continue their interactions (Byrne, 1961; Kendall and Yum, 1984; Prisbell and Andersen, 1980; Turner,

1993). Moreover, research has identified ‘similarity’ as an antecedent to increased identification with a television character (Eyal and Rubin, 2003; Turner, 1993).

Among many dimensions of similarity, prior research specifically indicates that, viewers exhibited more favorable attitude toward a model or spokesperson who shared their own ethnic background (Jeong, Cho, Lee, and Sputra 2014). Moreover, they also perceived the model or spokesperson with their ethnic background to be more similar to themselves and more credible (Martin, Lee, and Feng 2004). On the other hand, a media personality’s attitude similarity with the audience has found to be a significant predictor of PSI (Lee and Watkins, 2016; Turner, 1993). Rubin and McHugh (1987) found that, media personalities who are socially attractive as social or work partners, provided better context for PSI. Thus, to capture the source similarity effect, in this study, I manipulated vlogger’s ethnic similarity with viewers to examine its impact on viewer PSI experience, while controlling for the effect of vloggers’ attitude similarity with viewers as a covariate of PSI.

Physical Attractiveness:

People instinctively form a favorable first impression of attractive/likable individuals during their initial encounters, while the first impressions developed during interactions with unattractive/unlikable individuals are generally unfavorable and negative (Fiske and Neuberg, 1990). According to a meta-analysis conducted by Eagly et al., (1991), physically attractive people are in general viewed more favorably on a variety of personality traits such as social competence, intellectual competence, concern for others, and integrity, as compared to their less attractive counterparts. Social psychological research also provides strong evidence for the existence of a pervasive physical attractiveness stereotype, commonly illustrated by the phrase: “what is beautiful is good” (Regan, 2011).

Previous research has suggested that personal appearance may be the most direct source of information about other people (Shevlin et al., 2003). In fact, most people embrace the fairytale notion that our appearances reveal who we are and what we deserve (Regan, 2011). In many professions (e.g., personal selling, help desk, and reception), attractiveness is among the most important factors that consumers rely on to evaluate employee competence (Gronroos, 2000). Moreover, the persuasiveness of the information provided by a source is higher when he/she is perceived to possess desirable characteristics (Mills and Aronson, 1965). In addition to service encounters, the presence of a strong attractiveness-related halo effect has also been established in other contexts such as perceived competence of athletic coaches (Thelwell et al., 2010) and politicians (Surawski and Ossoff, 2006). In traditional media context, such as in television, physical attractiveness of media personalities has been identified as a primary predictor of their influence on the audience (Rubin and McHugh, 1987).

Parasocial Interaction (PSI)

The concept of parasocial interaction (PSI) was initiated by Horton and Wohl (1956) who described PSI as the one-sided personal relationship in between a viewer and a media character. PSI gives the illusion to a viewer that the media character is directly communicating to him or her, resulting in a one-sided feeling of closeness (Giles, 2002; Hoffner, 1996; Rubin, Perse and Powell, 1985). Perse and Rubin (1989, pp. 60) described the PSI as a friendship with a media character where the viewers "feel that they know and understand the persona in the same intimate way they know their flesh and blood friends". According to Horton and Wohl (1956), parasocial relationships can be extremely influential for an audience. Specifically, as parasocial relationships emerge, viewers start to appreciate the values and intentions of a media character,

which in turn often results in seeing the media character as counselor, comforter, and role model (Brown and Basil, 1995, 2010; Papa et al., 2000).

Prior research on PSI has focused predominantly on offline media such as television, radio, and audience mail in the context of audience - media character relationships (Auter, 1992; Avery and Ellis, 1979; Conway and Rubin, 1991; McGuire and LeRoy, 1977). However, recent studies have shifted their focus from the traditional media and began targeting contexts such as blogs (Colliander and Dahler, 2011), sports athletes (Sun, 2010), political candidates (Thorson and Rodgers, 2006), avatars (Jin, 2010), and social media (e.g., online communities, social networking sites) (Ballantine and Martin, 2005; Munzel and Kunz, 2014; Pagani et al., 2011) to broaden the scope of PSI.

In healthcare context, PSI can play a pivotal role in bringing positive health outcomes or behavior changes among the viewers of mediated health communications. For example, viewers process and store mediated interactions with spokespersons of health communications in a similar way as they respond to direct, interpersonal contact with real life health service providers (e.g., physicians, mental health professionals) (Brown and Basil, 1995; Rasmussen and Ewoldsen, 2016). Successful doctor-patient relationships as a result of following doctors' recommendations (Fuertes et al., 2007) and better health outcomes (Hall et al., 2002) are characterized by liking (Fuertes et al., 2007), trust (Walker et al., 2002), and communication (Ha et al., 2010), which are close to the fundamental elements of parasocial relationships (e.g., liking, credibility, and willingness to communicate) (Rubin and McHugh, 1987; Perse and Rubin, 1989; Tuchakinsky, 2010; Xiang et al., 2016). Moreover, PSI in educational media programs give rise to viewers' feeling of self-efficacy (Bandura, 1995; Papa et al., 2000), which is the ability to organize and execute courses of actions to manage prospective situations (Bandura, 1995), a core

element of successful doctor-patient relationships to bring positive health outcomes (Rasmussen and Ewoldsen, 2016). Lastly, the positive influence of celebrities in promoting health messages has been demonstrated repeatedly in last couple of decades (Brown, Basil, and Bocarnea, 2003; Brown and deMatviuk, 2010). For instance, when NBA star Magic Johnson was contracted with HIV – positive, people who were emotionally attached with Magic Johnson and had higher personal concern about the risk of HIV reported reduced high-risk sexual behaviors (Brown and Basil, 1995).

PSI has been posited as an appropriate theoretical framework for examining the one-sided relationships in between celebrities and audience (Papa et al., 2000; Stever and Lawson, 2013; Ewoldsen and Rasmussen, 2016). Therefore, given PSI's prevailing influence in healthcare relationships, similar proposition can be developed in the YouTube vlogger-viewer context of this study in relation to weight loss videos. Rubin and McHugh (1987) posited that the development of PSI is akin to that of interpersonal relationships and therefore could be thought of as their functional alternatives. As such, factors that contribute to one's influence on his/her audiences during an interpersonal communication could also be considered as antecedents to PSI experiences. Past research has already established a source's credibility, physical attractiveness, and perceived similarity with his/her audience as antecedents of audience's PSI experience with the source (Hoffner and Cantor, 1991; Hoffner, 1996; Rubin and McHugh, 1987; Turner, 1993; Hoorn and Konijn, 2003; Lee and Watkins, 2016). In this research, I focused on the interaction effects in between vlogger credibility, physical attractiveness, and ethnic similarity on viewer PSI experience with the vlogger to explore the relative importance of these three characteristics in engendering the feeling of PSI in viewers' mind.

Hypotheses Development

Vlogger credibility and physical attractiveness → PSI:

Past research in advertising has shown that using physically attractive spokesperson or endorser to influence people has been effective (Caballero, Lumpkin, and Madden, 1989; Kahle and Homer, 1985; Liu et al., 2007; Phau and Lum, 2000). However, the extant literature also indicates that the effectiveness of a source's physical attractiveness in persuasion may depend on restrictions or prerequisites (Caballero et al., 1989; Caballero and Solomon, 1984; Pornpitakpan, 2003). In this context, it is interesting to note that, although a physically attractive endorser or spokesperson has a general 'attractiveness effect' on his/her audience, when it comes to selecting an appropriate spokesperson or endorser, the person's credibility may be more important than the person's physical attractiveness in elevating the audience's agreement and behavioral intentions (Maddux and Rogers, 1980; Ohanian, 1991; Till and Busler, 1998).

For instance, Till and Busler (1998) examined the roles of endorsers' physical attractiveness and expertise (i.e., a dimension of credibility) in matching endorsers with appropriate product categories. Their proposed explanation of 'matching' was that, a physically attractive endorser would be more effective in endorsing products manufactured to enhance one's attractiveness, whereas an expert endorser would be more effective in endorsing products that are consistent with the endorser's expertise. The results showed a match up effect for the endorser's expertise but not for the endorser's physical attractiveness; however, a general 'attractiveness effect' was found based on the endorser's physical attractiveness. Toncar, Reid, and Anderson (2007) examined the different effects of three spokesperson types (i.e., national celebrity, local celebrity, and noncelebrity hurricane victim) on source credibility dimensions. The results indicate that although both the national and local celebrities were perceived as being

more attractive than the victim spokesperson in ads, there was no significant difference between the local celebrity and the hurricane victim in the level of expertise and trustworthiness. Moreover, Ohanian (1991) examined the relative effectiveness endorser source characteristics – physical attractiveness, trustworthiness, and expertise, found expertise as most closely associated with consumers' intent to purchase the endorsed product.

A possible explanation for the dominance of a source's credibility over his/her physical attractiveness in consumer persuasion can be given based on the attribution theory. Attribution theory (Kelly, 1967) suggests that when consumers are exposed to persuasive communications (e.g., advertisements) they attempt to make casual inferences to determine whether the message of the communication provides an accurate representation or whether the source of the message lacks credibility (e.g., Folkes, 1988; Mizerski et al., 1979). When the source's expertise is low, following the discounting principle of attribution theory (Kelly, 1972), consumers will discount the arguments made by the source in a communication (e.g., Eagly and Chaiken, 1975). As a result, health-diet claims made by a vlogger to lose weight will appear less useful to the audience when the vlogger's expertise is low. However, if the vlogger is physically attractive, his/her physical attractiveness may compensate for the lack of expertise to draw consumer attention to some extent via the 'attractiveness stereotype' which suggests that physically attractive individuals are perceived to have more socially desirable personality traits and characteristics (e.g., kindness, sensitivity, intelligence, and warmth) compared to the less attractive individuals (Eagly et al., 1991; Langlois et al., 2000). Importantly, this benefit will not hold if the vlogger's physical attractiveness is low (e.g., Liu et al., 2010). In contrast, when the source's credibility is high, consumers are more inclined to accept the message arguments by the source (Yoon and Kim, 2016). For example, research has shown evidences of positive effects of spokespersons

with both high and low physical attractiveness in influencing audiences when their credibility was high (Ilicic, Baxter, and Kulczynski, 2018; Liu et al., 2010; Toncar, Reid, and Anderson, 2007). Thus, per the context of this study, I hypothesize

H1: (a) When a vlogger's credibility is high, there will be no significant difference in viewers' PSI experience with the vlogger when the vlogger is physically attractive, as compared to a vlogger who is physically unattractive. (b) However, when a vlogger's credibility is low, viewers will experience greater PSI with the vlogger who is physically attractive as compared to the vlogger who is physically unattractive.

Vlogger credibility and ethnic similarity → PSI:

According to social identity theory (Tajfel and Turner, 1986; Tajfel, 1981), people tend to see themselves as members of selected groups (e.g., religious affiliation, gender, ethnicity), in order to differentiate themselves from others. Prior research showed that media viewers exhibited more favorable attitude toward a media character or spokesperson who shared their own ethnic background (Jeong et al., 2014). Further, media viewers perceived a character with their own ethnic background to be more similar to themselves and more credible (Martin et al., 2004). Other research indicate that, ads with models or spokespersons from the same ethnic/racial group with the audience were more effective in influencing product attitude and purchase intention, as compared to models or spokespersons from a different racial/ethnic group (Cano and Ortinau, 2012; Elias et al., 2011; Martin et al., 2004; Sierra et al., 2012).

However, in healthcare, evidences of people's preference for ethnic similarity in the physician–patient relationship and its effect on treatment satisfaction is equivocal (Knipscheer and Kleber, 2004; Lin and Guan, 2002). In Knipscheer and Kleber (2004), the majority of the respondents did not value physician's ethnic similarity with the patient as important factor in the therapist-patient relationship; rather they rated physician's clinical competence and compassion to be more relevant. On the other hand, Lin and Guan (2002) found that, physicians' ethnic

similarity with patients was a relevant factor in determining patients' overall satisfaction and referral intention among a minority population (i.e., Asian American) along with the physician's competence and humaneness. However, among the mainstream population (i.e., Caucasian Americans), the physician's competence was a significant predictor of overall satisfaction and professionalism for referral intention, while ethnic similarity was not a significant factor in regard to either overall satisfaction or referral intention.

According to Faraji-Rad et al., (2015), in the context of processing advice (e.g., health advices), the advice takers want to understand the mental state of the advice provider (that is independent from the information itself or affective response derived from the advice) by attributing thoughts and emotions to the advice provider. Perceived similarity with the advice provider (e.g., ethnic similarity) facilitates this process by creating a perception that matches peoples' goal of understanding the advisor and thus generates a 'feeling of certainty' (i.e., a feeling of knowing the advice provider). People use this feeling of certainty to subjectively validate their decision outputs (i.e., "feeling right" about the decision) taken on the advice they received (Faraji-Rad et al., 2015, p. 4). And, when something 'feels right', people allow or admit it as valid or just (Adval, 2001; Higgins, 2012). However, this effect supposed to occur only when people are not aware about the credibility of the advice provider. Thus, the question arises how perceived similarity with the advice provider would affect the advice receiver when the receiver is already aware of the credibility of the advice provider. The discounting principles of attribution theory (Kelley, 1973) assert that when individuals receive inconsistent information from their environment, they seek to create consistency through perceptual filters. While doing so, they draw on the most salient information which overrules the incongruent beliefs (Taylor and Fiske, 1978).

Thus, drawing on the discounting principles of attribution theory, I argue that when the credibility of the vlogger is high, consumers are more likely to use this attribute information to determine the validity of the advice, which in turn attenuates the ethnic similarity effect because the feeling of certainty driven by source's ethnic similarity would no longer be informative. This assumption is consistent with the findings of Faraji-Rad et al., (2015) which demonstrated that the effect of source similarity on persuasion weakens when the study participants were already primed to feel certain about the source. On the other hand, when the credibility of a vlogger is low, the similarity in ethnicity may compensate for the lack of credibility to some extent via his/her similarity-driven feeling of certainty (e.g., Shan, 2016). Moreover, the theory of homophily/similarity reinforces the idea that, consumers are more likely to evaluate sources that are similar to themselves as more credible than those with lower similarity (Ayeh, Au and Law, 2013; Shan, 2016). Thus, I hypothesize

H2: (a) When a vlogger's credibility is high, there will be no significant difference in viewers' PSI experience with the vlogger when the vlogger is ethnically similar to them, as compared to a vlogger who is ethnically not similar to the viewer. (b) However, when a vlogger's credibility is low, viewers will experience greater PSI with the vlogger who is ethnically similar to them, as compared to the vlogger who is ethnically not similar.

Vlogger ethnic similarity and physical attractiveness → PSI:

When selecting spokespersons for advertisements, advertisers tend to use those characters who they think can relate to their target audience (Ohanian, 1990; Till 1998; Till and Busler, 2000). The match-up hypothesis (Till and Busler, 2000) posits that, when a 'match' exists between the characteristics of an endorser and his/her audience (e.g., by race, gender, or language) the audiences will develop more positive attitudes towards the endorsed message (Kamins, 1990; Spence et al., 2013; Flanagin and Metzer, 2003). Specifically, research on the use of ethnicity in advertising has shown that advertisers benefit from matching the ethnic

background of the endorsers with the target audience (Appiah, 2001; Kerin, 1979; Schlinger & Plummer, 1972). In fact, there is a great level of convergence regarding the findings in the extant research, suggesting that audiences prefer advertisements using actors of their own ethnic group (Whittler, 1989; Whittler & DiMeo, 1991; Williams & Qualls, 1989).

On the other hand, a person's physical attractiveness is one of the first thing that people pay attention to when they meet someone new and it plays a fundamental role in how that person is perceived (Zebrowitz and Montepare, 2008). Research indicate that, physically attractive people are often judged to have warmer and friendlier dispositions (Fiske, Xu, Cuddy, and Glick,1999) and are considered to be more competent (Jackson, Hunter, and Hodge, 1995) and intelligent (Eagly, Ashmore, Makhijani, and Longo, 1991) as compared to their less attractive counterparts. Such inferences appear to occur rapidly and automatically (Olivola and Todorov, 2010). Moreover, the persuasiveness of the information is higher when the source is perceived to possess desirable characteristics (i.e., physical attractiveness) (Mills and Aronson, 1965). In traditional media such as in television, physical attractiveness of a media character has been identified as a primary predictor of audience PSI experience with that character (Rubin and McHugh, 1987).

Since the ethnic similarity and physical attractiveness of a source are both influential in persuading the audience, it will be informative to examine how a vlogger's perceived physical attractiveness and ethnic similarity with his/her viewers interact with each other to influence viewers' PSI experience with the vlogger. Moreover, recent research has produced results which contradict the findings of prior studies regrading spokespersons' persuasiveness of ethnic similarity and physical attractiveness. For instance, Lin and Xu (2017) found that, despite recognizing a larger social distance, Caucasian participants were significantly influenced by

Asian-American and African American online reviewers toward specific products. Furthermore, the Caucasians also rated Asian-American reviewers to be more trustworthy than even themselves (i.e., Caucasian reviewers) even after rating Asian-American males to be physically unattractive (Lin and Xu, 2017).

A possible explanation for the mixed results of sources' ethnic similarity and physical attractiveness in consumer persuasion can be given based on the "black sheep effect" (Marques and Yzerbyt, 1988), which suggests that, people judge a likable in-group member (i.e., with similar ethnicity) more positively than a likable out-group member (i.e., with different ethnicity), but they judge a dislikeable in-group member more negatively than a dislikeable out-group member. Here, the likability of an in-group member is determined by his/her ability to hold a positive/favorable image of the group (e.g., by appearing physically attractive), resulting in a multitude of positive biases from the members of his/her in-group including favorable attitudes (Deshpande et al., 1986; Whittler & DiMeo, 1991). On the other hand, when an in-group member fails to withhold the positive/favorable image of his/her group (e.g., by appearing physically unattractive) or appears unlikable, he/she attracts unfavorable evaluations from his/her in-group members which include – a) derogating the unlikable member, b) providing favorable evaluations to an outgroup member who possess the desirable characteristics of the in-group, but not a member of in-group due to the common identity in-group criteria (e.g., ethnicity), or c) evaluating an unlikable out-group member more favorably than an unlikable in-group member (Marques and Yzerbyt, 1988). Here, expulsing the unfavorable in-group member through negative evaluations helps to maintain the overall positivity of the in-group. Thus, I hypothesize:

H3: (a) When a vlogger is physically attractive, viewers will experience greater PSI with the vlogger who is ethnically similar to them, as compared to a vlogger who is ethnically not similar. (b) However, when a vlogger is physically unattractive, viewers will experience greater PSI with

the vlogger who is ethnically not similar to them, as compared to a vlogger who is ethnically similar.

PSI and Compliance Intention:

As discussed earlier, parasocial interaction explains the imaginary interpersonal connections with media characters (Horton and Wohl, 1956) that involves seeing them as friends, desiring to meet with them (Perse and Rubin, 1989; Rubin et al., 1985), seeking guidance from them, and considering them as role models. (Brown and Basil, 1995; Papa et al., 2000; Brown and Basil, 2010). For example, viewers may see their favorite TV shopping host as a friend who provides advice (Grant, Guthrie, and Ball-Rokeach, 1991; Rubin, Perse, and Powell, 1985) rather than as a selling agent. Moreover, viewers, by purchasing products recommended by their favorite media personality, try to affirm their relationship as well as loyalty to that personality (Grant, Guthrie, and Ball-Rokeach, 1991).

Research evidences also suggest that, parasocial relationships have positive effects on health and lifestyle oriented behavioral intentions. Such as, Diego Maradona's promotion of drug prevention (Brown and deMatviuk, 2010), the tragic death of UK Princess Diana (Brown, Basil and Bocarnea, 2003), and Earvin "Majic" Johnson's contraction of HIV (Lerner, 2006) have caused millions of people to make healthy lifestyle changes, wear seatbelts, and reduce risky sexual behavior (Brown and Basil, 2010).

Social comparison theory (Festinger, 1954) is a sustainable theory to explain these effects. According to this theory, individuals compare themselves with others in terms of what they possess and consume. These comparisons can be upward (i.e., comparison with someone who is better than the individual) or downward (i.e., comparisons with those worse than the individual) (Chan and Prendergast, 2008; Ogden and Venkat, 2001). Generally, individuals are likely to compare themselves with significant others such as celebrity and media character role

models or peers with similar outlooks and values (Lee and Watkins, 2016). This argument can be extended to YouTube personalities or vloggers. Viewers may feel that they 'know' a vlogger by their exposure to the videos by the vlogger in YouTube. In trun, repeated exposure to a vlogger and perceptions of credibility can lead to the formation of a parasocial relationship. As the viewer starts to see the vlogger as a credible source, he/she starts upward comparisons with the vlogger and seeks his/her advice like a role model (Rubin et al., 1985). Hence, when a vlogger promotes healthy eating behaviors to lose weight, the viewers appreciate his/her guidance which will increase their desire to eat healthy to lose weight . Thus, it is hypothesized:

H4: PSI with the vlogger is positively associated with compliance intention.

Viewer health consciousness as a moderator of the PSI-compliance intention relationship:

Viewer health consciousness is an important factor to consider while assessing viewers' compliance intention to follow a healthy behavior (e.g., healthy diet to lose weight) (Ophuis, 1989; Schifferstein and Ophuis, 1998). "Health consciousness has been defined as an individual difference variable that assesses the degree to which a person plays an active role in maintaining his or her health" (Gould, 1988, p.97). Research indicate that, health conscious people consciously monitors their state of health and are willing to perform the activities required to improve or maintain their health (Gould 1988; Michaelidou and Hassan 2008). On the other hand, prior research in PSI indicates that PSI with media personalities led people to make positive health behavior and lifestyle changes (Brown, 2009; Brown and deMatviuk, 2010, Brown and Basil, 2010). PSI influences viewers to follow healthy behaviors through viewers' upward comparison with media personalities and the emotional or psychological bonds that viewers develop with media characters (Brown and deMatviuk, 2010, Brown and Basil, 2010;

Lee and Watkins, 2016). Hence, the following section addresses the question how people's health consciousness affects the PSI-compliance intention relationship.

According to the Elaboration Likelihood Model of persuasion (Petty and Cacioppo, 1986), there is a continuum of message elaboration. At the high end of the continuum, people take the 'central route' when they tend to scrutinize and elaborate on the message arguments to derive an overall attitude. Towards the low end of the continuum, the 'peripheral route' predicts that people change their attitude by associating the issue/object of the message with positive or negative cues or by making inferences about the merits of the advocated position based on various simple cues such as the attractiveness or expertise of the source (Petty and Cacioppo, 1983, 1986). Since important source characteristics/cues such as credibility, physical attractiveness, and similarity with the audience are antecedents of viewer PSI experience with the source, in the context of this study I argue that when viewers experience PSI with a vlogger, they are likely to use the 'peripheral route' of message elaboration. That is, they would justify the merit of the message based on simple cues such as the physical attractiveness or credibility of the vlogger and thus would minimize their cognitive efforts. However, I also argue that depending on viewers' level of health consciousness their position in the elaboration likelihood continuum will differ. That is, viewers with high health consciousness will tend to use the central route to assess the merit of the message by the vlogger. On the other hand, viewers with low health consciousness will tend to use the peripheral route to assess the merit of the message. Thus, I hypothesize

H5: Viewer health consciousness negatively moderates the PSI-compliance intention relationship. Specifically, when viewers are less health conscious, PSI will have a stronger effect on compliance intention relative to when viewers are more health conscious.

Moderated mediation role of viewer readiness and health consciousness in the PSI – compliance intention relationship:

Although engaging in PSI with a media character motivates viewers to comply with certain behaviors or practices suggested by that person, it is important to consider the role of viewer readiness in the process. Viewer readiness refers to the extent to which viewers are prepared or likely to use or follow an innovation for the first time (e.g., adopting new lifestyle or technology) (Meuter et al., 2005). Prior research has used the construct consumer readiness to determine consumers' adoption of internet banking (Ho and Ko, 2008; Khadem and Mousavi, 2013), participation in service recovery (Chang et al., 2016), and compliance to follow physician provided health regimens (Dellande et al., 2004).

Meuter et al., (2005) conceptualizes consumer (i.e., viewer) readiness as consisting three dimensions - role clarity, ability, and motivation. In the context of the current dissertation, role clarity refers to how well viewers understand the roles or performance required from them to adequately comply with the health diet regimens suggested by the vlogger to lose weight. Ability signifies viewers' capacity and confidence to perform the actions expected from them to lose weight. Finally, motivation relates to viewer willingness to perform the actions in order to receive the desired results (e.g., losing weight) (Bowen, 1986; Larsson and Bowen, 1989; Meuter et al., 2005). According to the service marketing literature, consumers' role clarity, ability, and motivation independently enhance consumers' participation in co-creational activities (e.g., Dellande et al., 2004; Dong et al., 2008).

In the process of upward social comparison, PSI is shown to facilitate the acquisition of knowledge, skills, and motivations that can in turn reinforce compliance behavior. Prior research has used PSI and social comparison theory to explain how social comparison with celebrities influences consumer body image perceptions and consumers' motivation to achieve ideal body

shapes (Prieler & Choi, 2014; Ho, Lee, & Liao, 2016). Phua (2016) argues that PSI positively influences self-efficacy; i.e., the ability to perform specific activities. For instance, the viewers of the prominent mental health television program called the "Dr. Phil Show" developed greater efficacy beliefs about treating their own mental illness, which ultimately led to their greater intention to seek treatment for mental illness (Rasmussen and Ewoldsen, 2016).

To expand upon these findings, I introduce viewer readiness to examine its mediating impact on the PSI – compliance intention relationship. Investigating the role of viewer readiness for following a healthy diet is important as it also accounts for the roles of viewer role clarity and motivation in the process along with viewers' ability or efficacy. Therefore, I hypothesize,

H6: The effect of PSI on compliance intention is mediated by viewer readiness.

Given the importance of the mediating role of viewer readiness in the PSI-compliance intention relationship, it is also important to consider the role of viewer health consciousness in the process. Prior research indicates that health conscious people have been reported to be aware of their wellness and are motivated to improve and/or maintain their health and quality of life by engaging in healthy behaviors (Gould, 1988; Plank and Gould, 1990; Kraft and Goodell, 1993; Jayanti and Burns, 1998; Newsom et al., 2005). On the other hand, the role of PSI in health promotion as well as behavior changes are based on viewers' upward social comparison with the spokesperson or celebrity who is advancing the health message. In this case, rather than being intrinsically motivated to act in a healthy manner, the viewers are influenced to act healthy based on certain desired characteristics possessed by the spokesperson such as physical attractiveness or credibility. Thus, I argue that, the indirect influence of PSI on viewer compliance intention through viewer readiness would be stronger for individuals with low-health consciousness as compared to the individuals with high-health consciousness. I hypothesize

H7: The indirect effect of PSI on compliance intention mediated through viewer readiness is stronger for viewers with low-health consciousness relative to viewers with high-health consciousness.

Control Variables

Given the complex nature of parasocial interaction (PSI) and compliance, in this dissertation I have searched for and included potential alternative variables which can confound the hypothesized effects of the research models. I have included vlogger's attitude similarity with viewers and viewer ethnocentrism as control variables for viewer PSI experience with a vlogger. Lee and Watkins (2016) identified 'attitude similarity' of a source with his/her audience as a positive predictor of PSI. Ethnocentrism, the second control variable, is defined as a tendency to view someone's own group (e.g., ethnicity) as the center of everything and use his/her own group's standards to judge other groups (Lwin, Stanaland, and Williams, 2010). Prior literature state that, ethnocentrism is a key concept to understand in intercultural communication as this personality trait is directly related to intercultural communications (Lin and Rancer, 2003; Nuliep and McCroskey, 1997). Regarding PSI, Hu, Chen, Li and Yin (2019) found that, TV audiences high in ethnocentrism experienced significantly greater PSI with the media character from their own ethnicity as compared to the corresponding character from another ethnicity.

Lastly, among other variables, people's perceived value (i.e., a cost-benefit analysis of a preventive action) and perceived risk of non-compliance have been identified as important determinants of their compliance behavior. For instance, Rosenstock's (1974) health belief model reports that both variables influence the likelihood of individuals' engagement in preventive healthcare actions. Thus, I account for the influence of these two variables as covariates of viewer compliance intention.

CHAPTER III

STUDY 1

To explore the relative influence of the three vlogger characteristics – credibility, physical attractiveness, and ethnic similarity on viewer experience of PSI with a vlogger, this study looked for the interaction effects of these three vlogger characteristics upon their respective effects on PSI. To accomplish this goal, each of the three vlogger characteristics were manipulated in this study at two levels – high and low. Thus, this study involves a 2 (credibility: high vs. low) x 2 (physical attractiveness: high vs. low) x 2 (ethnic similarity: high vs. low) between subject factorial design. A pretest was conducted to assess the accuracy of the instruments to manipulate the three vlogger characteristics. Upon the pretest, once the manipulated stimuli were finalized, they were used in the main study.

Pretest

Design and Procedure

The purpose of the pretest was to select appropriate presenters to play the role of vloggers in the formulated health videos (i.e., mock vlogs) focused on how to lose weight by maintaining a healthy diet. The presenters were selected in terms of their perceived credibility, physical attractiveness, and ethnic similarity with the viewers. To play the role of vloggers, I used one gender (female) presenters to make the treatment consistent across all scenarios. Besides, some research has noted that, spokesperson gender does not significantly impact viewer responses (e.g., Freiden, 1984; Wolin, 2003). First, to manipulate ethnic similarity with the viewers (high

vs. low), two groups of females were recruited in the pretest to be presenters for the mock vlogs. The first group consisted of four Mexican females, while the second group consisted of four Caucasian American females. To capture the ethnic similarity effect accurately, respondents with only Mexican backgrounds were recruited in this study. Thus, the purpose of recruiting Mexican female presenters in this study was to reflect high ethnic similarity with the viewers, while the latter group or Caucasian American presenters would reflect low ethnic similarity with the viewers. Moreover, to make the ethnic similarity effect more salient, Hispanic names were assigned to the Mexican presenters and English names were assigned to the Caucasian American presenters. Second, to manipulate vlogger credibility (high vs. low), two versions of vlogger profile were created – one to reflect high credibility and the other to reflect low credibility. The profiles include information about the vlogger's educational and professional backgrounds. The high credibility profile was written in a way to reelect the vlogger's high expertise and trustworthiness in the health-diet topic, while the low credibility profile was written to reflect the vlogger's lack of expertise and trustworthiness in the health-diet topic. The two versions of vlogger profiles are listed below:

High credibility profile:

"*The vlogger in the following picture is Dr. Sara Walker/Dr. Victoria Ramirez, PhD in Health Science, a health fitness specialist who provides nutrition and wellness counseling in the Southwest region of US. As a registered dietitian with the American Dietetic Association, Dr. Walker/Dr. Ramirez is an expert in performance nutrition and weight management"*

Low credibility profile:

"The vlogger in the following picture is Ms. Sara Walker/Ms. Victoria Ramirez, a graduate student in Fine Arts at a Southwest College. She performs at a local theater in her area. She is also a member of the Music and Drama Club in her college"

Third, to manipulate vlogger's physical attractiveness (high vs. low), the physical attractiveness of each of the eight recruited female presenters from the two groups (i.e., four Mexican females and four Caucasian American females) were measured. From the measurement, the most and the least physically attractive females in each group were identified. These two selected females from each group (most vs. least - physically attractive Mexican/Caucasian American) were then further contacted and recruited for the main study.

The initial pool of potential presenters/vloggers for this study included 8 female actors: 4 Mexican and 4 Caucasian American, who were majoring in Drama and Theater. Apart from their ethnic background, another key criterion for selecting these 8 females was to have sufficient variances in their physical attractiveness level to identify the most and the least physically attractive ones in each of the ethnic groups. Moreover, while selecting them, it has also ensured that their physical and linguistic characteristics represented the intended population and no other population. For each selected presenter, two versions of their bio/profile were created; one to reflect high credibility (high expertise and high trustworthiness) and the other to reflect low credibility (low expertise and low trustworthiness). Essentially, for 8 presenters, 16 versions of the pretest instrument were developed. In each instrument, along with a presenter's bio, her full-frontal photo was included to manipulate ethnic similarity (i.e., Mexican or Caucasian American). While their respective physical attractiveness level was measured based on participant ratings perceived from the given photo. Participants evaluated the presenters based on a ten-item, seven-point credibility scale adapted from Ohanian (1990), a three-item, seven-point physical attractiveness scale adapted from McCroskey and McCain (1974), and a five-item, six-point ethnic similarity scale adapted from Street, O'Malley, Cooper, and Haidet (2008). These

scale items were also used as manipulation checks to evaluate the effectiveness of the manipulations in the main study.

The pretest was conducted online using Qualtrics online survey platform. 346 undergraduate students from the College of Business of University of Texas Rio Grande Valley participated in the pretest. Students participated in this pretest in exchange for extra credit from their course instructors. Sixteen versions of the pretest instrument were randomly assigned to the participants electronically. Data was collected over a two-week period. Once the data collection period was over, the gathered data was downloaded and analyzed. From the total responses received, 65 cases were excluded from further analysis due to being participants with non-Mexican origins. From the remaining responses of Mexican participants only, 54 cases were further excluded from final analysis due to incomplete responses, straight line answering, and ultimately failing to answer the attention check question correctly. The remaining dataset included responses from 227 participants (51.5% female, mean age = 22.8yrs).

Results of Pretest:

In the pretest, each participant rated the physical attractiveness of the presenter who they were exposed to by using three items adapted from McCroskey and McCain (1974)'s physical attractiveness scale which include – i) "I find Ms./Dr. Sara Walker/Victoria Ramirez very attractive physically, ii) I think she is quite pretty, and iii) She is good looking". Participants' perceived physical attractiveness score toward a presenter was measured by using the composite of the three items. Based on participant ratings, I selected one attractive (M[SD] = 5.26[0.99], n = 31) and one unattractive (M[SD] = 3.65[1.22], n = 32) presenter from the Mexican presenter group (t[df] = 1.99[61]; p<.001) and one attractive (M[SD] = 5.11[0.72], n = 24) and one

unattractive (M[SD] = 3.73[1.13], n = 25) presenter from the Caucasian presenter group (t[df] = 2.02[41]; p<.001) for further analysis.

Perceived ethnic similarity of the presenters by the participants were rated based on five items adapted from Street et al., (2008)'s ethnic similarity scale (shown in Table 2). As expected, participants rated the two Mexican presenters (i.e., attractive and unattractive) to be more ethnically similar to themselves (M[SD] = 4.10[0.81], n =31 and M[SD] = 4.24[0.71], n =32) as compared to the two Caucasian presenters (i.e., attractive and unattractive) (M[SD] = 2.70[1.15], n =25 and M[SD] = 2.49[0.98], n =25; respectively).

Lastly, participants rated credibility of the presenters by using ten items of Ohanian (1990)'s credibility scale. The manipulation of credibility appeared to work as the high credibility scenarios relative to the low credibility scenarios received higher perceived credibility scores from the participants for all the four selected presenters. The scores are presented here: for the attractive Mexican presenter (M[SD] = 5.91[1.04] vs.4.43[1.17]; t[df] = 2.05[29]; p<.001), for the unattractive Mexican presenter (M[SD] = 5.94[0.74] vs.4.39[1.36]; t[df] = 2.05[27]; p<.001), for the attractive Caucasian presenter (M[SD] = 5.64[1.0] vs. 4.04[1.39]; t[df] = 2.07[22]; p<.05) and for the unattractive Caucasian presenter (M[SD] = 5.07[1.07] vs. 3.9[1.45]; t[df] =2.07[23]; p<.05). Thus, the pretest positively signaled about the accuracy of the instruments to capture the intended manipulated effects of Study 1.

Main Study

Stimuli Development

In the pretest, the intended manipulations for credibility and ethnic similarity had worked successfully in all the sixteen cases. From the gathered responses, perceived physical attractiveness of each presenter by the participants were measured and evaluated to identify the

highest rated and the lowest rated presenter in terms of their physical attractiveness in each ethnicity group. Thus, the attractive and the unattractive female from each ethnicity groups were chosen. The selected two females from each ethnicity group were then re contacted and recruited to participate in the next part of the research. However, they were completely unaware of their criteria for selection.

In this part of the study, four videos (i.e., mock vlogs) were created by involving the four selected females in the pretest (2 - Mexican and 2- Caucasian American). In each video, one of them played the role of a vlogger who presented 'three health-diet tips to lose weight' in front of a camera. Except the presenter person, all the other elements of the four videos were kept constant. All the four presenters presented their speech using the same script (except the change in Hispanic and English names), were in same clothing, and all the videos were recorded in the same place with a neutral background with no confounding objects. During the period of video recording, the actors were paid in cash on an hourly basis. After the videos were recorded, they were edited using the Windows Photo app (a photo and video editing software) for smoothing purpose and to include necessary captions for viewer understanding. After editing, the length of the final version of each video was about four minutes.

As indicated earlier, this study involves a 2 (credibility: high vs. low) x 2 (physical attractiveness: high vs. low) x 2 (ethnic similarity: high vs. low) between subject experimental design. Therefore, eight versions of the measurement instrument for the main study were developed. Each version included one of the four created videos under which the biography of the presenter in the video were provided, either to reflect high credibility or low credibility. The rest of the instrument included the scale items to measure the constructs involved in the study.

Design and Procedure

The main study survey was conducted online by using Qualtrics online survey platform. Eight versions of the survey instrument were randomly assigned among the participants electronically. Each participant watched a video by a vlogger describing the scripted three steps of a healthy diet to lose weight and a short professional bio of the vlogger underneath the video. After being exposed to the stimuli, the participants filled out a questionnaire which essentially consisted of the scale items of the focal constructs of this study including the manipulation check items which were adapted from existing scales in the literature.

Three-hundred and thirty students from fifteen undergraduate classes across multiple disciplines (e.g., science, math, and business) from the University of Texas Rio Grande valley participated in this study. Prior to recruiting participants, twelve course instructors were contacted via email or in-person who were teaching two or more courses and was asked if they would allow to participate their students in this online survey in exchange for extra credits. The instructors who agreed with the proposal were sent an email with the online survey URL to share with their students. Recruiting student sample for this study is justified because research indicate that half of the College students in the U.S are anxious about at least one aspect of their physical appearance, and 'body weight' plays a pivotal role in that concern (Suissa, 2008). From the gathered responses, participants who were not of Mexican or Mexican American origin were filtered out with help of a filter question in the questionnaire to ensure that the final sample consist of participants with only Mexican origins to accurately capture the 'ethnic homophily' effect with the vlogger.

Measures

I relied on extant literature in marketing, communication, and healthcare as sources of measures in this dissertation. Scale items of most of the constructs were captured on a seven-point Likert scale. While in few exceptional cases, I used seven-point bipolar scale and five-point Likert scale. The scale items are listed in Table 1. First, to examine the effectiveness of the manipulations, manipulation check items were included in the questionnaire. Vloggers' credibility was captured by using a ten item, seven-point scale adopted from Ohanian (1990)'s scale to measure endorsers' expertise and trustworthiness. Vloggers' physical attractiveness was measured by using a nine-item, seven-point scale adapted from McCroskey and McCain (1974)'s physical attractiveness scale. To measure vloggers' ethnic similarity with viewers a five-item, six-point scale was used adapted from Street, O'Malley, Cooper, and Haidet (2008)'s ethnic similarity scale. The focal construct of this study, PSI was measured by using an eight-item, seven-point scale adapted from Lee and Watkins (2016) and Rubin, Perse, and Powell (1985). The two control variables of PSI in this study, vlogger attitude similarity and viewer ethnocentrism were measured by using two seven-item, seven-point scales adapted from McCroskey, McCroskey, and Richmond (2006) and Arli, Septiano, and Choudhury (2020) (originally adapted from Wrench, 2001) respectively.

Analysis and Results

Reliability and validity analysis:

To determine the reliability and validity of the scale items of each construct an exploratory factor analysis (EFA) was run. Factor loadings of all the items used for further analysis were above 0.60 and the Cronbach's Alpha of all the involved six constructs were above 0.80 (see Table 1). The composite reliability (CR) score of all the constructs were above 0.80,

and the average variance extracted (AVE) of each construct were above 0.50. According to Tabachnick and Fidell (2013), standardized factor loadings of >0.50, Cronbach's alpha values of >0.70, AVE values of >0.50, and CR values ranging from 0.81 to 0.97 reflects acceptable levels of reliability and convergent validity. Thus, the measures of this study enjoy adequate levels of reliability and convergent validity.

To examine discriminant validity among the constructs, the square rooted values of the AVEs of the constructs are placed on the diagonal line in the table below. To reflect discriminant validity, all the square roots of the AVEs need to be greater than any of the inter construct correlations in the table. And, from Table 1, it is evident that all the square rooted AVEs of the constructs satisfy that condition. As such, the measures possess adequate levels of discriminant validity.

Table 1: Interactor correlations along with CR and AVE scores (Note: Square rooted AVEs of the factors are shown in the diagonal lane in bold)

	CR	**AVE**	CREDI	PHYATT	ETSIM	PARASOC	ATTSIM	ETHNO
CREDI	0.95	0.68	**0.82**					
PHYATT	0.88	0.64	.080	**0.80**				
ETSIM	0.90	0.75	-.035	-.074	**0.87**			
PARASOC	0.85	0.54	.527	.105	.085	**0.73**		
ATTSIM	0.91	0.58	.330	-.040	.229	.540	**0.76**	
ETHNO	0.87	0.63	-.131	-.138	.001	-.007	-.071	**0.79**

Notes: CREDI = credibility, PHYATT = physical attractiveness, ETSIM = ethnic similarity, PARASOC = parasocial interaction, ATTSIM = attitude similarity, ETHNO = ethnocentrism.

Manipulation check:

The manipulation of credibility was checked using the composite of ten items adopted from Ohanian (1990)'s credibility scale (see Table 2). The manipulation appeared effective as each of the four selected presenters received higher credibility ratings during high credibility scenario as compared to the low credibility scenario. Presenters' perceived credibility scores in

high vs. low scenarios are presented here. The attractive Mexican presenter (M[SD] = 6.19[0.62] vs. 4.97[0.89]; t[df] = 2.11[17]; p<.01), the unattractive Mexican presenter (M[SD] = 5.69[1.07] vs. 4.96[1.53]; t[df] = 2.02[42]; p<.10), the attractive Caucasian presenter (M[SD] = 5.88[0.95] vs. 4.87[1.45]; t[df] = 2.03[36]; p<.01), and the unattractive Caucasian presenter (M[SD] = 6.32[0.88] vs. 5.52[1.34]; t[df] = 2.02[39]; p<.05).

The manipulation of ethnic similarity also appeared to work effectively. Presenters' ethnic similarity was checked by using three items adapted from Street et al., (2008)'s ethnic similarity scale (see Table 2). Relative to Caucasian presenters, participants rated the Mexican presenters to be ethnically more similar to them. Ethnic similarity ratings received by each presenter in the high and low credibility scenarios were pooled together to assess their overall ethnic similarity ratings. The ethnic similarity ratings received by the attractive and unattractive Mexican presenters are: (M[SD] = 4.08[1.43], n = 47) and (M[SD] = 4.61[1.09], n = 45) respectively. Whereas, ethnic similarity ratings received by the attractive and unattractive Caucasian presenters are: (M[SD] = 2.96[1.14], n = 52) and (M[SD] = 2.68[1.17], n =51).

The manipulation of presenters' physical attractiveness level was checked by using four items from McCroskey and McCain (1974)'s physical attractiveness scale (see Table 2). However, in contrary of my expectation as well as the pretest results, participants rated both the presenters in each group (i.e., attractive and unattractive) similarly in terms of their physical attractiveness. For instance, the scores of attractive vs. unattractive Mexican presenters are: (M[SD] = 5.78[1.10] vs. 5.50[0.97], t[df] = 1.99[63], p =0.32). While the physical attractiveness scores between the attractive and unattractive Caucasian presenters are: (M[SD] = 5.89[1.06] vs. 5.88[1.13]; t[df] =1.98[100]; p = 0.95). Thus, the manipulation of selected presenters' level of physical attractiveness was not successful.

Hypotheses testing:

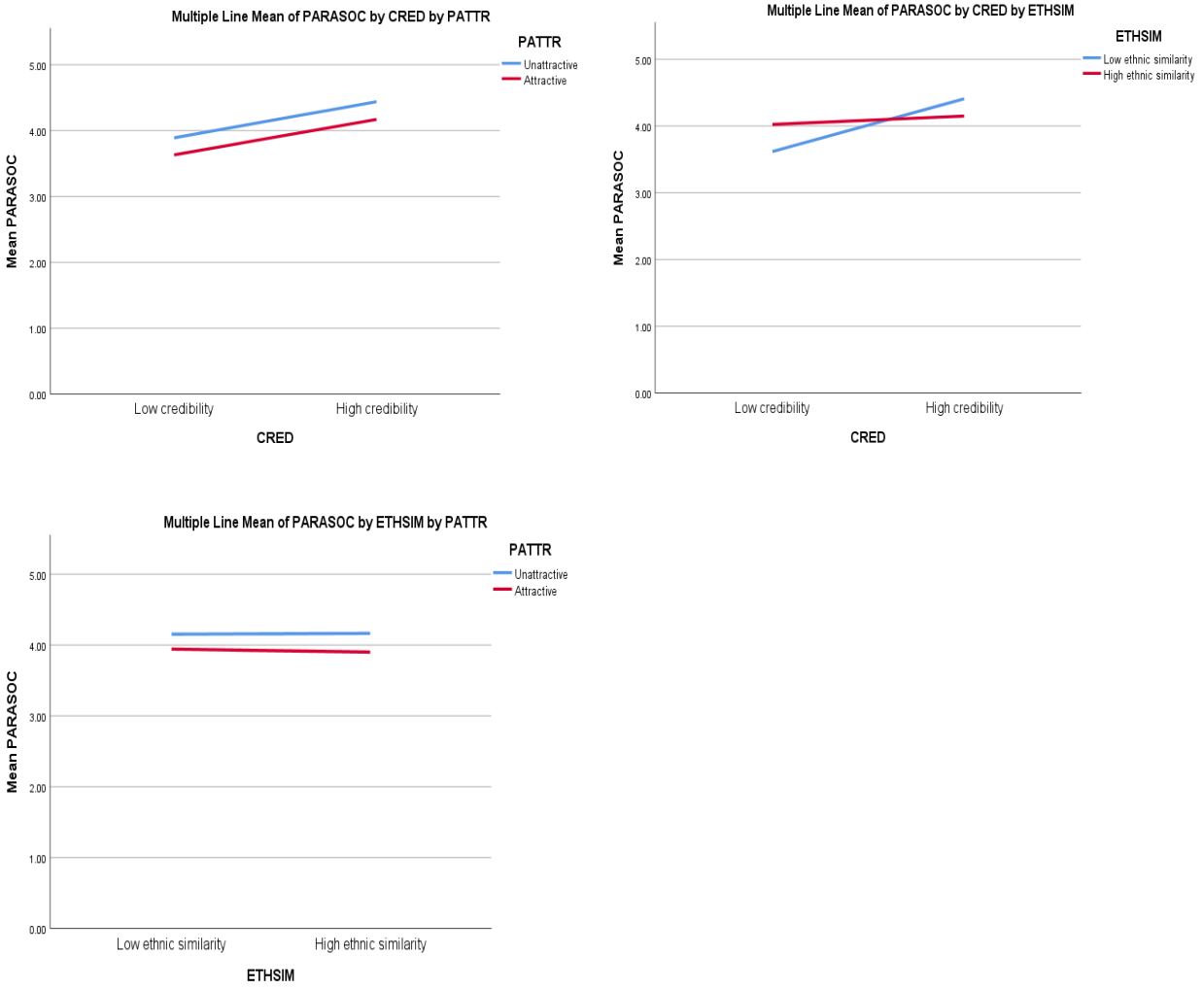
Two-way ANOVA tests were run to examine the interaction effects of three vlogger characteristics – credibility, physical attractiveness, and ethnic similarity on PSI. ANOVA post-hoc comparisons were used to test H1 – H3. As shown in Figure 3, participants in high credibility scenario experienced greater PSI with the vlogger as compared to the low credibility scenario ($M = 4.31$ vs. 3.78; $p<.05$). However, vlogger physical attractiveness seemed to have no effect on viewer PSI experience depending on vloggers' credibility level (high vs. low). Specifically, the results were as follows: In high credibility scenario (M: attractive vs. unattractive = 4.17 vs. 4.43; $p >.30$) and in low credibility scenario (M: attractive vs. unattractive = 3.63 vs. 3.89; $p >.30$). Thus, the hypothesized non-significant effect emerged in the high credibility scenario as viewers' PSI experience with the vlogger was not significantly different depending vlogger's physical attractiveness level. But the significant difference in viewer PSI experience in low credibility scenario was not found when viewers were expected to experience greater PSI with the vlogger who is physically attractive as compared to the one who is physically unattractive. Thus, H1 is not supported.

Regarding the interaction between vlogger credibility and ethnic similarity, viewers experienced greater PSI with the vlogger when vlogger credibility was high as compared to when vlogger credibility was low ($M = 4.31$ vs. 3.79: $p<.05$) (see Figure 3). However, vlogger ethnic similarity with viewers seemed to have no effect on viewer PSI experience depending on vlogger's credibility level (high vs. low). Specifically, the means in the high credibility scenario (M: high ethnic similarity vs. low ethnic similarity = 4.15 vs. 4.4; $p =.37$) and in low credibility scenario (M: high ethnic similarity vs. low ethnic similarity = 4.02 vs. 3.62; $p =.16$). As such, the hypothesized non-significant effect emerged in the high credibility scenario because there was no

significant difference in viewer PSI experience depending on their perceived ethnic similarity with the vlogger. Nonetheless, the expected significant difference in viewer PSI experience based on vlogger's ethnic similarity with viewers in the low credibility scenario was not found. Thus, overall, H2 is not supported.

For the interaction between vlogger physical attractiveness and ethnic similarity, depending on vlogger's level of ethnic similarity (high vs. low), viewer PSI experience with the vlogger did not significantly differ based on whether the vlogger was physically attractive or unattractive. Specifically, the means were not significantly different when the vlogger was ethnically similar to viewers (M: attractive vs. unattractive = 3.90 vs. 4.16; $p > .40$) and when the vlogger was not ethnically similar to viewers (M: attractive vs. unattractive = 3.94 vs. 4.15; $p > .40$). Therefore, H3 is not supported. Lastly, viewer attitude similarity with the vlogger and ethnocentrism were considered as the covariates of PSI in this study. The result indicates that viewer attitude similarity with the vlogger has a significant positive influence on viewer PSI experience with the vlogger ($\beta[t] = 0.542[8.253]$; $p < .001$); while the influence of viewer ethnocentrism on PSI was not significant ($\beta[t] = .031[0.478]$; $p > .60$).

Figure 3: Interaction effects of three vlogger characteristics – credibility, physical attractiveness, and ethnic similarity on PSI



Discussion

In accordance with the assumption of H1(a), Study 1 findings indicate that in case of high vlogger credibility, viewers experienced similar level of PSI with the vlogger irrespective of the vlogger's level of physical attractiveness (i.e., high/low). This finding is consistent with recent researches such as Ilicic et al., (2018) and Liu et al., (2010), which have shown the positive effect of spokespersons with both high and low physical attractiveness in influencing the audience when the spokespersons' credibility was high. On the other hand, no support was found

for H1(b); which proposed that the lack of a vlogger's credibility in influencing viewers can be compensated by his/her physical attractiveness. That is, in case of low credibility, viewers will experience greater PSI with the vlogger who is physically attractive as compared to the vlogger who is physically unattractive. However, in contrary to this assumption, the result found no significant difference in viewer PSI experience level based on vloggers' physical attractiveness. These findings essentially indicate the dominance of a spokesperson's credibility factor over his/her physical attractiveness; such that, when the credibility is low, even a physically attractive spokesperson cannot do much in influencing the audience.

In the interaction between vlogger credibility and ethnic similarity (H2), in accordance with the discounting principle of attribution theory (Kelley, 1973), viewers seemed to rely on the most relevant characteristics of the vlogger in processing decisions – which is 'credibility' of the vlogger in the context of receiving health advice. Thus, the result found no significant difference in viewer PSI experience whether the vlogger is ethnically similar or different from them, when the vlogger credibility was high. This outcome corroborated the findings of Knipscheer and Kleber (2004) and Lin and Guan (2002), which found that majority of the patients did not identified physician's ethnic similarity as an important factor in determining successful physician-patient relationships; but it is the physician's competence and compassion, which were more important. The similar effect was found in the low credibility scenario as well. When vlogger credibility is low, the vlogger who was similar in ethnicity with the viewers seemed to have no privilege over the vlogger who was not ethnically similar with the viewers. In both cases, there was no significant difference in viewers' PSI experiences and the PSI ratings were lower as compared to the high credibility scenarios ($M = 4.31$ vs. 3.79: $p<.05$). Thus, these

findings again signify the superiority of the source characteristic ‘credibility’ over the third factor, ‘ethnic similarity’.

Finally, in the interaction between vloggers’ physical attractiveness and ethnic similarity with the audience, the result failed to find any significant interaction effect in between these two source characteristics. Which essentially means that, when a vlogger is physically attractive, there is no significant difference in viewer PSI experience based on whether the vlogger is ethnically similar or not similar to the audience. On the other hand, when the vlogger is physically unattractive, there is also no difference in viewer PSI experience with the vlogger based on his/her ethnic similarity with the audience (high/low). This finding is rather surprising because it contradicts with the findings of both streams of literature on ethnic similarity and physical attractiveness. In general, prior research on source’s physical attractiveness tend to find the positive effects of a source’s physical attractiveness in persuasion, influence, favorable attitude, and so on (Eagly et al., 1991; Fiske et al.,1999; Jackson et al., 1995). While, there is a great deal of convergence on the results in advertising research where the audience preferred actors of their own ethnicity (Whittler, 1989; Whittler & DiMeo, 1991; Williams & Qualls, 1989); although findings are mixed in the healthcare literature where the physician’s ethnic similarity often did not get priority in patients’ consideration (Knipscheer and Kleber, 2004; Lin and Guan, 2002). Since, physician’s ethnic similarity with patients tend to have low priority when healthcare is concerned, this conclusion can be drawn to the context of this research to justify the lack of significance of vlogger’s ethnic similarity with the audience. While, vloggers’ physical attractiveness could have also lost its importance due to the same reason; because there can be other important characteristics of a health service provider which are more important in healthcare than physical attractiveness, such as competence and compassion.

Among the two covariates of PSI – vlogger attitude similarity with viewers and viewer ethnocentrism, I found strong support for the attitude similarity as a positive predictor of PSI. While the effect of viewer ethnocentrism on PSI was not significant.

Table 2: Measurement scales and factor loadings (Study 1)

Construct/Items	**Loadings**
Credibility (Ohanian, 1990)	
Undependable – Dependable	.824
Dishonest – Honest	.708
Unreliable – Reliable	.843
Insincere – Sincere	.777
Untrustworthy – Trustworthy	.856
Not an expert – Expert	.819
Inexperienced – Experienced	.861
Unknowledgeable – Knowledgeable	.843
Unqualified – Qualified	.886
Unskilled - Skilled	.889
Physical attractiveness (McCroskey & McCain, 1974)	
*I don't like the way she looks	.792
*She is somewhat ugly	.873
*She is not very good looking	.803
*She is repulsive to me	.729
Ethnic similarity (Street, O'Malley, Cooper & Haidet, 2008)	
Ms. Sara and I have _____ ethnic backgrounds (very different – very similar)	.856
She and I are _____ in terms of race	.869
She and I are _____ in terms of culture	.872
Parasocial interaction (Lee & Watkins, 2016; Rubin, Perse & Powell, 1985)	
I look forward to watching Ms. Sara on her YouTube channel	.755
If she appears on any YouTube channel, I would watch it	.850
When I watch her video, I feel as if I am part of her social group	.658
I would like to meet her in person	.605
If there is any story about her in a newspaper or magazine or online, I would read it.	.777
Attitude similarity (McCroskey, McCroskey & Richmond, 2006)	
Ms. Sara thinks like me	.726
She shares my values	.717
She is like me	.772

She treats people like I do	.785
She behaves like me	.821
She has thoughts and ideas that are similar to mine	.740
She has a lot in common with me	.780
Ethnocentrism (Arli, Septiano & Choudhury, 2020; Wrench, 2001)	
I don't respect values and customs of other cultures	.796
Other cultures should model themselves after my culture	.740
I do not feel the need to respect other cultures	.807
I would prefer to avoid interaction with people from other cultures	.823

Note: '*' indicates reversely coded item

CHAPTER IV

STUDY 2

The purpose of Study - 2 was to independently examine the influence of viewer PSI experience with a vlogger on viewer compliance inanition to the weight-loss health diet recommended by the vlogger in a health video. Using a scenario based experimental design, the variable PSI was manipulated in this study (i.e., high vs. low PSI). Along with examining the effects of PSI at different levels on viewer compliance intention, this study also accounted for important viewer characteristic in the process. That is, this study looked into the mediating role of viewer readiness and the moderating role of viewer health consciousness in the PSI → compliance intention relationship. Moreover, given the complex nature of people's compliance behavior, this study also accounted for the confounding roles of viewers' perceived value and perceived threat of non-compliance toward the recommended health diet in the video as covariates of the focal dependent variable of this study, compliance intention.

To conduct this study, initially two scenarios were created to manipulate PSI (i.e., high PSI scenario and low PSI scenario). To assess the effectiveness of the created scenarios in capturing the intended effects, a pretest was conducted. After satisfactory outcomes in the pretest, the created scenarios were employed to manipulate PSI in the main study.

Pretest

Design and Procedure

After thoroughly reviewing and analyzing the PSI literature, which included its definition, traits, triggers, and measurement scales – two scenarios were formulated to generate a high PSI experience and a low PSI experience. I shared the two created PSI manipulation scenarios with my PhD supervisor and with five other marketing PhD students for their views and comments on the scenarios. Upon having their feedback, necessary revisions were made to the scenarios which improved the overall quality of the scenarios. The revised PSI manipulation scenarios which were used in the pretest and ultimately used in the main study are listed as follows:

High PSI scenario:

"It is a lazy afternoon. You are at home and feel bored. You pick up your smartphone to watch something on YouTube. While randomly scrolling through YouTube's homepage, a certain video clip draws your attention. You decide to watch the video and tap on it to play it. In the video, there is a female presenter who is advising her viewers on a health topic.

You come to know that the name of the presenter is Sara Walker. She appears to be prepared for the video and greets her audience in a friendly manner. While passionately expressing her advice, she addresses you by looking right into your eyes through the camera and you feel as if she is directly talking to you. You adjust your posture to listen to her carefully. Listening to her makes you feel so comfortable that you feel you are with an old friend. Unknowingly, you start replying to her by smiling and nodding at her as if she can see you. You feel as if she can read your mind as she answers all the questions you have related to her advice. You think that it would be great to meet her in person and that you would like to see more of her videos. You are so engaged while listening to Ms. Sara that time flies and you feel that her five-minute video was over way too quickly. Thus, you start searching for more content produced by Sara Walker on YouTube."

Low PSI scenario:

"It is a lazy afternoon. You are at home and feel bored. You pick up your smartphone to watch something on YouTube. While randomly scrolling through YouTube's homepage, a certain video clip draws your attention. You decide to watch the video and tap on it to play it. In the video, there is a female presenter who is advising her viewers on a health topic.

You come to know that the name of the presenter is Sara Walker. You notice that she is not prepared for the video and the way she greets her audience is not friendly. While expressing her advice in a clumsy way, she struggles to keep eye contact, and most of the time she does not look into the camera. Unknowingly, you frown at her which you usually do when something displeases you. Listening to her makes you feel very uncomfortable and you feel disconnected from her; it's like being with someone you don't like. You shake your head to indicate that you are not at all convinced by her advice. You ask yourself : "How can a YouTube presenter be so unprofessional and expect people to listen to her?" You think that you would never want to meet her in person and that you would not want to see more of her videos. You are so irritated when listening to Ms. Sara that her five-minute video feels like an eternity. Thus, you start searching for content from other presenters on YouTube."

The pretest was conducted online by using Qualtrics. 80 participants were recruited in the survey sourced from the Amazon Mechanical Turk (MTurk). Two versions of the survey instrument were created to reflect high PSI and low PSI scenario. Participants were randomly assigned to the scenarios electronically. Initially, the survey exposed participants to the PSI manipulation scenarios where they were directed to imagine a scenario (i.e., high/low PSI scenario) as clearly as they can. Then, after leading the participants in the high or low PSI state, they were instructed to fill out an eight-item, seven-point PSI scale adapted from Rubin, Perse, and Powell (1985) which was included as manipulation check. The pretest instrument also included a nine-item, seven-point perspective taking ability scale adapted from Davis (1980) which has been showed in the literature as a strong predictor of PSI (Davis et al., 1987; Tsao 1996). I included this perspective taking ability scale in the pretest instrument as a potential covariate of PSI.

Results of Pretest

As mentioned above, Study 2 involved a scenario-based manipulation of PSI. In the pretest, participants were randomly assigned to the two PSI scenarios – high and low. After reading the scenario, participants rated their PSI experience with the vlogger in the scenario by using an eight item PSI scale adapted from Lee and Watkins (2016). Afterwards, participants

also answered a nine-item 'perspective taking ability' scale adapted from Davis (1980) which has found to be a significant predictor of PSI in the literature (Hartmann and Goldhoorn, 2011).

The manipulation appeared effective as in high PSI scenario, participants rated their PSI experience with the vlogger significantly higher relative to the low credibility scenario: M[SD] = 5.67[0.82] vs. 2.29[1.60]; t[df] = 2.03[33]; p<.001.

Main Study

Design and Procedure

Once the PSI manipulation scenarios were finalized after the pretest, they were employed in the main study to manipulate PSI. Similar to the pretest, the main study instrument also had two versions to reflect high vs. low PSI scenario. Participants were initially exposed to the PSI manipulation scenarios followed by a text description of the 'three weight-loss diet tips' by the vlogger in the video (video about which participants were asked to imagine in the PSI manipulation scenario). Afterwards, participants filled out a questionnaire consisted of scale items of PSI, viewer readiness, viewer health consciousness, compliance intention, and of the associated control variables which were all adapted from existing scales.

The main study experiment was conducted online by using Qualtrics. Participants were randomly assigned to the two scenarios electronically. 250 respondents participated in this study who were sourced from the Amazon MTurk. The rationale for recruiting a general sample by using MTurk was to enhance the generalizability of the research outcomes. However, participants who were only from the U.S were recruited in the experiment.

Measures

The manipulation of PSI in this study was checked by using the eight-item, seven-point PSI scale as in previous study adapted from Lee and Watkins (2016) and Rubin, Perse, and

Powell (1985). Viewer readiness was measured by using a nine-item seven-point scale adapted from Dellande et al.,(2004). Viewer health consciousness was measured by using an eight-item seven-point scale adapted from Ophuis (1989). Compliance intention was measured by using a six-item seven-point scale adapted from Sakib et al., (2020) and Hausman (2001). The two covariates of compliance intention in this study were – perceived value and perceived risk of non-compliance. Perceived value was measured by using a six-item seven-point scale adapted from Sakib et al., (2020) and Lee et al., (2007). While, perceived risk of non-compliance was measured by using a six-item seven-point scale adopted from Sakib et al., (2020) and was originally adapted from Folkman and Lazarus (1985) and Kirscht et al., (1978).

Analysis and Results

Reliability and validity analysis:

To determine the reliability and validity of the scale items of each construct an exploratory factor analysis (EFA) was run. Factor loadings of all the items used for further analysis were above 0.60 and the Cronbach's Alpha of all the involved six constructs were above 0.80 (see Table 3). The composite reliability (CR) score of all the constructs were above 0.80, and the average variance extracted (AVE) of each construct were above 0.50. According to Tabachnick and Fidell (2013), standardized factor loadings of >0.50, Cronbach's alpha values of >0.70, AVE values of >0.50, and CR values ranging from 0.81 to 0.97 reflects acceptable levels of reliability and convergent validity. Thus, the measures of this study hold adequate levels of reliability and convergent validity.

To examine discriminant validity among the constructs, the square rooted values of the AVEs of the constructs are placed on the diagonal line in the table below (see Table 3). To reflect discriminant validity, all the square roots of the AVEs need to be greater than any of the inter

construct correlations in the table. And, from Table 3, it is evident that all the square rooted AVEs of the constructs satisfy that condition. As such, the measures possess adequate levels of discriminant validity.

Table 3: Interactor correlations along with CR and AVE scores (Note: Square rooted AVEs of the factors are shown in the diagonal lane in bold)

	CR	**AVE**	PARASOC	READI	HEALCON	VALUE	RISK	COMPLI
PARASOC	.98	.83	**.91**					
READI	.94	.62	.565	**.79**				
HEALCON	.91	.72	.327	.398	**.85**			
VALUE	.91	.68	.595	.742	.338	**.82**		
RISK	.88	.66	.163	.412	.232	.415	**.81**	
COMPLI	.87	.70	.321	.553	.323	.477	.493	**.84**

Notes: PARASOC = parasocial interaction, READI = viewer readiness, HEALCON = viewer health consciousness, VALUE = perceived value, RISK = perceived risk of non-compliance, COMPLI = compliance intention.

Manipulation check:

Manipulation of PSI was checked by using composite of eight items adapted from Lee and Watkin's (2016) PSI scale. The manipulation appeared to be effective as participants in the high PSI scenario reported significantly higher PSI experience with the vlogger as compared to the participants exposed to the low credibility scenario: (M[SD] = 5.36[1.22] vs. 2.57[1.44]; t[df] = 1.97[167]; $p<.001$). Thus, the scenario-based manipulation of PSI was successful.

Hypotheses testing:

To examine the effect of the two levels of PSI (high and low) on viewer compliance intention, an independent sample t-test was run. As hypothesized, participants in the high PSI scenario reported higher compliance intention toward the prescribed health behavior (i.e., weight-loss diet) relative to the participants exposed to the low PSI scenario (M[SD]: 5.61[1.0] vs 5.20[1.23]; t[df] =1.97[161]; $p<.05$). Thus, H4 is supported.

To test the moderating role of viewer health consciousness on the relationship between PSI and compliance intention (H5), Haye's PROCESSS Macro Model 1 was run in SPSS. However, the effect of the interaction term (i.e., PSI * health consciousness) on compliance intention has failed to reach its significance (B = - 0.028; SE = 0.045; t = -0.625; p = 0.533). Thus, H5 is not supported.

I used 5000 bootstrap samples to conduct moderated mediation analyses at 95% confidence interval (PROCESS model 8; Hayes 2017) and examined the mediating role of viewer readiness in determining the interaction effect of viewer PSI experience and health consciousness on compliance intention. The results reveal that the 95% confidence interval (CI) for the total indirect effect included zero (Index = -0.251, 95% CI [-.605, .092]), which implies that viewer readiness does not play an intermediary role in the interaction effect of PSI and viewer health consciousness on compliance intention. Thus, H7 is not supported. However, the 95% CI for the indirect effect of PSI itself on compliance intention via viewer readiness excluded zero at its both levels (high and low) (B = .253, 95% CI [.007, .529]) and (B = .504, 95% CI [.253, .784]). This implies that, viewer readiness plays an intermediary role in the effect of viewer PSI experience on compliance intention in case of both high and low PSI scenarios and the mediating role is not affected by viewers' level of health consciousness (high/low). In contrast with the t-test results, the main effect of PSI on compliance intention was not significant in this analysis (β = -.576; SE = .448; t = -1.286; p = .200), indicating a full mediation effect of viewer readiness in the PSI-compliance intention relationship. Thus, H6 is supported. While, viewer health consciousness was found to have a significant main effect on viewer readiness (β = 1.39; SE = 5.44; t = 2.57; p<.05) but not on compliance intention (β = -.291; SE = .474; t = -.615; p = .540); overall, indicating a lack of relevance of viewer health consciousness in the PSI-

compliance intention relationship. Finally, both the covariates of compliance intention in this study, perceived value and perceived risk of non-compliance were found to have significant positive influences on compliance intention, ($\beta[t] = .326[5.231]$; $p<.001$) and ($\beta[t] = .341[4.636]$; $p<.001$) respectively.

Discussion

The significant positive influence of PSI on compliance intention was found, where viewers exposed to the high PSI scenario reported higher compliance intention toward the prescribed health behavior as compared to the ones who were exposed to the low PSI scenario. Thus, this finding extends the PSI literature to healthcare in relation to peoples' compliance behavior toward health advices.

In addition to the direct positive influence of PSI on compliance intention, this study also examined for the moderating role of viewer health consciousness in the PSI - compliance intention relationship. That hypothesis was partially supported because no significant difference was found in among the highly health conscious viewers in the high vs. low PSI scenario on their compliance intention ratings. Since health-conscious viewers have more knowledge about health behaviors, they would likely to focus on the core arguments by the vlogger (central route), thus PSI which is essentially formed based on peripheral cues such as professionalism, presentation skills etc. would have less impact on viewers' compliance intention. However, per my expectation based on literature review no significant effect on compliance intention was found in the low vs. high PSI situation when viewers were less health conscious, which is surprising. One reason for this lack of support can be attributed to the 'text-based explanation' of the three health tips which were presented by the vlogger in the video. Although, viewers may went to the high/low PSI state after reading the PSI manipulation scenario (as the manipulation has worked),

they may get influenced by the text based explanation of the three health tips (which as constant across all the segments), and thus elevate participants' compliance intention across the scenarios and causing the null effect.

Then, the moderated mediation effect between PSI and health consciousness on compliance intention through viewer readiness was also tested; but in contrary to the proposed hypothesis (H7), no support was found. The Haye's PROCESS model 8 at 95 percent confidence interval showed that viewer readiness does not play an intermediary role in the interaction effect of PSI and viewer health consciousness on compliance intention. Thus, viewer health consciousness seemed to have no significance in the PSI- compliance intention relationship. However, a significant full mediation effect of viewer readiness in the PSI – compliance intention was found; thus, highlighting the importance of readiness in this relationship. Lastly, the two covariates of compliance intention – perceived value and perceived risk of non-compliance were also found to have significant positive influences on compliance intention.

Table 4: Measurement scales and factor loadings (Study 2)

Construct/Items	**Loadings**
Parasocial interaction (Lee & Watkins, 2016; Rubin, Perse & Powell, 1985)	
I look forward to watching Ms. Sara on her YouTube channel.	.938
If she appears on any YouTube channel, I would watch it	.973
When I watch her video, I feel as if I am part of her social group	.951
I see her like an old friend	.984
I would like to meet her in person	.946
If there is any story about her in a newspaper or magazine or online, I would read it.	.869
She makes me feel comfortable, as if I am with my friends	.877
When she showed me how to eat healthy to lose weight, it helped me make up my own mind about eating healthy to lose weight.	.730

Compliance intention (Hausman, 2001; Sakib et al., 2020)	
I will be careful about what I eat or drink.	.601
I will pay attention so that I do not go hungry	.969
I will pay attention so that I do not starve myself	.891
Viewer readiness (Dellande et al., 2004)	
After learning about Sara Walker's weight-loss diet video …	
I am clear on how I can lose weight by controlling my hunger	.825
I am clear on how I can lose weight by being careful with my food and drink intake	.772
I am clear on how I can lose weight by not starving myself in the name of being on a diet.	.700
I feel I am able to control my hunger	.753
I feel I am able to become careful with what I eat or drink	.812
I feel I am able to avoid starving myself in the name of being on a diet.	.940
I feel motivated to control my hunger	.707
I feel motivated to become careful with what I eat or drink	.760
I feel motivated to not to starving myself in the name of being on a diet.	.785
Health consciousness (Ophuis, 1989)	
I have the impression that I sacrifice a lot for my health.	.727
I consider myself very health conscious	.939
I think that I take health into account a lot in my life	.914
I am prepared to sacrifice a lot, to eat as healthy as possible	.818
Perceived value (Lee et al., 2007; Sakib et al., 2020)	
I will feel better about myself if I follow Sara Walker's three weight-loss advices.	.816
I can obtain good results by following her weight-loss advices	.844
It is economical to follow her weight-loss advices	.884
Following her weight-loss advices will worth the time and effort	.866
Following her weight-loss advices will not cost me much.	.684
Perceived risk of non-compliance (Folkman & Lazarus, 1985; Kirscht et al., 1978; Sakib et al., 2020)	
An overweight person is likely to remain obese if corrective measures are not taken	.703
People who do not eat healthy tend to have a shorter life span	.685
Seeing myself as overweight is frightening to me	.907
It is stressful to imagine myself as obese	.917

CHAPTER V

DISCUSSION, IMPLICATIONS, AND CONCLUSION

Drawing on the notion of parasocial interaction (PSI) theory (Horton and Wohl, 1956), this dissertation aimed at investigating factors that can impact viewers' compliance intention toward adopting a healthy behavior (i.e., losing weight through healthy diet) in the YouTube health vlogger-viewer context. In the process, this dissertation identified three source (i.e., vlogger) characteristics from the literature – credibility, physical attractiveness, and ethnic similarity as antecedents of viewer PSI experience with the vlogger. Study 1 investigated the interaction effects among these three vlogger characteristics on PSI to examine their relative importance in PSI development. Study 2 focused on PSI and its effect on viewer compliance intention along with the moderating role of viewer health consciousness and mediating role of viewer readiness in the process. In this chapter, I discuss the findings of the two studies of this dissertation on a broader perspective in the light of the extant literature. Upon the general discussion, several potential managerial as well as social implications are presented. Further, the limitations of this research and directions for future researchers are provided at the end of this chapter.

General Discussion

Prior research provides considerable evidences of how the three key source characteristics – credibility, physical attractiveness, and similarity affect the persuasiveness and impact of delivered communications on the receiver. Credibility of a source has been identified

as a positive characteristic and being employed in persuasive communications since long time back to influence audiences' acceptance of persuasive messages or behavioral changes (e.g., Byrne et al., 2012; Hovaland and Weiss, 1951; Major and Coleman, 2012; McCroskey and Teven, 1999). Physical attractiveness is another heavily relied characteristic of a source where generally a physically attractive communicator is expected to be more persuasive as compared to the less attractive counterpart and also perceived to have other desirable characteristics (e.g., social competence, intelligence, likableness) (Berscheid and Walster, 1974; Dion, Berscheid, and Walster, 1972; Mills and Aronson, 1965). And, perceived similarity with a communicator (e.g., ethnicity, background, attitude, and gender) also plays a critical role in persuasive communication by engendering more positive attitude and agreement from the audience toward the communicated message due to the similarities exist between the two parties.

To complement this growing body of literature, this dissertation delved deeper into the relationships between these source characteristics and looked for the interaction effects of sources' credibility, physical attractiveness, and ethnic similarity with the audience while investigating their influences on PSI in the YouTube health vlogger-viewer context (Study 1). However, in contrary to the theory driven assumptions, no significant interaction effect was found among the three source characteristics which is surprising and contradicts with the common findings of past literature. Nevertheless, in general, the results indicated the superiority of a source's credibility over the other two characteristics – physical attractiveness and ethnic similarity; such that, when a vlogger's credibility was high, viewer's PSI experience with the vlogger did not differ significantly based on whether the vlogger is ethnically similar/different to the viewers or based on whether the vlogger is physically attractive/unattractive. In addition,

viewers across the scenarios reported greater PSI experience with the vlogger during the high credibility scenario as compared to the low credibility scenario.

On the other hand, while analyzing the interactions between vlogger's physical attractiveness and ethnic similarity, no significant difference in viewer PSI experience was found based on vlogger's physical attractiveness (high vs. low) and ethnic similarity (high vs. low) with viewers. The lack of significance of vlogger's ethnic similarity with the audience can be attributed to the context of this study, which is healthcare. A few researches in healthcare which focused on the physician's ethnic similarity factor with patients in determining treatment satisfaction and successful patient-physician relationship indicate that majority of the patients did not find physician's ethnic similarity as an important factor; but rather they found physician's competence and compassion to be more important factors to consider. However, I would attribute the overall lack of support for vlogger's physical attractiveness in generating PSI experiences to the ineffective manipulation of vloggers' physical attractiveness (i.e., attractive vs. unattractive) in Study 1, which was a key limitation of the experimental design of this study. Moreover, a recent research in healthcare indicate that, like most other areas of human interaction, 'physical attractiveness stereotype' is also present in healthcare Westfall (2018); as this stereotype activates automatically and extremely difficult to resist, especially when individuals are unaware of this.

To delve into the other part of the psychological process, Study 2 has focused solely on the effect of PSI on viewers' compliance intention toward the prescribed health behavior in the video. In accordance with my prediction, viewer PSI experience with the vlogger has positively influenced viewers' compliance intention. Moreover, the effect of PSI on compliance intention has also worked through viewer readiness which consists of viewers' role clarity, ability, and

motivation. Thus, along with the sheer characteristics of a source, this dissertation also highlights the importance of 'quality content' in the video to reinforce viewer compliance intention toward the health behavior. However, viewers' 'health consciousness' has found to have no impact in the PSI-compliance intention relationship; neither on the direct path nor on the indirect path through viewer readiness. In other words, viewers' compliance intention toward the prescribed health behavior did not differ depending on whether they are health conscious by nature or not. This finding is surprising but indicates toward a positive implication. That is, this PSI driven mechanism of health communication has the potential to elevate the compliance intention of people who are generally not health conscious to such a level that is comparable with the compliance intention level of people who are health conscious.

Managerial and Social Implications

The findings from the two studies of this dissertation has important implications for health service providers (such as physicians, dietitians, and nutritionists), government health organizations, consumer welfare organizations, and for potential health experts who want to launch their own YouTube channel, post videos on different health topics, and thus use this powerful video streaming medium to reach large number of people. From the interaction effects of the three source characteristics on PSI in Study 1, it is evident that, credibility plays the dominant role as a source characteristic above the other two characteristics. Thus when recruiting vloggers to promote healthcare messages, irrespective of the person's physical attractiveness or ethnic similarity, it is his/her credibility that must be taken into consideration and should factor into the design and communication of health campaigns.

One of the core contributions of this dissertation is that, viewer PSI experience with the vlogger positively influences their compliance intention toward the suggested health behavior.

Moreover, a mediating role of viewer readiness – role clarity, ability, and motivation was also found in the PSI-compliance intention relationship. This finding contributes to the extant healthcare literature by highlighting a mechanism through which PSI influences viewer compliance intention to follow a health behavior. To elaborate, PSI can result in higher levels of viewer readiness (in terms of role clarity, ability, and motivation) in individuals, which in turn enhance compliance with vlogger's instructions. The process works through viewers' upward social comparison with the vlogger which motivates and empowers them to exert effort on the direction of the vlogger's suggestion and seek the desired outcomes. Thus, when creating health-related communication materials, marketers should evaluate vloggers' personability in order to induce feelings of closeness and emotional connection with their viewers. Such abilities will help in strengthening PSI and have the potential to motivate viewers, create a sense of empowerment in them, and result in clearer role perceptions in achieving the desired outcomes. If these conditions are met, PSI can result in higher consumer readiness and compliance intentions, especially among vulnerable consumer groups (e.g., those suffering from low self-esteem and unfulfilled emotional needs) who are more likely to develop connections with celebrities promoting solutions to their problems (e.g., Dr. Phil for television viewers who are mentally disturbed; Derrick et al., 2008; Rasmussen and Ewoldsen, 2016).

Then, the lack of support of viewer health consciousness as a moderator in the PSI-compliance intention relationship or in the moderated mediation effect of PSI and health consciousness on compliance intention through viewer readiness indicate that, compliance effects of PSI are not differentially influenced by viewers' level of health consciousness. One explanation for this finding can be that, since PSI is a feeling which is essentially formed by the peripheral cues of a communication, such as the characteristics of the source e.g., credibility,

physical attractiveness etc. the scrutinizing of the message itself by the source is less likely to take place when viewers are already experiencing PSI with a vlogger. This phenomenon undermines the value of health consciousness in the process. In other words, people who are less health conscious by nature can also report high compliance intention toward the recommendations of a health video only because they liked the 'vlogger' in the video. Thus, this PSI based mechanism has the potential to profoundly impact general peoples' health as it not only motivates people who are already health conscious to follow a prescribed health behavior but also motivates people who are not health conscious by nature to follow a healthy behavior because they 'like' the person they are listening to. Moreover, although not hypothesized, a significant main effect of viewer health consciousness on viewer readiness was found. That is, viewers who are more health-conscious exhibited higher role clarity, ability, and motivation to follow the suggested health behaviors as compared to the less health conscious viewers. This finding reinforces the value of the 'quality content' in the video along with the relevant source characteristics. Since viewers who are more health conscious have more knowledge about health and are more likely to scrutinize the message arguments of a health video as compared to the less heath conscious counterpart, if they do not find the content of the video useful, they will not be motivated to follow the prescribed behavior by the vlogger.

Lastly, the results indicate that situational factors such as perceived value of compliance and perceived risk of non-compliance influence compliance intentions. Therefore, such information should be communicated to the target audience in order to enhance individuals' understanding of the value of compliance with the proposed healthy behavior.

Limitations and Future Research

As compliance with health-related messages is a complex issue, especially in cases where the it takes time to see the results (e.g., losing weight), predictions of compliance intention may not necessarily reflect the actual behavior. Moreover, healthcare industry is so fragmented that, depending on differences among various health issues, a different set of course characteristics may become more important. Which is evident from the results of Study 1, were the research failed to find any significant main or interaction effects of vlogger physical attractiveness and ethnic similarity on PSI, despite being influential in the literature in influencing consumers and persuasion. However, one potential limitation of the experimental design of Study 1 is that, the manipulation of vlogger physical attractiveness failed to work effectively. This can potentially impact the main or interaction effects of vloggers' physical attractiveness on PSI along with the other source characteristics.

To capture the ethnic similarity effect carefully, in the first study I recruited participants with Mexican backgrounds only from a Hispanic majority serving institute. Thus, the sample is restricted to a single ethnicity within a single country. Future research is encouraged to examine these relationships in other healthcare intervention contexts using more representative samples. In this research I employed fictitious vlogs to manipulate vlogger characteristics rather than original vlogs, which can also impact the generalizability of the findings. Moreover, only female vloggers were recruited to be presenters in the vlogs. Future research can employ male vloggers and can look for any potential contrasts.

Lastly, even though this research found PSI to be a strong predictor of compliance intention, I examined viewers PSI experience with the vlogger based on a single exposure. In the real world, viewers establish parasocial relationships (PSR) with vloggers through repeated

exposures. Thus, future research should adopt a longitudinal approach and measure PSR, compliance intentions, as well as actual compliance behaviors over a period of time for more insights

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