

Online shopping: A comparison of New Zealand and Chinese shoppers

Xing Ye

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XING YE

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Abstract

This research paper provides a comparative analysis of New Zealand and Chinese shoppers' online shopping behavior. The dissertation examines consumers' frequency of shopping, with particular focus on the comparison of online shopping behavior by Chinese online shoppers and New Zealand online shoppers. The advent and rise of technology in online shopping has led individuals to be able to undertake almost all their daily shopping needs through the use of online shopping websites. This research attempts to find clarification by proposing the mediating role of social influence between national culture and frequency of shopping online. It is important to provide an examination of the impact of social influence on online shopping behavior. Understanding this aspect is highly beneficial for marketers, as it will aid marketers in developing improved business strategies in order to attract the attention of consumers to make purchases.

This research is an examination of four identified hypotheses that cover the importance of online shopping behavior, frequency of shopping online, social influence and national culture as elements which may impact the shoppers' decision in online shopping.

H1: National culture impacts frequency of shopping online.

H2: Social influence mediates between national culture and frequency of shopping online.

H2a: Normative social influence has a mediating role on frequency of shopping online.

H2b: Informational social influence has a mediating role on frequency of shopping online.

Participants in an online survey were female online shoppers aged 18-24 years living in China and New Zealand who had experienced online shopping in the past six months. The survey was presented in an online format and consisted of two different versions,

namely, a Chinese version, and an English version. 111 participants filled out the Chinese version and another 139 participants filled out the English version.

The findings of the research indicate that social influence partially mediates between national culture and frequency of online shopping; that normative and informational social influence mediate frequency of online shopping. Future research can investigate relationships between frequency of online shopping and other factors such as level of trust by online shoppers.

Table of Contents

Chapter One: Introduction

1.1 Background of the dissertation	12
1.2 Problem statement	12
1.3 Research aim.....	13
1.4 Justification for the research.....	13
1.5 Methodology.....	14
1.6 Summary of the research	14

Chapter Two: Literature Review

2.0 Introduction	15
2.1 Online shopping behavior.....	15
2.2 Social influence	16
2.3 National culture	18

Chapter Three: Theoretical Framework

3.1 Theoretical framework	21
3.2 Collectivism and individualism-Social influence.....	21
3.3 Social influence- frequency of online shopping	22
3.4 Collectivism and individualism- frequency of online shopping.....	22
3. Hypotheses development.....	23

Chapter Four: Methodology

4.1 Research design & data collection methods	28
4.2 Measurements	28
4.3 Sample	29

Chapter Five: Findings

5.1 Introduction	32
5.2 Description of NZ sample	32
5.3 Description of China sample.....	33
5.4 Exploratory factor analysis	33

5.4.1 Exploratory factor analysis for normative and informational influence.....	33
5.4.2 Exploratory factor analysis for national culture	33
5.5 Cultural Values: horizontal/vertical, individualism/collectivism.....	36
5.6 Normative and informational influence (comparison of NZ and China).....	39
5.7 Comparison of New Zealand and China on the shopping variables	40
5.7.1 Frequency of looking, buying and spending on clothing online.....	40
5.7.2 Frequency of looking, buying and spending on shoes online	42
5.7.3 Frequency of looking, buying and spending on cosmetics online	44
5.8 Hayes analysis for normative influence as a mediator.....	45
5.8.1 Normative influence as a mediator for looking for clothing.....	45
5.8.2 Normative influence as a mediator in clothing spending.....	46
5.8.3 Normative influence as a mediator in clothing buying	46
5.8.4 Normative influence as a mediator in looking for shoes	47
5.8.5 Normative influence as a mediator in spending on shoes	47
5.8.6 Normative influence as a mediator in buying for shoes.....	48
5.8.7 Normative influence as a mediator in looking for cosmetics.....	48
5.8.8 Normative influence as a mediator in cosmetics spending	49
5.8.9 Normative influence as a mediator in cosmetics buying	49
5.9 Hayes analysis for informational influence as a mediator	50
5.9.1 Informational influence as a mediator in looking for clothing	50
5.9.2 Informational influence as a mediator in spending on clothing.....	51
5.9.3 Informational influence as a mediator in clothing buying	51
5.9.4 Informational influence as a mediator in looking for shoes.....	52
5.9.5 Informational influence as a mediator in shoes spending	52
5.9.6 Informational influence as a mediator in shoes buying	53
5.9.7 Informational influence as a mediator in looking for cosmetics.....	53
5.9.8 Informational influence as a mediator in cosmetics spending	54
5.9.9 Informational influence as a mediator in cosmetics buying.....	54
5.9.10 Summary of tests of mediation.....	54

Chapter Six: Discussion

6.1 Introduction	56
------------------------	----

6.2 Answers to research hypotheses	57
6.3 Answers to research aim.....	57
6.4 Managerial implications	58
6.5 Limitation and future research.....	60
6.6 Conclusion.....	62
References.....	64
Appendices	67

List of Tables

Table 1: Demographics-Age (NZ).....	32
Table 2: Demographics-Place of residence (NZ)	32
Table 3: Demographics-Current employment (NZ)	33
Table 4: Demographics-Monthly income (NZ).....	33
Table 5: Demographics –Age (China).....	34
Table 6: Demographics-Place of residence (China)	35
Table 7: Demographics-Current employment (China).....	35
Table 8: Demographics-Monthly income (China).....	36
Table 9: Shopping for Clothing	38
Table 10: Shopping for Shoes	40
Table 11: Shopping for Cosmetics	44
Table 12: Summary of tests of mediation.....	58

List of Figures

Figure 1: Theoretical framework.....21

Figure 2: Mediation analysis for “looking for clothing” (1)45

Figure 3: Mediation analysis for “looking for clothing” (2).....53

Attestation of Authorship⁴¹

I hereby declare that this dissertation is my own work and it is the highest performance of my academic knowledge. It contains no material or article previously written or published by any author, nor any material used that has been previously used to receive degree in any University or institution of higher learning. Published materials or articles have been used in this paper as reference only.⁴¹

XING YE 邢叶

Signature

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Ethical Approval

This research was approved by the AUT Ethics communities on 10 October 2016.

Chapter One: Introduction

1.1 Background of the dissertation

The amount of research about online shopping behavior has increased due to the increase in the population of online shoppers and online shopping websites. However, most of this literature has focused on understanding consumers' intentions to purchase in online shopping websites and has then applied the theory of diffusion of innovation, technology acceptance model and the theory of planned behavior to explore this shopping behavior (Tan, Yan & Urquhart, 2006). There are few research studies about the impact of social influence and cultural differences in online shopping. Online shoppers come from different countries and participate in online shopping. They display various shopping behavior derived from their cultures and backgrounds. The main aim of this research is to extend previous literature based on integrating different cultures to better understand the impact of social influence on online shopping behavior across two cultures. It has been found that Individualism and Collectivism have important influence on online shopping behaviors (Bearden *et al.*, 1989).

Most consumers are satisfied with their experiences and feelings in online shopping and a majority of consumers intend to make more online purchases (Lim, 2014). Therefore, online stores can take advantages from helpful research studies due to the increased numbers of online consumers. Online shopping websites can also be helped by an improved acknowledgement of online shopping behavior to sell their services or products easily and effectively (Tsai & Pai, 2012).

Many models and theories have been adopted to study online shopping behavior such as the technology acceptance model, the theory of planned behavior and so on (Tan, Yan & Urquhart, 2006). The understanding level of online shopping websites and stores are enhanced by the acknowledgement of these helpful models which let them know why consumers purchase in online stores and their intention to purchase. This research focuses on developing and testing a theoretical framework to comprehend the effect of social influence and national cultural differences in online shopping behavior.

The main objectives of the research are to find answers and explore useful perspectives about how social influence affects the online shopping behaviors.

1.5 Problem statement

Online shopping behavior is worthy of research as online shopping is a new retailing medium and online shopping behavior is different from traditional consumer behavior (Lim, 2014). In addition, social influence likely influences the individual's motives for consumption. Therefore, learning more about the relationship between the impact of social influence and national cultural on online shopping behavior is important. In order to offer appropriate assistance to marketing practitioners, it is important that a quantitative study is conducted to investigate and determine the factors that have impact on online shopping behavior in China and New Zealand. This dissertation focuses on investigating the differences in online shopping behavior of New Zealand and Chinese online shoppers.

1.2 Research aim

Cultural effects and social influence cannot be ignored with the development and globalization of e-commerce (Amant, 2002). Therefore, it is essential for researchers to consider social influence and cultural differences as recently online buyers come from distinctive cultural backgrounds. However, there are few research studies that explore the relationship between social influence, national cultural differences and online shopping behavior (Kacen & Lee, 2002; Lee, 2000). This dissertation intends to find improvements based on introducing the mediating effect of social influence and different types of national culture. It is critical to contribute an exhaustive examination of the impact of social influence and national cultural on online shopping behavior.

1.3 Justification for the research

Online shopping is a special issue that pictures and distinguishes people's lives in modern society. It is crucial to notice that there is little research that has studied the current performance and specialization of online shopping websites in China. Most

research has paid attention to online shopping patterns. Also, some quantitative-based research in the field of consumer behavior has concentrated on consumers' age and gender (Richard, Chebat, Yang, & Putrevu, 2010). This dissertation is an opportunity to investigate and examine the factors that have impact on online shopping behavior in China and New Zealand. For instance, online purchase decision and frequency of purchasing in New Zealand and China are likely influenced by social influence. Research rarely compares Chinese online shopping websites to Western websites and, therefore, this research aims to investigate the difference of online shopping behavior of both New Zealand and Chinese online shoppers.

1.4 Methodology

Data was gathered via an online survey. The survey consisted of two different versions, namely, a Chinese version, and an English version. 111 participants completed the Chinese questionnaire and another 139 participants completed the English questionnaire. The survey was conducted using Survey Monkey software and CINT research panels from China and New Zealand. Relationships between nationality, social influence and frequency of online shopping were tested with ANOVA and Hayes Process Analysis.

A comprehensive and specific description about methodology used in the research is provided in Chapter Four.

1.6 Summary of the research

Chapter One described the background of the research, the aim of the research, the explanation of the research, and the methodology. Chapter Two presents a literature review. Chapter Three presents a theoretical framework in order to express the relationship between nationality, normative and informational social influence, and frequency of online shopping. Chapter Four is about the methodology used in the dissertation. Chapter Five provides the main findings of the study based on precise

investigation. Lastly, Chapter Six presents a discussion, limitations of the research, and conclusions based on the investigation.

Chapter Two: Literature Review

2.0 Introduction

The internet is developing rapidly and many consumers are familiar with purchasing products online. This section reviews the key literature on online shopping behavior, social influence and national culture. A brief review is conducted based on previous research articles in the field of online shopping behavior, social influence, and culture cross-cultural studies.

2.1 Online shopping behavior

Online shopping refers to a form of electronic commerce rising in the last 20 years which allows people to buy products and services directly from online stores on the Internet through websites (Ruyter, 2004). The information search behavior of online consumers have been investigated and explored (Jaillet, 2002). The predictors of online shopping behavior have also been examined (Foucault & Scheufele, 2002). Some non-functional motivations which can drive online consumers' intention to make the online purchase decision have been explored. For instance, it is said that online shopping consumers would like to buy more clothing and other fashion products if they have more online purchasing experience (Goldsmith and Goldsmith, 2002). Besides, there are many different models and theories such as the Technology Acceptance Model, the Web Behavior Model, the Innovation Diffusion Theory, and the Theory of Planned Behavior that can be used to investigate and study consumers' online shopping behavior (Tan, Yan & Urquhart, 2007). The impact of social influence and national cultural differences on online shopping behavior is still worth exploring. Moreover, these theoretical models and frameworks can help online shopping websites to know the factors or issues that can motivate consumers to purchase online.

Some research has explored the effects concerned with the intention to shop online in different cultural backgrounds. National cultural differences can influence consumers' intention and motivation for adopting online shopping (Smith et al., 2013).

Furthermore, it is indicated that online shoppers' intention to buy online is relatively weaker in individualist cultures than in collectivist cultures (Smith et al., 2013). However, personal preferences, specific needs and wants, and rights are important factors that are capable of motivating consumers in individualist cultures. In other words, preferences of groups and its harmony are more important for consumers from collectivist cultural backgrounds (Triandis, 1994). In addition, it was found that there is a stronger relationship associated with attitude, feeling and intention in individualist than in collectivist cultures. (Lee, 2000; Kacen and Lee, 2002). The present research seeks to have clarification by examining the impact of social influence and influences from different national cultural backgrounds on consumers' online buying behavior through reviewing previous literature and designing a study to test the relationship between national culture, social influence and frequency of shopping online.

2.2 Social influence

Social influence refers to the change in the behavior of a person caused intentionally or unintentionally by another person, when the first person has a relationship with another person and even society in general (Huarng & Christopher, 2003).

Social influence promotes direct information processing while focusing on the individual's motives for consumption (Tan, Yan & Urquhart, 2007). These motives can change the social meaning of consumption and purchase decisions (Huarng & Christopher, 2003). For example, a social network consists of a state of connectedness and interactions of individuals in a group, which plays a very significant role as an instrument for the dissemination of information and ideas that spread within the group (Hu, Gong & Guo, 2015). A Web-based social network can influence people's opinions by exchanging ideas and interaction with others through a discussion forum and people can use it to make a comparison between other shoppers' and their own shopping experiences (Hu, Gong & Guo, 2015). Moreover, social networks become popular when many online shopping stores provide platforms in their websites to help

consumers to make their purchase decisions by evaluating reviews about brands and products that are written by previous customers.

Most online buyers prefer to check comments and advice posted by previous shoppers while checking product features before making their buying decisions in order to minimize the uncertainty and risk of purchasing online. In addition, there are two types of social influence in buying new products. The first one is normative influence (subjective norms), and the second one is informational social influence (Bearden *et al.*, 1989). Normative social influence (subjective norms) has the power to create social pressure to convince people to buy or use a product (Bearden *et al.*, 1989). People will not purchase or use a product that is not accepted by others in the society unless the product strongly matches their preferences.

Informational social influences refers to a kind of information gathering process that let individuals inspect shopping experiences of others consumers in their social platforms or online shopping websites and then make a decision about whether or not to buy the new product which they have not tried before (Bearden *et al.*, 1989). In the online shopping environment, informational social influence also refers the quality of the information, the perceived credibility of the source, and information quantity on a product or service (Filieri, 2015).

In other words, it has been acknowledged that the informational social influence has a mediating role between consumers' opinion and feeling about a product or a brand and their willingness to purchase it through increasing their confidence and positive attitude about their preferences toward the product or the brand (Bearden *et al.*, 1989). Therefore, it is valuable to explore the impact of social influence on online shopping behavior as it can provide many benefits for online retailers to improve their online stores and their way of operation. For example, posting high quality reviews of products and brands from online consumers and trusted sources is a useful tool for online retailers and shopping websites to convince other shoppers to buy their products. Besides, personal and detailed reviews from online shoppers for products help online stores to predict future market trends and sales trends. Also, matching the opinion

leaders' position of online stores and websites can be identified and used to increase effectiveness of marketing due to their high influence.

Some consumers tend to believe reviews posted on online shopping websites about products and brands are from other online shoppers. Whereas, some consumers are more willing to believe words, opinions and advice from their own friends, family members but not someone they are not familiar with (Batinic & Appel, 2013). Also, it is true that friends, family members, or business partners have great power in influencing individuals' purchase decision. For example, many online shopping websites have their online communities and these communities allow participants to show their ideas, opinions, and their product preferences and to share their suggestions based on identification of trusting members and rating reviews of others. In addition, social network sites such as Facebook, Twitter and MySpace occupy large volume of traffic to online shopping stores. These social media platforms are now becoming the beginning place for their users who enjoy online shopping (Hu, Gong & Guo, 2015). Amazon.com is one of the online stores which promote consumers to purchase products for their friends or family members as gifts in order to promote and recommend products to their friends or family members. Consumers can post their product reviews, pictures of products, and their own recommendations or suggestions for products for other consumers on the shopping websites.

Moreover, the increase in traffic from social media platforms to online stores indicates that there are a large number of influential consumers that can be directly affected by the buying decisions of other customers. Thus, it is good for online stores and shopping websites to know that they can benefit from this social influence between their consumers which can help in developing customer relationship management and then increase sales for the long run (Hu, Gong & Guo, 2015).

2.3 National Culture

Individualism/collectivism is a cultural dimension proposed by Hofstede (2001), who offered a model of cultural backgrounds with five different dimensions. It explains the

influence of different cultures and its associated values on its members in different societies, and it also describes the patterns and relationship of these different values related to individuals' behavior.

This research uses the cultural framework proposed by Hofstede (2001) because this model is the most popular and suitable theory used in cross cultural areas (Tan, Yan & Urquhart, 2007).

Individualism refers to a social pattern and norm in which people see themselves as independent individuals (Triandis, 1994). On the other hand, individuals who come from collectivist cultural backgrounds treat themselves as an essential and important part in a group as a group member (Triandis, 1994). Collectivism refers to the idea that the person should behave based on the moral norms and concerns that groups and society want.

Collectivists usually focus on community, society, or country. In the case of online shopping behavior for online shoppers from different countries and cultures, experiences of online shopping may differ between Chinese consumers and Western consumers. They have distinct ways when buying online, for example, Chinese consumers are more interdependent as they care about what others say. Western consumers are more independent as they focus on their point of view and options (Lee, 2000). People in individualistic cultures such as Western countries make online shopping decisions mostly by themselves and the process of their online buying would not be too complicated or bothered by others compared with Chinese consumers. The reason is that they do not focus on the product's popularity and whether it can present high status in society (Triandis, 1994).

Online consumers in collectivistic cultures are very different from individualistic cultures. They treat the social norms of their cultures very importantly (Markus and Kitayama, 1999). They listen to suggestions and opinions from their family and friends and try to avoid doing things that impact reputation and do not place themselves as different from others because they care about harmony and unification (Markus and

Kitayama, 1998). The same attribute may be observed in Chinese society's collectivist nature where group members can influence each other considerably.

Chapter Three: Theoretical Framework

3.1 Theoretical framework

This paragraph describes the conceptual framework for the research. The influence of normative and informational social influence and culture on online shopping has emerged as a significant issue in consumer behavior research (Pookulangara and Koesler, 2011). However, styles of social media platforms are different in different national cultures. Therefore, the research builds up the national cultural framework based on the concepts of different cultural dimensions (Hofstede, 1991), which is powerful and convincing in describing social influence and differences that occur in various cultures in consumer behavior. The dependent variable in the framework is frequency of shopping online for various category of products, the independent variable is national culture and the mediator is social influence.

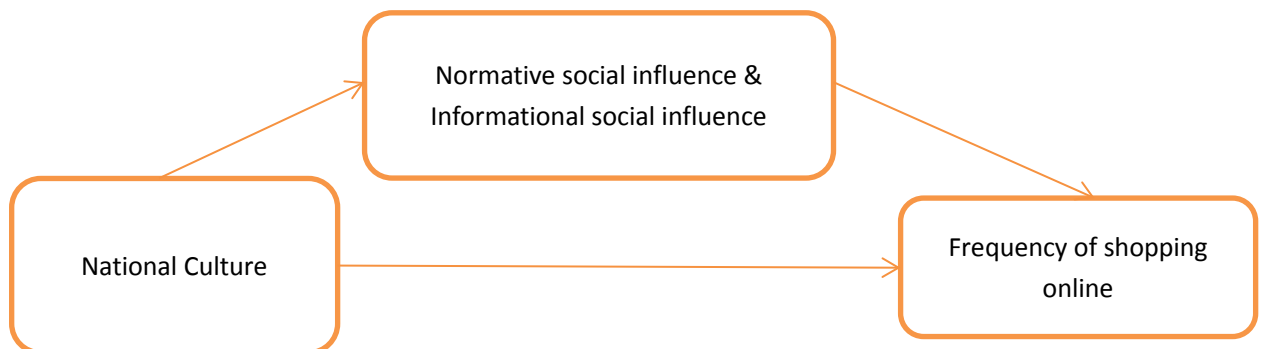


Figure 1: Theoretical framework

3.2 Collectivism and individualism-Social influence

Interdependence and sociality have been treated seriously by people in collectivist cultures (Hofstede, 1991). Consumers in collectivist cultures pay more attention to social influence than people in individualist cultures. They make their shopping decisions based on opinions and suggestions from others in their groups (Yoon et al., 2011). They are influenced by social situations more than their own behavior or personality compared to individualist cultural consumers. Therefore, it can be concluded that social influence may have a stronger impact on consumers in

collectivist cultures and their purchase decisions will also be strongly influenced by other individuals in the collectivist society (Winsted, 1997). Moreover, another suggestion about the collectivistic consumers and social influence is that collectivistic shoppers will get more pleasure and enjoyment from social influence in online shopping compared with individualistic shoppers (Pookulangara & Koesler, 2011). Therefore, it can be hypothesized that: Collectivist consumers are positively related to social influence occurring in the online shopping experience.

3.3 Social influence- frequency of online shopping

It is also essential to make a prediction about frequency of consumers' online shopping.

As frequency of online shopping is consistent with consumer intention to purchase product therefore it is crucial to investigate its importance and relationship with social influence. It can be hypothesized that frequency of online shopping and social influence are positively associated with each other.

3.4 Collectivism and individualism- Frequency of online shopping

Some research shows that collectivist cultural consumers such as Chinese consumers are interdependent and prefer to undertake lots of information search and ask the opinions of their friends and family members or do some window shopping before making a purchase decision in comparison to the consumers in individualist cultures (Doran, 2002). Moreover, Chinese consumers feel more pleasure from browsing experiences than Western consumers in online shopping (Ackerman and Tellis, 2001). They spend a long duration in browsing online shopping websites to search for information about products and brands, and they treat it as one of their favourite activities in daily life compared with consumers in individualist cultures (Ackerman and Tellis, 2001). However, there is a limited research on the relationship between frequency of online shopping and cross-cultural studies. Therefore, it can be predicted that social influence on frequency of online shopping is stronger for the

collectivistic consumers than for the individualistic consumer as the former care more about friends and family members' opinions and advice.

3.6 Hypothesis development

This section describes four hypotheses in total. These specific hypotheses related to the online shopping culture and social influences are discussed below.

H1. National culture impacts frequency of shopping online

It is important to examine frequency of shopping online as a key outcome variable in consumers' online shopping behavior, recognizing that previous shopping behavior can influence continued behavior in the long run. Therefore, it is important to understand consumers' shopping frequency in order to determine market segments as online shoppers with large consumption experiences will contribute more sales compared to the infrequent shoppers (Martin, Mortimer & Andrews, 2015). In addition, frequent online buyers can generate more product sale and experience higher customer satisfaction and loyalty in online shopping websites or online stores. In addition, marketing coordinators undertake their target marketing according to shoppers who have more frequent purchase experiences (Martin, Mortimer & Andrews, 2015)

Besides, in the case of online shopping behavior from different countries and cultures, online shoppers such as Chinese consumers and New Zealand consumers, may reflect different shopping behavior. They have distinct ways when buying online. For example, Chinese consumers might be more interdependent and care about what others say. New Zealand consumers might be more independent and focus on their ideas and opinions and ways of doing things (Lee, 2000). Therefore, it is significant to identify whether or not national culture impacts frequency of online shopping of online shoppers for New Zealand versus China.

H2. Social influence mediates the impact of national culture on frequency of shopping online

Social influence refers to individuals' attitudes and feelings towards pressures from the

society which encourages them to act the same way as other people in society (Ajzen and Fishbein, 1980). Social influence consists of normative influence and informational influence (Bearden *et al.*, 1989). Normative influence has the power to create social pressure to convince consumer to buy or not to buy a product (Bearden *et al.*, 1989). Informational social influence relates to people's disposition to follow the pattern of other people according to information gathered as indication or clue to the best product to buy (Bearden *et al.*, 1989). Normative social influence is the social phenomenon reflecting an individual's disposition to comply with behavior and actions from other people (Burnkrant & Cousineau, 1975). For instance, consumers are more willing to choose the store with more customers when faced with two similar stores. There are many shoppers who will not buy products online once their friends tell them not to buy products online (Chen *et al.*, 2010). Collectivist consumers likely pay more attention to social influence and opinions of others from their reference groups. On the other hand, individualist consumers believe their own choices and act upon their judgments to use the product obtained by their effort (Triandis, 1994).

H2a. Normative social influence has a mediating role on frequency of shopping online

Normative social influence is about people's tendency to comply with the expectations from other people or a reference group (Bearden *et al.*, 1989). Consumers alter their own judgments to match up the beliefs and actions of other individuals for the purpose of identifying with them in the reference group (Burnkrant & Cousineau, 1975). On the other hand, the conformity derived from normative influence refers to the requirement to be recognized by members within reference groups and to achieve social rewards for example people prefer to be accepted and welcomed by others in the society (Lascu & Zinkhan, 1999). The "like" signature from Facebook conveys positive and optimistic information and this is increasingly provided by many online shopping websites. The number of "likes" also induces people to buy products or services because their friends or family members recommend this product or brand to them. It is said that normative social influence has the persuasion power to impact consumers' buying behavior in

social platforms where the people online act similarly to their friends (Kuan, Zhong, Y.K, Chau, 2014). This action may increase the probability for consumers to make purchase decisions and increase frequency of shopping online.

For example, some cosmetics companies adopt this strategy in advertising their anti-aging products. They portray of aging women and let consumers think aging is an unacceptable situation which women should manage properly. Audiences will probably buy products related to anti-aging after seeing these kinds of advertisements as they want to be as perfect as others. The cosmetics companies win based on the strategy of using the power of normative social influence. Consumers are often persuaded by advertising strategies adopting social influence and often buy the same products or similar products to fulfill their social needs. Mostly they buy these products as they want to be like others.

Therefore, we can deduce that normative social influence may mediate the impacts of national culture on frequency of online shopping.

H2b. Informational social influence has a mediating role on frequency of shopping online

Informational social influence is about the kind of influence which lets people accept ideas and information gathered from others (Nolan, 2014). Informational social influence is also about the judgment of the recipient towards the relevant information or ideas (Deutsch & Gerard, 1955). Informational social influence is also about the quality of information in products' reviews from online consumers, the perceived credibility of the source (Filieri, 2015)

As Web 2.0 platform emerge, it has become easy to express your own ideas and perspectives to other online shoppers by posting product reviews and chatting with each other about unique buying experiences.

Informational social influence results in conformity as people see behaviors and judgments of others which reflect as information and they consider it to be more appropriate decision to listen to advice from others (Liu & Sutanto, 2012).

Moreover, susceptibility towards informational influence can impact people's attitudes, emotions and behaviors. Some consumers are more likely to be influenced by others in their daily life and they are the kind of people who have high susceptibility towards informational social influence, whereas others display low level of susceptibility towards informational social influence (Bearden *et al.*, 1989; Chen, Teng, Yu and Yu, 2016). Shoppers who have high susceptibility towards informational social influence are relatively dependent on other people, and shoppers who have low susceptibility towards informational social influence are relatively independent (Bearden *et al.*, 1989; Chen, Teng, Yu and Yu, 2016).

For instance, some consumers with dependent characteristics often comply with suggestions from their friends and families before buying products online, whereas consumers with independent characteristics feel free and confident in making their purchase decisions by themselves. In general, shoppers who have high susceptibility to informational social influence prefer to listen to the opinions of others to achieve a sense of self-identity. These individuals with high levels of susceptibility may believe that other shoppers provide reliable and credible information regarding an online store, brand or product during the process of information search. However, shoppers with low susceptibility prefer to believe in their own opinions but not information from internet word of mouth (Bickart & Schindler, 2001). Besides, these low susceptibility shoppers search product information and research product recommendations from third party websites. Therefore, we can deduce that informational social influence may mediate the impacts of national culture on frequency of online shopping.

Chapter Four: Methodology

Clothing, shoes and beauty products are common fashion products which are well established in online shopping (Xu, Ling, Truong and Klink, 2014). This research focuses on these popular product categories.

All participants in the online survey research purchase clothing, shoes and beauty products through online shopping websites. These participants browse and search product information or read reviews and communicate with other online shoppers. They might also chat with their friends, family members to obtain ideas, opinions and advice about products and brands.

4.1 Research design and data collection methods

The online questionnaire used reliable and well-known measuring instruments, to measure cultural values (vertical/horizontal, individualism/collectivism), normative and informational social influence. All of these questions were rated on a seven-point Likert scale from "strongly disagree" (1) to "strongly agree" (7) (Huang & Mead, 2014).

For example, cultural values were measured by using the scale proposed by Triandis and Gelfand (1998). Horizontal individualism can be measured based on the scale of Triandis and Gelfand using the following 4 items: (1) I prefer to be independent and not rely on other people (2) I prefer to rely on myself mostly and seldom rely on others (3) I always do my stuff instead of taking care of other thing. (4) I think personal identity and being independent is crucial to my life. Vertical individualism can be measured using the following 4 items: (5) It is very significant to do my activities better than other people. (6) I believe winning means everything. (7) Competition is significant and I treat it as a necessary thing. (8) I will get very tense and keenly excited when other people do better than me.

Horizontal collectivism can be measured with items such as : (1) It makes me very

excited when my partners or colleagues succeed; (2) I care about the well-being of my colleagues; (3) I think spending time with my friends and family members can be pleasurable; (4) Cooperating with others will bring me happiness; (5) It is essential in my knowledge that parents and children should stay together. Vertical collectivism can be measured with items such as: (6) It is acceptable to sacrifice myself to be in charge of family issues as much as possible; (7) Sacrificing is required to maintain family integrity as much as possible; (8) I respect judgment and choice made by other people.

Bearden, Netemeyer and Teel, (1989) scale was used to measure normative social influence and informational social influence. Normative social influence was measured by the following items:

- “I will accept a fashion style when my friends think well of them.”
- “It is important for me to know that products and brands I choose and purchase are accepted by my friends, family members and other people.”
- “I buy products and brands that are accepted by my friends when I go shopping.”
- “I always buy expected brands and products that people prefer to see me wearing and using them.”
- “I think it is important for me to know that whether my clothing and products I use bring good impression to other people.”
- “The action of buying same products and brands would make me have a sense of belonging.”
- “If I want to be like someone, I always purchase the same clothing and products they wear and use.”
- “I always identify others by buying the same products they buy.”

Informational social influence was measured by the following items:

- “I always observe products and brands others choose and use in order to ensure I buy right products and brands.”

- “I always ask opinions from friends if I do not have enough experiences about a product or brand.”
- “In order to choose the best alternative product, I always ask opinions from others.”
- “I often collect information and ideas from my friends and family members for the products before I purchase them.”

4.2 Research instrument (Measurements)

The survey questionnaire compared four sections:

- Frequency of looking online, frequency of buying online, and money spend in shopping online for each of the three product categories (Clothing, shoes, cosmetics)
- Measure of cultural values (horizontal/vertical, individualistic/ collective)
- Measure of normative and informational social influence
- Demographics

A series of frequency tables test and ANOVA tests were applied to examine and estimate the relationships between the independent variables and the dependent variables for testing the study's hypotheses (Soole, 2012). In addition, tests for mediation were conducted using Hayes Process Analysis model 4.

4.3 Sampling method

This research sought a minimum of 200 young women who are aged 18-24 from China and New Zealand to complete the online survey, using online panels supplied by the CINT research company. These samples are selected according to their age, nationality, place of residence and whether they have shopped online for clothing or shoes or cosmetics previously. The reason why the overall sample size is around 200 young women is because this total member is adequate for the research requirements and affordable for the research budget. In addition, the research focuses on young women

because female users are often hard core shopping. Women are more likely to be social and share their ideas and opinions online. Their comments occupy a lot of the product reviews on shopping websites.

Quota sampling is chosen to use in the research as it is the nonprobability equivalent of stratified sampling. According to this sampling technique, the population is first classified by characteristics such as age and nationality. Like stratified sampling, the researcher can first identifies the stratum and their proportions as they are represented in the population. (Robinson, 2014). Participants in an online survey were female online shoppers who had experienced online shopping in the past six months. The survey was presented in an online format and consisted of two different versions, namely, a Chinese version, and an English version. 111 participants complete the Chinese version and another 139 participants completed the English version of the survey.

Chapter Five: Findings

5.1 Introduction

Chapter Five provides the main findings of the study. The results of online surveys are displayed and discussed in this chapter. Online survey with a total of 250 participants were conducted; 111 participants from China, 139 participants from New Zealand. Relationships between nationality, social influence and frequency of online shopping are tested with ANOVA and Hayes Process Analysis.

5.2 Description of NZ sample

Table 1- Demographics-Age (NZ)

		What is your age?			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18	32	23.0	23.5	23.5
	19	19	13.7	14.0	37.5
	20	18	12.9	13.2	50.7
	21	25	18.0	18.4	69.1
	22	14	10.1	10.3	79.4
	23	13	9.4	9.6	89.0
	24	15	10.8	11.0	100.0
	Total	136	97.8	100.0	
Missing	System	3	2.2		
Total		139	100.0		

136 New Zealand respondents declared their age (Table 1). 23.5 percent (n=18) of the sample are 18. 14.0 percent (n=19) of the sample are 19. 13.2 percent (n=18) of the sample are 20. 18.4 percent (n=25) of the sample are 21. 10.3 percent (n=14) of the sample are 22. 9.6 percent (n=13) of the sample are 23. 11.0 percent (n=15) of the sample are 24.

Table 2-Demographics- Place of residence (NZ)

Where do you live?		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Auckland	44	31.7	32.4	32.4
	Hamilton	10	7.2	7.4	39.7
	Wellington	17	12.2	12.5	52.2
	Rest of North Island	32	23.0	23.5	75.7
	Christchurch	16	11.5	11.8	87.5
	Rest of south Island	17	12.2	12.5	100.0
	Total	136	97.8	100.0	
Missing	System	3	2.2		
Total		139	100.0		

136 respondents declared their place of living (Table 2). 32.4 percent (n=44) of the sample live in Auckland. 7.4 percent (n=10) of the sample live in Hamilton. 12.5 percent (n=17) of the sample live in Wellington. 23.5 percent (n=32) of the sample live in rest of north island. 11.8 percent (n=16) of the sample live in Christchurch. 12.5 percent (n=17) of the sample live in rest of south island. 2.2 percent (n=3) of the sample are system missing. Therefore, most of respondents live in Auckland and the rest of the North Island.

Table 3-Demographics- Current employment (NZ)

Are you currently in employment?		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, fulltime	29	20.9	21.3	21.3
	Yes, parttime	37	26.6	27.2	48.5
	No (eg. I am a fulltime student)	70	50.4	51.5	100.0
	Total	136	97.8	100.0	
Missing	System	3	2.2		
Total		139	100.0		

136 respondents declared their employment condition (Table 3). 21.3 percent (n=29) of the sample have a fulltime job. 27.2 percent (n=37) of the sample have a part time job. 51.5 percent (n=70) of the sample are fulltime students. 2.2 percent (n=3) of the

sample are system missing. Therefore, over half of respondents are fulltime student.

Table 4-Demographics- Monthly income (NZ)

What is your approximate monthly incomes?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	under \$500	54	38.6	39.7	39.7
	\$501-\$1000	33	23.6	24.3	64.0
	\$1001-\$1500	15	10.7	11.0	75.0
	\$1501-\$2000	14	10.0	10.3	85.3
	\$2001-\$3000	14	10.0	10.3	95.6
	More than \$3000	2	1.4	1.5	97.1
	7	4	2.9	2.9	100.0
Total		136	97.1	100.0	
Missing	System	4	2.9		
Total		140	100.0		

There are 139 respondents declared approximately monthly incomes (Table 4). 39.7 percent (n=54) of the sample earn almost \$500 a month. 24.3 percent (n=33) of the sample earn \$501-\$1000 a month. 11.0 percent (n=15) of the sample earn \$1001-\$1500 a month. 10.3 percent (n=14) of the sample earn \$1000-\$1500 a month. 10.3 percent (n=14) of the sample earn \$1501-\$2000. 10.3 percent (n=14) of the sample earn \$2001-\$3000. 1.5 percent (n=4) of the sample earn more than \$3000 a month. 2.9 percent (n=3) of the sample are system missing. Thus, about 60% of respondents have more than \$500 monthly income.

5.3 Description of China sample

Table 5-Demographics-Age (China)

What is your age?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18	4	3.6	3.6	3.6
	19	3	2.7	2.7	6.3
	20	11	9.9	9.9	16.2
	21	18	16.2	16.2	32.4
	22	24	21.6	21.6	54.1
	23	15	13.5	13.5	67.6
	24	36	32.4	32.4	100.0
	Total	111	100.0	100.0	

There are 111 China respondents who declared their age (Table 5). 3.6 percent (n=4) of the sample are 18. 2.7 percent (n=3) of the sample are 19. 9.9 percent (n=11) of the sample are 20. 16.2 percent (n=18) of the sample are 21. 21.6 percent (n=24) of the sample are 22. 13.5 percent (n=15) of the sample are 23. 32.4 percent (n=36) of the sample are 24.

Table 6-Demographics-Place of residence (China)

Where do you live?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Beijing	13	11.7	11.7	11.7
	Shanghai	12	10.8	10.8	22.5
	Guangzhou	8	7.2	7.2	29.7
	Rest of South cities	48	43.2	43.2	73.0
	Rest of North cities	30	27.0	27.0	100.0
	Total	111	100.0	100.0	

There are 111 respondents declared their place of living (Table 6). 11.7 percent (n=13) of the sample live in Beijing. 10.8 percent (n=12) of the sample live in Shanghai. 7.2 percent (n=8) of the sample live in Guangzhou. 43.2 percent (n=48) of the sample live in rest of south cities 27.0 percent (n=30) of the sample live in rest of north cities. Therefore, most of respondents live in rest of south cities and rest of north cities.

Table 7-Demographics-Current employment (China)

Are you currently in employment?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, fulltime	62	55.9	55.9	55.9
	Yes, parttime	16	14.4	14.4	70.3
	No (eg. I am a fulltime student)	33	29.7	29.7	100.0
	Total	111	100.0	100.0	

111 respondents declared their employment condition (Table 7). 55.9 percent (n=62) of the sample have a fulltime job. 14.4 percent (n=16) of the sample have a part time job. 29.7 percent (n=33) of the sample are fulltime students. Thus, over half of respondents are fulltime employees.

Table 8-Demographics-Monthly income (China)

What is your approximately monthly incomes?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid under ¥500	26	23.4	23.4	23.4
¥501-¥1000	7	6.3	6.3	29.7
¥1001-¥1500	13	11.7	11.7	41.4
¥1501-¥2000	6	5.4	5.4	46.8
¥2001-¥2500	8	7.2	7.2	54.1
¥2501-¥3000	13	11.7	11.7	65.8
More than ¥3000	38	34.2	34.2	100.0
Total	111	100.0	100.0	

111 respondents declared their approximately monthly incomes (Table 8). 23.4 percent (n=26) of the sample earn under ¥500 a month. 6.3 percent (n=7) of the sample earn ¥501-¥1000 a month. 11.7 percent (n=13) of the sample earn ¥1001-¥1500 a month. 5.4 percent (n=6) of the sample earn ¥1501-¥2000 a month. 7.2 percent (n=8) of the sample earn ¥2001-¥2500. 11.7 percent (n=13) of the sample earn ¥2501-¥3000 a month. 34.2 percent (n=38) of the sample earn more than ¥3000 a month. Thus, about 65.8% of respondents have over ¥2500 monthly income.

5.4 Exploratory factor analysis

5.4.1 Exploratory factor analysis of normative and informational influence

Exploratory factor analysis was conducted on the 12 rating scale items to measure normative and informational influence.

One item “I always observe products and brands others choose and use in order to ensure I buy right products and brands.” Cross loaded so was deleted. The analysis was rerun.

Appendix 5 shows that two factors account for 65.014 % of the variance.

Factor 1 is a “normative influence” factor about preferring listening advices from friends before making purchase decision of products and brands.

Factor 2 is “informational influence” factor about preferring gathering information and relying on advices of friends and family members about product experiences.

The first eight items in the table of exploratory factor analysis were used to calculate composite scores for normative influence. The last three items were used to calculate composite scores for informational influence.

5.4.2 Exploratory factor analysis of national cultures

Exploratory factor analysis was conducted on 16 rating scale items to measure national cultures.

Two items cross loaded: “It is very significant to do my activities better than other people”, “I think spending time with my friends and family members can be pleasurable”; so were deleted, and the analysis rerun.

Appendix 5 shows that four factors account for 70.006 % of the variance.

Factor 1 is a “vertical collectivism” factor about preferring depending on themselves rather than others.

Factor 2 is a “horizontal individualism” factor about enjoying the feeling of winning and enjoy to compete with others in societies.

Factor 3 is a “vertical individualism” factor about taking care of welling-being of colleagues.

Factor 4 is a “horizontal collectivism” factor about sacrificing and taking care of family are necessary.

The first four items in the table of exploratory factor analysis were used to calculate composite scores for vertical collectivism. The following three items were used to calculate composite scores for horizontal individualism. The following three items were used to calculate composite scores for vertical individualism. The last four items were used to calculate composite scores for horizontal collectivism.

5.5 Cultural Values: horizontal/vertical, individualism/collectivism

1. A one-way ANOVA test was conducted to compare the cultural dimension of horizontal-individualistic for New Zealand shoppers versus Chinese shoppers. The ANOVA test firstly shows that there is a significant difference between New Zealand shoppers and Chinese shoppers in the cultural dimension of horizontal-individualistic ($F= 36.226$, $df=1$, $p=.000$). The mean for China is 5.4617 and it is greater than the mean for New Zealand which is 4.7174. It indicates that Chinese shoppers are more horizontal-individualistic than New Zealand shoppers.
2. An ANOVA test also shows that there is a significant difference between New Zealand and Chinese shoppers in the cultural dimension of vertical-individualistic ($F=191.613$, $df=1$, $p=.000$). The mean for China is 4.8859 and it is greater than the mean for New Zealand which is 2.9541. It indicates that Chinese shoppers are more vertical-individualistic than New Zealand shoppers.
3. An ANOVA test also shows that there is a no difference between New Zealand and Chinese shoppers in the cultural dimension of horizontal-collectivistic ($F=.015$, $df=1$, $p=.902$). The mean for New Zealand is 4.8498 and it is smaller than the mean for China which is 4.8647.

4. An ANOVA test also shows that there is a significant difference between New Zealand and Chinese shoppers in the cultural dimension of vertical-collectivistic on sale ($F=63.503$, $df=1$, $p=.000$). The mean of China is 5.5360 and it is greater than the mean for New Zealand which is 4.5652. It indicates that Chinese shoppers are more vertical-collectivistic than New Zealand shoppers.

Although the results are not as expected it appears that the Chinese shoppers, young women living in cities, are more independent and they enjoy competing with others, whether it is in the workplace or their own clothing and makeup. The results illustrate that they think their personal identity is crucial to them and they often do their “own” thing. They also express different cognition strongly as they think winning is everything and competition is important.

It was generally expected that New Zealand shoppers would like to compete with others and like the feeling of winning and will get tense when other people do better than them but the results are opposite. The same thing occurred in both horizontal and vertical individualism. Chinese women shoppers are more horizontal and vertical individualistic because most of them live in large cosmopolitan cities and these cities are very modern and the Western way of thinking permeates into every aspects in their lives. Therefore, these young Chinese women shoppers who are aged between 18-24 years have a distinct way of thinking and way of doing things than elder Chinese.

In addition, their education backgrounds and social class in the online questionnaire were not asked and these factors represent level of being educated and attitudes towards their different social groups, behaviors and beliefs shared in the same social groups. Different social classes have different desires for achievement. In China, people in relatively high social class prefer to compete with others and they enjoy the feeling of victory and they enjoy being successful than other people in the society. Thus, Chinese respondents in these social classes chose to strongly agree or agree with scale items such as “winning is everything” and “competition is significant”.

Besides, there might be lots of Maori and Pacific Island respondents in the New

Zealand sample as they may be included amongst young New Zealand women shoppers and cannot be ignored. At the same time, many of Maori and Pacific Island individuals are collectivistic and not as individualistic as European New Zealanders. Therefore, these factors lead to relatively conflicting results not as expected.

In addition, the ANOVA test also showed that there are significant differences between New Zealand and Chinese shoppers in the cultural dimension of vertical collectivistic. It indicates that Chinese shoppers are more vertical collectivistic than New Zealand shoppers. The result is what was expected before as Chinese shoppers are generally more collectivistic as collectivism refers to the idea that the person should behave based on moral norms and concerns that groups and the society wanted (Triandis, 1994). Chinese shoppers pay more attention to family values, members, and relationships with the parents and children. They think it is their duty to take care of their family even though it needs their sacrifices. For example, Chinese consumers are more interdependent as they care about what others say in online shopping. They care about advice from their friends and family members and their purchase decisions rely heavily on them. This is the expected result that Chinese shoppers are more vertical collectivistic than New Zealand shoppers.

5.6 Normative and informational influence (Comparison of New Zealand and China)

An ANOVA test also shows there is a significant difference between New Zealand and Chinese shoppers in normative influence ($F=94.615$, $df=1$, $p=.000$). The mean for China is 4.1306 and it is greater than the mean for New Zealand which is 2.7772 which indicates that Chinese shoppers are more likely to be influenced by normative social influence than New Zealand shoppers.

An ANOVA test also shows there is a significant difference between New Zealand and Chinese shoppers in informational influence ($F=27.445$, $df=1$, $p=.000$). The mean for China is 4.8288 and it is greater than the mean for New Zealand which is 4.1256 which indicates that Chinese shoppers are more likely to be influenced by informational

social influence than New Zealand shoppers.

5.7 Comparison of New Zealand and China on the shopping variables

5.7.1 Frequency of looking and buying and money spent on clothing online

Table 9-Shopping for clothing

		N	Mean
Do you ever shop online for clothing?	NZ	139	1.04
	China	111	1.03
	Total	250	1.04
How often do you go online to look at the clothing on sale?	NZ	139	3.21
	China	111	2.39
	Total	250	2.84
How often do you buy clothing online?	NZ	139	5.20
	China	111	4.04
	Total	250	4.68
How much do you spend on purchasing clothing online each month?	NZ	139	2.84
	China	111	5.51
	Total	250	4.03

A one-way ANOVA test was conducted to compare frequency of online looking and shopping for clothing by New Zealand shoppers versus Chinese shoppers. A ANOVA test firstly shows there is no difference between New Zealand shoppers and Chinese shoppers in whether or not they shop online for clothing ($F = .460$, $df = 1$, $p = .498$).

An ANOVA test shows there is a significant differences between New Zealand and Chinese shoppers in frequency of going online to look for clothing ($F = 17.697$, $df = 1$, $p = .000$). The mean for China is 2.39 and it is less than the mean for New Zealand

which is 3.21 which indicates that Chinese shoppers go online to look clothing on sale more frequently than New Zealand shoppers. (1= every day, 2=several times a week, 3=once a week, 4=several times a month, 5=once a month, 6=less than once a month, 7=never)

(1=every day, 2=several times a week, 3=once a week, 4=several times a month, 5=once a month, 6=less than once a month, 7=never)⁴³

An ANOVA test shows there is a significant difference between New Zealand and Chinese shoppers in frequency of buying clothing online ($F=53.546$, $df=1$, $p=.000$). The mean for China is 4.04 and it is less than the mean for New Zealand which is 5.20 which indicates that Chinese shoppers buy clothing online more frequently than New Zealand shoppers.

An ANOVA test shows there is a significant difference between money the amount of money spent on buying clothing online between New Zealand and Chinese shoppers ($F=136.190$, $df=1$, $p=.000$). The mean for China is 5.51 and it is greater than the mean for New Zealand which is 2.84 which indicates that Chinese shoppers spend more money on buying clothing online than New Zealand shoppers.

5.7.2 Frequency of looking, buying and spending on shoes online

Table 10 - Shopping for shoes

		N	Mean
Do you ever shop online for shoes?	NZ	139	1.42
	China	111	1.05
	Total	250	1.26
How often do you go online to look at the shoes one sale?	NZ	139	4.78
	China	111	3.48
	Total	250	4.20
How often do you buy shoes online?	NZ	139	6.11
	China	111	5.03
	Total	250	5.63
How often do you spend on purchasing shoes online each month?	NZ	139	1.62
	China	111	3.69
	Total	250	2.54

A one-way ANOVA test was conducted to compare frequency of online looking and shopping for shoes from New Zealand shoppers and Chinese shoppers. The ANOVA test firstly shows there is a significant difference between New Zealand shoppers and Chinese shoppers in shopping online for shoes ($F=51.151$, $df=1$, $p=.000$).

An ANOVA test shows there is a significant difference between New Zealand and Chinese shoppers in frequency of going online to look for shoes ($F=33.113$, $df=1$, $p=.000$). The mean for China is 3.48 and it is less than the mean for New Zealand which is 4.78 which indicates that Chinese shoppers go online to look shoes on sale more frequently than New Zealand shoppers.

An ANOVA test shows there is a significant difference between New Zealand and Chinese shoppers in the frequency of buying shoes online ($F=48.817$, $df=1$, $p=.000$). The mean for China is 5.03 and it is less than the mean for New Zealand which is 6.11 which indicates that Chinese shoppers buy shoes online more frequently than New Zealand shoppers.

The ANOVA test shows there is a significant difference between the amount of money spent on buying clothing online between New Zealand and Chinese shoppers ($F=125.250$, $df=1$, $p=.000$). The mean for China is 3.69 and it is greater than the mean for New Zealand which is 1.62 which indicates that Chinese shoppers spend more money on buying shoes online than New Zealand shoppers.

5.7.3 Frequency of looking and buying and money spent on cosmetics online

Table 11-Shopping for cosmetics

		N	Mean
Do you ever shop online for cosmetics?	NZ	139	1.34
	China	111	1.14
	Total	250	1.25
How often do you go online to look at the cosmetics on sale?	NZ	139	4.42
	China	111	4.12
	Total	250	4.28
How often do you buy cosmetics online?	NZ	139	5.67
	China	111	5.30
	Total	250	5.50
How often do you spend on purchasing cosmetics online each month?	NZ	139	1.69
	China	111	3.81
	Total	250	2.63

A one-way ANOVA test was conducted to compare frequency of online looking and shopping for cosmetics from New Zealand shoppers and Chinese shoppers.

An ANOVA test firstly shows there is a significant difference between New Zealand shoppers and Chinese shoppers in shopping online for cosmetics ($F=14.308$, $df=1$, $p=.000$). The mean for China is 1.14 and it is less than the mean for New Zealand which is 1.32 which indicates that the total number of Chinese shoppers of buying cosmetics online is greater than New Zealand shoppers.

An ANOVA test shows there is no difference between New Zealand and Chinese shoppers in frequency of going online to look for cosmetics ($F=1.377$, $df=1$, $p=.242$). The mean for China is 4.12 and it is less than the mean for New Zealand which is 4.24 which indicates that Chinese shoppers go online to look for cosmetics on sale more frequently than New Zealand shoppers.

An ANOVA test shows there is a significant difference between New Zealand and Chinese shoppers in frequency of buying cosmetics online ($F=4.742$, $df=1$, $p=.030$). The mean for China is 5.30 and it is less than the mean for New Zealand which is 5.67 which indicates that Chinese shoppers buy cosmetics online more frequently than New Zealand shoppers.

An ANOVA test shows there is a significant difference between the amount spent on buying cosmetics online between New Zealand and Chinese shoppers ($F=87.674$, $df=1$, $p=.000$). The mean for China is 3.81 and it is greater than the mean for New Zealand which is 1.69 which indicates that Chinese shoppers spend more money on buying cosmetics online than New Zealand shoppers.

5.8 Hayes analysis for normative influence as a mediator

Hayes Process Analysis model 4 was run to test the role of normative social influence as a mediator between nationality of shopper (NZ versus Chinese) and several outcomes measuring online shopping. The diagram below illustrates this approach to analysis using the example of “looking for clothing” as one of the outcome variables.

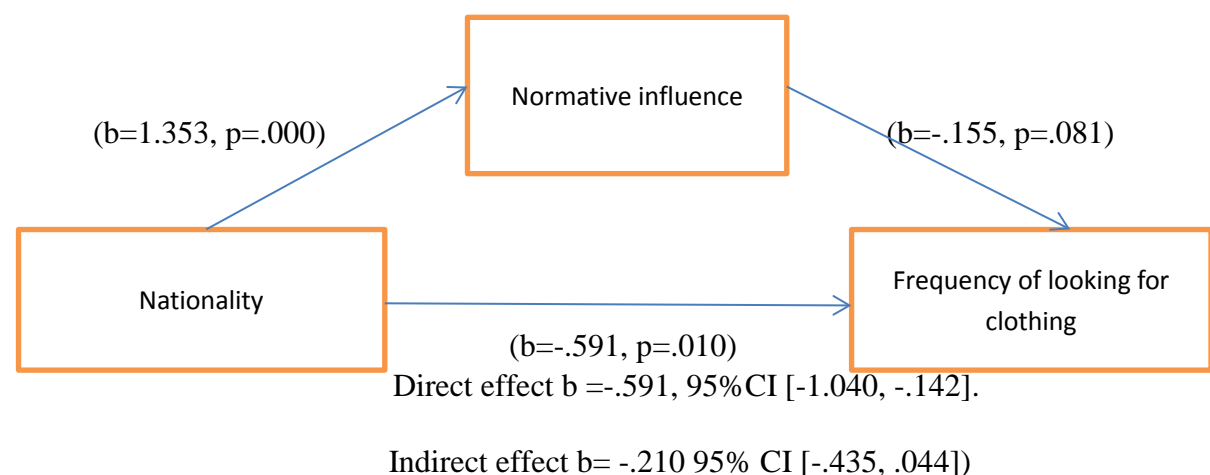


Figure 2: Mediation analysis for “looking for clothing” (1)

5.8.1 Normative influence as a mediator for looking for clothing

Hayes model 4 was run to test if normative social influence mediates the relationship between nationality of shopper (NZ versus Chinese) and frequency of looking for clothing online.

The relationship between nationality and normative social influence is highly significant ($b=1.353$, $p=.000$); the relationship between normative social influence and looking for clothing is not significant ($b=-.155$, $p=.081$). The relationship between nationality and looking for clothing is significant ($b=-.591$, $p=.010$).

There is a significant direct effect of nationality on looking for clothing, $b = -.591$, 95%CI [-1.040, -.142].

Normative social influence does not mediate the relationship between nationality and looking for clothing (Indirect effect 95% CI [-.435, .044]).

5.8.2 Normative influence as a mediator in clothing spending

Hayes model 4 was run to test if normative social influence mediates the relationship between nationality of shoppers (NZ versus Chinese) and amount of money spent on clothing.

The relationship between nationality and normative social influence is highly significant ($b=1.353$, $p=.000$); the relationship between normative social influence and spending on clothing is significant ($b=.246$, $p=.019$). In addition, the relationship between nationality and frequency of spending on clothing is also highly significant ($b=2.326$, $p=.000$).

There was a significant direct effect of nationality and spending on clothing, $b = 2.326$, 95%CI [1.799, 2.852].

Normative social influence partially mediates the relationship between New Zealand shoppers and Chinese shoppers and clothing spending (indirect effect 95% CI [.055, .651]).

5.8.3 Normative influence as a mediator in clothing buying

Hayes model 4 was run to test if normative social influence mediates the relationship between nationality of shoppers (NZ versus Chinese) and frequency of buying clothing.

The relationship between nationality and normative social influence is highly significant ($b=1.353$, $p=.000$); the relationship between normative social influence and clothing buying is significant ($b=-.227$, $p=.002$). In addition, the relationship between nationality and buying clothing is also highly significant ($b=-.852$, $p=.000$).

There is a significant direct effect of nationality and buying clothing, $b = -.852$, 95% CI[1.215, -.489].

Normative social influence fully mediates the relationship between New Zealand shoppers and Chinese shoppers and buying clothing. (Indirect effect 95% CI[-.523,-.120])

5.8.4 Normative influence as a mediator in looking for shoes

Hayes model 4 was run to test if normative social influence mediates the relationship between nationality of shoppers (NZ versus Chinese) and frequency of looking for shoes online.

The relationship between nationality and normative social influence is highly significant ($b=1.353$, $p=.000$); the relationship between normative social influence and looking for shoes is significant ($b= -.338$, $p=.001$). In addition, the relationship between nationality and looking for shoes is also highly significant ($b=-.833$, $p=.002$).

Therefore, there was a significant direct effect of nationality and looking for shoes, $b = -.833$, 95% CI[-1.349,-.317].

Normative social influence partially mediates the relationship between New Zealand shoppers and Chinese shoppers and looking for shoes. (Indirect effect 95% CI[-.727,-.199])

5.8.5 Normative influence as a mediator in spending on shoes

Hayes model 4 was run to test if normative social influence mediates the relationship between nationality of shoppers (NZ versus Chinese) and amount of money spent on shoes.

The relationship between nationality and normative social influence is highly significant ($b=1.353$, $p=.000$); the relationship between normative social influence and spending on shoes is significant ($b=.236$, $p=.005$). In addition, the relationship between nationality and spending on shoes is also highly significant ($b=1.751$, $p=.000$).

There was a significant direct effect of nationality and spending on shoes, $b = 1.751$, 95%CI [1.324, 2.178].

Normative social influence partially mediates the relationship between New Zealand shoppers and Chinese shoppers and spending on shoes (indirect effect 95% CI [.087, .585])

5.8.6 Normative influence as a mediator in buying for shoes

Hayes model 4 was run to test if normative social influence mediates the relationship between nationality of shoppers (NZ versus Chinese) and frequency of buying shoes.

The relationship between nationality and normative social influence is highly significant ($b=1.353$, $p=.000$); the relationship between normative social influence and buying shoes is highly significant ($b=-.282$, $p=.000$). In addition, the relationship between nationality and buying shoes is also highly significant ($b=-.693$, $p=.000$).

Therefore, there was a significant direct effect of nationality and buying shoes, $b = -.693$, 95%CI [-1.041, -.345].

Normative social influence partially mediates the relationship between New Zealand shoppers and Chinese shoppers and buying shoes (Indirect effect 95% CI [-.625, -.189]).

5.8.7 Normative influence as a mediator in looking for cosmetics

Hayes model 4 was run to test if normative social influence mediates the relationship between nationality of shopper (NZ versus Chinese) and frequency of looking for cosmetics online.

The relationship between nationality and normative social influence is highly significant ($b=1.353$, $p=.000$); the relationship between normative social influence and looking for cosmetics is not significant ($b= -.207$, $p= .078$). In addition, the relationship between nationality and cosmetics look is also not significant ($b= -.009$, $p= .977$).

There is no direct effect of nationality and looking for cosmetics $b = -.009$, 95%CI $[-.600, .583]$.

Normative social influence does not mediate the relationship between New Zealand shoppers and Chinese shoppers and looking for cosmetics (Indirect effect 95% CI $[-.596, .026]$).

5.8.8 Normative influence as a mediator in cosmetics spending

Hayes model 4 was run to test if normative social influence mediates the relationship between nationality of shopper (NZ versus Chinese) and amount of money spent on cosmetics spending.

The relationship between nationality and normative social influence is highly significant ($b=1.353$, $p=.000$); the relationship between normative social influence and spending on cosmetics is significant ($b=.219$, $p=.035$). In addition, the relationship between nationality and spending on shoes is also highly significant ($b=1.819$, $p=.000$).

There was a significant direct effect of New Zealand and Chinese shoppers and spending on cosmetics, $b = 1.819$, 95%CI $[1.296, 2.342]$.

Normative social influence partially mediates the relationship between New Zealand shoppers and Chinese shoppers and spending on cosmetics (indirect effect 95% CI $[.075, .575]$).

5.8.9 Normative influence as a mediator in cosmetics buying

Hayes model 4 was run to test if normative social influence mediates the relationship

between nationality of shopper (NZ versus Chinese) and frequency of buying cosmetics online.

The relationship between nationality and normative social influence is highly significant ($b=1.353$, $p=.000$); the relationship between normative social influence and cosmetics buying is significant ($b= -.169$, $p= .031$). In addition, the relationship between nationality and cosmetics buying is not significant ($b=-.141$, $p=.482$).

Therefore, there was a significant indirect effect of New Zealand and Chinese shoppers and cosmetics buying, $b = -.229$, 95% CI $[-.441, -.018]$.

Normative social influence partially mediates the relationship between New Zealand shoppers and Chinese shoppers and cosmetics buying (Indirect effect 95% CI $[-.441, -.018]$).

5.9 Hayes analysis for informational influence as a mediator

5.9.1 Informational influence as a mediator in looking for clothing

Hayes Process Analysis model 4 was run to test the role of informational social influence as a mediator between nationality of shopper (NZ versus Chinese) and several outcomes measuring online shopping. The diagram below illustrates this approach to analysis using the example of “looking for clothing” as one of the outcome variables.

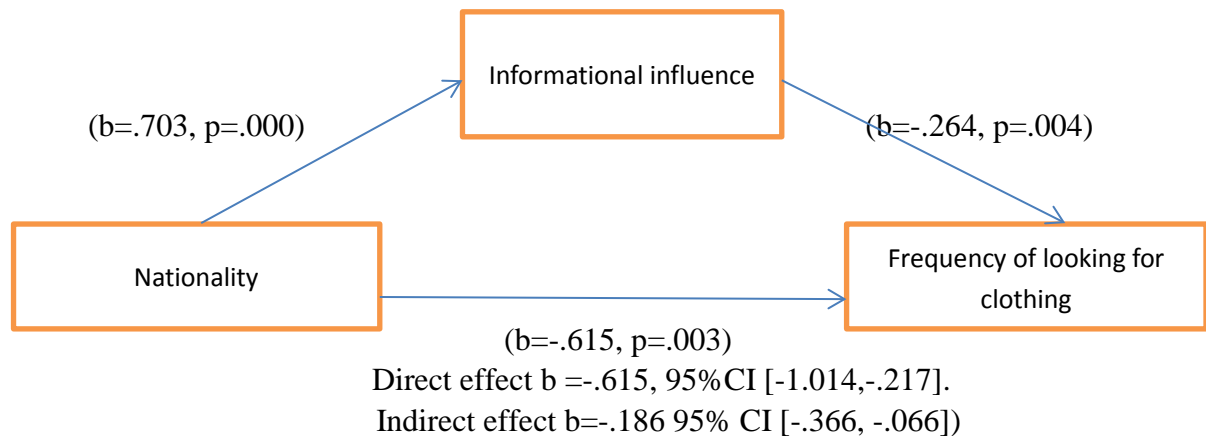


Figure 3: Mediation analysis for “looking for clothing” (2)

Hayes model 4 was run to test if informational social influence mediates the relationship between nationality of shopper (NZ versus Chinese) and frequency of looking for clothing.

The relationship between nationality and informational social influence is highly significant ($b=.703$, $p=.000$); the relationship between informational social influence and looking for clothing is significant ($b= -.264$, $p= .004$). In addition, the relationship between nationality and looking for clothing is highly significant ($b=-.615$, $p=.003$).

There was a significant direct effect of nationality and looking for clothing, $b =-.615$, 95%CI [-1.014,-.217]

Informational social influence partially mediates the relationship between nationality and looking for clothing (Indirect effect 95% CI[-.366, -.066]).

5.9.2 Informational influence as a mediator in spending on clothing

Hayes model 4 was run to test if informational social influence mediates the relationship between nationality of shoppers (NZ versus Chinese) and amount of money spent on clothing online.

The relationship between nationality and informational social influence is highly significant ($b=.703$, $p=.000$); the relationship between informational social influence and spending on clothing is significant ($b= .247$, $p= .023$). In addition, the relationship

between nationality and spending on clothing is highly significant ($b=2.485$, $p=.000$).

Therefore, there was a significant direct effect of nationality and clothing spending, $b=2.485$, 95%CI[2.013, 2.957].

Informational social influence does not mediate the relationship between New Zealand shoppers and Chinese shoppers and clothing spending. (Indirect effect 95% CI[-.009, .362])

5.9.3 Informational influence as a mediator in clothing buying

Hayes model 4 was run to test if informational social influence mediates the relationship between nationality of shoppers (NZ versus Chinese) and frequency of buying clothing online.

The relationship between nationality and informational social influence is highly significant ($b=.703$, $p=.000$); the relationship between informational social influence and frequency of buying clothing is significant ($b=-.102$, $p=.177$). In addition, the relationship between nationality and frequency of buying clothing is highly significant ($b=-1.088$, $p=.000$).

Therefore, there was a significant direct effect of nationality and clothing buying, $b=-1.088$, 95%CI[-1.419, -.757].

Informational social influence does not mediate the relationship between New Zealand shoppers and Chinese shoppers and clothing buying (Indirect effect 95% CI[-.196, .037]).

5.9.4 Informational influence as a mediator in looking for shoes

Hayes model 4 was run to test if informational social influence mediates the relationship between nationality of shoppers (NZ versus Chinese) and frequency of looking for shoes online.

The relationship between nationality and informational social influence is highly significant ($b=.703$, $p=.000$); the relationship between informational social influence

and looking for shoes is significant ($b = -.359$, $p = .001$). In addition, the relationship between nationality and looking for shoes is highly significant ($b = -1.038$, $p = .000$).

Therefore, there was a significant direct effect of nationality and looking for shoes, $b = -1.038$, 95%CI[-1.500, -.576].

Informational social influence partially mediates the relationship between New Zealand shoppers and Chinese shoppers and looking for shoes (Indirect effect 95% CI[-.451, -.119]).

5.9.5 Informational influence as a mediator in shoes spending

Hayes model 4 was run to test if informational social influence mediates the relationship between nationality of shoppers (NZ versus Chinese) and amount of money spent on clothing online.

The relationship between nationality and informational social influence is highly significant ($b = .703$, $p = .000$); the relationship between informational social influence and shoes spending is significant ($b = .173$, $p = .050$). In addition, the relationship between nationality and spending on shoes is highly significant ($b = 1.949$, $p = .000$).

Therefore, there was a significant direct effect of nationality and shoes spending, $b = 1.949$, 95%CI[1.563, 2.334].

Informational social influence does not mediate the relationship between New Zealand shoppers and Chinese shoppers and shoes spending (Indirect effect 95% CI[-.043, .295]).

5.9.6 Informational influence as a mediator in shoes buying

Hayes model 4 was run to test if informational social influence mediates the relationship between nationality of shopper (NZ versus Chinese) and frequency of buying shoes online.

The relationship between nationality and informational social influence is highly significant ($b = .703$, $p = .000$); the relationship between informational social influence

and shoes buying is significant ($b = -.204$, $p = .005$). In addition, the relationship between nationality and shoes buying is highly significant ($b = -.931$, $p = .000$).

Therefore, there was a significant direct effect of nationality and shoes buying, $b = -.931$, 95%CI[-1.248, -.613].

Informational social influence partially mediates the relationship between New Zealand shoppers and Chinese shoppers and shoes buying (Indirect effect 95% CI[-.288, -.039]).

5.9.7 Informational influence as a mediator in looking for cosmetics

Hayes model 4 was run to test if informational social influence mediates the relationship between nationality of shoppers (NZ versus Chinese) and frequency of looking for cosmetics online .

The relationship between nationality and informational social influence is highly significant ($b = .703$, $p = .000$); the relationship between informational social influence and looking for cosmetics is significant ($b = -.354$, $p = .003$). In addition, the relationship between nationality and looking for cosmetics is highly significant ($b = -.040$, $p = .881$).

Therefore, there was not a direct effect of nationality on looking for cosmetics, $b = -.040$, 95%CI[-.564,.484].

Informational social influence does not mediate the relationship between New Zealand shoppers and Chinese shoppers and looking for cosmetics (Indirect effect 95% CI[-.105, .222]).

5.9.8 Informational influence as a mediator in cosmetics spending

Hayes model 4 was run to test if informational social influence mediates the relationship between nationality of shopper (NZ versus Chinese) and amount of money spent on cosmetics online.

The relationship between nationality and informational social influence is highly

significant ($b=.703$, $p=.000$); the relationship between informational social influence and spending on cosmetics is significant ($b=.073$, $p=.498$). In addition, the relationship between nationality and spending on cosmetics is highly significant ($b=2.064$, $p=.000$).

Therefore, there was a significant direct effect of nationality and cosmetics spending, $b=2.064$, 95%CI[1.592,2.536].

Informational social influence does not mediate the relationship between New Zealand shoppers and Chinese shoppers and cosmetics spending (Indirect effect 95% CI[-.105, .222]).

5.9.9 Informational influence as a mediator in cosmetics buying

Hayes model 4 was run to test if informational social influence mediates the relationship between nationality of shopper (NZ versus Chinese) and frequency of buying cosmetics online.

The relationship between nationality and informational social influence is highly significant ($b=.703$, $p=.000$); the relationship between informational social influence and frequency of buying cosmetics online is significant ($b=-.194$, $p=.016$). In addition, the relationship between nationality and frequency of buying cosmetics online is not significant ($b=-.233$, $p=.195$).

Therefore, there was not a significant direct effect of nationality and cosmetics buying, $b=-.233$, 95%CI[-.585, .120].

Informational social influence fully mediates the relationship between New Zealand shoppers and Chinese shoppers and frequency of buying cosmetics online (Indirect effect 95% CI[-.282, -.026]).

5.9.10 Summary of tests of mediation

Table 12- Summary of tests of mediation

Normative influence	
Clothing looking	Direct effect, no mediation
Clothing spending	Partial mediation
Clothing buying	Full mediation
Shoes looking	Partial mediation
Shoes spending	Partial mediation
Shoes buying	Partial mediation
Cosmetics looking	No relationship
Informational influence	
Clothing looking	Partial mediation
Clothing spending	Direct effect, no mediation
Clothing buying	Direct effect, no mediation
Shoes looking	Partial mediation
Shoes spending	Direct effect, no mediation
Shoes buying	Partial mediation
Cosmetics looking	No relationship
Cosmetics spending	Direct effect, no mediation
Cosmetics buying	Full mediation

Chapter Six: Discussion

6.1 Introduction

The main goal of the dissertation was to find out what are the similarities and differences between New Zealand and China shoppers in online shopping. A sample of female New Zealand shoppers aged 18-24 was compared to a sample of female Chinese shoppers aged 18-24. Literature review was provided in Chapter Two on social influence and cultural dimensions in terms of individualism and collectivism. The cultural dimensions were proposed by Hofstede. Social influence is another factor in the research as the another aim of this research is to extend previous literature on national culture and shopping to better understand the impact of social influence on frequency of online shopping across two cultures. In Chapter 3, a theoretical framework was presented to express the relationship between nationality, normative and informational social influence and frequency of online shopping. The research design, data collection methods and measurements were presented in Chapter 4. Findings of the research and results were provided in Chapter 5. ANOVA tests and Hayes models were used in order to analyze the findings. In Chapter 6, results from findings are used to compare with previous similar research. Research questions and hypotheses are also answered. Research limitations and suggestions for future research suggestions are given as related to this topic. A Conclusion is provided at the end of the chapter.

6.2 Answers to research hypotheses

Results analyzed from the main findings partially support each of the following hypotheses:

1. Social influence mediates the impact of culture on frequency of shopping online.
2. Normative social influence has a mediating role on frequency of shopping online.

3. Informational social influence has a mediating role on frequency of shopping online.

In fine detail:

1. Normative social influence partially mediates the relationship between nationality and frequency of buying clothing online and amount of money spent online on clothing.
2. Normative social influence partially mediates the relationship between nationality and looking for shoes, buying shoes and amount of money spent online on shoes.
3. Normative social influence partially mediates the relationship between nationality and buying cosmetics and amount of money spent online on cosmetics.
4. Informational social influence does not mediate the relationship between nationality and frequency of buying clothing online and amount of money spent online on clothing.
5. Informational social influence mediates the relationship between nationality and looking for shoes and amount of money spent online on shoes.
6. Informational social influence does not mediate the relationship between nationality and looking for cosmetics, and buying cosmetics. Informational social influence fully mediates amount of money spent online on cosmetics.

6.3 Answer to the research aim

The aim of the research was to explore the similarities and differences between New Zealand shoppers and Chinese shoppers in frequency of online shopping. As shoppers from these two countries have different national cultures, the research tried to seek the similarities and differences in online shopping.

This research attempted to find clarification by proposing the mediating effect of

social influence on the impact of national culture on the frequency of online shopping. Therefore, it is important to provide a clear and meaningful examination of the impact of social influence on online shopping behavior for marketers or online stores to understand the different patterns or styles of communication or thinking for customers from national cultures.

6.4 Managerial implications

As the results show, Chinese shoppers are oriented more towards horizontal-individualism and collectivism in comparison to New Zealand shoppers. It should be noticed that Chinese online shopping environment is more dynamic and progressive than New Zealand. For example, in Taobao's double 11 day on November 11, 2016 the amount of online sales reached 14.3 billion dollars compared to the same day in 2015 which was \$9.3 billion (Lugmayr, Nov 12).

Therefore, the following suggestions are provided for online shopping websites to use in building website platforms and messages store owners want to express to their customers.

1. Site search is very important in an online shopping website as shoppers love to search relevant products or products with key words which help them to find products they want conveniently. For Chinese shoppers, especially young women in big cities, they are very familiar with products with cheap prices and huge discount, and they can easily recognize whether or not products with a huge discount are great quality which means they often pay attention to specific products or try to search products with key words.

On the other hand, young Chinese women shoppers pay much attention to the opinions and advices from their friends and family members as they are more collectivistic than young New Zealand women shoppers. An eye-catching site search is a good symbol to remind them what else they want even after they purchase.

2. Attractive photos along with previous product reviews are strong promotional tools for online shopping websites to use in attracting young women shoppers no matter which national culture. There are over thousands of online stores for women's clothing, shoes and cosmetics in Taobao and Amazon.com. Popular and successful stores always put attractive photos in appropriate positions and post previous product reviews from past buyers as evidence to show good looking or quality products. This action cannot be ignored in building online stores because online shoppers will not give much time on online stores after long time searching if they do not find their products. Therefore, the first look or visual appeal of the product and product page sometimes represents something and leads to positive results. As it is the customers' habits to compare products and prices, it is not an easy thing to make customers buy products online. Thus, it is important to design appropriate stores with attractive product photos or place photos based on product reviews some by customers.

3. Sometimes less is more to online shoppers. It is easy to find an online store with loads of content, videos, photos describing wonderful features and prices of the product. These complicated product contents, videos and photos sometimes confuse shoppers' attention and hinder the shopping experience. Therefore, a clear, regular and smart design for the product page should be considered because product pages influence the customer shopping experience and overall sales.

4. Train the customer services team to ensure that the online store has excellent levels of customer services. It is easy to understand that customers will not like the online store if it is difficult to contact with. They enjoy asking opinions from customer services members when they are interested in products, but the buying opportunity will fade away if they cannot get answers or responses from customer services in an online store. This can make online shoppers feel angry and disappointed about the store and it might leave a negative impression towards the store.

Thus, it is crucial for online stores to have a passionate customer service team to

answer questions and respond quickly enough to make sure of the quality of customer services. Customer services can also influence shoppers' purchase decisions so that customer service members should be capable to provide advice and opinions towards products on color, size, usage and issues of mix and match and so on, to increase the potential of purchase, store and brand awareness for long run. This method is very suitable for Chinese online stores as most young Chinese women shoppers who don't have much online shopping experiences will heavily rely on advice from customer services when they make their purchase decision. For example, it is not a difficult thing to convince young Chinese women shoppers to choose the color or style of clothing and shoes or even cosmetics.

6.5 Theoretical Implications

Previous research on online shopping has focussed on investigating factors the motivations influencing online shopping. Little research has examined cultural differences in online shopping behavior. This research gap is addressed by the dissertation through investigating cultural differences and social influence in consumer online shopping behavior, examining purchase frequency, products purchased, and the effects of social influence in two different national cultures.

The findings of this research indicate that there needs to be further research on online shopping behavior topic as influenced by cross-cultural and social influences.

6.5 Limitations and Future Research

This research has some limitations such as time and budget limited the possibility to expand the research. The time spent on the research decided and defined the scope of the research and the sample for the research. The budget restricted the sample size from New Zealand and China to a small sample. In addition, some factors such as browsing experience were not considered in this research.

The sample size is relatively small for each countries and the Chinese sample mostly come from big cities which means respondents from these cities are more western

compared with respondents in small cities or villages. Some respondents from New Zealand sample are from Maori and Pacific island cultural backgrounds and they are likely more collectivistic compared with European New Zealanders. This cultural issue is not considered in this questionnaire and this may be a reason why the results show New Zealand shoppers are not as individualistic as expected. There should be a question asking about the cultural background in the questionnaire in order to classify respondents from different cultures.

In addition, there is a difference between English questionnaire and Chinese questionnaire. There is no option for “neither agree nor disagree” in general question in English questionnaire and this is found after completing all results analysis. This inconsistency of general question in English questionnaire can make the results occurred deviation. This situation can be improved in further research before collecting data in order to provide consistency in questionnaires.

Besides, trust of online shoppers and price are factors which can influence frequency of online shopping. Future research can focus on investigating and examining these relevant relationships with online shopping behavior.

This research is limited by age group of respondents and further research can examine respondents from different age groups in order to investigate the relationship between frequency of online shopping and online shoppers with different age and gender and the relationship between social influence or national cultures and online shoppers with different age and gender. Thus, it would be more beneficial for owners of online stores to study in the long run.

6.6 Conclusion

The findings show that there are significant relationships between normative social influence and looking, buying and spending on clothing, shoes, and cosmetics. In addition, for informational social influence, there are fewer relationships between informational social influence and looking, buying and spending on clothing and shoes and cosmetics.

The environment of online shopping has rapidly grown in the past ten years and it is crucial for people who want to join in the online business or owners of online stores to know more about consumer shopping behavior in the online environment. This research is beneficial to both marketers and online stores owners, as it will aid marketers in improving business strategies in order to attract the attention of consumers to make purchases.

In conclusion, this research proposes and highlights the significance of national culture and social influence and their impacts on frequency of online shopping. This research points out that social influence mediates the impact of national culture on frequency of online shopping.

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Appendix 1: Ethics approval letter

Ethical approval letter

10 October 2016

Ken Hyde

Faculty of Business Economics and Law

Dear Ken

Re Ethics Application: **16/361 Online shopping: A comparison of Chinese and New Zealand shoppers**

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Subcommittee (AUTEC).

Your ethics application has been approved for three years until 10 October 2019.

As part of the ethics approval process, you are required to submit the following to AUTEC:

- A brief annual progress report using form EA2, which is available online through <http://www.aut.ac.nz/researchethics>. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 10 October 2019;
- A brief report on the status of the project using form EA3, which is available online through <http://www.aut.ac.nz/researchethics>. This report is to be submitted either when the approval expires on 10 October 2019 or on completion of the project.

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to obtain this. If your research is undertaken within a jurisdiction outside New Zealand, you will need to make the arrangements necessary to meet the legal and ethical requirements that apply there.

To enable us to provide you with efficient service, please use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

All the very best with your research,



Kate O'Connor
Executive Secretary
Auckland University of Technology Ethics Committee
Cc: Xing Ye, 274846257@qq.com

Appendix 2:

Participant Information Sheet

Date Information Sheet Produced:

1 October 2016

Project Title

Online shopping: A comparison of New Zealand and Chinese shoppers

An Invitation

You are invited to participate in the research project conducted by Master of Business student Xing Ye, of AUT University. Your participation in this research is valued and will help to understand the differences in online shopping by New Zealand and Chinese shoppers.

Your participation is voluntary. You may withdraw from the project at any time prior to the completion of the survey collection. This form contains information regarding the research you are being asked to participate in, which you may retain for your records.

What is the purpose of this research?

The research examines consumers' frequency of shopping, specifically focusing on the comparison of online shopping behavior by Chinese online shoppers and New Zealand online shoppers. It is critical to provide an examination of the impact of social culture influence on online shopping behavior.

How was I identified and why am I being invited to participate in this research?

You are invited on the grounds that you are a woman aged 18-24 year.

What will happen in this research?

Answer an online survey that will take ten minutes of your time.

What are the discomforts and risks?

There are no known risks associated with the participation in this study.

How will these discomforts and risks be alleviated?

Your responses are anonymous; the answers will not be linked to you personally. You do not have to answer any questions that you do not want to.

What are the benefits?

Your participation in this research will help you to explore your differences in online shopping. The results of the research will be analysed to complete the Master of Business at the AUT University and to write up research.

How will my privacy be protected?

The information obtained during the survey will remain confidential.

What are the costs of participating in this research?

If you wish to participate, the time requirements will be around 10 minutes. There is no monetary cost for participation in the research.

What opportunity do I have to consider this invitation?

I would appreciate your decision to be made within one week upon receiving of this invitation.

How do I agree to participate in this research?

By completing the survey, you agree to participate in the research.

Will I receive feedback on the results of this research?

If you want to receive an Executive Summary of the research findings, please email 274846257@qq.com.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Assoc. Prof. Ken Hyde, ken.hyde@aut.ac.nz, (09) 921 9999 ext 5605

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTECH, Kate O'Connor, ethics@aut.ac.nz, (09) 921 9999 ext 6038.

Whom do I contact for further information about this research?

Researcher Contact Details:

Xing Ye, 274846257@qq.com

Project Supervisor Contact Details:

Associate Professor Ken Hyde, khyde@aut.ac.nz, +64 9 921 9999 ext. 5605

Approved by the Auckland University of Technology Ethics Committee on type the date final ethics approval was granted, AUTECH Reference number 16/361.

Appendix 3: Questionnaire (English)

Online Shopping

Research on Online Shopping

My name is Xing Ye. I am a student of the Master of Business at Auckland University of Technology in New Zealand. I am researching online shopping, a comparison of Chinese and New Zealand female shoppers.

Please take 10 minutes to complete the following questions. Your answers are anonymous. By completing the survey you agree to participate in the research.

1. In the last 12 months, have you ever bought any clothes, shoes or cosmetics online?

☐ yes

☐ no

Online Shopping CLOTHES

* 2. Do you ever shop online for clothing?

☐ yes

☐ no

*

3. How often do you go online to look at the clothing on sale?

☐ every day

☐ several times a week

☐ once a week

☐ several times a month

☐ once a month

☐ less than once a month

☐ never

4. How often do you buy clothing online?

☐ every day

☐ several times a week

☐ once a week *

☐ several times a month

☐ once a month

☐ less than once a month

☐ never

* 5. How much do you spend on purchasing clothing online each month?

- ☐ \$0
- ☐ \$ 1-\$50
- ☐ \$ 51-\$100
- ☐ \$ 101-\$150
- ☐ \$ 151-\$200
- ☐ \$ 201-\$300
- ☐ \$ 301-\$400
- ☐ \$ 401-\$500
- ☐ More than \$500

Online Shopping **SHOES**

* 6. Do you ever shop online for shoes?

☐ Yes

☐ No

* 7. How often do you go online to look at the shoes on sale?

☐ every day

☐ several times a week

☐ once a week

☐ several times a month

☐ once a month

☐ less than once a month

☐ never

* 8. How often do you buy shoes online?

☐ every day

☐ several times a week

☐ once a week

☐ several times a month

☐ once a month

☐ less than once a month

☐ never

* 9. How often do you spend on purchasing shoes online each month?

- ☐ \$ 1-\$50
- ☐ \$ 51-\$100
- ☐ \$ 101-\$150
- ☐ \$ 151-\$200
- ☐ \$ 201-\$300
- ☐ \$ 301-\$400
- ☐ \$ 401-\$500
- ☐ more than \$500

Online Shopping COSMETICS

10. Do you ever shop online for cosmetics?

- * ☐ Yes
☐ No

* 11. How often do you go online to look at the cosmetics on sale?

- ☐ every day
☐ several times a week
☐ once a week
☐ several times a month
☐ once a month
☐ less than once a month
☐ never

* 12. How often do you buy cosmetics online?

- ☐ every day
☐ several times a week
☐ once a week
☐ several times a month
☐ once a month
☐ less than once a month
☐ never

* 13. How often do you spend on purchasing cosmetics online each month?

- ☐ \$ 1-\$50
- ☐ \$ 51-\$100
- ☐ \$ 101-\$150
- ☐ \$ 151-\$200
- ☐ \$ 201-\$300
- ☐ \$ 301-\$400
- ☐ \$ 401-\$500
- ☐ more than \$500

Online Shopping **GENERAL**

* 14. I prefer to be independent but not relying on other people.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

*

15. I prefer to rely on myself mostly; and I seldom rely on others.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ Strongly agree

*

16. I always do my stuffs instead of taking care of other thing.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

* 17. I think personal identity and being independent is crucial to my life.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

*

18. It is very significant to do my thing better than other people.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

*

19. I believe winning is everything.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

*

20. Competition is significant and I treat it as necessary thing.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

21. I will get very tense and keenly excited when other people do better than I do.

*

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

*

22. It would let me be very excited when my partner or colleagues succeed.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

*

23. I care about the well-being of my colleagues.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

*

24. I think spending time with my friends and family members can be called as pleasure.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

25. Cooperating with other will bring me happiness.

- * ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

*

26. It is essential in my knowledge is that parents and children have to stay together.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

*

27. It's acceptable that to sacrifice myself to be in charge of family issues as much as possible.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

*

28. Sacrificing is required to maintain family integrity as much as possible.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

29. I respect judgment and choice made by other people.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little *
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

30. I will accept a fashion style when my friends think well of them.

- ☐ strongly disagree
- ☐ disagree *
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

31. It is significant for me to know that products and brands I choose and purchase are accepted by my friends, family members and other people.

- ☐ strongly disagree
- ☐ disagree *
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

32. I buy accepted products and brands by my friends when I go shopping.

- ☐ strongly disagree
- ☐ disagree *
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

33. I always buy expected brands and products if people see me wearing and using them.

- ☐ strongly disagree
- * ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

* 34. I think it's important for me to know do my clothing and products I use bring good impression to other people.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

* 35. The action of buying same products and brands would make me obtain a sense of belonging.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

* 36. If I want to be like someone, I always purchase the same clothing and products they wear and use.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

37. I often identify others based on purchasing the same products they purchase.

- * ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

*

38. I always observe products and brands others choose and use in order to ensure I buy right products and brands.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

*

39. I always ask opinions from friends if I don't have many experiences about a product or brand.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

*

40. In order to choose the best alternative product from a whole product category, I always ask opinions from others.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

41. I often collect information and ideas from my friends and family members concerning
* products before I purchase them.

- ☐ strongly disagree
- ☐ disagree
- ☐ disagree a little
- ☐ agree a little
- ☐ agree
- ☐ strongly agree

Online Shopping **ABOUT YOU**

* 42. What is your age?

- ☐ 18
- ☐ 19
- ☐ 20
- ☐ 21
- ☐ 22
- ☐ 23
- ☐ 24

* 43. Where do you live?

- ☐ Auckland
- ☐ Hamilton
- ☐ Wellington
- ☐ Rest of North Island
- ☐ Christchurch
- ☐ Rest of south Island

44. Are your currently in employment?

- ☐ Yes, fulltime
- ☐ Yes, partime
- ☐ No (eg. I am a fulltime student)

* 45. What is your approximately monthly income?

- ☐ under \$500
- ☐ \$501-\$1000
- ☐ \$1001-\$1500
- ☐ \$1501-\$2000
- ☐ \$2001-\$2500
- ☐ \$2501-\$3000
- ☐ more than \$3000

Online Shopping

THANK YOU FOR YOUR YOUR TIME.

Appendix 4: Questionnaire (Chinese)

网络购物调查问卷

我叫邢叶。我是新西兰奥克兰理工大学商学硕士的学生。

我在研究网上购物，比较了中国和新西兰的女性消费者。

请花 10 分钟完成以下问题。

你的答案是匿名的。

当你完成这份调查问卷后你将同意参与我们的研究。

1. 在过去的12个月里，你是否在网上购买过衣服，鞋履，化妆品类产品？

☐ 有

☐ 没有

服饰

2. 你曾经在网上买衣服吗？

- * ☐ 有
☐ 没有

* 3. 你多久去一次网上看服装销售？

- ☐ 每天都有
☐ 一周几次
☐ 每周一次
☐ 每月几次
☐ 一月一次
☐ 一个月少于一次
☐ 从来不

4. 你多久在网上买一次衣服？

- * ☐ 每天
☐ 一周几次
☐ 每周一次
☐ 每月几次
☐ 一月一次
☐ 一个月少于一次
☐ 从来不

* 5. 你每个月花多少钱在网上买衣服？

☐ ¥ 0

☐ ¥ 1-¥50

☐ ¥ 51-¥100

☐ ¥ 101-¥150

☐ ¥ 151-¥200

☐ ¥ 201-¥300

☐ ¥ 301-¥400

☐ ¥ 401-¥500

☐ 超过¥500

鞋履

6. 你曾经在网上买鞋吗？

- * ☐ 有
☐ 没有

* 7. 你多久去一次网上看鞋的销售？

- ☐ 每天都有
☐ 一周几次
☐ 每周一次
☐ 每月几次
☐ 一月一次
☐ 一个月少于一次
☐ 从来不

8. 你多久在网上买一次鞋？

- * ☐ 每天都有
☐ 一周几次
☐ 每周一次
☐ 每月几次
☐ 一月一次
☐ 一个月少于一次
☐ 从来不

* 9. 你每个月在网上买鞋花多少钱?

- ☐ ± 0
- ☐ ¥ 1-¥125
- ☐ ¥ 126-250
- ☐ ¥ 251-¥375
- ☐ ¥ 376-¥500
- ☐ ¥ 501-¥625
- ☐ ¥ 625-¥750
- ☐ ¥ 750-¥875
- ☐ 超过¥1000

* 10. 你曾经在网上买化妆品吗？

- ☐ 有
- ☐ 没有

* 11. 你多久去一次网上看化妆品的销售？

- ☐ 每天都有
- ☐ 一周几次
- ☐ 每周一次
- ☐ 每月几次
- ☐ 一月一次
- ☐ 一个月少于一次
- ☐ 从来不

* 12. 你多久在网上买一次化妆品？

- ☐ 每天
- ☐ 一周几次
- ☐ 每周一次
- ☐ 每月几次
- ☐ 一月一次
- ☐ 一个月少于一次
- ☐ 从来不

* 13. 你每个月在网上买化妆品花多少钱？

- ☐ ￥ 0
- ☐ ￥ 1-¥125
- ☐ ￥ 126-250
- ☐ ￥ 251-¥375
- ☐ ￥ 376-¥500
- ☐ ￥ 501-¥625
- ☐ ￥ 625-¥750
- ☐ ￥ 750-¥875
- ☐ 超过¥1000

常规问题

14. 我宁愿依靠自己而不是别人。

- ★
- ☐ 强烈不同意
 - ☐ 不同意
 - ☐ 有一点不同意
 - ☐ 不同意也不反对
 - ☐ 同意一点
 - ☐ 同意
 - ☐ 强烈同意

★

15. 我大部分时间都依靠自己，我很少依靠别人。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

★

16. 我经常做“我自己的事”。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

17. 我的个人身份，独立于他人，对我来说是非常重要的。

*

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

*

18. 对我来说重要的是我做我的工作比别人好。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

*

19. 胜利就是一切。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

20. 竞争是自然的法则。

★

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

★

21. 当另一个人比我做得更好时，我变得紧张和被唤醒。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

★

22. 如果有同事得奖，我会感到自豪。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

* 23. 我的同事的幸福对我来说很重要。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

*

24. 对我来说，快乐是和别人在一起的时间。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

*

25. 当我和别人合作的时候我感觉很好。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

26. 父母和孩子必须尽可能多地呆在一起。

- ★ ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

★

27. 照顾我的家人是我的责任，即使我不得不牺牲我想要的。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

★

28. 无论需要什么样的牺牲，家庭成员都应该团结在一起。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

*

29. 我尊重我的团队所做的决定，这是很重要的。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

*

30. 我接受时尚的风格直到我的朋友们同意他们。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

*

31. 我知道别人喜欢我买的产品和品牌是对我来说是很重要的。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

32. 当购买产品时，我会购买我认为朋友和其他人会赞成的品牌。

*

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

*

33. 如果别人能看到我使用的产品，我经常购买他们期望我买的品牌。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

*

34. 我喜欢知道什么牌子和产品对别人有好的印象。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

35. 我通过购买其他人购买的相同的产品和品牌来实现归属感。

*

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

*

36. 我经常尝试购买他们所买的相同的产品，如果我想成为一个像别人一样的人。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

*

37. 我经常通过购买他们所购买的相同产品和品牌来识别其他人。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

38. 为了确保我买正确的产品或品牌，我经常观察别人的购买和使用。

*

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

*

39. 如果我有一个产品的经验，我经常问我的朋友们的产品。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

*

40. 我经常和其他人交谈，帮助选择一个产品类别中的最佳选择。

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

41. 我经常从朋友或家人那里收集关于产品的信息，在我买之前。

*

- ☐ 强烈不同意
- ☐ 不同意
- ☐ 有一点不同意
- ☐ 不同意也不反对
- ☐ 同意一点
- ☐ 同意
- ☐ 强烈同意

关于你

42. 你的年龄是多少？

*

- ☐ 18
- ☐ 19
- ☐ 20
- ☐ 21
- ☐ 22
- ☐ 23
- ☐ 24

43. 你住在哪里？

*

- ☐ 北京
- ☐ 上海
- ☐ 广州
- ☐ 中国其他南方城市
- ☐ 中国其他北方城市

44. 你目前在就业吗？

*

- ☐ 是的 全职
- ☐ 是的 兼职
- ☐ 不是 我是全日制学生

* 45. 你的月收入是多少？

- ☐ 小于¥500
- ☐ ¥ 500-¥1000
- ☐ ¥ 1001-¥1500
- ☐ ¥ 1501-¥2000
- ☐ ¥ 2001-¥2500
- ☐ ¥ 2501-¥3000
- ☐ 大于¥3000

网络购物调查问卷

感谢您的时间

Appendix 5

Exploratory factor analysis

Exploratory factor analysis of normative and informational influence

Component	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.826	52.963	52.963	5.826	52.963	52.963	4.917	44.698	44.698
2	1.326	12.050	65.014	1.326	12.050	65.014	2.235	20.316	65.014
3	.919	8.353	73.367						
4	.530	4.816	78.183						
5	.505	4.592	82.775						
6	.447	4.063	86.837						
7	.366	3.331	90.169						
8	.343	3.119	93.288						
9	.301	2.736	96.025						
10	.263	2.393	98.417						
11	.174	1.583	100.000						

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

	Component	
	1	2
I accept fashion styles until my friends approve of them.	.730	
It is significant for me to know that others like the products and brands I buy.	.822	
When buying products, I purchase brands than I think friends and others will approve of.	.822	
If other people can see me using a product, I often purchase the brand they expect me to buy.	.822	
I like to know that brands and products make good impressions on others.	.775	
I achieve a sense of belonging by purchasing the same products and brands that others buy.	.739	
I often try to buy the same products than they buy if I want to be like someone.	.756	
I often identify with other people by purchasing the same products and brands they purchase.	.698	
If I have little experience with a product, I often ask my friends about the products.		.815
I often talk with other people to help choose the best alternative available from a product class.		.758
I frequently gather information from friends or family about a product before I buy.		.777

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Exploratory factor analysis of national cultures

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.379	38.419	38.419	5.379	38.419	38.419	2.632	18.799	18.799
2	1.959	13.993	52.412	1.959	13.993	52.412	2.606	18.617	37.416
3	1.478	10.559	62.971	1.478	10.559	62.971	2.358	16.841	54.257
4	.985	7.035	70.006	.985	7.035	70.006	2.205	15.750	70.006
5	.698	4.986	74.993						
6	.553	3.950	78.942						
7	.460	3.286	82.228						
8	.440	3.142	85.371						
9	.411	2.933	88.304						
10	.375	2.681	90.985						
11	.356	2.545	93.530						
12	.333	2.380	95.910						
13	.304	2.169	98.079						
14	.269	1.921	100.000						

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

	Component			
	1	2	3	4
I'd rather depend on myself than others.		.789		
I rely on myself most of the time: I rarely rely on others.		.790		
I often do "my own thing".		.786		
My personal identity, independent of others, is very important to me.		.652		
Winning is everything.			.796	
Competition is the law of nature.			.799	
When another person does better than I do, I get tense and aroused.			.839	
If a coworker gets a prize, I would feel proud.				.828
The well-being of my coworkers is important to me.				.811
I feel good when I cooperate with others.				.732
Parents and children must stay together as much as possible.	.750			
It's my duty to take care of my family, even when I have to sacrifice what I want.	.822			
Family members should stick together, no matter what sacrifices are required.	.824			
It is important to me that I respect the decisions made by my groups.	.578			

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Appendix 6

Cultural values (Comparison of New Zealand and China)

Descriptives									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
horizindiv	NZ	138	4.7174	.91212	.07764	4.5639	4.8709	1.00	6.00
	China	111	5.4617	1.03748	.09847	5.2666	5.6569	1.00	7.00
	Total	249	5.0492	1.03655	.06569	4.9198	5.1786	1.00	7.00
vertindiv	NZ	138	2.9541	1.11554	.09496	2.7663	3.1419	1.00	6.00
	China	111	4.8859	1.06789	.10136	4.6850	5.0868	1.00	7.00
	Total	249	3.8153	1.45566	.09225	3.6336	3.9970	1.00	7.00
horizcoll	NZ	138	4.8647	.77222	.06574	4.7347	4.9947	1.00	6.00
	China	111	4.8498	1.12253	.10655	4.6387	5.0610	1.00	7.00
	Total	249	4.8581	.94254	.05973	4.7405	4.9757	1.00	7.00
vertcoll	NZ	138	4.5652	.92871	.07906	4.4089	4.7215	1.00	6.00
	China	111	5.5360	.98791	.09377	5.3502	5.7219	2.25	7.00
	Total	249	4.9980	1.06918	.06776	4.8645	5.1314	1.00	7.00
normative	NZ	138	2.7772	1.09627	.09332	2.5926	2.9617	1.00	6.00
	China	111	4.1306	1.08520	.10300	3.9265	4.3348	1.50	6.63
	Total	249	3.3805	1.28088	.08117	3.2206	3.5404	1.00	6.63
informational	NZ	138	4.1256	1.06801	.09091	3.9458	4.3054	1.00	6.00
	China	111	4.8288	1.03364	.09811	4.6344	5.0233	1.00	7.00

Total	249	4.4391	1.10755	.07019	4.3008	4.5773	1.00	7.00
-------	-----	--------	---------	--------	--------	--------	------	------

ANOVA test of cultural values (Comparison of New Zealand and China)

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
horizindiv	Between Groups	34.082	1	34.082	36.226	.000
	Within Groups	232.378	247	.941		
	Total	266.460	248			
vertindiv	Between Groups	229.571	1	229.571	191.613	.000
	Within Groups	295.931	247	1.198		
	Total	525.502	248			
horizcoll	Between Groups	.014	1	.014	.015	.902
	Within Groups	220.306	247	.892		
	Total	220.320	248			
vertcoll	Between Groups	57.980	1	57.980	63.503	.000
	Within Groups	225.519	247	.913		
	Total	283.499	248			

normative	Between Groups	112.692	1	112.692	94.615	.000
	Within Groups	294.191	247	1.191		
	Total	406.883	248			
informational	Between Groups	30.422	1	30.422	27.445	.000
	Within Groups	273.793	247	1.108		
	Total	304.215	248			

Normative and informational influence (Comparison of New Zealand and China)

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
normative	NZ	138	2.7772	1.09627	.09332	2.5926	2.9617	1.00	6.00
	China	111	4.1306	1.08520	.10300	3.9265	4.3348	1.50	6.63
	Total	249	3.3805	1.28088	.08117	3.2206	3.5404	1.00	6.63
informational	NZ	138	4.1256	1.06801	.09091	3.9458	4.3054	1.00	6.00
	China	111	4.8288	1.03364	.09811	4.6344	5.0233	1.00	7.00
	Total	249	4.4391	1.10755	.07019	4.3008	4.5773	1.00	7.00

Normative and informational influence (Comparison of New Zealand and China)

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
normative	Between Groups	112.692	1	112.692	94.615	.000
	Within Groups	294.191	247	1.191		
	Total	406.883	248			
informational	Between Groups	30.422	1	30.422	27.445	.000
	Within Groups	273.793	247	1.108		
	Total	304.215	248			

Appendix 8: Comparison of New Zealand and China on the shopping variables

Frequency of looking, buying and spending on clothing online

Descriptives									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Do you ever shop online for clothing?	NZ	139	1.04	.204	.017	1.01	1.08	1	2
	China	111	1.03	.163	.015	1.00	1.06	1	2
	Total	250	1.04	.187	.012	1.01	1.06	1	2
How often do you go online to look at the clothing on sale?	NZ	139	3.21	1.586	.134	2.94	3.47	1	7
	China	111	2.39	1.466	.139	2.11	2.66	1	7
	Total	250	2.84	1.584	.100	2.65	3.04	1	7
How often do you buy clothing online?	NZ	139	5.20	1.150	.098	5.01	5.39	2	7
	China	111	4.04	1.368	.130	3.78	4.29	1	7
	Total	250	4.68	1.377	.087	4.51	4.86	1	7
How much do you spend on purchasing clothing online each month?	NZ	139	2.84	1.358	.115	2.61	3.07	1	8
	China	111	5.51	2.231	.212	5.09	5.93	1	9
	Total	250	4.03	2.234	.141	3.75	4.31	1	9

Frequency of looking, buying and spending on clothing online ANOVA test

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Do you ever shop online for clothing?	Between Groups	.016	1	.016	.460	.498
	Within Groups	8.660	248	.035		
	Total	8.676	249			
How often do you go online to look at the clothing on sale?	Between Groups	41.624	1	41.624	17.697	.000
	Within Groups	583.292	248	2.352		
	Total	624.916	249			
How often do you buy clothing online?	Between Groups	83.820	1	83.820	53.546	.000
	Within Groups	388.216	248	1.565		
	Total	472.036	249			
How much do you spend on purchasing clothing online each month?	Between Groups	440.556	1	440.556	136.190	.000
	Within Groups	802.248	248	3.235		
	Total	1242.804	249			

Frequency of looking, buying and spending on shoes online

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Do you ever shop online for shoes?	NZ	139	1.42	.495	.042	1.33	1.50	1	2
	China	111	1.05	.227	.022	1.01	1.10	1	2
	Total	250	1.26	.437	.028	1.20	1.31	1	2
How often do you go online to look at the shoes one sale?	NZ	139	4.78	1.864	.158	4.47	5.10	1	7
	China	111	3.48	1.678	.159	3.16	3.79	1	7
	Total	250	4.20	1.895	.120	3.97	4.44	1	7
How often do you buy shoes online?	NZ	139	6.11	1.061	.090	5.93	6.29	2	7
	China	111	5.03	1.385	.131	4.77	5.29	1	7
	Total	250	5.63	1.327	.084	5.46	5.79	1	7
How often do you spend on purchasing shoes online each month?	NZ	139	1.62	1.086	.092	1.44	1.80	1	7
	China	111	3.69	1.828	.174	3.35	4.04	1	9
	Total	250	2.54	1.788	.113	2.32	2.76	1	9

Frequency of looking, buying and spending on shoes online

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Do you ever shop online for shoes?	Between Groups	8.142	1	8.142	51.151	.000
	Within Groups	39.474	248	.159		
	Total	47.616	249			
How often do you go online to look at the shoes one sale?	Between Groups	105.377	1	105.377	33.113	.000
	Within Groups	789.219	248	3.182		
	Total	894.596	249			
How often do you buy shoes online?	Between Groups	72.104	1	72.104	48.817	.000
	Within Groups	366.300	248	1.477		
	Total	438.404	249			
How often do you spend on purchasing shoes online each month?	Between Groups	265.723	1	265.723	124.250	.000
	Within Groups	530.377	248	2.139		
	Total	796.100	249			

Frequency of looking, buying and spending on cosmetics online

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Do you ever shop online for cosmetics?	NZ	139	1.34	.475	.040	1.26	1.42	1	2
	China	111	1.14	.343	.033	1.07	1.20	1	2
	Total	250	1.25	.433	.027	1.19	1.30	1	2
How often do you go online to look at the cosmetics on sale?	NZ	139	4.42	2.140	.181	4.06	4.78	1	7
	China	111	4.12	1.833	.174	3.77	4.46	1	7
	Total	250	4.28	2.011	.127	4.03	4.53	1	7
How often do you buy cosmetics online?	NZ	139	5.67	1.421	.121	5.43	5.91	2	7
	China	111	5.30	1.233	.117	5.07	5.53	1	7
	Total	250	5.50	1.351	.085	5.34	5.67	1	7
How often do you spend on purchasing cosmetics online each month?	NZ	139	1.69	1.323	.112	1.47	1.91	1	8
	China	111	3.81	2.222	.211	3.39	4.23	1	9
	Total	250	2.63	2.065	.131	2.37	2.89	1	9

Frequency of looking, buying and spending on cosmetics online

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Do you ever shop online for cosmetics?	Between Groups	2.543	1	2.543	14.308	.000
	Within Groups	44.081	248	.178		
	Total	46.624	249			
How often do you go online to look at the cosmetics on sale?	Between Groups	5.560	1	5.560	1.377	.242
	Within Groups	1001.276	248	4.037		
	Total	1006.836	249			
How often do you buy cosmetics online?	Between Groups	8.530	1	8.530	4.743	.030
	Within Groups	445.966	248	1.798		
	Total	454.496	249			
How often do you spend on purchasing cosmetics online each month?	Between Groups	277.419	1	277.419	87.674	.000
	Within Groups	784.725	248	3.164		
	Total	1062.144	249			

Appendix 9: Hayes process analysis to test for mediation effects

Normative influence as a mediator for looking for clothing

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Release 2.15

Written by Andrew F. Hayes, Ph.D.

www.afhayes.com

Documental

Model = 4

Y = clothlook

X = nzchina

M = normativ

Sample size

249

Outcome: normativ

Model Summary

R	R-sq	MSE	F	df1	df2	p
.526	.277	1.191	94.615	1.000	247.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.424	.213	6.693	.000	1.005	1.843
nzchina	1.353	.139	9.727	.000	1.079	1.628

Outcome: clothlook

Model Summary

R	R-sq	MSE	F	df1	df2	p
.275	.076	2.310	10.079	2.000	246.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	4.211	.322	13.075	.000	3.576	4.845

normativ	-.155	.089	-1.753	.081	-.330	.019
nzchina	-.591	.228	-2.592	.010	-1.040	-.142

***** DIRECT AND INDIRECT EFFECTS

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
-.591	.228	-2.592	.010	-1.040	-.142

Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
normativ	-.210	.123	-.435	.044

***** ANALYSIS NOTES AND WARNINGS

Number of bootstrap samples for bias corrected bootstrap confidence intervals:

1000

Level of confidence for all confidence intervals in output:

95.00

NOTE: Some cases were deleted due to missing data. The number of such cases was:

1

----- END MATRIX -----

Normative influence as a mediator for clothing spending

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Release 2.15

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 4

Y = clothspe

X = nzchina

M = normativ

Sample size
249

Outcome: normativ

Model Summary

R	R-sq	MSE	F	df1	df2	p
.526	.277	1.191	94.615	1.000	247.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.424	.213	6.693	.000	1.005	1.843
nzchina	1.353	.139	9.727	.000	1.079	1.628

Outcome: clothspe

Model Summary

R	R-sq	MSE	F	df1	df2	p
.606	.367	3.175	71.270	2.000	246.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	-.153	.378	-.407	.685	-.897	.590
normativ	.246	.104	2.367	.019	.041	.451
nzchina	2.326	.267	8.705	.000	1.799	2.852

***** DIRECT AND INDIRECT EFFECTS

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
2.326	.267	8.705	.000	1.799	2.852

Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
normativ	.333	.148	.055	.651

***** ANALYSIS NOTES AND WARNINGS

Number of bootstrap samples for bias corrected bootstrap confidence intervals:

1000

Level of confidence for all confidence intervals in output:

95.00

NOTE: Some cases were deleted due to missing data. The number of such cases was:

1

----- END MATRIX -----

Normative influence as a mediator in clothing buying

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Release 2.15

Written by Andrew F. Hayes, Ph.D.

www.afhayes.com

Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 4

Y = clothbuy

X = nzchina

M = normativ

Sample size

249

Outcome: normativ

Model Summary

R	R-sq	MSE	F	df1	df2	p
.526	.277	1.191	94.615	1.000	247.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.424	.213	6.693	.000	1.005	1.843
nzchina	1.353	.139	9.727	.000	1.079	1.628

Outcome: clothbuy

Model Summary

R	R-sq	MSE	F	df1	df2	p
.456	.208	1.514	32.348	2.000	246.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	6.679	.261	25.624	.000	6.166	7.192
normativ	-.227	.072	-3.169	.002	-.369	-.086
nzchina	-.852	.184	-4.618	.000	-1.215	-.489

***** DIRECT AND INDIRECT EFFECTS

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
-.852	.184	-4.618	.000	-1.215	-.489

Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
normativ	-.308	.103	-.523	-.120

***** ANALYSIS NOTES AND WARNINGS

Number of bootstrap samples for bias corrected bootstrap confidence intervals:

1000

Level of confidence for all confidence intervals in output:

95.00

NOTE: Some cases were deleted due to missing data. The number of such cases was:

1

----- END MATRIX -----

Normative influence as a mediator in looking for shoes

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Release 2.15

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 4
Y = shoesloo
X = nzchina
M = normativ

Sample size
249

Outcome: normativ

Model Summary

R	R-sq	MSE	F	df1	df2	p
.526	.277	1.191	94.615	1.000	247.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.424	.213	6.693	.000	1.005	1.843
nzchina	1.353	.139	9.727	.000	1.079	1.628

Outcome: shoeslook

Model Summary

R	R-sq	MSE	F	df1	df2	p
.392	.154	3.051	22.313	2.000	246.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	6.541	.370	17.674	.000	5.812	7.269
normativ	-.338	.102	-3.323	.001	-.539	-.138
nzchina	-.833	.262	-3.179	.002	-1.349	-.317

***** DIRECT AND INDIRECT EFFECTS

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
-.833	.262	-3.179	.002	-1.349	-.317

Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
normativ	-.458	.136	-.727	-.199

***** ANALYSIS NOTES AND WARNINGS

Number of bootstrap samples for bias corrected bootstrap confidence intervals:
1000

Level of confidence for all confidence intervals in output:
95.00

NOTE: Some cases were deleted due to missing data. The number of such cases was:
1

----- END MATRIX -----

Normative influence as a mediator in spending on shoes

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Release 2.15

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 4

Y = shoesspe

X = nzchina

M = normativ

Sample size

249

Outcome: normativ

Model Summary

R	R-sq	MSE	F	df1	df2	p
.526	.277	1.191	94.615	1.000	247.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.424	.213	6.693	.000	1.005	1.843
nzchina	1.353	.139	9.727	.000	1.079	1.628

Outcome: shoesspe

Model Summary

R	R-sq	MSE	F	df1	df2	p
.594	.353	2.088	67.091	2.000	246.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	-.784	.306	-2.560	.011	-1.386	-.181
normativ	.236	.084	2.804	.005	.070	.402
nzchina	1.751	.217	8.082	.000	1.324	2.178

***** DIRECT AND INDIRECT EFFECTS

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
1.751	.217	8.082	.000	1.324	2.178

Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
normativ	.320	.126	.087	.585

***** ANALYSIS NOTES AND WARNINGS

Number of bootstrap samples for bias corrected bootstrap confidence intervals:

1000

Level of confidence for all confidence intervals in output:

95.00

NOTE: Some cases were deleted due to missing data. The number of such cases was:

1

----- END MATRIX -----

Normative influence as a mediator in buying for shoes

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Release 2.15

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 4

Y = shoesbuy

X = nzchina

M = normativ

Sample size

249

Outcome: normativ

Model Summary

R	R-sq	MSE	F	df1	df2	p
.526	.277	1.191	94.615	1.000	247.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.424	.213	6.693	.000	1.005	1.843
nzchina	1.353	.139	9.727	.000	1.079	1.628

Outcome: shoesbuy

Model Summary

R	R-sq	MSE	F	df1	df2	p
.465	.216	1.391	33.928	2.000	246.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	7.577	.250	30.326	.000	7.085	8.069
normativ	-.282	.069	-4.098	.000	-.417	-.146
nzchina	-.693	.177	-3.919	.000	-1.041	-.345

***** DIRECT AND INDIRECT EFFECTS

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
-.693	.177	-3.919	.000	-1.041	-.345

Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
normativ	-.381	.109	-.625	-.189

***** ANALYSIS NOTES AND WARNINGS

Number of bootstrap samples for bias corrected bootstrap confidence intervals:

1000

Level of confidence for all confidence intervals in output:

95.00

NOTE: Some cases were deleted due to missing data. The number of such cases was:

1

----- END MATRIX -----

Normative influence as a mediator in looking for cosmetics

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Release 2.15

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 4

Y = cosmetic

X = nzchina

M = normativ

Sample size

249

Outcome: normativ

Model Summary

R	R-sq	MSE	F	df1	df2	p
.526	.277	1.191	94.615	1.000	247.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.424	.213	6.693	.000	1.005	1.843
nzchina	1.353	.139	9.727	.000	1.079	1.628

Outcome: cosmetic

Model Summary

R	R-sq	MSE	F	df1	df2	p
.133	.018	4.009	2.209	2.000	246.000	.112

Model

	coeff	se	t	p	LLCI	ULCI
constant	4.989	.424	11.761	.000	4.153	5.824
normativ	-.207	.117	-1.772	.078	-.437	.023
nzchina	-.009	.300	-.029	.977	-.600	.583

***** DIRECT AND INDIRECT EFFECTS

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
-.009	.300	-.029	.977	-.600	.583

Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
normativ	-.280	.157	-.596	.026

***** ANALYSIS NOTES AND WARNINGS

Number of bootstrap samples for bias corrected bootstrap confidence intervals:

1000

Level of confidence for all confidence intervals in output:

95.00

NOTE: Some cases were deleted due to missing data. The number of such cases was:

1

----- END MATRIX -----

Normative influence as a mediator in cosmetics spending

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Release 2.15

Written by Andrew F. Hayes, Ph.D. www.afhayes.com

Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 4

Y = cosmetic

X = nzchina

M = normativ

Sample size

Outcome: normativ

Model Summary

R	R-sq	MSE	F	df1	df2	p
.526	.277	1.191	94.615	1.000	247.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.424	.213	6.693	.000	1.005	1.843
nzchina	1.353	.139	9.727	.000	1.079	1.628

Outcome: cosmetic

Model Summary

R	R-sq	MSE	F	df1	df2	p
.523	.273	3.131	46.206	2.000	246.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	-.731	.375	-1.950	.052	-1.469	.007
normativ	.219	.103	2.122	.035	.016	.422
nzchina	1.819	.265	6.856	.000	1.296	2.342

***** DIRECT AND INDIRECT EFFECTS

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
1.819	.265	6.856	.000	1.296	2.342

Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
normativ	.296	.125	.075	.575

***** ANALYSIS NOTES AND WARNINGS

Number of bootstrap samples for bias corrected bootstrap confidence

intervals:

1000

Level of confidence for all confidence intervals in output:

95.00

NOTE: Some cases were deleted due to missing data. The number of such cases was:

1

----- END MATRIX -----

Normative influence as a mediator in cosmetics buying

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Release 2.15

Written by Andrew F. Hayes, Ph.D. www.afhayes.com

Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 4

Y = cosmeticbuy

X = nzchina

M = normativ

Sample size

249

Outcome: normativ

Model Summary

R	R-sq	MSE	F	df1	df2	p
.526	.277	1.191	94.615	1.000	247.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.424	.213	6.693	.000	1.005	1.843
nzchina	1.353	.139	9.727	.000	1.079	1.628

```

*****
*****
Outcome: cosmetic

Model Summary

      R      R-sq      MSE      F      df1      df2      p
    .192    .037    1.778    4.719    2.000    246.000    .010

Model

      coeff      se      t      p      LLCI      ULCI
constant    6.276    .283   22.216    .000    5.720    6.833
normativ   -.169    .078   -2.172    .031   -.322   -.016
nzechina   -.141    .200   -.704    .482   -.535    .253

***** DIRECT AND INDIRECT EFFECTS
*****

Direct effect of X on Y

      Effect      SE      t      p      LLCI      ULCI
    -.141    .200   -.704    .482   -.535    .253

Indirect effect of X on Y

      Effect  Boot SE  BootLLCI  BootULCI
normativ   -.229    .107   -.441   -.018

***** ANALYSIS NOTES AND WARNINGS
*****

Number of bootstrap samples for bias corrected bootstrap confidence
intervals:
    1000

Level of confidence for all confidence intervals in output:
    95.00

NOTE: Some cases were deleted due to missing data. The number of such
cases was:
    1

----- END MATRIX -----

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Informational influence as a mediator in looking for clothing

Hayes Process Analysis model 4 was run to test the role of informational social

influence as a mediator between nationality of shopper (NZ versus Chinese) and several outcomes measuring online shopping. The diagram below illustrates this approach to analysis using the example of “looking for clothing” as one of the outcome variable.

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Release 2.15

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 4
Y = clothlook
X = nzchina
M = informat

Sample size
249

Outcome: informat

Model Summary

R	R-sq	MSE	F	df1	df2	p
.316	.100	1.108	27.445	1.000	247.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.422	.205	16.677	.000	3.018	3.827
nzchina	.703	.134	5.239	.000	.439	.968

Outcome: clothloo

Model Summary

R	R-sq	MSE	F	df1	df2	p
.309	.095	2.262	12.940	2.000	246.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	4.892	.427	11.446	.000	4.051	5.734
informat	-.264	.091	-2.903	.004	-.443	-.085
nzchina	-.615	.202	-3.045	.003	-1.014	-.217

***** DIRECT AND INDIRECT EFFECTS

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
-.615	.202	-3.045	.003	-1.014	-.217

Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
informat	-.186	.075	-.366	-.066

***** ANALYSIS NOTES AND WARNINGS

Number of bootstrap samples for bias corrected bootstrap confidence intervals:

1000

Level of confidence for all confidence intervals in output:

95.00

NOTE: Some cases were deleted due to missing data. The number of such cases was:

1

----- END MATRIX -----

Informational influence as a mediator in spending on clothing

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Release 2.15

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 4

Y = clothspe

X = nzchina

M = informat

Sample size

249

Outcome: informat

Model Summary

R	R-sq	MSE	F	df1	df2	p
.316	.100	1.108	27.445	1.000	247.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.422	.205	16.677	.000	3.018	3.827
nzchina	.703	.134	5.239	.000	.439	.968

Outcome: clothspe

Model Summary

R	R-sq	MSE	F	df1	df2	p
.605	.366	3.179	70.997	2.000	246.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	-.648	.507	-1.279	.202	-1.647	.350
informat	.247	.108	2.291	.023	.035	.459
nzchina	2.485	.240	10.369	.000	2.013	2.957

***** DIRECT AND INDIRECT EFFECTS

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
2.485	.240	10.369	.000	2.013	2.957

Indirect effect of X on Y

Effect	Boot SE	BootLLCI	BootULCI
--------	---------	----------	----------

informat .174 .098 -.009 .362

***** ANALYSIS NOTES AND WARNINGS

Number of bootstrap samples for bias corrected bootstrap confidence intervals:

1000

Level of confidence for all confidence intervals in output:

95.00

NOTE: Some cases were deleted due to missing data. The number of such cases was:

1

----- END MATRIX -----

Informational influence as a mediator in clothing buying

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Release 2.15

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 4

Y = clothbuy

X = nzchina

M = informat

Sample size

249

Outcome: informat

Model Summary

R	R-sq	MSE	F	df1	df2	p
.316	.100	1.108	27.445	1.000	247.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.422	.205	16.677	.000	3.018	3.827
nzchina	.703	.134	5.239	.000	.439	.968

Outcome: clothbuy

Model Summary

R	R-sq	MSE	F	df1	df2	p
.427	.182	1.564	27.367	2.000	246.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	6.706	.355	18.868	.000	6.006	7.406
informat	-.102	.076	-1.355	.177	-.251	.046
nzchina	-1.088	.168	-6.471	.000	-1.419	-.757

***** DIRECT AND INDIRECT EFFECTS

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
-1.088	.168	-6.471	.000	-1.419	-.757

Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
informat	-.072	.058	-.196	.037

***** ANALYSIS NOTES AND WARNINGS

Number of bootstrap samples for bias corrected bootstrap confidence intervals:

1000

Level of confidence for all confidence intervals in output:

95.00

NOTE: Some cases were deleted due to missing data. The number of such cases was:

1

----- END MATRIX -----

Informational influence as a mediator in looking for shoes

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Release 2.15

Written by Andrew F. Hayes, Ph.D. www.afhayes.com

Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 4

Y = shoesloo

X = nzchina

M = informat

Sample size

249

Outcome: informat

Model Summary

R	R-sq	MSE	F	df1	df2	p
.316	.100	1.108	27.445	1.000	247.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.422	.205	16.677	.000	3.018	3.827
nzchina	.703	.134	5.239	.000	.439	.968

Outcome: shoesloo

Model Summary

R	R-sq	MSE	F	df1	df2	p
.394	.155	3.045	22.616	2.000	246.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	7.287	.496	14.693	.000	6.310	8.264

informat	-.359	.105	-3.403	.001	-.567	-.151
nzchina	-1.038	.235	-4.428	.000	-1.500	-.576

***** DIRECT AND INDIRECT EFFECTS

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
-1.038	.235	-4.428	.000	-1.500	-.576

Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
informat	-.252	.082	-.451	-.119

***** ANALYSIS NOTES AND WARNINGS

Number of bootstrap samples for bias corrected bootstrap confidence intervals:

1000

Level of confidence for all confidence intervals in output:

95.00

NOTE: Some cases were deleted due to missing data. The number of such cases was:

1

----- END MATRIX -----

Informational influence as a mediator in shoes spending

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Release 2.15

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 4

Y = shoesspe

X = nzchina

M = informat

Sample size

249

Outcome: informat

Model Summary

R	R-sq	MSE	F	df1	df2	p
.316	.100	1.108	27.445	1.000	247.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.422	.205	16.677	.000	3.018	3.827
nzchina	.703	.134	5.239	.000	.439	.968

Outcome: shoesspe

Model Summary

R	R-sq	MSE	F	df1	df2	p
.585	.343	2.121	64.100	2.000	246.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	-1.040	.414	-2.511	.013	-1.855	-.224
informat	.173	.088	1.966	.050	.000	.346
nzchina	1.949	.196	9.957	.000	1.563	2.334

***** DIRECT AND INDIRECT EFFECTS

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
1.949	.196	9.957	.000	1.563	2.334

Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
informat	.122	.083	-.043	.295

***** ANALYSIS NOTES AND WARNINGS

Number of bootstrap samples for bias corrected bootstrap confidence intervals:

1000

Level of confidence for all confidence intervals in output:

95.00

NOTE: Some cases were deleted due to missing data. The number of such cases was:

1

----- END MATRIX -----

Informational influence as a mediator in shoes buying

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Release 2.15

Written by Andrew F. Hayes, Ph.D. www.afhayes.com

Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 4

Y = shoesbuy

X = nzchina

M = informat

Sample size

249

Outcome: informat

Model Summary

R	R-sq	MSE	F	df1	df2	p
.316	.100	1.108	27.445	1.000	247.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.422	.205	16.677	.000	3.018	3.827

nzchina	.703	.134	5.239	.000	.439	.968
---------	------	------	-------	------	------	------

Outcome: shoesbuy

Model Summary

R	R-sq	MSE	F	df1	df2	p
.435	.189	1.439	28.636	2.000	246.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	7.875	.341	23.095	.000	7.203	8.546
informat	-.204	.073	-2.816	.005	-.347	-.061
nzchina	-.931	.161	-5.773	.000	-1.248	-.613

***** DIRECT AND INDIRECT EFFECTS

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
-.931	.161	-5.773	.000	-1.248	-.613

Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
informat	-.144	.059	-.288	-.039

***** ANALYSIS NOTES AND WARNINGS

Number of bootstrap samples for bias corrected bootstrap confidence intervals:

1000

Level of confidence for all confidence intervals in output:

95.00

NOTE: Some cases were deleted due to missing data. The number of such cases was:

1

----- END MATRIX -----

Informational influence as a mediator in looking for cosmetics

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Release 2.15

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 4
Y = cosmetic
X = nzchina
M = informat

Sample size
249

Outcome: informat

Model Summary

R	R-sq	MSE	F	df1	df2	p
.316	.100	1.108	27.445	1.000	247.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.422	.205	16.677	.000	3.018	3.827
nzchina	.703	.134	5.239	.000	.439	.968

Outcome: cosmetic

Model Summary

R	R-sq	MSE	F	df1	df2	p
.198	.039	3.921	5.019	2.000	246.000	.007

Model

	coeff	se	t	p	LLCI	ULCI
constant	5.905	.563	10.492	.000	4.796	7.013
informat	-.354	.120	-2.955	.003	-.589	-.118
nzchina	-.040	.266	-.150	.881	-.564	.484

***** DIRECT AND INDIRECT EFFECTS

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
-.040	.266	-.150	.881	-.564	.484

Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
informat	-.249	.091	-.436	-.078

***** ANALYSIS NOTES AND WARNINGS

Number of bootstrap samples for bias corrected bootstrap confidence intervals:

1000

Level of confidence for all confidence intervals in output:

95.00

NOTE: Some cases were deleted due to missing data. The number of such cases was:

1

----- END MATRIX -----

Informational influence as a mediator in cosmetics spending

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Release 2.15

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 4

Y = cosmetic

X = nzchina

M = informat

Sample size

249

Outcome: informat

Model Summary

R	R-sq	MSE	F	df1	df2	p
.316	.100	1.108	27.445	1.000	247.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.422	.205	16.677	.000	3.018	3.827
nzchina	.703	.134	5.239	.000	.439	.968

Outcome: cosmetic

Model Summary

R	R-sq	MSE	F	df1	df2	p
.511	.261	3.182	43.477	2.000	246.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	-.670	.507	-1.321	.188	-1.668	.329
informat	.073	.108	.678	.498	-.139	.285
nzchina	2.064	.240	8.608	.000	1.592	2.536

***** DIRECT AND INDIRECT EFFECTS

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
2.064	.240	8.608	.000	1.592	2.536

Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
informat	.051	.082	-.105	.222

***** ANALYSIS NOTES AND WARNINGS

Number of bootstrap samples for bias corrected bootstrap confidence intervals:

1000

Level of confidence for all confidence intervals in output:

95.00

NOTE: Some cases were deleted due to missing data. The number of such cases was:

1

----- END MATRIX -----

Informational influence as a mediator in cosmetics buying

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Release 2.15

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 4

Y = cosmeticbuy
X = nzchina
M = informat

Sample size

249

Outcome: informat

Model Summary

R	R-sq	MSE	F	df1	df2	p
.316	.100	1.108	27.445	1.000	247.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.422	.205	16.677	.000	3.018	3.827
nzchina	.703	.134	5.239	.000	.439	.968

Outcome: cosmeticbuy

Model Summary

R	R-sq	MSE	F	df1	df2	p
.203	.041	1.770	5.294	2.000	246.000	.006

Model

	coeff	se	t	p	LLCI	ULCI
constant	6.702	.378	17.722	.000	5.957	7.446
informat	-.194	.080	-2.418	.016	-.353	-.036
nzchina	-.233	.179	-1.301	.195	-.585	.120

***** DIRECT AND INDIRECT EFFECTS

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
-.233	.179	-1.301	.195	-.585	.120

Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
informat	-.137	.064	-.282	-.026

***** ANALYSIS NOTES AND WARNINGS

Number of bootstrap samples for bias corrected bootstrap confidence intervals:

1000

Level of confidence for all confidence intervals in output:

95.00

NOTE: Some cases were deleted due to missing data. The number of such cases was:

1

----- END MATRIX -----

