



Which Forms a Better Impression: Self-Introduction or Introduction by a Third-party?

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Which Forms a Better Impression: Self-Introduction or Introduction by a Third-party?

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Abstract

Numerous studies have explored factors contributing to the formation of first impressions but have not investigated these factors in virtual contexts. The proposed research aims to explore the most effective type of introduction across different sociocultural contexts in a virtual setting. The research compared three types of introduction (self-introduction, peer-introduction, and authority-introduction) in participants from China and the U.S. to assess which type was the most effective in each country. Participants were students recruited from universities in China and the U.S. respectively. An individual was introduced to the participants in three groups virtually by different parties: the individual herself, a student, and a professor. Based on the introduction, participants were asked to evaluate the first impression with two dimensions (Competency and Trustworthiness). The descriptive results showed that in China, professor-introduction led to the highest average first impression score while self-introduction led to the lowest. However, in the US, peer-introduction led to the highest average score while professor-introduction led to the lowest. In addition, in China, the score from the professor-introduction was statistically higher than the one from self-introduction, while the difference was insignificant in the US. The findings of the study can be meaningful in various fields, such as building rapport in a therapeutic relationship, accelerating transfer student's adaptation to a new environment, and supporting a new employee's assimilation into an organization.

Dedication

I dedicate this thesis to my husband Luming, for his unconditional support and encouragement over my four years' study and beyond.

Acknowledgments

I would like to express my gratitude to Dr. Max Krasnow, my thesis director, and Dr. Adrienne Tierney, my research advisor for their insights and guidance. They inspired me and ignited my passion for research studies.

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Chapter I

Introduction

Numerous studies have affirmed the importance of first impressions and explored factors contributing to the formation. However, past studies have not investigated the conditions in a virtual setting or different sociocultural contexts. In a digital world today, the likelihood that people make an initial judgment based on virtual interactions has increased rapidly. Frequent interactions are happening across geographic boundaries and cultures through social media, online learning, and business meetings. The recent coronavirus pandemic has accelerated the need to understand the factors contributing to the formation of first impressions in a different sociocultural context in a virtual setting.

The Importance of First Impression

Substantial research has affirmed the importance and accuracy of first impressions. Willis and Todorov (2006) investigated the minimal conditions under which people make trait inferences from the facial appearance of other people. In five experiments, they manipulated the exposure time of unfamiliar faces, from 0.1 second to 1 second. Their findings suggest that as minimal exposure as 0.1 second is sufficient for people to make such inferences. All the correlations between judgments made after a 0.1 second glimpse and judgments made without time constraints were high and increased exposure time did not significantly change the correlations. Ambady and Rosenthal (1992) conducted a meta-analysis on the accuracy of predictions from short observations (under 5 minutes) of expressive behavior such as speech, body language, and tone of voice. They found the

overall effect size for the accuracy was .39 and longer periods of observation didn't yield greater accuracy. Naumann et al. (2009) examined the accuracy of observers' impressions on 10 personality traits based on full-body photographs. The 10 personality traits include the Big Five traits (i.e., extraversion, agreeableness, conscientiousness, emotional stability, and openness) as well as likability, self-esteem, loneliness, religiosity, and political orientation. Their findings indicate that first impressions are reasonably accurate for a number of personality traits (e.g., aggregated-observer accuracy in a spontaneous posture averaged .25 across all 10 traits).

Further, once people form an initial judgment about a person, they will use such judgment to determine future communication and relationship development. Sunnafrank (1986) captured this relationship in the Predicted Outcome Value theory (POV): people predict the benefits and future outcome of their relationships based on the information sought from their initial interactions. If people predict a positive outcome of the relationship, they will desire more communication with the other person, which may lead to the further development of their relationship (Littlejohn, 2004). On the contrary, if people predict a negative outcome, they will tend to restrict communication, which may hinder the development of future relationships. Ramirez et al. (2010) used a longitudinal method to examine if POV could be extended to study the effects of unexpected events in ongoing relationships (e.g., with friends, romantic partners, and roommates). In their study, participants were asked to think of a relationship in which an unexpected event had recently occurred and then asked to report on the event, the pre-event state of the relationship, behavior occurring since the event, and the post-event state of the relationship. Their findings strongly supported POV extension to ongoing relationships:

people seek information to maintain and expand communicative contact with relational partners, signal interest in relationship development, and pursue positive relational outcomes. When people alter their outcome value expectation for a relationship due to an unexpected event, they will also change their evaluation of partners, attraction to partners, and attempts to develop the relationship. For example, changes resulting in more positive outcome value expectation of the relationship should increase levels of behaviors and perceptions associated with relational maintenance, whereas changes resulting in less positive outcome value expectations should produce decreases in these same factors. Thus, a good first impression is key to the success of a future relationship, not only in the initial development stage but also has a lasting effect on relationship maintenance.

Factors Contributing to First Impression

Given the importance of first impressions, numerous studies have explored factors contributing to the formation of first impressions in various contexts. One of the key factors examined has been physical appearance, which is the first piece of information accessible to others and it can offer valuable personality-relevant information to influence the perceiver's judgment (Naumann et al., 2009). For example, Etcoff et al. (2011) tested the impact of cosmetics on judgments of facial images. In their study, participants were asked to rate the same female faces with or without color cosmetics, with varied styles of makeup from minimal (natural), to moderate (professional), to dramatic (glamorous). Their results indicate that makeup has a significant positive effect on the judgment of attractiveness and competence at a brief and longer inspection times. Overall, their findings suggest that people judge women with makeup as more likable, competent, and trustworthy than those with bare faces. Johnson et al. (2002) conducted open-ended

interviews with 39 women to explore people's impressions of others and people's beliefs regarding others' impressions of them. Their findings revealed that people form impressions of others based on appearance and dress cues, e.g., type of suits, shoes, color, and fit of garments. The content of the information inferred included personality characteristics, information about behaviors, biological traits, health and hygiene, and social roles. The majority of these participants believed that both they and others were accurate at decoding information from general appearance and dress cues. Similarly, Howlett et al. (2013) investigated the effect of minor changes in clothing on the perception of a male model. In their study, 274 participants were asked to rate four images (bespoke suit-static posture, bespoke suit-dynamic posture, regular suit-static posture, and regular suit-dynamic posture) on five dimensions (confidence, success, trustworthiness, salary, and flexibility). Their results showed that when pictured in a bespoke (made-to-measure) suit, the model was rated more positively on all attributes except trustworthiness, compared to the ones in a regular (off-the-rack) suit. On the evidence of this study, it appears that even small changes (the cut of a suit) in clothing choice can communicate an extensive and complex array of information about a person, which can heavily influence the impression formation.

Furthermore, body language also plays a critical role in first impression formation, especially in job interviews. DeGroot and Motowidlo (1999) used videotaped interviews with 110 managers to examine the effect of visual and vocal cues in interview performance. Their results indicated that both vocal (pitch, pitch variability, speech rate, pauses, and amplitude variability) and visual cues (physical attractiveness, smiling, gaze, hand movement, and body orientation) correlated with the interviews' judgments. Stewart

et al. (2008) examined how an applicant's handshake influences hiring recommendations formed during the interview. Participants in this study were 98 undergraduate students. They participated in mock interviews and received ratings of their employment suitability. The result showed that individuals who followed common prescriptions for shaking hands, such as having a firm grip and looking the other person in the eye, received higher ratings of employment suitability from interviewers.

In addition to judgments based on physical appearance and body language, some research has examined personal traits that impact first impressions. Fiske et al. (2007) found that from widely varied cultures, there are two fundamental dimensions of social cognition: warmth and competence. They suggested that from an evolutionary perspective, social animals must determine immediately whether the other conspecific is friend or foe, and whether the other conspecific can enact those intentions. Promoting survival, these two dimensions provide fundamental social structural answers about competition and status. The warmth dimension captures traits that are related to perceived intent including friendliness, trustworthiness, empathy, and kindness that indicates whether others are likely to have good or ill intentions toward us, whereas the competence dimension reflects traits that are related to perceived ability, including intelligence, power, efficacy, and skill that answers the question of whether others are capable of carrying out those intentions (Cuddy et al., 2011). People perceived as warm and competent during the initial interactions elicited uniformly positive emotions and behaviors. Thus, through behaviors that communicate warmth and competence information, people will manage to leave a better impression.

With the advance of technology, first impressions can occur in a wide variety of virtual settings. From a commercial perspective, more companies are doing business across geographic boundaries and time zones, therefore they apply virtual meetings such as audio-, video- and web-conferencing to reduce travel costs and increase business mobility and collaboration (Lyons et al., 2010; Lindeblad et al., 2016). From an academic perspective, distance learning is getting popular with advantages including more flexibility and convenience for the learner, easier facilitation of communication between the learner and the teacher, and more variety in learner experience from using multimedia-teaching material (Al-Arimi, 2014). More and more college students are also using online learning tools such as practice tests and online study groups to obtain knowledge and enhance comprehension (Johnson, 2008). From a social networking perspective, Manovich (2012) reported that, in the U.S., 65 percent of internet-using adults reported using social network sites such as Facebook, MySpace, or LinkedIn to connect with each other. In the face of the global pandemic, more and more people are adapting to the new norm – developing and maintaining relationships virtually.

Social network sites have three primary features – profiles, connection lists, and traversing connections (Boyd & Ellison, 2007). Lacking visible bodies, online profiles offer the participants many possibilities to actively construct a representation of how they would like to be identified by others. Connection lists represent the collection of a person's relations in multiple contexts such as work and family. Compared to earlier communication tools that enabled individuals to establish and share a private list of contacts, connection lists on social networks sites extends the practice of creating a publicly visible list of contacts. The ability to see and traverse others' contact lists is innovative and

important in several ways. Traversing the connections between people (e.g., allowing visitors on Person A's site to surf to Person B's site) to view profiles enables people to find shared contacts easily, which lowers the barriers to initiating contact with other users. It also allows people to see the relationships between others, to reconnect with old acquaintances, and thus enhance their social interactions (Ellison & Boyd, 2013). The literature demonstrates that profiles, connection lists, and traversing connections play important roles in communication methods. It also raises the question as to situations where profile information is limited, such as e-mail exchange and phone conversation, will the connection or traversing connection be relevant in making an assessment, particularly as it relates to forming first impressions?

Past research has focused on physical appearance, body language, and personal traits that impact first impressions but has not investigated these factors in virtual contexts. Given that more and more first impressions occur via virtual interactions, and that social connections are a primary piece of information available in those environments, it is critical to understand to what extent people use social connections to formulate a first impression. According to Berger and Calabrese's (1975) uncertainty reduction theory (URT) of initial interaction, when strangers meet, people need information about the other to reduce their uncertainty or increase predictability about the behavior of both in the interaction. During this information-seeking process, the shared network helps to reduce uncertainty, which is crucial to the development of a relationship (West & Turner, 2018). For instance, on someone's first day to work, his supervisor can choose to introduce him or ask him to do a self-introduction to his new team. If his supervisor introduces him, the team may find him more trustworthy because the shared

network contributes to the uncertainty reduction. This shows a mechanism whereby social connections (the association between two or more people) may play a critical role in influencing first impression in virtual contexts.

First Impressions in Different Sociocultural Contexts

Social connections might mean different things in different sociocultural contexts as people from a different culture might hold different perceptions and understandings of social connection. Hofstede (2010) identified six dimensions of cultural variation: individualism, power distance, masculinity, uncertainty avoidance, long-term orientation, and indulgence. In consideration of the relevance to social connection, the proposed research refers to the dimensions of individualism and power distance to explore sociocultural context differences.

The fundamental issue addressed by the dimension of individualism is the degree of interdependence a society maintains among its members (Hofstede, 2010). Based on this description, China was scored at 20 out of 100 on the dimension of individualism while the U.S. was scored much higher at 91 out of 100. Such scores indicate that China has a highly collectivist culture, and the U.S. on the contrary, has a more individualistic orientation. Therefore, people in the U.S. may prioritize and emphasize the individual over the entire group in their social network, whereas in China, in-groups may influence a wide range of social situations and individuals tend to be more dependent on others in their social network for decision-making (Hofstede, 2010; LeFebvre & Franke, 2013; Triandis, 1989). Power distance expresses the degree to which the less powerful members of a society expect and accept that power is distributed unequally (power being defined as the degree to which a person is able to influence other people's ideas and behavior). It

shows how a society handles inequalities among people. China was scored at 80 out of 100 on this dimension while the U.S. was scored much lower at 40 out of 100. China's high score indicates the tendency to accept inequity and power differences in society and individuals are more likely to be influenced by the formal authority in their social network. On the contrary, the U.S. has a less power distance orientation and places more emphasis on equal rights in all aspects of society. With the understanding of these two dimensions of cultural variation, the study will take the factors of social connection and sociocultural context into the further analysis of first impression formation.

Study Aim and Hypotheses

The proposed research aims to explore the most effective type of introduction in terms of social connection (self-introduction, peer-introduction, and authority-introduction) in each sociocultural context (China and the U.S.) in a virtual setting. With the following hypotheses, the study will enhance the general understanding of first impression formation in a virtual context.

Hypothesis 1

Based on China's collectivist culture, it is expected that introduction by a third-party (peer or authority) will lead to a better first impression in China compared to self-introduction because people are more dependent on the peer or authority for their decision-making. However, the difference is expected to be smaller in the U.S. because of its highly individualistic culture where people prioritize and emphasize the individual over the entire group, and therefore people may place less value on the social connection.

Hypothesis 2

Based on the dimension of power distance, it is expected that introduction by an authority will lead to the best first impression in China compared to the other two types of introduction because people have high respect for rank and authority. However, the difference is expected to be smaller in the U.S., which has a culture with a less power distance orientation.

Significance of the Study

The findings of the study can be meaningful in different fields, such as building rapport in a therapeutic relationship, accelerating transfer student's adaptation to a new environment, and supporting new employee's assimilation into an organization. For example, in China, if the introduction by an authority is the most effective, mental health organizations should consider setting up an online referral system for the initiation of a therapeutic relationship between patients and therapists. If the therapist manages to leave a better first impression at the beginning, the patient will desire the development of a trusting relationship, which may lead to more effective and successful future treatments. Another example is about accelerating a new employee's assimilation in a corporation. When new employees come to work, they are expected to assimilate into the organization quickly by building business relationships at different levels. To make a good start, their companies should consider the difference in their sociocultural contexts and find the most effective way to make introductions. The good work relationships will enable their success in the business environment.

Chapter II

Method

The study was conducted using an online format that included questionnaires administered via Qualtrics. The target sample was 252 participants, 126 participants from China and the U.S. respectively. The sample size was determined with the help of G*Power 3.1 – analysis of variance (ANOVA) test: fixed effects, special, main effects and interactions with a 2 X 3 design, an effect size f of 0.25, an alpha of 0.05, and a power of 0.95 – the total sample size should be 251. The U.S. participants were recruited through Amazon Mechanical Turk and the Chinese participants were recruited from Tencent. The information of the study was posted on these online platforms, including the purpose of the study, expected involvement, compensation, and data protection.

Participants

In total, 249 participants responded to the study (109 from the U.S. and 140 from China). However, 11 data points were excluded from the initial collection due to incomplete or duplicate inputs (6 from the U.S. and 5 from China). After data cleaning, a total of 238 participants provided valid data inputs to the study. They were all university students above 18 years old, with 103 from the U.S. and 135 from China. Among all the participants, 65% were female (53% female from the U.S. participants and 72% female from the Chinese participants). The average age of the participants was 21 years old (18 years old for the U.S. participants and 24 years old for the Chinese participants). The

Chinese group showed a higher female ratio and a higher mean age than the U.S. group. The demographic details of the participants are shown in Table 1.

Table 1. Participants Demographics

	The U.S.	China	Total
Sample Size	103	135	238
Gender: Female	56 (53%)	98 (72%)	154 (65%)
Average Age	18.21	23.82	21.39

This table presents the demographic break down of the U.S and Chinese participants.

Design and Procedure

This study is considered as a 2 (country where the participant is from) X 3 (manner of introduction) between-subjects design with two independent variables. The Country info has two levels (China or the U.S.) and the type of introduction has three levels (self-introduction, student-introduction, or professor-introduction). The dependent measures were the participants' rating scores with two dimensions (Competency and Trustworthiness) from the survey of their first impression on the individual being introduced.

Data Collection

Data was collected via the web-based survey tool Qualtrics for all the participants in the U.S. and China. After obtaining their consent to the study, a randomizer was applied in the survey flow to assign the participants to three comparison groups (self-introduction; student-introduction; professor-introduction). The participants were asked

to provide their personal information (i.e., age, gender) and rate the individual on their first impression with the introduction they received in each group. They were made aware that as part of this research design, they may not be told or may be misled about the purpose or procedures of the study. A debriefing was provided to all participants upon their completion of the study to inform them of the hypothetical profiles that they viewed and rated as part of the study design.

Study Protocol

In all three groups, a hypothetical individual (the same Subject) was introduced to the participants with a brief introduction. After reading through the introduction (see Appendix 1, Appendix 2, and Appendix 3), all the participants were asked to rate the Subject on the first impression with two dimensions: Competency and Trustworthiness. The participants in different groups were given the same introduction description but introduced by a different party, i.e., the participants in the Self-introduction Group were given a paragraph of self-introduction of the Subject; those in the Student-introduction Group were given the introduction by another student; those in the Professor-introduction Group were given the introduction by a professor.

Although the Subject being introduced was a hypothetical person, the profile was set up with careful deliberations: 1) excessive details about the Subject were not provided as to avoid the interference of leading factors to the impression formation, such as education (degree obtained), and the social role of the Subject (being introduced as a student, guest speaker or a professor); 2) the same picture of the Subject was provided as

to control the effect of physical appearance, clothing, and body language. The photo provided in the introduction was a photo of the author.

Study Reliability

The research is expected to yield reliable results with the sample size and random assignment. In terms of the study design, the virtual introduction contributed to the reliability because presenting the content online could guarantee the same condition of some factors of the Subject as discussed above. The study design didn't include an acquaintance in the introduction, which eliminated the influence of the relationship between the participant and the introducer. For example, if a participant had a poor relationship with the introducer, it could affect the first impression by having a negative influence. The virtual introduction could also minimize the interference caused by the introducer's varying style, such as presentation skills, body language, and energy level during the introduction. In terms of the measures, the dimensions of Competency and Trustworthiness are deemed as reliable scales to measure first impressions. The two dimensions are chosen because they are the most commonly used in other research studies (e.g., Etcoff et al., 2011; Fiske et al., 2007; Howlett et al., 2013; Willis & Todorov, 2006) and relevant to this study in a virtual setting.

Data Analysis

The rating scores of the two dimensions (Competency and Trustworthiness) added together represented the Overall First Impression score as the dependent measure, while the two dimensions separately were considered as supplementary analysis. The mean and

standard deviation for each condition of the independent variable were obtained. To investigate the two hypotheses, data analysis was performed as below.

A two-way ANOVA was conducted on the dependent measure (Overall First Impression score) with a subject group (the U.S. participants or the Chinese participants) and type of introduction (self-introduction, student-introduction, or professor-introduction) as between-subject variables. Interaction between Country and Type of Introduction was tested before interpreting the main effects. The profile plot was captured to compare the mean first impression scores.

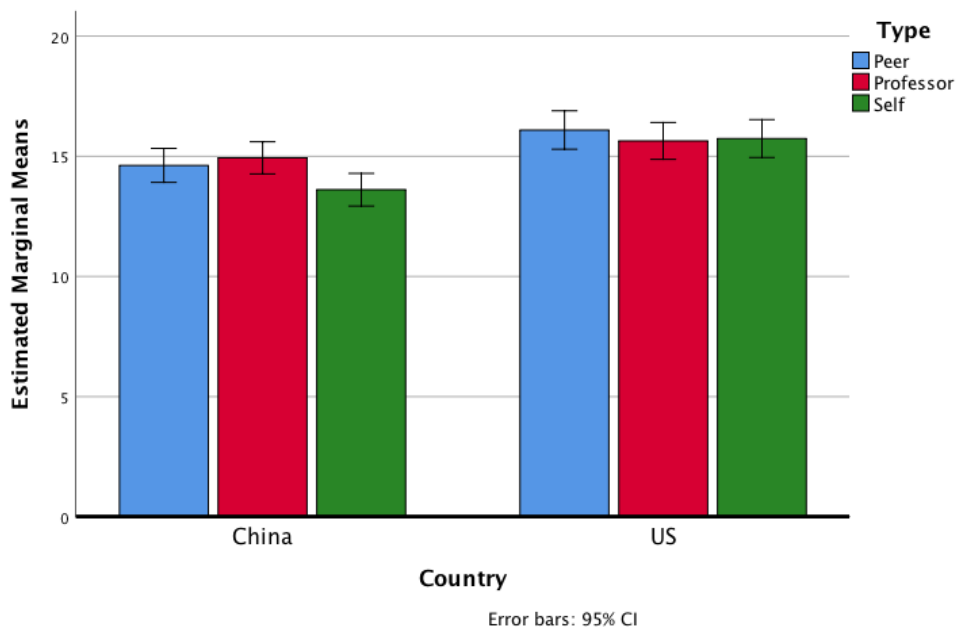
As exploratory analyses, a one-way ANOVA was conducted for both groups (the U.S. participants group and the Chinese participants group) respectively to determine if the mean Overall First Impression scores differ under the different introduction conditions. As supplementary, the mean scores of Competency and Trustworthiness were also tested as dependent variables to explore the difference. Post hoc tests (i.e., Tukey's HSD) were applied as needed to test which type of introduction led to the highest mean Overall First Impression score, Competency score, and Trustworthiness score in each country.

Chapter III

Results

With the final sample of 238 participants, Figure 1 shows the descriptive differences in mean scores of the Overall First Impression under the different types of introductions in each country. For the Chinese participants, professor-introduction led to the highest mean score of Overall First Impression while self-introduction led to the lowest. For the U.S. participants, peer-introduction led to the highest mean score of Overall First Impression while professor-introduction led to the lowest.

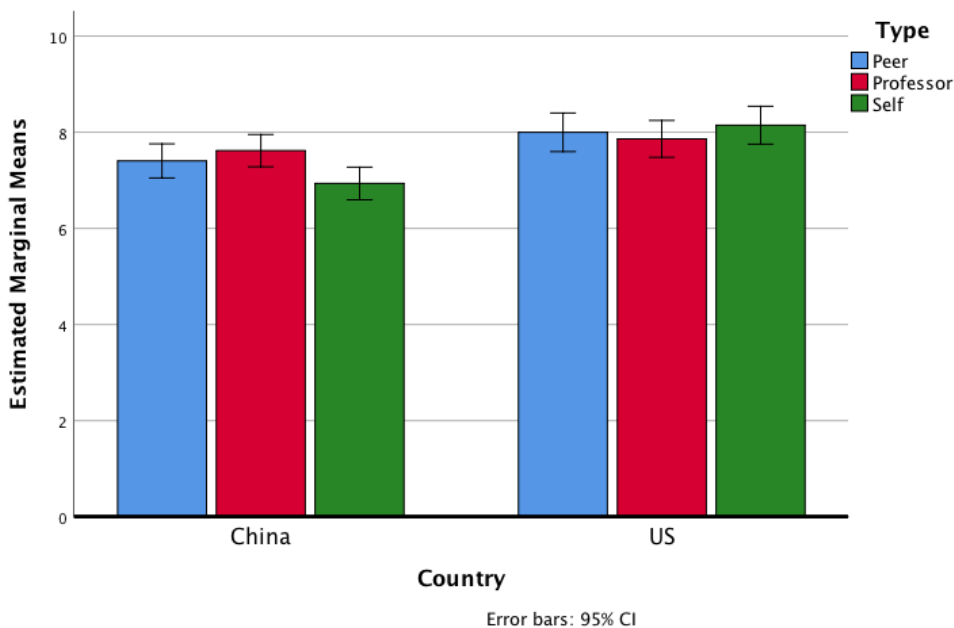
Figure 1. Means of Overall First Impression for Each Country



This plot displays the difference in the mean scores of Overall First Impression for the Chinese and the U.S. participants under the various types of introductions.

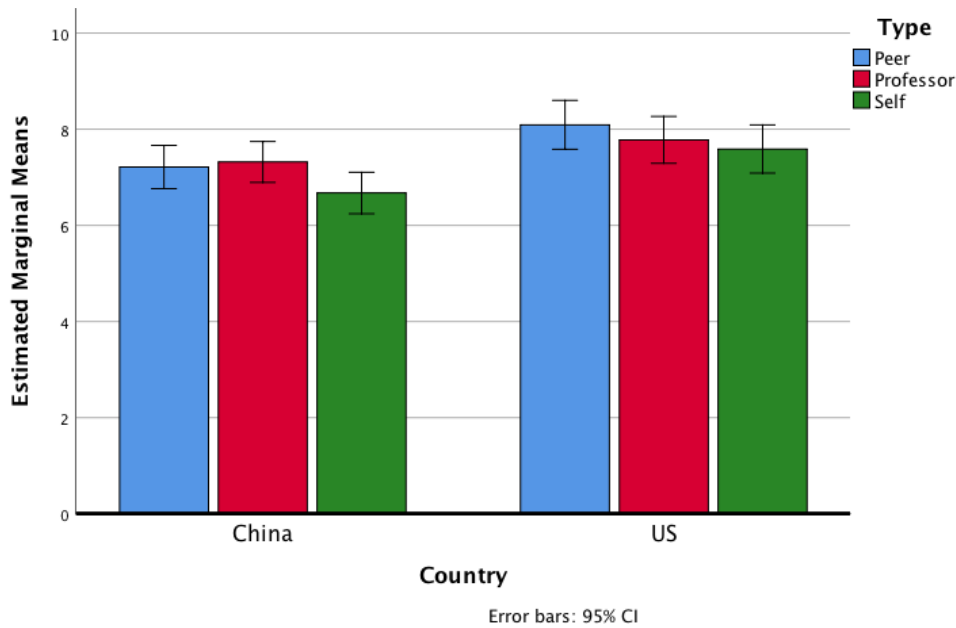
When looking at the two dimensions separately, Figure 2 and Figure 3 show the descriptive differences in mean scores of the Competency and Trustworthiness scores respectively. For the Chinese participants, similar to what was shown in the Overall First Impression scores, professor-introduction led to the highest mean score of both the Competency and the Trustworthiness scores while self-introduction led to the lowest. For the U.S. participants, self-introduction led to the highest mean score of Competency while professor-introduction led to the lowest; peer-introduction led to the highest mean score of Trustworthiness while self-introduction led to the lowest.

Figure 2. Means of Competency Scores for Each Country



This plot displays the difference in the mean scores of Competency for the Chinese and the U.S. participants under the various types of introductions.

Figure 3. Means of Trustworthiness Scores for Each Country



This plot displays the difference in the mean scores of Trustworthiness for the Chinese and the U.S. participants under the various types of introductions.

Interaction between Country and Type of Introduction

Results from a 2 (China or U.S.) x 3 (self-introduction, student-introduction, or professor-introduction) ANOVA indicated that the two main effects did not interact in predicting the Overall First Impression score, $F(2, 232) = 1.873, p = .156$. Thus, the main effects could be interpreted independently. For the effect of Country, the result suggested that the average scores of Overall First Impression differed for a different country ($p < .001$) and the mean Overall First Impression scores were higher for the U.S. participants under all three types of introductions than the Chinese participants. For the effect of Type of Introduction, the average first impression score was similar for different types of introduction ($p = 0.134$).

Table 2. Tests of Between-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	167.676 ^a	5	33.535	6.188	.000	.118
Intercept	53225.327	1	53225.327	9821.106	.000	.977
Country	119.883	1	119.883	22.121	.000	.087
Type	21.997	2	10.998	2.029	.134	.017
Country * Type	20.298	2	10.149	1.873	.156	.016
Error	1257.320	232	5.419			
Total	55005.000	238				
Corrected Total	1424.996	237				

a. R Squared = .118 (Adjusted R Squared = .099)

*This table displays the interaction between the two main effects (Country * Type) and the main effects of Country and Type of Introduction (Type) independently.*

As a follow-up exploratory analysis, a one-way ANOVA was conducted for both country groups respectively to examine the effect of different introduction types on first impression in each country. The Overall First Impression score was obtained as the dependent variable, while the Competency score and Trustworthiness score were captured as supplementary.

First Impression with Different Types of Introduction in China

Results from the one-way ANOVA showed that the mean Overall First Impression scores differed statistically under the different introduction conditions in China ($p = .012$). According to Turkey's HSD, professor-introduction had a higher average first impression score compared to self-introduction ($p = .011$). However, the difference between self-introduction and peer-introduction was not significant ($p = .082$).

The difference between peer-introduction and professor-introduction was also not significant ($p = .775$). This is consistent with what was expected in Hypothesis 1.

Table 3. China One-way ANOVA Overall First Impression Scores

	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Between Groups	44.301	2	22.150	4.614	.012
Within Groups	633.670	132	4.801		
Total	677.970	134			

This table shows that the three control groups with different types of introduction (Between Groups) have statistically different means of Overall First Impression score.

Table 4. China Turkey HSD for Overall First Impression Scores

(I) Type of Introduction	(J) Type of Introduction	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Self	Peer	-1.010	.468	.082	-2.12	.10
	Professor	-1.327*	.454	.011	-2.40	-.25
Peer	Self	1.010	.468	.082	-.10	2.12
	Professor	-.317	.465	.775	-1.42	.79
Professor	Self	1.327*	.454	.011	.25	2.40
	Peer	.317	.465	.775	-.79	1.42

*. The mean difference is significant at the 0.05 level.

This table displays which type of introduction differs in the means of the Overall First Impression score.

Results from the one-way ANOVA showed that the mean Competency scores differed statistically under the different introduction conditions in China ($p = .011$). According to Turkey HSD, professor-introduction had a higher average Competency score compared to self-introduction ($p = .009$). However, the difference between self-introduction and peer-introduction was not significant ($p = .113$). The difference between peer-introduction and professor-introduction was also not significant ($p = .633$).

Table 5. China One-way ANOVA Competency Scores

	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Between Groups	11.274	2	5.637	4.708	.011
Within Groups	158.030	132	1.197		
Total	169.304	134			

This table shows that the three control groups with different types of introduction (Between Groups) have statistically different means of Competency score.

Table 6. China Turkey HSD for Competency Scores

(I) Type of Introduction	(J) Type of Introduction	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Self	Peer	-.470	.234	.113	-1.02	.08
	Professor	-.682*	.227	.009	-1.22	-.14
Peer	Self	.470	.234	.113	-.08	1.02
	Professor	-.212	.232	.633	-.76	.34
Professor	Self	.682*	.227	.009	.14	1.22

Peer	.212	.232	.633	-.34	.76
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*. The mean difference is significant at the 0.05 level.

This table displays which type of introduction differs in the mean of Competency score.

Results from the one-way ANOVA showed that the mean Trustworthiness scores were similar among the three types of introduction (self-introduction, peer-introduction, and professor-introduction) in China ($p = .070$).

Table 7. China One-way ANOVA Trustworthiness Scores

	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Between Groups	11.007	2	5.504	2.717	.070
Within Groups	267.393	132	2.026		
Total	278.400	134			

This table shows that the three control groups with different types of introduction (Between Groups) have similar means of Trustworthiness score.

First Impression with Different Types of Introduction in the U.S.

Results from the one-way ANOVA showed that the mean first impression scores were similar among the three types of introduction (self-introduction, peer-introduction, and professor-introduction) in the U.S. ($p = .735$). This is consistent with what was expected in the hypotheses.

Table 8. U.S. One-way ANOVA Overall First Impression Scores

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.845	2	1.922	.308	.735
Within Groups	623.650	100	6.237		
Total	627.495	102			

This table shows that the three control groups with different types of introduction (Between Groups) have similar means of Overall First Impression score.

Results from the one-way ANOVA showed that the mean Competency scores were similar among the three types of introduction (self-introduction, peer-introduction, and professor-introduction) in the U.S. ($p = .638$).

Table 9. U.S. One-way ANOVA Competency Scores

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.430	2	.715	.451	.638
Within Groups	158.570	100	1.586		
Total	160.000	102			

This table shows that the three control groups with different types of introduction (Between Groups) have similar means of Competency score.

Results from the one-way ANOVA showed that the mean Trustworthiness scores were similar among the three types of introduction (self-introduction, peer-introduction, and professor-introduction) in the U.S. ($p = .415$).

Table 10. U.S. One-way ANOVA Trustworthiness Scores

	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Between Groups	4.310	2	2.155	.886	.415
Within Groups	243.185	100	2.432		
Total	247.495	102			

This table shows that the three control groups with different types of introduction (Between Groups) have similar means of Trustworthiness score.

Chapter IV

Discussion

The study aimed to explore the most effective type of introduction (self-introduction, peer-introduction, and authority-introduction) in different sociocultural contexts (China and the U.S.) in a virtual setting. To have a general understanding of how the three introduction conditions influenced the first impression, the study first compared the mean scores of Overall First Impression in both China and the U.S. The descriptive differences in the mean scores showed that in China, professor-introduction led to the best first impression while self-introduction led the poorest; in the U.S., peer-introduction led to the best while professor-introduction led to the poorest.

To have a further understanding of the statistical differences, a two-way ANOVA was conducted to test the two main effects: Country and Type of Introduction. The results suggested no interaction between the effects. The U.S. participants gave higher Overall First Impressions scores than the Chinese group, but there were no differences among the introduction types. A one-way ANOVA was conducted to examine the effect of introduction type on first impression in each country. The results indicated that in China, professor-introduction had a higher average Overall First Impression score compared to self-introduction, while in the U.S. the introduction types did not differ.

In Hypothesis 1, it was expected that in China, introduction by a third-party (peer or authority) would lead to a better first impression compared to self-introduction, while in the U.S. the difference was expected to be smaller. The above-mentioned statistical findings failed to reject this hypothesis in either China or in the U.S.

In Hypothesis 2, it was expected that in China, introduction by an authority would lead to the best first impression compared to the other two types of introduction, while in the U.S. the difference was expected to be smaller. The descriptive findings in China provided partial support for this hypothesis, although the statistic differences were insignificant. On the U.S. side, the statistical findings failed to reject this hypothesis.

Limitations and Future Directions

The study was conducted in China and the U.S. in an academic environment with a virtual setting so the results may not generalize to: 1) other countries or regions with different cultures; 2) other non-academic contexts; 3) a face-to-face setting. Future studies can consider including a broader sample across countries or regions with mixed cultures. Future studies can also explore first impression in a variety of environments where first impression occurs in a frequent manner, e.g., workplaces, clinics, and communities. Despite the coronavirus pandemic, the need and desire to have interaction in person is inevitable. Future research can take into account the influence of the setting by including both virtual and in-person scenarios and compare the effects.

This study used a Chinese female identity as the Subject and the participants from China and the U.S. might hold different views on that identity when forming first impression. Gender difference could also influence first impressions but this study did not test the effect of gender. Future studies could further examine the gender factor (e.g., gender of the Subject, gender of the participant) and help address this question.

Appendix 1.

Template for Self-introduction

Introducing Amelia to You

My name is Amelia. Let me take this opportunity to introduce myself to you.

I was born and raised in Shanghai, China. After obtaining my bachelor's degree in Business, I started my career in marketing. I am a rather quiet person, with a good sense of humor. I love traveling, cooking, and hiking in my spare time. Here is a picture of me.



Figure 4. Introduction Picture

This was the picture attached to all three types of introductions.

Appendix 2.

Template for Peer-introduction

Introducing Amelia to You

I am Luke, a Psychology student from a US university. Let me take this opportunity to introduce my friend Amelia to you.

Amelia was born and raised in Shanghai, China. After obtaining her bachelor's degree in Business, she started her career in marketing. Amelia is a rather quiet person, with a good sense of humor. She loves traveling, cooking, and hiking in her spare time. Here is a picture of her.



Figure 5. Introduction Picture

This was the picture attached to all three types of introductions.

Appendix 3.

Template for Professor-introduction

Introducing Amelia to You

I am Alex, a professor at a US university. Let me take this opportunity to introduce my former student Amelia to you.

Amelia was born and raised in Shanghai, China. After obtaining her bachelor's degree in Business, she started her career in marketing. Amelia is a rather quiet person, with a good sense of humor. She loves traveling, cooking, and hiking in her spare time. Here is a picture of her.



Figure 6. Introduction Picture

This was the picture attached to all three types of introductions.

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