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Final Thesis

**Compromise Effect and Delay Option – Under the  
Influence of Justification and Accountability – In  
Consumer Behaviors Across Cultures**

A comparison between Italian and Vietnamese university students

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## ABSTRACT

*Compromise effect and delay option are well-researched topics in literatures. Nonetheless, not many previous works addressed the impacts of cultural variations and of choosing for others on these concepts. This paper, therefore, aims at analyzing compromise effect and delay decisions in consumer behaviors across cultures, in the light of accountability and justification. It conducted quantitative research via online surveys with three treatments: controlled, accountability-treated (choosing for others), and accountability- and justification-treated (choosing for others and explaining choice). Its participants comprised three groups: Italian students in Italy, Vietnamese students in Italy, and Vietnamese students in Vietnam. Research results suggest there was no statistically significant difference in the tendency to compromise or to delay decisions when participants choose for others versus for themselves, when they must explain their choice versus when they must not. Additionally, no statistically significant difference among cultural groups was found. These findings somewhat contradict with findings of past research. Further analysis showed that participants seem to have rather clear preferences for their choice and exhibited preference-reversal when choosing for themselves versus for others. This is a remarkably interesting finding and might be the cause of the paper's unexpected results since compromise effect does not have strong influences on consumers' decisions when clear preferences are present.*



# TABLE OF CONTENTS

<b>1. Introduction .....</b>	<b>7</b>
<b>2. Literature Review .....</b>	<b>9</b>
<b>2.1. Culture and Choice .....</b>	<b>9</b>
2.1.1. Definition of Culture .....	12
2.1.2. Existing Cultural Models.....	13
2.1.3. Impacts of Cultures on individuals' decision-making and behaviors.....	21
<b>2.2. Context Effects .....</b>	<b>30</b>
2.2.1. Attraction effect, Compromise effect, and Similarity effect .....	30
2.2.2. Preferences and Context effects (attraction and compromise effects).....	35
<b>2.3. Possibility of Delay: the no-choice option .....</b>	<b>37</b>
2.3.1. Deferred decision under conflict and preference uncertainty .....	37
2.3.2. Impacts of alternative attractiveness on the no-choice option.....	40
2.3.3. Impacts of the context effects on the no-choice option .....	40
2.3.4. Impacts of the Delay Option across cultures .....	41
<b>2.4. Justification and Accountability .....</b>	<b>42</b>
2.4.1. Justification .....	42
2.4.2. Accountability .....	42
2.4.3. Impacts of Justification and Accountability on Context effects .....	44
2.4.4. Impacts of Justification and Accountability on Compromise effect across cultures.....	46
2.4.5. Impacts of justification and accountability on delay option.....	48
<b>3. Research objectives and Hypotheses .....</b>	<b>51</b>
<b>3.1. Research objectives .....</b>	<b>51</b>
<b>3.2. Research questions and hypotheses.....</b>	<b>52</b>
<b>4. Methodologies .....</b>	<b>53</b>
<b>4.1. Data collection process – Experiment design.....</b>	<b>53</b>
<b>4.2. Targeted participants .....</b>	<b>54</b>
<b>4.3. Data analysis methods .....</b>	<b>54</b>
<b>5. Results.....</b>	<b>55</b>
<b>5.1. Descriptive analysis.....</b>	<b>55</b>
<b>5.2. Quantitative analysis - Hypothesis testing .....</b>	<b>59</b>
<b>5.3. Potential reasons for insignificant results regarding compromise effect .....</b>	<b>64</b>
<b>6. General Discussion and Implications.....</b>	<b>69</b>

6.1. General Discussion.....	69
6.2. Implications .....	72
7. Research Limitations and Possible Future Directions .....	73
7.1. Research Limitations .....	73
7.2. Possible Future Directions.....	75
REFERENCES.....	77
APPENDICES .....	91
Appendix A: Questionnaires.....	91
Appendix B: Questionnaires' Result summary table – in number of participants.....	101



## LIST OF FIGURES

Figure 1: “East meets West” .....	9
Figure 2: Hofstede's six cultural dimensions - a comparison among China, Italy, Vietnam, and the United States .....	14
Figure 3: An illustration of Schwartz's framework .....	15
Figure 4: Schwartz's framework - Student samples: 40 nations, value types and cultural regions .....	16
Figure 5: High-context vs. low-context continuum .....	18
Figure 6: Comparisons: linear-active, multi-active, and reactive .....	20
Figure 7: The Lewis Model.....	20
Figure 8: The Cardinal Issue Perspective (CIP).....	21
Figure 9: Positioning of asymmetrically dominated and relatively inferior alternatives .....	31
Figure 10: The decoy effect – an experiment from National Geographic TV .....	32
Figure 11: Illustration of Compromise effect .....	33
Figure 12: A compromise effect by moving choice set position.....	33
Figure 13: An example of compromise effect in marketing .....	34
Figure 14: Comparing Attraction and Compromise effects .....	34
Figure 15: An experiment on the no-choice option .....	38
Figure 16: Percentages of participants choosing the compromise alternative .....	57
Figure 17: Percentages of participants delaying decision .....	58
Figure 18: Percentages of participants choosing the Low-Low alternative .....	64
Figure 19: Percentages of participants choosing the High-High alternative.....	65

## LIST OF TABLES

Table 1: Questionnaires' result summary table - in percentage (%).....	55
Table 2: Selection of compromise alternative and delay option – Kruskal-Wallis H tests: Testing statistical differences among student groups .....	59
Table 3: Mann-Whitney U tests - Survey 1, Rice cooker question.....	60
Table 4: Mann-Whitney U tests - Survey 2, Washing machine question .....	60
Table 5: Selection of compromise alternative and delay option – Kruskal Wallis H tests: Testing statistical differences among survey conditions.....	61
Table 6: Selection of Low-Low alternative - Testing statistical differences among survey conditions .....	66
Table 7: Selection of High-High alternative - Testing statistical differences among survey conditions .....	67
Table 8: Questionnaires' Result summary table – in number of participants .....	101

## **1. Introduction**

Despite recent claims of reversed globalization, international flows of trade, information, people, and capital all rose significantly in 2017 and the world has become more globalized than ever, according to the DHL Global Connectedness Index 2018 (Altman, Ghemawat, & Bastian, 2019). In this increasingly interconnected world, gaining a better understanding of cultural diversities in consumer behaviors is crucial for firms in developing their sales and marketing strategies. This paper, thus, began by exploring and reviewing literatures on cultures and choices (section 2.1.); specifically, it examines the definitions of cultures, a variety of existing frameworks used to compare and differentiate cultures, and the impacts of cultures on individuals' behaviors and decision-making. Overall, a substantially large amount of previous research has been dedicated to determining the influences of cultures on various areas of human decision-making process (Yates & de Oliveira, 2016), proving that cross-cultural research is incredibly valuable in analyzing human behaviors.

Among all the phenomenon related to the fascinating human behaviors, the main interest of this research is on the compromise effect and consumers' tendency to defer decisions, which are analyzed in-depth in Section 2.2 and 2.3 of this paper, respectively. In short, compromise effect suggests that an option tends to be more likely selected when it becomes the middle or compromise option in a set (Simonson, 1989); whereas, deferred decisions refer to situations when customers have the choice to not buy anything, to delay buying, or to buy somewhere else. Both compromise effect and deferred decisions often result from decision context, conflict, and preference uncertainty (Dhar, 1997a, 1997b; Dhar & Simonson, 2003; Simonson, 1989; Simonson & Tversky, 1992). In most cases, the uncertainty regarding one's own preference is less than the uncertainty regarding the preference of others; therefore, making choices for others instead of for oneself could potentially enhance both compromise effect and consumers' tendency to delay decisions. Section 2.4 of this paper, hence, focuses on investigating the justification and accountability phenomenon, as well as the compromise effect and deferred decisions under the influence of justification and accountability (choosing for others). Chang, Chuang, Cheng, and Huang (2012) proposed that, when no justification is required, the compromise effect is larger when individuals make choices for others rather than for themselves especially if the relationship is distant rather than close; however, when justification is required, an opposite trend is observed: compromise effect is less significant when individuals make choices for others rather than for themselves.

Research had been done regarding compromise effect across cultures. Specifically, Briley, Morris, and Simonson (2000) demonstrated that principles enjoining compromise are less salient in North American culture than in East Asian cultures and the cultural variations in the tendency to select the compromise alternatives are larger when participants are required to give reason for their choice. This finding indicated that cultures do influence the compromise effect in consumer behaviors. There is, nonetheless, not much previous research regarding the impacts of choosing for others (accountability) on compromise effects across cultures. Furthermore, not many previous works mentioned cultural variations in deferred decisions or, in more details, in deferred decisions under the impacts of justification and accountability.

This paper, therefore, aims at providing a better perspective on compromise effect and on consumers' tendency to defer decisions, in the light of both accountability and justification, in consumer behaviors across cultures by involving two countries: Italy and Vietnam. Italy and Vietnam were selected because, despite representing the West and the East, individualistic culture and collectivistic culture respectively, they are significantly different from the well-known, classic pairs of East-West comparisons such as America versus China or Japan. Specifically, this research aims at answering two main research questions:

- What are the influences of accountability (choosing for others) on compromise effect across cultures when justification is required versus when it is not?
- What are the influences of accountability (choosing for others) on deferred decisions across cultures when justification is required versus when it is not?

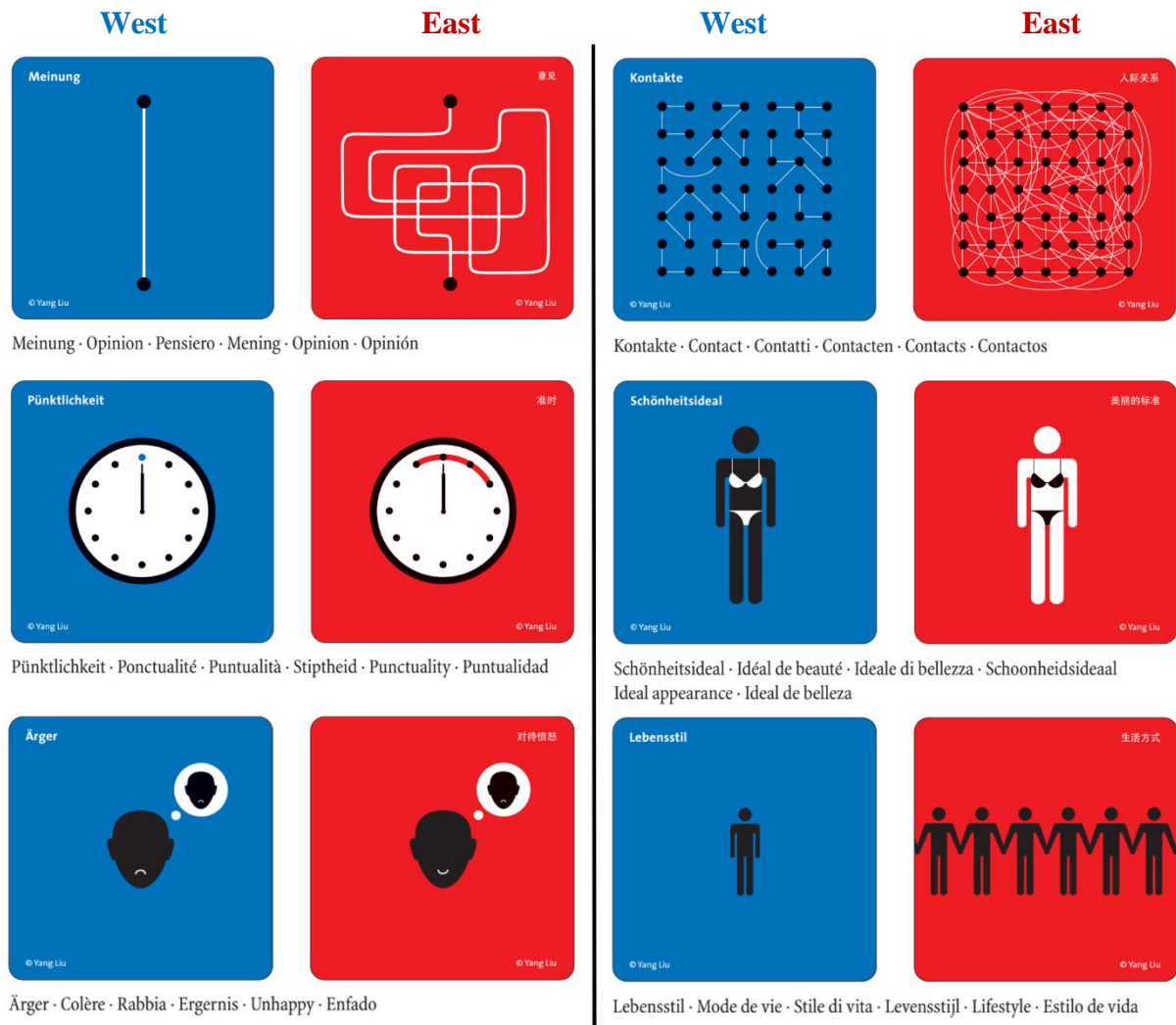
The paper attempts to address these questions by conducting a quantitative research through the means of online questionnaires, with three different survey treatments: controlled, accountability-treated (choosing for others), and accountability- and justification-treated (choosing for others and explaining choice). The targeted research participants were university students and could be divided into three main categories: Vietnamese students studying in Vietnam, Italian students studying in Italy, and Vietnamese students studying in Italy. The experiment will be described in detail in section 4 – methodologies – of this paper. The experiment's results, discussions and implications, and potential limitations are going to be discussed in section 5, 6, and 7 of this research, respectively.

## 2. Literature Review

### 2.1. Culture and Choice

As depicted in the well-known poster series “East meets West” (“Ost trifft West” in German) of Yang Liu (n.d.), vast differences exist among cultures and they dictate individuals’ behaviors to a great extent. The artwork was based on Yang Liu’s personal experiences of Germany (representing Western cultures) and China (representing Eastern cultures). It has won several awards in international competitions, has been displayed worldwide in over 30 exhibitions and museums, and has turned into a symbol of cultural exchange (Liu, n.d.).

Figure 1: “East meets West” (Liu, n.d.)



## West



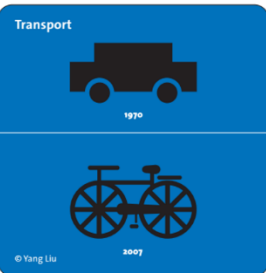
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At the restaurant · En el restaurante



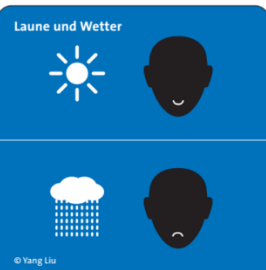
Duschzeiten · Heures des douches · Orario per la doccia · Douchetijden  
Shower time · Hora de la ducha



Umgang mit Problemen · Gestion des problèmes · Gestione dei problemi  
Omgang met problemen · Dealing with problems · Solución de problemas

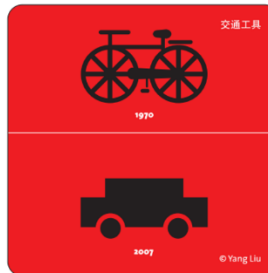
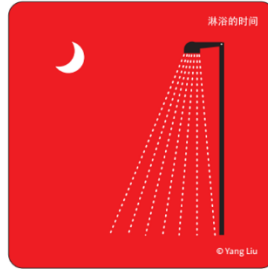
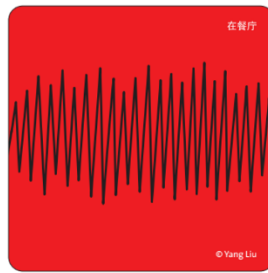


Transport · Transports · Trasporto · Transport · Transport · Transporte



Laune und Wetter · Humeur et météo · Umore e tempo · Humeur en weer  
Mood and weather · Tiempo y estado de ánimo

## East



## West



Reisen · Voyage · Viaggi · Reizen · Travel · Viajes



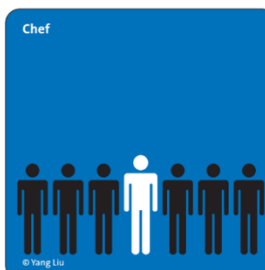
Bei Bauchschmerzen · En cas de maux de ventre · In caso di mal di pancia  
Bij buikpijn · For an upset stomach · Contra el dolor de barriga



Drei Mahlzeiten · Trois repas · Tre pasti · Drie maaltijden · Three meals  
Tres comidas al día



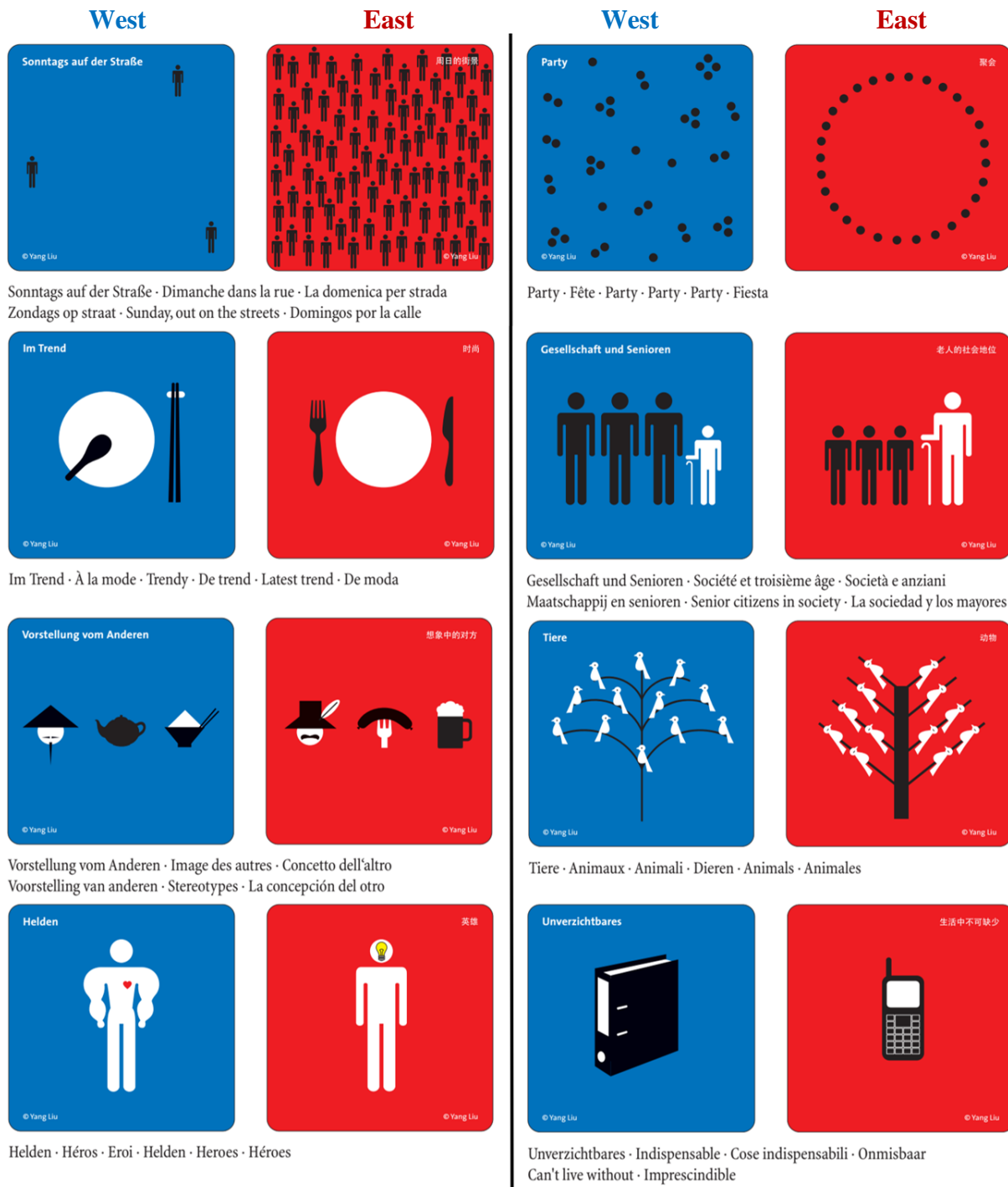
Senioren im Alltag · Troisième âge au quotidien · Anziani e quotidianità  
Senioren in het dagelijks leven · Senior citizens · Mayores en el día a día



Chef · Chef · Il capo · Chef · Boss · El jefe

## East





Indeed, a large amount of research has been done to determine the influences of various cultures on individual's decision-making and behaviors. However, before going into further details, this paper first reviews the definitions of culture as well as diverse models used to compare and differentiate cultures.

### 2.1.1. Definition of Culture

Oxford Advanced Learners' Dictionary defines culture as "the customs and beliefs, art, way of life and social organization of a particular country or group" ("Culture," 2019). This definition, despite providing a brief overview of the meaning of culture, is not comprehensive.

Culture is a particularly complicated term to define. In the early 1990s, even though anthropologists had devoted a century to sufficiently define culture, they did not reach any agreement regarding its nature (Apte, 1994, p. 2001). More recently, in 2012, Helen Spencer-Oatey published a 22-page article called "What is Culture? A Compilation of Quotations" dedicated to compiling and analyzing the large amount of existing definitions of culture in a coherent way. Among the article's cited quotations are the following:

*"Culture [...] is that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society"* (Tylor, 1871)

*"Culture consists of patterns, explicit and implicit, of and for behavior acquired and transmitted by symbols, constituting the distinctive achievements of human groups, including their embodiment in artifacts; the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values; culture systems may, on the one hand, be considered as products of action, on the other, as conditional elements of future action"* (Kroeber & Kluckhohn, 1952, p. 181)

*Culture is "the set of attitudes, values, beliefs, and behaviors shared by a group of people, but different for each individual, communicated from one generation to the next"* (Matsumoto, 1996, p. 16)

*"Culture is a fuzzy set of basic assumptions and values, orientations to life, beliefs, policies, procedures and behavioural conventions that are shared by a group of people, and that influence (but do not determine) each member's behaviour and his/her interpretations of the 'meaning' of other people's behaviour"* (Spencer-Oatey, 2008, p. 3)

*"Culture is the collective programming of the mind that distinguishes the members of one group or category of people from others"* (Hofstede, 2011, p. 3)

Through analyzing and elaborating a variety of definitions, Helen Spencer-Oatey (2012) suggested 12 key characteristics of culture:

- Culture is revealed at various layers of depth
- Culture influences behaviors and interpretations of behaviors



- Culture could be differentiated from both individuals' unique personality and universal human nature
- Culture affects biological processes
- Culture is associated with social groups
- Culture is both a social construct and an individual construct
- Culture is always “both socially and psychologically distributed in a group”, hence, “the delineation of a culture’s features will always be fuzzy”
- Culture has both emic (distinctive) and etic (universal) elements
- Culture is learnt
- Culture is subject to gradual change
- The diverse parts of a culture are all interrelated to some extent
- Culture is a descriptive concept, not an evaluative concept

Together, these 12 key features provide a somewhat comprehensive meaning of culture.

### **2.1.2. Existing Cultural Models**

Many scholars have attempted to classify cultures; among them, the work of Hofstede is one of the most widely used and recognized. Hofstede’s model involves six cultural dimensions; the first four were proposed in his paper in 1980 (Hofstede, 1980) while the fifth and sixth were calculated and added later in 2010 (Hofstede, Hofstede, & Minkov, 2010). These dimensions are as follows:

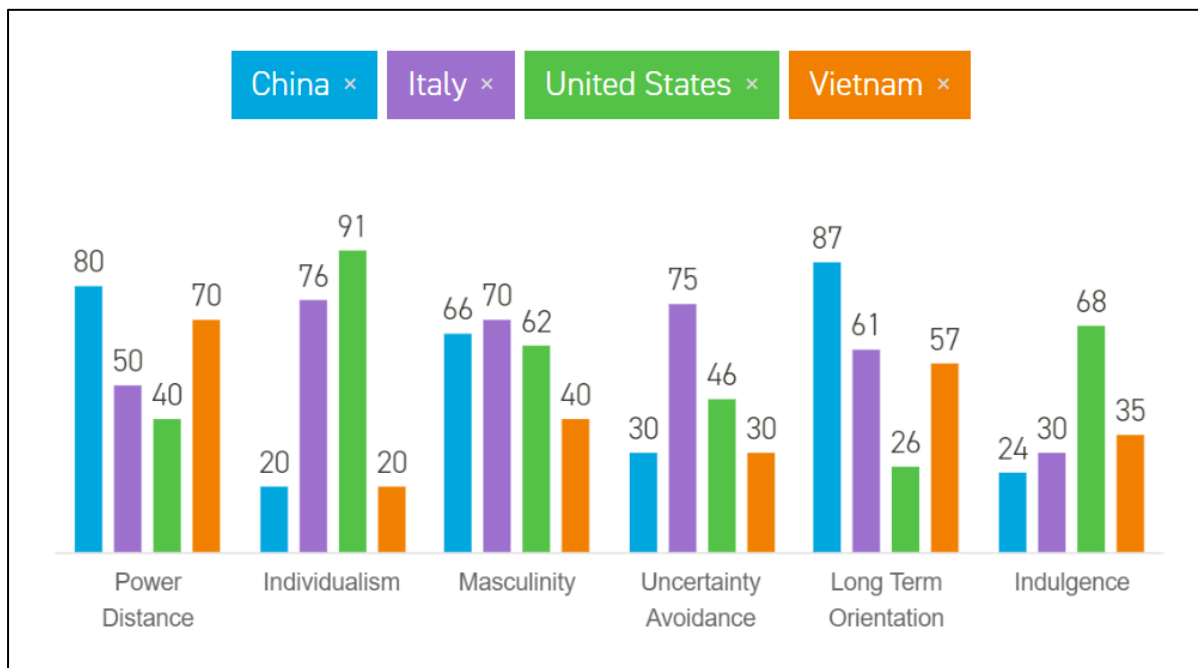
- *Power Distance* (small versus large): the degree to which a society accepts the unequal distribution of power in organizations and institutions
- *Uncertainty Avoidance* (weak versus strong): the degree to which a society feels intimidated by and tries to avoid ambiguous and uncertain future
- *Individualism* versus *Collectivism*: the extent to which individuals are integrated into primary groups within a society – the higher (lower) the level of integration, the more the society leans toward collectivism (individualism)
- *Masculinity* versus *Femininity*: the degree to which society’s dominant values are “masculine” (i.e. driven by competition, success, and achievement, with success equals being the best in field) rather than “feminine” (i.e. emphasize quality of life, care for others, and discourage being different from the crowd)
- *Long-Term* versus *Short-Term Orientation*: the extent to which people in a society prioritise their efforts on the present and the past or on the future

- *Indulgence versus Restraint*: the degree to which people in a society control their impulses and desires regarding enjoyment of life; weak control implies “indulgence” while strong control implies “restraint”

(Hofstede, 1980, 2011; Hofstede et al., 2010)

Figure 2 represents an example of the measurements of Hofstede’s six dimensions across different cultures (China, Italy, Vietnam, and the United States). As can be seen, Hofstede’s model presented a clear and comprehensible means of comparing and contrasting cultures of a great variety of countries – data is currently available for the total of 76 nations around the world (Hofstede et al., 2010).

**Figure 2: Hofstede's six cultural dimensions - a comparison among China, Italy, Vietnam, and the United States** (“Country Comparison,” 2019)

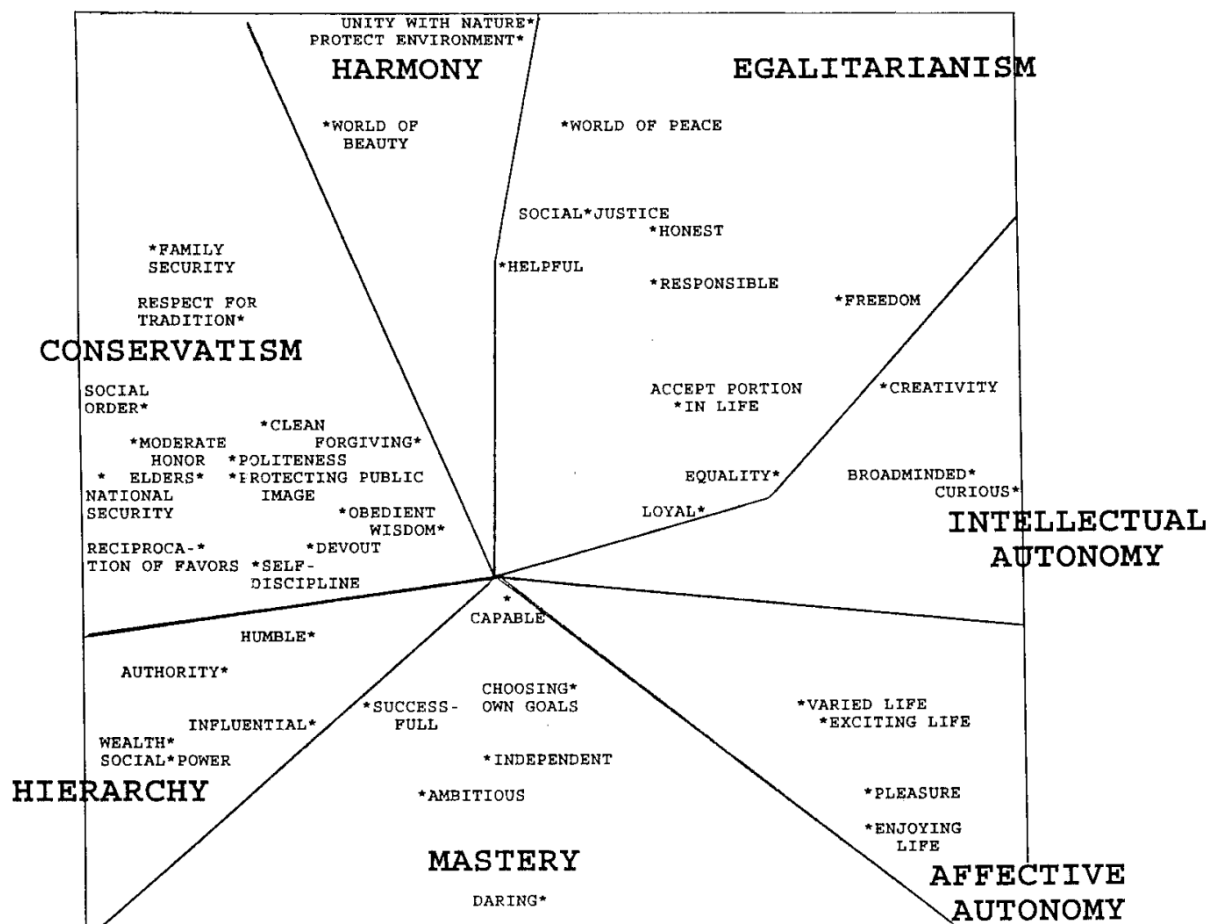


Overall, Hofstede’s work improved the world’s understanding of important cultural differences between countries; nevertheless, it is not flawless. The model has been criticized by many, still, few have proposed viable alternatives beyond validating or disagreeing with Hofstede’s dimensions (Odongo, 2016). “No other research has found completely new dimensions of culture other than variants of Hofstede’s dimensions, although there is agreement that culture is much more complex than what Hofstede portrayed” (Odongo, 2016, p. 19).

To alleviate Hofstede framework’s weaknesses, Imm Ng, Anne Lee, and Soutar (2007) mentioned the cultural values framework of Schwartz as another means to calculate cultural

distance. Through analyzing inter-country distances between 23 different nations, they demonstrated that Hofstede's and Schwartz's measures are not congruent (despite some similarities); moreover, at least in trade context, Schwartz's measures of cultural distance may be superior (Imm Ng et al., 2007).

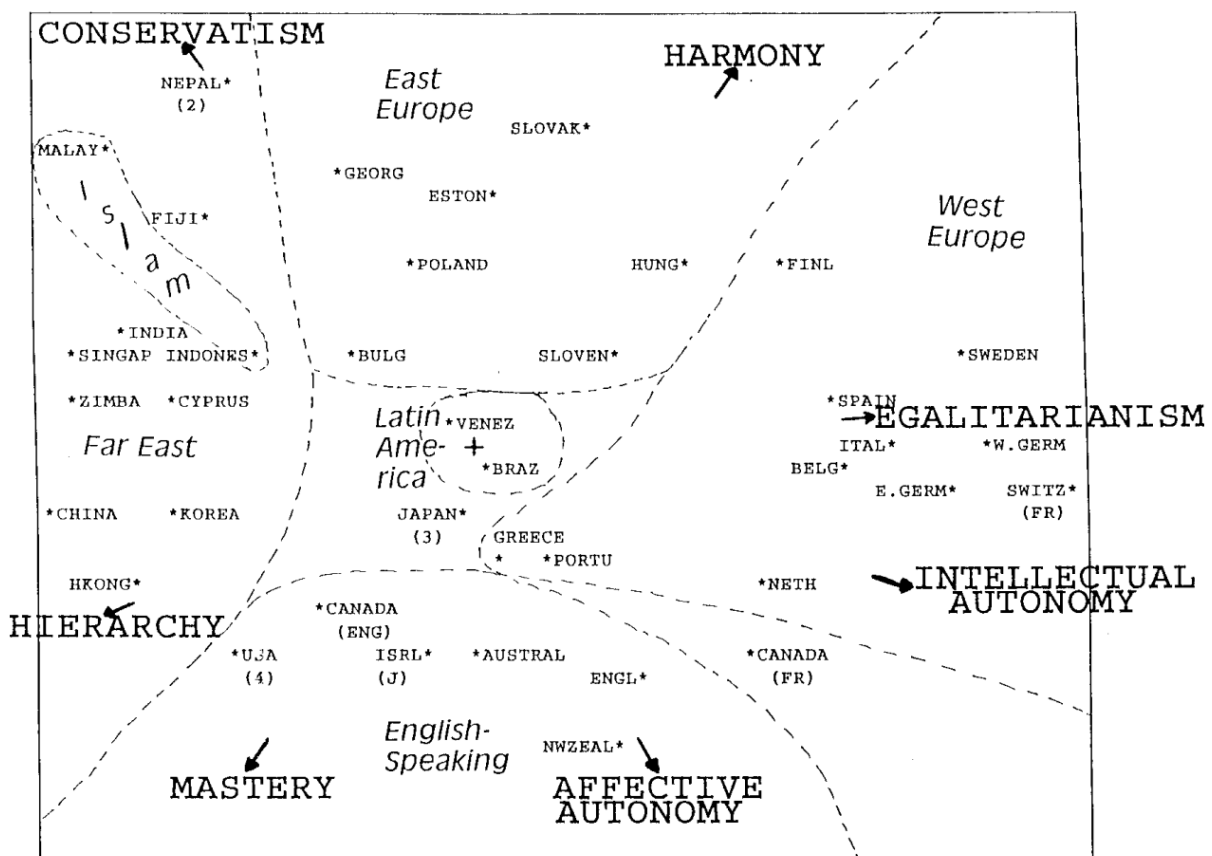
**Figure 3: An illustration of Schwartz's framework (Schwartz, 1999)**



Schwartz (1999) considered three main issues that all societies must confront and from those derived seven value types to be used for culture comparison. The first issue involves defining the nature of the connection between the group and the individual; it is related to three value types: *Conservatism*, *Intellectual Autonomy*, and *Affective Autonomy*. Conservatism refers to the emphasis on status-quo maintenance, propriety, and avoidance of actions that might disturb the traditional order or the solidary group; meanwhile, autonomy refers to an emphasis on recognizing individuals as independent entities who are entitled to pursue their own ideas and intellectual interests (Intellectual Autonomy), as well as affectively positive experience (Affective Autonomy). The second issue is to ensure responsible behaviors that will maintain

the social connection and the sense of community; resolution of this issue results in two value types: *Hierarchy* and *Egalitarianism*. Whereas hierarchy refers to an emphasis on the legitimacy of an uneven distribution of resources, power, and roles; Egalitarianism refers to an emphasis on the transcendence of selfless interests in promoting others' welfare. The third, and last, issue is associated with humankind's relation to the social and natural world; it includes two value types: *Mastery* and *Harmony*. While mastery refers to an emphasis on advancing through active self-assertion, harmony refers to an emphasis on fitting in and harmonizing with nature and the environment. Overall, the seven value types could be arranged into three bipolar dimensions expressing the contrast between alternatives resolutions to each of the three aforementioned issues: Conservatism versus Autonomy, Hierarchy versus Egalitarianism, Harmony versus Mastery. Figure 3 and 4 provide visual illustrations of the Schwartz's framework where pairs of opposite value types are located in opposing directions from the center and pairs of compatible value types are arranged in proximity around the circle. (Schwartz, 1999).

**Figure 4: Schwartz's framework - Student samples: 40 nations, value types and cultural regions (Schwartz, 1999)**



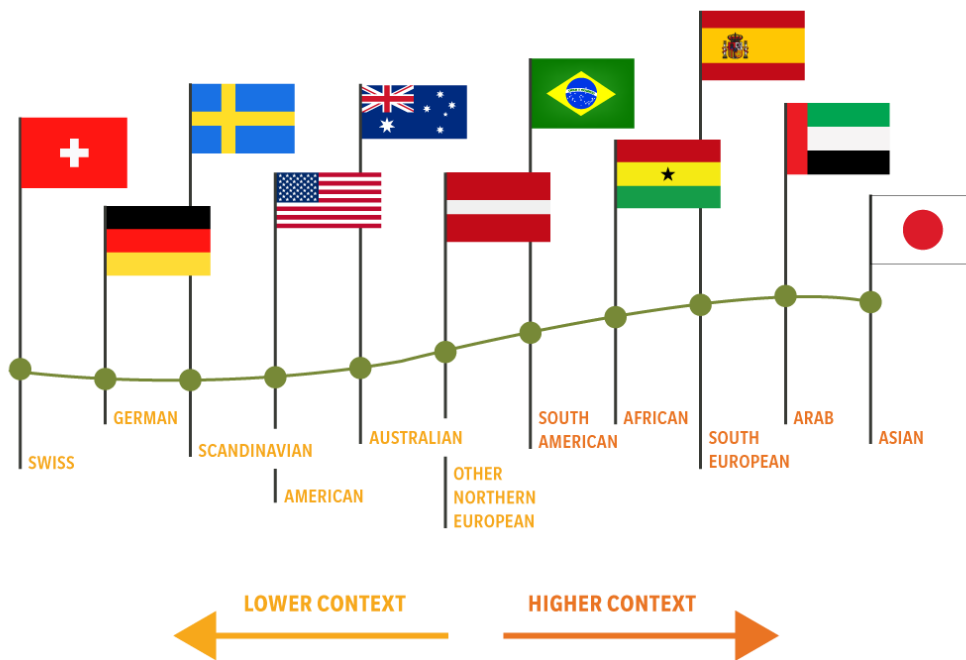
Both Schwartz's and Hofstede's frameworks, however, could well be argued as obsolete due to their outdated data which were obtained several decades ago and might have been overtaken by substantial modernization in many of the surveyed countries (Chen & Li, 2005; Imm Ng et al., 2007). Modernization has affected culture and led to notable shifts in cultural values (Chen & Li, 2005; Imm Ng et al., 2007).

Besides the work of Schwartz and Hofstede, a few other similar models were proposed, including the seven cultural dimensions of Trompenaars and Hampden-Turner (1998), the GLOBE framework (2004), and several others. Trompenaars and Hampden-Turner presented seven dimensions to differentiate cultures: (1) *universalism versus particularism*, (2) *individualism versus communitarianism*, (3) *specific versus diffuse*, (4) *neutral versus emotional*, (5) *achievement versus ascription*, (6) *sequential time versus synchronous time*, and (7) *internal direction versus outer direction* (Trompenaars & Hampden-Turner, 1998). GLOBE framework came a bit later in 2004 building on previous findings of Hofstede (1980), Schwartz (1999), and some others (House et al., 2004). It involves nine cultural dimensions, namely: (1) *power distance*, (2) *uncertainty avoidance*, (3) *humane orientation*, (4) *institutional collectivism*, (5) *in-group collectivism*, (6) *assertiveness*, (7) *gender egalitarianism*, (8) *future orientation*, (9) *performance orientation*. Its main goal is to determine the link between national culture, desirable leadership attributes, and societal effectiveness (House et al., 2004).

Although all the models mentioned above compare cultures on a large and rather complicated set of dimensions, there exist much simpler frameworks that classify cultures on a continuum with two opposite ends.

Edward T. Hall (1976), for example, classified cultures into *High-* versus *Low- context* based on communication style. High-context cultures are the cultures in which communication rules are implicit and are mainly transmitted using contextual/background elements, such as body language, tone of voice, or a person's status (Hall, 1976; Hall & Hall, 1990). Low-context cultures, on the other hand, involve explicit communication rules with information primarily communicated through language in a clear and defined way (Hall, 1976; Hall & Hall, 1990). Asia, Arab, Africa, Central Europe, and Latin America are areas with generally high-context cultures, while Western Europe and English-speaking countries like England, Australia, and the United States are generally considered to have low-context cultures (see Figure 5) (Hall, 1976; Hall & Hall, 1990). Kim, Pan, and Park (1998) empirically confirmed Hall's concept of high- versus low-context among the American, Chinese, and Korean cultures.

**Figure 5: High-context vs. low-context continuum (Bernstein, 2017)**



Cultures can also be arranged on the continuum of perception of time (*monochronic* versus *polychronic*) and space (*high* versus *low territoriality*) (Hall & Hall, 1990). In cultures with monochronic time, people usually do one thing at a time with careful planning and strict deadlines, and view time as linear, sequential, and tangible (it can be “saved”, “spent”, “wasted”, and “lost”) (Hall & Hall, 1990). Meanwhile, in cultures with polychronic time, people usually do multiple things at once, view time as fluid, and value human interaction over time resulting in relatively less concern for “getting things done” (i.e. looser deadlines, less structure and low punctuality) (Hall & Hall, 1990). In terms of perception of space, people with high territoriality tend to have more concern for boundaries and ownership of space, whereas people with lower territoriality put less importance on these matters and are more willing to share (Hall & Hall, 1990). High-context cultures often perceive time as polychronic and have low territoriality while low-context cultures typically perceive time as monochronic and have high territoriality (Hall & Hall, 1990).

Considering the dissimilarity in cognitive styles, cultures can be classified into two opposite groups: one with *holistic thinking* and the other with *analytic thinking* approach (Nisbett, Peng, Choi, & Norenzayan, 2001; Peng & Nisbett, 1999). Holistic thinking style views the context as a whole, emphasizes relationships between the field and the focal object, pays attention to changes, contradictions, the existence of multiple perspectives, and the compromising options; it relies on experience-based knowledge instead of abstract logic and uses relationships to

explain and predict events (Nisbett et al., 2001; Peng & Nisbett, 1999). Analytic thinking style, on the other hand, detaches the object from its context, categorizes the object focusing on its attributes, and uses categorization rules in explaining and predicting object's behaviors; it decontextualizes structure from content, utilizes formal logic, and avoids contradictions (Nisbett et al., 2001; Peng & Nisbett, 1999). Overall, Westerners tend to think more analytically, whereas East Asians tend to think more holistically (Nisbett et al., 2001; Peng & Nisbett, 1999; Varnum, Grossmann, Kitayama, & Nisbett, 2010). Varnum, Grossmann, Kitayama, and Nisbett also found that cognitive style is theoretically connected to social orientation; hence, individualists (the independents) are generally analytic whereas collectivists (the inter-dependents) are generally holistic (Varnum et al., 2010).

Another familiar continuum of cultures is *Tightness* versus *Looseness*, which bases on the strength of cultural norm and of sanctioning (Gelfand, Nishii, & Raver, 2006). "Tight" cultures have a lot of strong norms that are strictly enforced; whereas "loose" cultures have fewer and weaker norms that can be violated to some extent without penalty (Gelfand et al., 2006, 2011). In a quite recent research, Li, Gordon, and Gelfand recommended tightness-looseness as "a new framework to understand consumer behavior" (R. Li, Gordon, & Gelfand, 2017)

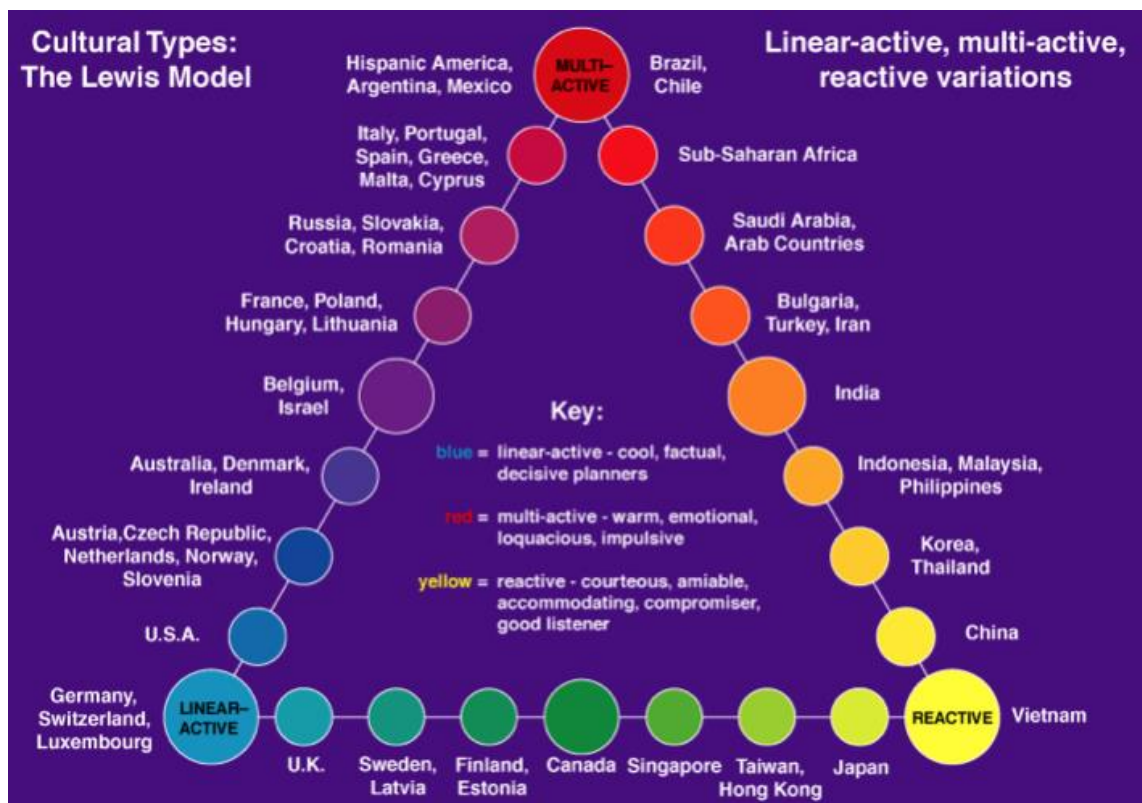
Additionally, a large amount of research categorizes cultures on the continuum of *individualism* versus *collectivism* (or *independence* versus *interdependence*) (Yates & de Oliveira, 2016) even though it is just one of the six dimensions of the Hofstede's framework.

Finally, the last model worth mentioning when it comes to cross-cultural comparisons is the Lewis Model developed in 1996 (Lewis, 2006). Based partially on Edward T. Hall's work, Lewis (2006) proposed a tripartite model dividing humans into three main categories basing on their behaviors: *linear-active*, *multi-active*, and *reactive* (Figure 6). Linear-active people focus on doing one thing at a time with careful planning, scheduling, and organization (Lewis, 2006). Multi-active people are lively and loquacious; they do multiple things at once, prioritize tasks basing on importance and relative thrill rather than time schedule (Lewis, 2006). Reactive people prioritize respect and courtesy; they often listen to their interlocutors calmly and quietly and react to others' proposals carefully (Lewis, 2006). Basing on data obtained from 50,000 executives and more than 150,000 online surveys of 68 different nationalities, Lewis (2006) arranged various national cultures on a triangle with three points representing the three cultural types as illustrated in Figure 7.

Figure 6: Comparisons: linear-active, multi-active, and reactive (Gates, Lewis, Bairatchnyi, & Brown, 2009; “The Lewis Model – Dimensions of Behaviour,” 2015)

LINEAR-ACTIVE	MULTI-ACTIVE	REACTIVE
Talks half the time	Talks most of the time	Listens most of the time
Does one thing at a time	Does several things at once	Reacts to partner's action
Plans ahead step by step	Plans grand outline only	Looks at general principles
Polite but direct	Emotional	Polite, indirect
Partly conceals feelings	Displays feelings	Conceals feelings
Confronts with logic	Confronts emotionally	Never confronts
Dislikes losing face	Has good excuses	Must not lose face
Rarely interrupts	Often interrupts	Doesn't interrupt
Job-oriented	People-oriented	Very people-oriented
Sticks to facts	Feelings before facts	Statements are promises
Truth before diplomacy	Flexible truth	Diplomacy over truth
Sometimes impatient	Impatient	Patient
Limited body language	Unlimited body language	Subtle body language
Respects officialdom	Seeks out key person	Uses connections
Separates the social and professional	Mixes the social and professional	Connects the social and professional

Figure 7: The Lewis Model (“The Lewis Model – Dimensions of Behaviour,” 2015)



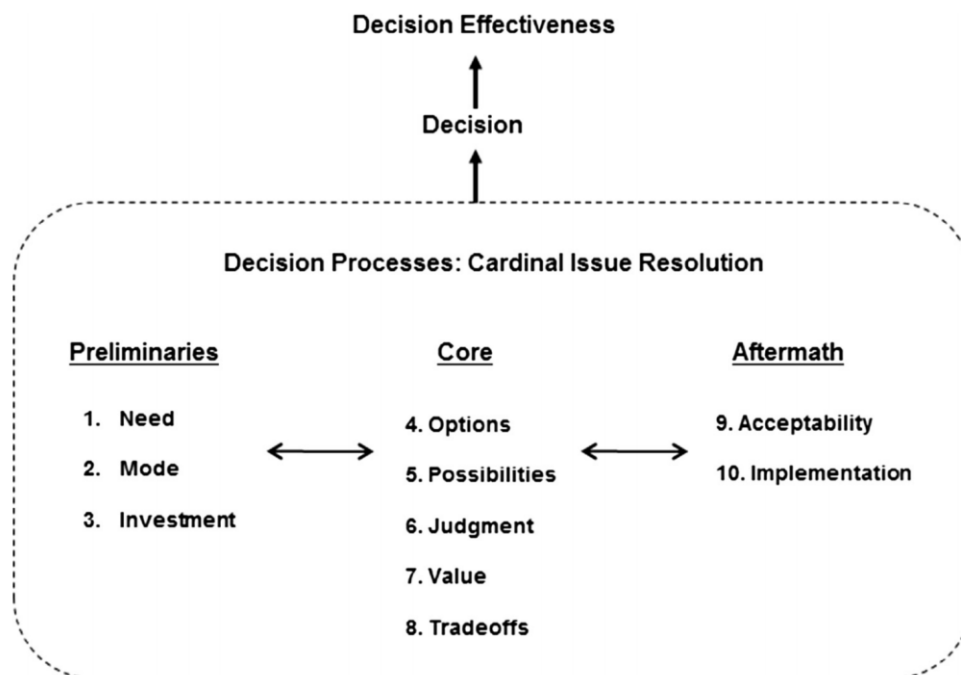


In conclusion, there exist plenty of frameworks addressing cultural differences between countries/nationalities. Each of the frameworks approaches culture from a different angle (e.g. behaviors, communication styles, cognitive styles, perception of space and time, strength of norms and sanctions, etc.) and is widely used in different business functions such as business planning, marketing, communication, human resource management, selection of preferred leadership style, and so on.

### 2.1.3. Impacts of Cultures on individuals’ decision-making and behaviors

The paper, so far, provided a definition of culture, reviewed existing cultural frameworks, and demonstrated to a limited extent that cultures have an effect on individuals’ behaviors. This section is, therefore, dedicated to describing in detail the impacts of cultures on various areas of human decision-making process and to proving that a cross-cultural research is incredibly valuable in analyzing human behaviors. To do so, it first focuses on providing a comprehensive and detailed anatomy of a decision following the profound article of Yates and de Oliveira (2016) and the “Cardinal Issue Perspective” (CIP) of Yates and Potworowski (2012).

**Figure 8: The Cardinal Issue Perspective (CIP) (Yates & de Oliveira, 2016)**



The “Cardinal Issue Perspective” (CIP) claims that every decision problem requires the decision-maker to confront several “cardinal issues” or challenges, either deliberately or unconsciously; and the decision-makers’ resolutions to those issues comprise his/her “decision processes” (Yates & Potworowski, 2012). The majority of decision successes and failures

could be traced back to the decision-maker's resolutions to one or more of the cardinal issues and to the resolutions' effectiveness (Yates & Potworowski, 2012). The CIP includes, in total, ten cardinal issues that are divided into three categories corresponding to the three phases of every decision process: "preliminaries" (preparation phase), "core" (primary tasks), and "aftermath" (after-the-decision-has-been-made phase) respectively (Yates & Potworowski, 2012). Sequentially following the decision-making process, the ten cardinal issues are: (1) *Need*, (2) *Mode*, (3) *Investment*, (4) *Options*, (5) *Possibilities*, (6) *Judgement*, (7) *Value*, (8) *Tradeoffs*, (9) *Acceptability*, and (10) *Implementation* (Yates & Potworowski, 2012); they are further depicted in Figure 8.

Following Yates and de Oliveira (2016), the next part of this section will be devoted to analyzing and evaluating how decision-makers across cultures address each cardinal issue, thus, proving the diversity of resolutions across cultures and the substantial impacts of cultures on decision-making.

### **(1) Need**

The first cardinal issue addresses the "Need" to make decision; in this aspect, Yates and de Oliveira (2016) have reviewed previous research and found that individuals around the globe differ in their attention, information interpretation, and motivations.

In terms of attention, Hamamura, Meijer, Heine, Kamaya, and Hori (2009) showed that, on average, Japanese are more sensitive to the presence/absence of negative information, while Americans are more sensitive to the presence/absence of positive information. In addition, Elliot, Chirkov, Kim, and Sheldon (2001) stated that Asian Americans, Russians, and South-Koreans tend to adopt avoidance personal goals, which focus on avoiding negative state or outcome, more than European Americans. Eye-tracking data from several experiments suggested that North Americans (European Canadians and Americans) concentrate more on focal objects in a photograph than East Asians (Chinese and Japanese) who attend more to the background (consistent with the aforementioned holistic versus analytic thinking framework) (Chua, Boland, & Nisbett, 2005; Masuda, Wang, Ishii, & Ito, 2012); moreover, when judging emotions, Easterners persistently focus on the eye region instead of evenly distributing their fixations across the face like Westerners (Jack, Blais, Scheepers, Schyns, & Caldara, 2009).

Even when attention is paid on the same information, cultures differ in interpretation of that information. For example, Ji, Zhang, and Guo (2008) discovered that Canadians were more likely to sell and less likely to buy falling stock, more likely to buy and less likely to sell rising

stock in comparison to Chinese when the stock market trends are simple; this indicates that Canadians tend to view rising trends as opportunities, whereas Chinese tends to consider falling trends to be opportunities.

Finally, individuals across cultures differ in the extent to which they feel the need to make decisions or to call a particular action a “decision” (Yates & de Oliveira, 2016). Research showed that Americans are more likely to construe actions as decisions or choices in comparison to Indians; this finding held “whether participants were construing their own behaviors or other people’s behaviors, whether they were categorizing experimentally controlled or naturally occurring streams of behavior, whether they focused on ongoing behavior or behavior recalled from memory, and whether the actions were mundane or important” (Savani, Markus, Naidu, Kumar, & Berlia, 2010, p. 396).

In summary, because people across cultures differ in their attention, information interpretation, and motivations, they approach decision-making in different ways even from the very beginning (Yates & de Oliveira, 2016).

## **(2) Mode**

Regarding the next cardinal issue “Mode”, cultures vary in “Who (what) decides, and how?” (Yates & de Oliveira, 2016).

In some cultures, individual autonomous decision-making is endorsed, while in others, some forms of involvement of other people in decision-making (e.g. advice) are encouraged. For instance, Chentsova-Dutton and Vaughn (2012) found that Russians asked for advice and gave advice, including unsolicited ones, more often than Americans; they considered advice-giving as an attribute of supportive relationships. Whereas unsolicited advices are fostered in Russian culture, they are perceived to be intrusive and inappropriate in European American culture; this reflects Russians’ preference for practical interdependence and Americans’ emphasis on independent, individual decision-making (Chentsova-Dutton & Vaughn, 2012). In another study, Indians showed higher tendency of compliance with advice than Americans; furthermore, they were more likely to experience strengthened relationships when accommodating others’ advice into their decision-making processes in comparison to Americans (Savani, Morris, Naidu, Kumar, & Berlia, 2011).

Cultures also differ in whether they value more rapid and intuitive or more deliberative decision-making. Reviewing several previous researches, Yates and de Oliveira (2016) pointed

out that among East Asians, Chinese and Koreans prefer fast, intuitive, or rule-based decision modes, whereas Japanese prefer slower and more thorough decision modes. Additionally, Buchtel and Norenzayan (2008) demonstrated that East Asians put more importance and emphasis on intuitive reasoning rather than analytic reasoning compared to their Western peers.

### **(3) Investment**

Cultural contrasts also appear in the “Investment” issue which concerns the amount of resources – time, money, mental energy – devoted to the decision processes, or in other words, the indecisiveness in decision-making (Yates & de Oliveira, 2016). Although no cultural variation in indecisiveness was found in the making of critical decisions (indecisiveness was universally high), for less important decisions, many East Asian groups – Japanese, Hong Kongers, and Taiwanese included – were proved to be more indecisive than their Western counterparts of European heritage (L. M. W. Li, Masuda, & Russell, 2014; Mann et al., 1998).

### **(4) Options**

In terms of the fourth cardinal issue “Options”, cultures vary in level of creativity which is crucial in generating a good set of alternatives for decision-making. The study of Niu and Sternberg (2001) showed that American students demonstrated more artistic creativity than their Chinese peers. However, creativity is not just art-related; Erez and Nouri (2010) divided it into two main aspects – novelty versus idea’s usefulness and appropriateness, and identified three cultural values that influence these aspects. They suggested that cultures with low collectivism, low uncertainty avoidance, and low power distance improve ideas’ novelty, while the opposite values increase discussions on ideas’ usefulness and appropriateness. Researchers also claimed that individualistic cultures encourage divergent thinking, deviance and uniqueness, whereas collectivistic cultures encourage conformity in thinking (Erez & Nouri, 2010). Regarding this, Goncalo and Staw (2006) illustrated that, under specific instructions for creativity, individualistic groups generated more ideas, presented a larger amount of ideas that deviate from pre-existing solutions, proposed ideas that were evaluated to be more novel, and were generally more creative in comparison to their collectivistic counterparts. Beside idea generation, in the idea selection stage, individualistic groups also chose the best and most creative ideas; regardless of whether the instructions were to be practical or creative, ideas selected by individualistic groups were evaluated to be more creative compared to those of collectivistic groups (Goncalo & Staw, 2006).

### **(5) Possibilities**

The next cardinal challenge “Possibilities”, which gives answers to the question of “what could happen if that action were taken?”, is a bit trickier to discuss as no previous literature specifically addressed the issue; nonetheless, prior cross-cultural studies had two findings that might be relevant enough to provide some future research directions (Yates & de Oliveira, 2016). Firstly, it could be anticipated that, as decisions would normally be made by a larger number of individuals in horizontal collectivistic societies (rather than individualistic societies), the resulting broader perspectives, if managed well, might imply better possibility recognition (Yates & de Oliveira, 2016). Secondly, regarding cognitive styles, a possible assumption is that cultures with holistic thinking may encourage more thoroughness in identifying potential consequences of each alternative under consideration (Yates & de Oliveira, 2016).

## **(6) Judgement**

Significant cultural variations can also be seen in the cardinal issue “Judgement” in terms of probability judgements, overconfidence, and attribution.

Since as early as 1977, the study of (Phillips & Wright, 1977, p. 517) showed that the English were more likely than the Chinese to “take a probabilistic view of the world”. In this research, participants of the two countries gave answers to 45 trivia questions and indicated their confidence level for each of the answers; the results depicted that the Chinese were substantially more overconfident than the English in their judgements (Phillips & Wright, 1977). Beside Chinese, other East Asian cultures (including Hong Kong, Indonesia, and Malaysia) also demonstrated higher overconfidence in comparison to the culture of Britain (G. N. Wright et al., 1978; G. Wright & Wisudha, 1982); similar findings of overconfidence were also seen in India, Taiwan, and mainland China versus the United States (J.-W. Lee et al., 1995; Yates et al., 1989). Japanese people, having exhibited much less overconfidence and at times even showed under-confidence, seem to be an unusual exception in Asia (Yates, Lee, Shinotsuka, Patalano, & Sieck, 1998). Yates et al. (1998) also found that cross-national differences in overconfidence and probabilistic thinking are not limited to matters of general knowledge but could be generalized to the judgments involved in common practical decisions as well. Apart from East Asians, Mexicans also displayed more overconfidence when compared to Americans (Lechuga & Wiebe, 2011). Furthermore, Stankov and Lee (2014) implemented a broad study examining overconfidence level in 33 different nations and discovered that, despite being widespread, overconfidence varied in degree depending on the

world regions; they also found that differences in overconfidence can be attributed to variations in cross-cultural cognitive ability.

Another aspect of judgements beside overconfidence that varies across cultures is called attribution. Research among multiple East Asian and North American groups suggested that the former is more accustomed to attributing causality to situational or contextual factors than the latter (which is more dispositional); these differences in judgement have been consistently observed in newspapers, surveys, as well as in some experimental culture-priming studies (F. Lee, Hallahan, & Herzog, 1996; Morris & Peng, 1994; Peng & Knowles, 2003). For example, in Miller's study in 1984, even though Indian and American children explained events similarly, variations emerged and acquired with age: Indian adults mentioned situational factors more whereas American adults mentioned dispositional factors more when attempting to explain someone's behaviors. This evidence could be linked to the differences in cognitive thinking styles across cultures (holistic versus analytic thinking) and suggested that cultural variations have great influences on individuals' judgements.

## **(7) Value**

The next cardinal challenge "Value" refers to the fact that individuals arrive at different decisions partly because they like or value different things; regarding this, cross-cultural discrepancies are reflected in the impact of personal versus social values on decisions, the impact of the self, cognitive dissonance, loss aversion, and adaptation of reference point (Yates & de Oliveira, 2016).

Firstly, cultures vary when it comes to the effect of personal values on a decision: even though personal values matter a lot in Westerners' decision processes, they are less crucial in other more collectivistic nations (Yates & de Oliveira, 2016). Research suggested that Indians are less likely to make choices according to their individual preferences and are less motivated to communicate their preferences in comparison to Americans (Savani, Markus, & Conner, 2008); they also do not feel burdened or constricted when accommodating others' advice in their decision-making (Savani et al., 2011). Additionally, individuals in collectivistic cultures could even find positive values in selecting alternatives that adhere to the norms rather than their personal preference: Bontempo, Lobel, and Triandis (1990) discovered that while Brazilians "would do what was expected of them and would enjoy doing so", Americans showed "not only less intention to do what was expected of them but also less enjoyment regarding adherence to norms".

Secondly, in terms of impact of the self, cultures reported differences in the intensity of “endowment effect” – the tendency of prospective sellers to value objects more than prospective buyers do. This phenomenon appeared stronger among Americans and Canadians than among Asians of diverse backgrounds (Maddux et al., 2010).

Cognitive dissonance, or “spreading of alternatives”, refers to the phenomenon when individuals rate the selected item as better than the rejected one, in spite of initially liking the two items equally, as a way to justify their decisions. According to Heine and Lehman (1997), this phenomenon was observed among Canadians but not among Japanese, proving that cross-cultural variations exist.

Regarding loss aversion, Wang, Rieger, and Hens (2017) carried out a survey in 53 nations around the world to look for potential cross-cultural differences in loss aversion and found that power distance, masculinity, and individualism enhance loss aversion. The result of their study showed that, on average, Eastern Europeans have the highest level of loss aversion, whereas Africans have the lowest. These findings are similar to the “*cushion hypothesis*” of Weber and Hsee (2000) which proposed that collectivistic cultures support more risk-taking as an individual’s social network could provide financial support in case of setbacks, making losses seem less intimidating.

Finally, the feelings of individuals regarding a decision outcome are not fixed but rather depend on their “reference point”, which changes from one moment to another (Kahneman & Tversky, 1979). Arkes, Hirshleifer, Jiang, and Lim (2008) discovered that individuals universally “reset” their reference points after gains more than after losses; however, their experiments illustrated that Asians (i.e. Chinese and Korean) adapted their reference points more frequent compared to Americans (Arkes, Hirshleifer, Jiang, & Lim, 2010).

## **(8) Tradeoffs**

Very little research has been implemented regarding the cultural discrepancies in resolutions to tradeoff dilemmas – the eighth cardinal issue; most of which was proposed by P.C. Chu, Eric E. Spire, and colleagues. Their studies demonstrated that Japanese and Chinese decision-makers prefer non-compensatory schemes (the approach in which a weakness in one dimension could not be compensated for by a strength in another), whereas American decision-makers prefer compensatory schemes (the approach in which a weakness in one dimension could be offset by a strength in another) in addressing trade-off dilemmas (Chu & Spire, 2008; Chu, Spire, & Sueyoshi, 1999). In addition, Chu, Spire, Farn, and Sueyoshi (2005) observed that,

despite having very close geographical, economic, historical, and cultural ties, Taiwanese still differed from Japanese in terms of decision processes; specifically, the former leaned more toward using compensatory approach than the latter.

### **(9) Acceptability**

The “Acceptability” cardinal challenge is about avoiding situations in which one’s decision is undermined by other parties as they oppose to either the decision itself or to how it was made (Yates & de Oliveira, 2016). Cultures often vary considerably in how the acceptability issue is addressed, especially in the case of negotiations; they differ in intra-cultural and cross-cultural negotiation strategies and joint outcomes.

Firstly, several dissimilarities in intra-cultural negotiations have been observed. There is evidence that Americans prefer direct communication, while their Japanese counterparts prefer indirect communication and using influence (e.g. reference to status, sympathy) when negotiating intra-culturally (Adair, Okumura, & Brett, 2001). In addition, Americans often approach ingroup negotiations in a more competitive ways in comparison to Brazilians, who more strongly favor conflict avoidance, accommodation, and collaboration (Pearson & Stephan, 1998). Gelfand et al. (2013) also discovered that discrepancies exist between group versus solo negotiations across cultures; owing to social monitoring, it is expected that working in a group would amplify the social norms already-present in a culture (compared to working solo). The studies found that Taiwanese group negotiators performed more poorly than both Taiwanese solo negotiators and American group negotiators due to their greater concern for maintaining harmony; American groups, however, did not outperform American solo negotiators (thanks to their emphasis on competitiveness) as expected (Gelfand et al., 2013).

When negotiations are cross-cultural, instead of intracultural, cultural contrasts in negotiating strategies (e.g. direct versus indirect communication, or competitive versus collaborative emphasis, etc.) can make joint gain negotiations even more challenging (Brett et al., 1998); for instances, Brett and Okumura (1998) showed that cross-cultural negotiations between Japanese and Americans had lower joint gains in comparison to intracultural negotiations within each country. Furthermore, Adair et al. (2001) proposed that one-sided cultural adaptation in negotiating styles is not enough to enhance joint profits: although Japanese adapted their negotiating styles during negotiations with Americans, since Americans did not do the same, the resulting outcomes were still inferior compared to intracultural outcomes. To better achieve mutually beneficial outcomes, several research suggested the importance of gaining “cultural



intelligence” (CQ) which is the ability to adapt effectively to various cultural situations (Earley & Ang, 2003). CQ involves preparation for, adaptation to, and learning from intercultural interactions as well as engagement in perspective-taking (Mor, Morris, & Joh, 2013). It is “a key predictor of intercultural negotiation effectiveness”: negotiating dyads with higher CQ were more likely to employ integrative negotiation behaviors (that are mutually beneficial), therefore ultimately achieved higher joint profits than dyads with lower CQ (Groves, Feyerherm, & Gu, 2014; Imai & Gelfand, 2010).

Regarding negotiating joint gains, Brett et al. (1998) implemented a research across six diverse cultural backgrounds – the United States, Brazil, Hong Kong, Japan, Russia, and France – and found that there was no direct relationship between cultures and joint-gain negotiations. Instead, three factors seemingly essential for joint-gain negotiations are: an emphasis on information sharing, motivations to continuously improving the alternatives on the table, and an ability to simultaneously handle multiple issues; these factors are present in various cultures but in different ways (Brett et al., 1998).

#### **(10) Implementation**

The “Implementation” cardinal issue refers to the actions taken by individuals in their attempts to ensure that their decisions will be implemented; literature on this matter is recent and limited in number but is predicted to grow rapidly in the future (Yates & de Oliveira, 2016). Representatives of this literature are the studies of Dholakia and Bagozzi (2002), Gollwitzer (1999), and Nickerson and Rogers (2010) regarding “implementation intentions” – concrete and actionable plans to realize a decision – and their benefits. Strategies ensuring decision implementation as well as their effectiveness are expected to vary across cultures (Yates & de Oliveira, 2016).

## **2.2. Context Effects**

To develop effective marketing strategies, it is essential to take into consideration how consumers select among alternatives. Classical economic theories on consumers rely on the value maximization assumption – which stated that each alternative has a subjective value (or utility) and consumers will choose the alternative with the largest value – and have been applying it widely in marketing settings for both practical and theoretical purposes (Simonson & Tversky, 1992). Value maximization assumption implies that the context, which is defined by the set of possible choices under consideration, is irrelevant to the consumers' preference between alternatives (Simonson & Tversky, 1992). Therefore, if product A is preferred over product B in one context (for instance, when only two products, A and B, are available), then product B could not be preferred over product A in another context (for example, when another product – product C – is added to the alternative set). However, research on similarity effect (Tversky, 1972), attraction effect (Huber, Payne, & Puto, 1982; Huber & Puto, 1983), and compromise effect (Simonson, 1989) demonstrated that, contrary to the implication of value maximization assumption, consumer preferences are affected by the context of choice – this is called the context effects.

### **2.2.1. Attraction effect, Compromise effect, and Similarity effect**

The three main context effects found in previous literatures are similarity (also known as substitution) effect, attraction (also known as asymmetric dominance) effect, and compromise (also known as extremeness aversion) effect.

#### **Similarity effect**

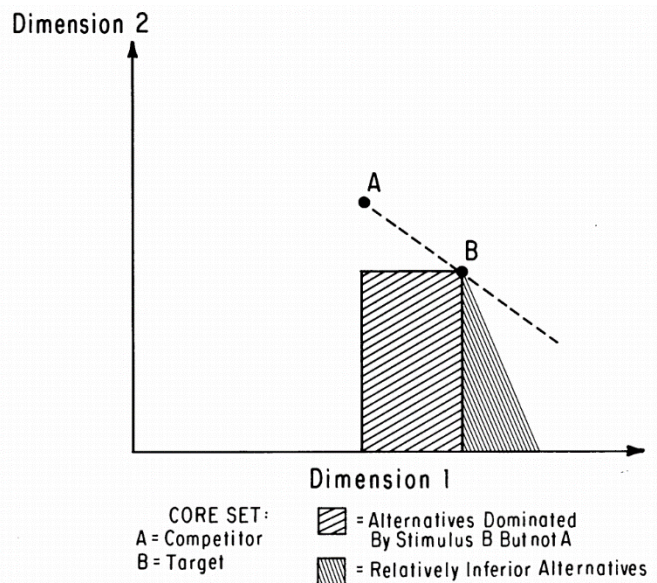
Oppose to the standard classic assumption that a newly added choice will take share from others proportionately to their original shares, the similarity effect is the idea that a newly added item takes disproportionately more share from the alternatives most similar to it rather than from dissimilar options (Huber & Puto, 1983; Tversky, 1972). This effect was first mentioned by Tversky (1972) and later confirmed in findings of Huber and Puto (1983) who also showed that the effect is very sensitive to the new item's positioning in the choice set.

#### **Attraction effect**

Asymmetrically dominated alternatives are items that are dominated by one option in the choice set but not by another (Huber et al., 1982). Their graphical placement is depicted by the shaded rectangle in Figure 9. Relatively inferior alternatives are not dominated – not “inferior

in an absolute sense” – but are “less desirable” as they represent a relatively worse tradeoff of attributes in comparison to the core choice set (Huber & Puto, 1983, p. 33). Their positioning is illustrated by the shaded triangle in Figure 9. Attraction (or asymmetric dominance) effect refers to the situation in which the addition of a decoy – an asymmetrically dominated alternative or a relatively inferior option – to a set enhances the choice probability and attractiveness of the dominating alternative (Huber et al., 1982; Huber &

**Figure 9: Positioning of asymmetrically dominated and relatively inferior alternatives**  
(Huber & Puto, 1983)



Puto, 1983). This effect operates in the opposite direction to the similarity effect (Huber & Puto, 1983). Figure 9 represents graphically the possible placement of a decoy in a choice set in order to generate the attraction effect: if the added decoy lies in the shaded area (either the rectangle or the triangle), it can increase the probability that the dominating item (option B or the target) will be chosen (Huber et al., 1982; Huber & Puto, 1983).

Attraction effect could be explained by the tradeoff contrast hypothesis which stated that, when deciding whether or not to choose a particular option, people often compare it with other currently available alternatives (Simonson & Tversky, 1992). The addition of the decoy, therefore, manipulates this comparison, makes the target option relatively more attractive, and boost the probability that it will be selected.

Attraction effect leads to important theoretical and managerial implications regarding sales and marketing strategies. Its influences on consumer behaviors were proved to be robust by several studies, including the more recent ones (Gomez, Martínez-Molés, Urbano, & Vila, 2016; Huber, Payne, & Puto, 2014).

The following experiment on attraction effect, implemented by National Geographic (n.d.), not only provided a simple example of the phenomenon but also illustrated how organizations can take advantage of the effect when designing their sales and marketing strategies. The experiment was carried out in a real cinema where the selection of popcorn and its price were

manipulated in order to test the influences of attraction effect on consumers' behavior. The first group of customers were offered a choice between a small popcorn at \$3 or a large one at \$7 (see Figure 10); as the result, most customers purchased the small option owing to their personal needs in that moment. The second group of customers, on the other hand, were offered three alternatives: a small popcorn at \$3, a medium popcorn (the decoy) at \$6.5, and a large popcorn at \$7 (see Figure 10). This time, most customers selected the large popcorn because they viewed it as a better-value option in comparison to the medium one (more popcorn for only 50 cents). The attraction effect encouraged the customers to purchase the more expensive option. As can be seen from this experiment, it is beneficial for companies to consider attraction effects when designing their marketing and sale strategies, and it is crucial for consumers to acknowledge the possible manipulations from firms in order to make better decisions.

**Figure 10: The decoy effect – an experiment from National Geographic TV**

(National Geographic, n.d.)



### Compromise effect

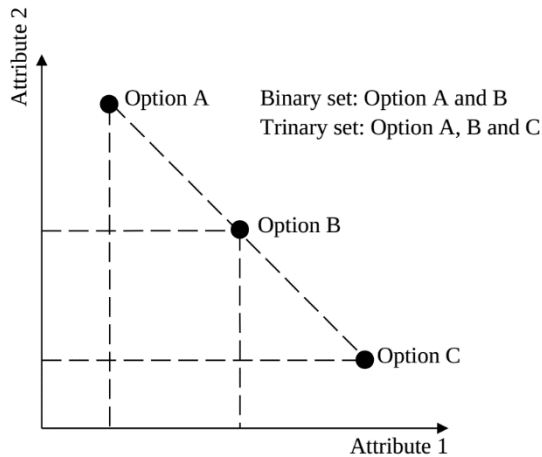
Compromise effect suggests that an option tends to be more likely selected when it becomes the middle or compromise option in a set (Simonson, 1989).

Although being a compromise tends to enhance choice probability, adding a nondominated adjacent alternative would reduce the share of the compromise option according to the similarity/substitution effect (Huber & Puto, 1983). Hence, it is unclear whether the overall impact of adding a nondominated adjacent alternative would be to boost or to shrink the market share of the compromising option. Nonetheless, the compromise argument does predict that the probability of the middle choice would increase relative to the probability of the other existing alternative, which is against the similarity effect (Simonson, 1989). Figure 11

illustrates graphically the compromise effect where the addition of option C to the original binary set (with option A and B) would increase option B's relative probability in comparison to that of option A.

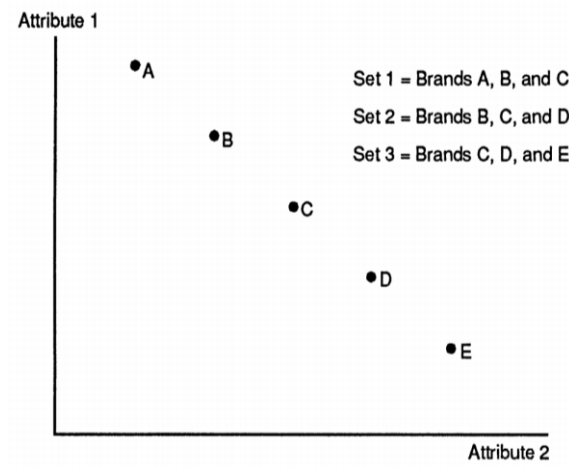
**Figure 11: Illustration of Compromise effect**

(Cheng, Chang, Chuang, & Yu, 2012)



**Figure 12: A compromise effect by moving choice set position**

(Simonson, 1989)



In addition, Simonson (1989) also tested the compromise effect in an experiment represented by Figure 12. The experiment involved three choice sets, each had three alternatives (A, B, C; B, C, D; or C, D, E); each of the options B, C, and D were a compromise in one choice set and an extreme alternative in the other(s). The results of the experiment showed that the probabilities of alternatives B, C, and D were larger when they represented the compromising choice rather than the extreme option.

Compromise effect could be explained by the extremeness aversion hypothesis (Simonson & Tversky, 1992) which is based on the notion of loss aversion: “losses loom larger than corresponding gains” (Tversky & Kahneman, 1991, p. 1039). As a loss on one attribute often looms larger than a gain on the other, the decision makers tend to select the middle option that provides a compromise between the two attributes.

Compromise effect provides highly practical implications for firms in marketing aspects such as consumer choice prediction, product positioning, competitive strategy, and communication (Simonson & Tversky, 1992). Its robustness regarding consumer behaviors was proven in numerous recent research from strictly theoretical experiments to more realistic ones (Lichters, Müller, Sarstedt, & Vogt, 2016; Müller, Kroll, & Vogt, 2010, 2012; Neumann, Böckenholt, & Sinha, 2016; Pinger, Ruhmer-Krell, & Schumacher, 2016). Figure 13 illustrates a practical way

that compromise effect might be used in marketing strategies in order to manipulate consumers' behaviors (Cramer, 2013).

**Figure 13: An example of compromise effect in marketing (Cramer, 2013)**



### Summary

In summary, attraction and compromise effects (Huber et al., 1982; Simonson, 1989) are among the most conceptually and empirically well-researched context effects. Their influences are not only evident in consumer behaviors, e.g. regarding fast-moving consumer goods (FMCGs), durables, and services in both theoretical and highly realistic experiments (Gomez et al., 2016; Lichters et al., 2016; Müller et al., 2010, 2012; Pinger et al., 2016), but also appear relevant in other decision-making situations such as “simple perceptual-decision-making tasks” (Trueblood, Brown, Heathcote, & Busemeyer, 2013), individuals' or groups' strategic and managerial decision-making (Glazer & Simonson, 1995), and negotiation or bargaining (de Clippel & Eliaz, 2012).

**Figure 14: Comparing Attraction and Compromise effects (de Clippel & Eliaz, 2012)**

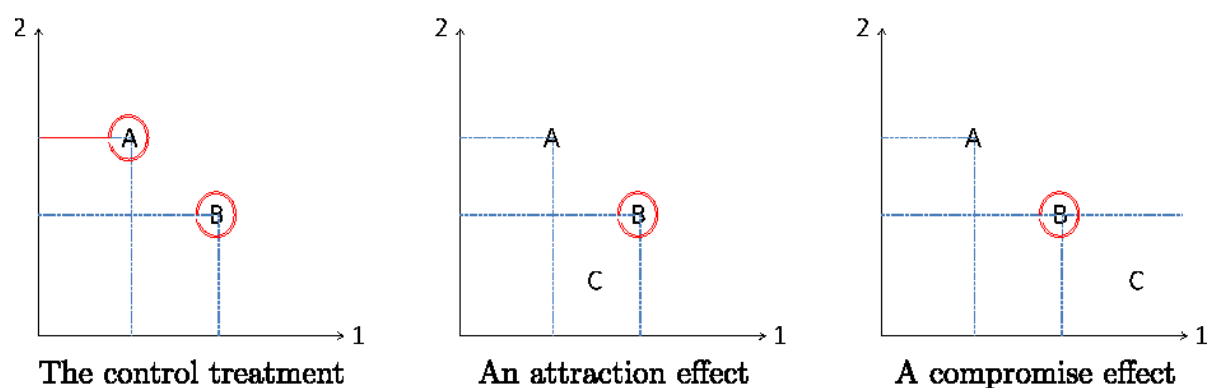


Figure 14 compares graphically the choice sets manipulated by either attraction or compromise effect with the original choice set under no manipulation. Theoretically, the addition of option C, whether as an asymmetrically dominated alternative to provoke attraction effect or as an extreme option to generate compromise effect, would increase the attractiveness or relative probability of option B in comparison to option A. This argument violates the regularity principle, which is central in most models of choice (Luce, 1977) and which states that the probability of an item being selected could not be enhanced by the addition of other items to the set (Simonson, 1989).

### **2.2.2. Preferences and Context effects (attraction and compromise effects)**

Oxford dictionaries (2019) define preference as “a greater liking for one alternative over another or others”. As mentioned above, according to the value maximization assumption of classical economic theories, preference does not depend on context, it could not be influenced by a change in context. Previous research regarding context effects (as described in the preceding section), however, proved otherwise: preference is context-dependent (Tversky & Simonson, 1993), it is often constructed “on the fly” for a particular choice problem or decision (Yoon & Simonson, 2008, p. 334).

Preferences are not always well-established: when making choices, people often find it difficult to precisely evaluate the utilities of different alternatives, thus are uncertain about their preference. Context effects usually do not have a strong influence on buying decisions of consumers when they have a clear preference, for instance when the consumers habitually buy the same brand of a product type; nevertheless, when consumers are unsure about their preference, they are more likely to look at the context to determine the best option (Simonson & Tversky, 1992). Under preference uncertainty, consumers tend to analyze the context and choose the option supported by the best reason, e.g. the compromise or dominance relationships (Simonson, 1989).

Since attraction effect is usually perceptual, people seldom associate their choice of the asymmetrically dominating alternative with the position of the alternative in the set, but rather believe that their selection reflects their true underlying preference; this results in high perceived certainty with the choice (Yoon & Simonson, 2005). Regarding compromise effect, on the other hand, people tend to select the compromise option primarily due to their unclear preference and that the compromise option represents the safest choice under low preference certainty (Simonson & Tversky, 1992; Yoon & Simonson, 2005). Yoon and Simonson (2005)

argued that this contrast between attraction and compromise effect leads to different degree of choice persistence: choices based on clear preferences are more likely to be enduring whereas choices made with weak or no preferences are more fleeting. When consumers think that their initial choice represents their underlying preferences as in the case of attraction effect, they tend to select the same option again in future consumption occasions even if it does not dominate any other alternatives in the future choice set. With respect to compromise effect, however, due to initial unclear preference, people usually change their choice when the option no longer presents a compromising solution in the new choice set. The experiment of Yoon and Simonson (2005) showed that the attraction effect lasted even after one week across three diverse product categories whereas the compromise effect disappeared. Additionally, the authors found that participants who selected asymmetrically dominating alternative could better recognize their own choice after one week in comparison to participants who selected the compromise option. Nonetheless, it was the latter who were superior in remembering the other (unselected) alternatives in the set.



### **2.3. Possibility of Delay: the no-choice option**

Most of the research on marketing and consumer choice involves choice tasks where participants are required to select among a given set of available alternatives (hereafter, forced choice). Nevertheless, in the real world, consumers are usually not forced to choose but have the choice to not buy anything, to delay buying, or to buy somewhere else (hereafter, delay or deferral or no-choice option).

In general, the research of Greenleaf and Lehmann (1995) found ten main causes of substantial delay in the decision-making of consumers. Consumers tend to defer decision when they (1) do not have time to make a decision, (2) find shopping unpleasant, (3) face performance risks (product not functioning properly/satisfactorily) and financial risks, (4) face social and psychological risks (due to the judgements of oneself and others), (5) are in need of (are waiting for) someone's advice or consent, (6) need to gather information, (7) expect a change in market (product's price reductions, quality improvements, or both), (8) are uncertain about their need, (9) cannot afford the purchase, or (10) already have an available substitute at home (Greenleaf & Lehmann, 1995). Additionally, the authors showed that these reasons influence different stages of the decision-making process (Greenleaf & Lehmann, 1995).

In particular, regarding delay in the scope of research experiments on consumer choice, the reasons for selecting the no-choice option include the conflict, preference uncertainty, or difficulty in determining the best alternative, the perceived attractiveness of the available alternatives, and the context of the decision (the set of alternatives under consideration) (Dhar, 1997a, 1997b; Dhar & Nowlis, 1999; Dhar & Simonson, 2003; Tversky & Shafir, 1992). These are most closely linked to the aforementioned reasons (3), (4), (6), and (8) of Greenleaf and Lehmann (1995) and will be further analyzed in details in the following sections of this paper.

#### **2.3.1. Deferred decision under conflict and preference uncertainty**

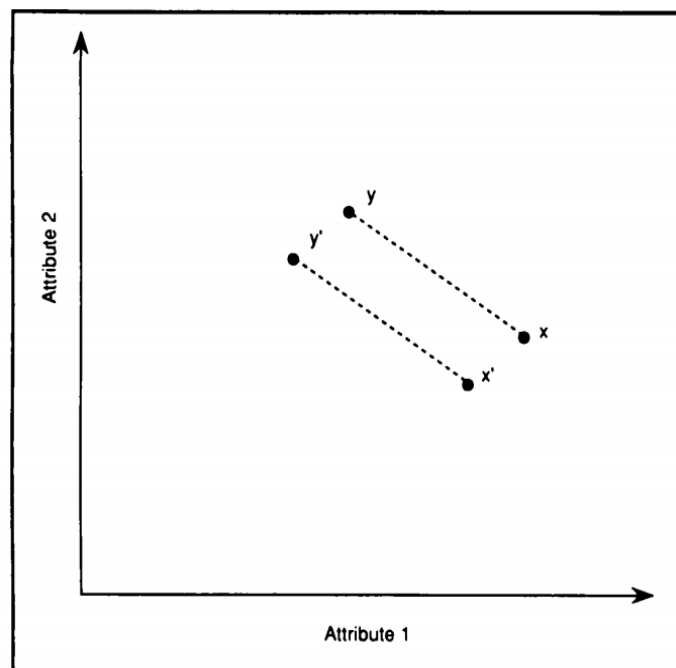
##### **Deferred decision: conflict versus the classic value maximization assumption**

Conflict emerges as people are not always sure of how to make tradeoff between benefits and costs, values and risks, immediate satisfaction and future discomfort. Conflict resolution is further complicated by preference uncertainty and the uncertainty regarding the consequences of one's actions; it is also hindered by the anticipation of regret and dissonance. Conflict is not considered in the classical rational choice theory which relies on the value maximization assumption. As mentioned above, this assumption claims that each alternative has a subjective

value (or utility) and consumers will choose the alternative with the largest value. Consider a simple situation where a consumer can either choose one of the two product alternatives A and B or delay the decision to think more about their choice, to seek more information or new alternatives. According to the value maximization assumption, the no-choice option would be selected only when its subjective value (or utility) exceeds that of the other available options. Nonetheless, previous research demonstrated that conflicts do matter: decision-makers tend to delay decision more when the choice between A and B is difficult (i.e. when A and B are very similar in attractiveness – high conflict) than when the choice is simple (for instance when A dominates B or vice versa – low conflict) (Tversky & Shafir, 1992). Moreover, contrary to the value maximization assumption, existing studies have shown that the addition of a new option to a given choice set may enhance conflict as well as the tendency to select the no-choice option (Tversky & Shafir, 1992). This violates the regularity principle which is central in most models of choice and which states that the probability of any option being selected could not be enhanced by the addition of other options to the set (Luce, 1977).

Let  $s$  denotes the no-choice option and  $x, y, x'$ , and  $y'$  denote the options depicted in Figure 15. According to the value maximization assumption, if the subjective utility of  $s$  exceeds that of both  $x$  and  $y$ , it must also exceed that of  $x'$  and  $y'$  because  $x$  dominates  $x'$  and  $y$  dominates  $y'$  in all attributes. Consequently, if the no-choice option  $s$  is chosen from the set  $\{s, x, y\}$ , it must also be chosen from the set  $\{s, x, x'\}$  and  $\{s, y, y'\}$ . In other words, the probability that the no-choice option  $s$  is selected could not be larger in the conflict condition

**Figure 15: An experiment on the no-choice option** (Tversky & Shafir, 1992)



with two options  $x$  and  $y$  than in the dominance condition with two options  $x$  and  $x'$ , or  $y$  and  $y'$ . However, in study 1 of Tversky and Shafir (1992), contrast to the value maximization assumption, the probability that the no-choice option  $s$  is selected from the set  $\{s, x, y\}$  actually exceeded the probability that it is selected from the set  $\{s, x, x'\}$  and  $\{s, y, y'\}$  in all sub-

experiments (with choices of gambles and apartments). In other words, people delayed decision more in the conflict situation when making choice is difficult than in the dominance one when making choice is rather easy (Tversky & Shafir, 1992).

Also according to the value maximization assumption, if a consumer selects  $y$  from the choice set  $\{y, z\}$  (implying that the subjective utility of  $y$  is larger than that of  $z$ ), he/she will not select  $z$  from the choice set  $\{x, y, z\}$  because  $z$  could not be selected from any set that includes  $y$ . Therefore, if  $z$  denotes the no-choice option, a consumer who prefers  $y$  to the no-choice option should not select the no-choice option when both  $x$  and  $y$  are available. Again, contrary to the value maximization assumption, study 2 of Tversky and Shafir (1992) illustrated that when  $x$  and  $y$  are similar in attractiveness, adding  $x$  to the option set  $\{y, z\}$  can generate more conflict and increases participants' tendency to delay their decisions.

### **Deferred decision: Preference uncertainty**

As preference uncertainty enhances conflicts, it is expected that increasing the preference uncertainty in a choice set would result in higher tendency of participants selecting the no-choice option. In study 3 of their research, Dhar and Simonson (2003) attempted to manipulate the level of preference uncertainty by describing the attributes of each alternative either in value ranges (vague and highly uncertain) or in point values (more precise). Additionally, the attributes' values were designed such that the smallest values in the range treatment were at least equal to the point values in the no-range treatment. As predicted, the experiment's findings demonstrated that participants are more likely to choose the no-choice option (delay purchase decisions) when seeing value ranges rather than point values of attributes, even when the alternatives described by value ranges are at least equally attractive compared to the ones described by point values (Dhar & Simonson, 2003). This confirmed the prediction that a higher level of preference uncertainty would lead to a higher probability of participants selecting the no-choice option.

Also, regarding preference uncertainty, it is predicted that when participants can choose multiple alternatives, preference uncertainty would be less of a problem and, thus, the share of the no-choice option would decline compared to when participants can choose only one option. The results of study 5 of Dhar (1997a) supported this prediction: participants tend to choose more (or delay less) when they could choose both options from a choice set with two equally attractive alternatives in comparison to when they could choose only one single option.

### **2.3.2. Impacts of alternative attractiveness on the no-choice option**

One of the reasons why consumers select the no-choice option is that none of the offered alternatives are considered attractive. Previous research proposes that an alternative's attractiveness can be influenced by the context, which means that the same option maybe deemed as more or as less attractive depending on its comparison to other available alternatives in the offered set.

Houston and Sherman (1995) found that, when comparing alternatives, individuals often disregard ("cancel") attributes that are shared by the alternatives while assigning more weight to the unique attributes of each alternatives. Building on this study, Dhar and Sherman (1996) suggest that the attractiveness of alternatives in a choice set could be increased or decreased by altering which attributes appear unique. In their study 1, participants were asked to either delay decision or choose between pairs of alternatives that are either unique-good (share bad attributes but have unique good attributes) or unique-bad (share good attribute but have unique bad attributes). Although the alternatives in both conditions (unique-good and unique-bad) were matched for attractiveness, a significantly larger proportion of respondents was willing to make a choice when the available options were a unique-good pair rather than a unique-bad one. In other words, participants tend to defer decision more when the available choices were a unique-bad pair rather than a unique-good one (Dhar & Sherman, 1996).

Additionally, Dhar and Simonson (2003) studied the influence of the delay option on the preference between an all-average option (average on all attributes) and a mixed option (good on some attributes, bad on others) in four categories: restaurant, calculator, portable computer, and camcorder (Study 1). In short, the authors found that the all-average choice lost disproportionately more share compared to the mixed one when the delay option was introduced (Dhar & Simonson, 2003).

### **2.3.3. Impacts of the context effects on the no-choice option**

A person might select the no-choice option and defer his/her decision if he/she does not find the offered alternatives adequately attractive (as demonstrated by the unique-bad pairs of alternatives in the previous section) or if he/she is uncertain regarding his/her preferences among the available alternatives. As the no-choice option provides a solution to avoid uncertainty and conflict, it takes share mostly from the alternative that people would choose in forced choice situation under preference uncertainty (e.g. compromise option). Indeed, Study

2 of Dhar and Simonson (2003) demonstrated that the introduction of the delay option weakens the compromise effect.

Since attraction effect is usually perceptual, people seldom associate their choice of the asymmetrically dominating alternative with the position of the alternative in the set, but rather believe that their selection reflects their true underlying preference; this results in high perceived certainty with the choice (Yoon & Simonson, 2005). Consequently, introducing the no-choice option to the set influences the attraction effect in an opposite direction to the compromise effect: the attraction effect tends to be stronger when participants have the delay option, or in other words, the delay option strengthens the attraction effect (Dhar & Simonson, 2003). In addition, study 2 of Dhar and Simonson (2003) also showed that the percentage of participants who select the deferral option reduces when the offered set is enlarged by the addition of an asymmetrically dominated alternative.

In summary, the no-choice option “systematically moderates the magnitude of context effects”; it weakens the compromise effect and strengthens the attraction effect compared to the forced choice condition (Dhar & Simonson, 2003, p. 152). Moreover, its impact arose at a significantly higher degree when the addition of the third alternative was at the high-quality end (Dhar & Simonson, 2003).

#### **2.3.4. Impacts of the Delay Option across cultures**

Not much previous research was devoted to analyzing the effects of the delay option in consumer choice and behaviors across cultures, making it an interesting area to be considered in future studies.

## **2.4. Justification and Accountability**

This section is dedicated to reviewing literatures on justification and accountability, their definitions, characteristics, as well as their impacts on decision-making in general, and on context effects specifically.

### **2.4.1. Justification**

Decision-makers often seek a convincing rationale for their decisions, whether for intra-personal purposes so that they can feel self-assured for having made the right choice, or for inter-personal motives so that they may explain to others the logic behind their decision (Shafir, Simonson, & Tversky, 1993). In simpler words, when decision makers need to make a choice, they often search for and construct reasons to solve the conflict and rationalize their choice to others, as well as to themselves (Shafir et al., 1993).

### **2.4.2. Accountability**

As stated by Lerner and Tetlock (1999, p. 255), “accountability refers to the implicit or explicit expectation that one may be called on to justify one's beliefs, feelings, and actions to others”. It could involve (1) *mere presence of another* (people expect that their performance will be observed by another), (2) *identifiability* (people expect that their words and actions during a study will be personally linked to them), (3) *evaluation* (people expect that another will assess their performance following some ground rules accompanied by some implied consequences), and (4) *reason-giving* (people expect that they must justify their words and actions) (Lerner & Tetlock, 1999). Lerner and Tetlock (1999) categorized accountability into eight types, which include four pairs of opposing types:

- *Accountability toward an audience with unknown versus known views.* Previous research showed that, when decision-makers learned about audience’s views before forming their own opinion, accountability toward that audience would result in decision-makers conforming and strategically shifting their opinion towards that of the audience even if this shift leads to inefficient decision outcomes. By doing so, decision-makers could avoid the cognitive work of interpreting complex information, evaluating pros and cons of various alternatives, and making difficult trade-offs. When audience’s views are unknown, however, accountability would lead people to perform preemptive self-criticism which means thinking more self-critically, considering multiple perspectives on the decision, and trying to anticipate other people’s objections. Exceptions occur when people believe they

can guess their audience's views; in these circumstances, people do not perform preemptive self-criticism, but rather shift toward the presumed audience's views.

- *Pre- versus post-decisional accountability.* While pre-decisional accountability means people know that they are accountable for their decisions before deciding, post-decisional accountability means people learn about their accountability after-the-fact. The latter causes defensive bolstering in which people try to justify their past actions and opinions.
- *Process accountability versus outcome accountability.* Process accountability would lead people to conduct a rather fair analysis of alternatives and reduce the need for self-justification, whereas outcome accountability would enhance the need for self-justification and defense of past decisions (Simonson & Staw, 1992).
- *Illegitimate versus legitimate accountability.* Accountability to legitimate audiences (such as friends and family) generally leads to positive responses from decision-makers; on the contrary, when the audience is perceived to be illegitimate, intrusive or insulting, accountability would not result in any beneficial effects and might even backfire.

(Lerner & Tetlock, 1999)

Generally, effortful and self-critical thinking tends to be triggered when decision-makers learn before forming their opinions that the audience they are accountable to has unknown views, concerns about accuracy, cares about processes more than outcomes, is moderately well-informed, and has a legitimate reason to request for justification (Lerner & Tetlock, 1999). Nevertheless, even in studies that involve this particular type of accountability, impacts vary largely across dependent variables and judgement tasks, sometimes enhancing, sometimes providing no effect on, and sometimes decreasing judgement and choice (Lerner & Tetlock, 1999). According Lerner's and Tetlock's article (1999), pre-decisional accountability to an unknown audience tends to attenuate biases that result from the absence of effort and self-critical attention in one's decision-making processes and from the failure to recognize and utilize all relevant cues. It tends to amplify bias (1) when a given judgment bias arises from naïve reliance on normatively (but not obviously) irrelevant information or (2) when a given choice bias arises because the seemingly easiest-to-rationalize choice is the biased option. Finally, it tends to have no impact on biases that arises exclusively from the absence of knowledge and special training regarding formal decision rules (extra effort could not illuminate these rules). Depending on numerous moderators, accountability may affect how people think (their cognitive processing), what people say they think (their temporary presentations), or a combination of both. All above impacts of accountability result from the

fact that when people anticipate having to justify their decisions, they desire to avoid appearing incompetent or foolish in front of their audiences.

### **2.4.3. Impacts of Justification and Accountability on Context effects**

When decision-makers have established preferences, they could use their preference to justify their decision. Under preference uncertainty, however, choosing becomes more difficult, and decision-makers tend to take into account the context – the set of possible choices under consideration – in order to rationalize their choice, resulting in asymmetric dominance (attraction) and extremeness aversion (compromise) effects (Simonson, 1989). In most cases, the uncertainty regarding one's own preference is less than the uncertainty regarding the preference of others; thus, the need to justify a choice to others (i.e. accountability) tends to make the decision-makers consider the context even more, leading to an increase in the influences of context effects. In other words, pre-decisional accountability to an audience with unknown views tends to amplify attraction and compromise effects (Lerner & Tetlock, 1999).

Study 1, as well as the pilot study, of Simonson (1989) showed that the attraction effect is likely to be stronger when participants expect to be judged by others (especially when the preferences of others are unknown); additionally, study 2 of the research demonstrated that choosing the asymmetrically dominating alternative is perceived as less likely to be criticized and easier to justify. This, however, does not imply that accountability will always lead consumers to select the dominating alternatives. In a lot of cases, the consumers know or can guess the preferences of those who they are accountable to (accountability to an audience with known views), their spouse for example, and this knowledge may override the asymmetric dominance effect. Indeed, the experiments of Helgadóttir (2015) among 386 university students from University of Reykjavik in Iceland illustrated that attraction effect has an impact when individuals make choice for themselves but has no effect when they make choice for a friend.

Justification and accountability impact compromise effect somewhat differently. On the one hand, the middle option can be said to combine both attributes; on the other hand, it can be evaluated as not the best on any attribute. Although the former view provides justification for selecting the compromise alternative, the latter view makes the choice more difficult to rationalize. Overall though, as choosing the compromise alternative is the safest and most reasonable solution when the preferences of the evaluators are unknown, consumers who expect to be judged by others are predicted to exhibit the compromise effect (Lerner & Tetlock, 1999; Simonson, 1989). This prediction was partially confirmed by the experiment of



Simonson (1989); specifically, it was confirmed by the pilot study but not by study 1. The limited support might be due to the fact that, while the compromise alternative is perceived as safer (is less likely to be negatively evaluated), it is not viewed as easier to rationalize.

Another experiment regarding accountability and compromise effect was carried out by Chang et al. (2012) whose findings suggested that the compromise effect is larger when individual makes choices for others rather than for himself/herself (study 1). This is supposedly because making a choice for others involves more uncertainty and greater consideration of negative consequences. An individual's knowledge of others' preferences, behaviors, and attitudes in a particular choice context is to a great extent determined by whether the relationship between them is distant or close. Generally, close relationships equal frequent interactions, thus increase one's understanding of the other's preferences, while distant relationships entail greater uncertainty. Therefore, it is expected that people would be more likely to select the compromise alternative as a safe and quick solution when they are required to make choices for distant others rather than close ones. This was supported by the findings of study 2 of Chang et al. (2012); the magnitude of the compromise effect is most significant for classmates, family members, friends, and oneself, in descending order. In addition, study 4 of the research found that the compromise effect was even stronger when participants making choices for others anticipated feeling regret (i.e. anticipated negative outcomes) compared to when they did not (Chang et al., 2012). The authors argued that the anticipation of regrets (negative outcomes) enhanced the decision-makers' feeling of uncertainty, thus increased the influences of compromise effect (Chang et al., 2012).

Nevertheless, Chang et al. (2012) further demonstrated (in their study 3) that when people have to provide reasons for their decision to a specific other (who will evaluate their choice), they tend to select the compromise alternative less when they choose for this specific other in comparison to when they choose for themselves. In other words, the compromise effect is less significant when people make choices for others rather than for themselves when justification is required. Specifically, the experiment paired up participants and asked them to rationalize their decision to their partner in written form; the participants were asked to make choices for their partner in one treatment and for themselves in another. This study showed that when people need to justify their choice, they tend to behave somewhat differently compared to when justifications are not required.

#### **2.4.4. Impacts of Justification and Accountability on Compromise effect across cultures**

Simonson, Sela, and Sood (2017, p. 322) observed that some consumers have a “habitual tendency to avoid extreme options that are partly heritable, formed in childhood, and moderated by age and personality traits such as preference for moderation”. This finding leads to a belief that differences in cultures could potentially have an impact on the influences of compromise effects on consumer behaviors. Indeed, the research of Briley et al. (2000), which is summarized in the section below, supported this belief.

#### **Impacts of justification requirement on compromise effect across cultures**

Briley et al. (2000) proposed that culture might influence people’s decisions through the reasons that they recruit when required to justify their choices; more specifically, cultures endow people with various principles or rules that provide guidance for decision-making, and a need to give reasons triggers such cultural knowledge. Through five well-implemented studies, the authors provided evidences supporting their prediction that principles enjoining compromise are less salient in North American culture than in East Asian cultures and the cultural variations in the tendency to select the compromise alternatives are larger when participants are required to give reason for their choice.

The first study of Briley et al. (2000) was carried out among students in Hong Kong and the United States. The study presented the participants with multiple shopping scenarios where they must make a choice among three options (two extreme alternatives and one compromise). In the control treatment (where justification is not required), the U.S and Hong Kong groups demonstrated similar patterns of choice with approximately 50 percent of participants choosing the compromise alternative in both groups (48 percent in the U.S. and 50 percent in Hong Kong). In the reason treatment (where providing reasons for choice is required), nonetheless, there were differences in the choice patterns of the two cultural groups: the proportion of U.S participants selecting compromise alternatives fell to 39 percent, while the proportion of Hong Kong participants selecting compromise alternatives rose to 56 percent. As can be seen, despite the similarity in the control treatment, having to provide reasons reduced the compromise effect on US participants but enhanced this effect on Hong Kong participants.

Study 2 and 3 of Briley et al. (2000), which compared Japanese versus American respondents and Asian-American versus European-American respondents respectively, showed similar results. In study 2, although Japanese and American participants selected the compromise alternatives in similar proportions in the control treatment (38 and 40 percent respectively), the

former increased (to 43 percent) while the latter decreased (to 29 percent) their tendency to select the compromise options in the reason treatment. Study 3 was different from Study 1 and 2 in that it compared two diverse cultural groups within a single country by involving bicultural Asian-American respondents who have lived in the U.S. for four years or more; still, similar results were observed. European-American participants selected the compromise options 33 percent less in the reason treatment than in the control treatment, whereas Asian-American participants selected the compromise options 4 percent more in the reason treatment than in the control treatment. That the influence of reasons on compromise effect was weaker among Asian-Americans (study 3) than among Hong Kong Chinese (study 1) and Japanese (study 2) to some extent reflected the combined impact of their Asian origins and of their life in the USA.

Briley et al. (2000, p. 164) further analyzed the reasons provided by participants in study 1 and confirmed that “a subject’s culture is a good predictor of the type of reason he or she generated”. Specifically, the authors demonstrated that Hong Kong participants tend to use compromise-oriented reasons more than their American counterparts (42 percent and 24 percent of cases respectively). In addition, reason type seems to be a good predictor of choices: 87 percent of extreme choices were backed by reasons that highlight or give priority to one single attribute, and 61 percent of compromise choices were backed by reasons that indicated some balancing between attributes. For Hong Kong subjects, in particular, compromise-oriented reasons had an especially strong impact: in 91 percent of the time that they endorsed balance in their explanation, Hong Kong participants ended up choosing the compromise option. These results showed that when individuals explain their choice, the content of their reasons mediates the relationship between their cultural backgrounds and their preferences for compromise options.

Overall, the findings of studies 1-3 were impressively robust and supported the authors’ hypothesis that the justification requirement “evokes a different cognitive strategy”, “activates cultural knowledge”, and therefore lead to differences in choice patterns and variations in the impact of compromise effect across cultures (Briley et al., 2000, pp. 165–167).

Briley et al. (2000) also found in Study 4 that Chinese proverbs are more likely to promote compromising as a solution to decision conflicts and life’s dilemmas, whereas American proverbs are more likely to encourage extreme, non-compromising solutions that pursue a single interest. The proverbs provide “strong, historically rooted evidence of the different perspectives of Americans and Chinese with regard to the value of pursuing compromise”

(Briley et al., 2000, p. 173). The patterns found in the proverbs were additionally reinforced by the attitudes of participants from these cultures: for decision guides, Hong Kong participants endorsed non-compromising proverbs less and pro-compromising proverbs more in comparison to Americans regardless of the proverbs' cultural origin. These findings support the idea that culture provides guidelines for decision-making and that these guidelines differ for Hong Kong and U.S. participants. Moreover, they are coherent with the findings of studies 1-3 and the proposition that justification requirement results in different choice patterns since it triggers different cultural norms.

Finally, in study 5, the authors analyzed the social desirability of different reason types across cultures by asking participants to review the reasons provided by others for their choice and predict how their peers would evaluate these reasons (Briley et al., 2000). While the U.S. subjects viewed extreme reasons as much more acceptable compared to compromise reasons, Hong Kong participants viewed both reason types as similarly acceptable displaying the tendency to be supportive and to avoid criticisms (Briley et al., 2000).

### **Impacts of choosing for others (accountability) on compromise effect across cultures**

Choosing for others, despite being a common practice in consumer behaviors, is not discussed very often in the literature. There is not much previous research regarding the impacts of choosing for others (i.e. accountability to others) on context effects in general, and on compromise effect in particular, across cultures. In fact, Chang et al. (2012), whose research looked into compromise effect in choosing for others, suggested in the future-research-directions section of their paper that cross-cultural studies could be carried out to investigate whether individuals from Eastern versus Western, or collectivistic versus individualistic cultures exhibit different levels of compromise effect when they need to make choices for others rather than for themselves.

#### **2.4.5. Impacts of justification and accountability on delay option**

As choosing for others often entails more preference uncertainty than choosing for oneself, it could be expected that the no-choice option, as a safer (less risky) alternative to making a choice, would be more attractive in the former situation rather than in the latter. In other words, accountability is predicted to increase preference uncertainty; hence, it would enhance the probability of participants choosing the delay option. Nevertheless, very little research was conducted regarding this matter. One of the few studies available is the working paper of Dhar and O'Curry (1996), cited by Dhar (1997b). This paper analyzed the impact of accountability

on the no-choice option when participants were presented with either a choice set with two equally attractive options or a choice set with one option dominating the other. Consistent with the idea that the delay option may be deemed a safe option under preference uncertainty, participants in the high-accountability treatment tend to delay decision more when the set consists of two equally attractive options than when it contains an option that clearly dominates the other (Dhar, 1997b).



### **3. Research objectives and Hypotheses**

#### **3.1. Research objectives**

Compromise effect is one of the most relevant and previously well-researched context effects. Chang et al. (2012) suggested that the compromise effect is larger when individuals make choices for others rather than for themselves, especially when the relationship is distant rather than close. Nevertheless, when they must provide reasons for their decision, an opposite trend was observed: compromise effect is less significant when individuals make choices for others rather than for themselves (Chang et al., 2012). There is, however, not much previous research regarding the impacts of making choices for others (accountability) on compromise effects across cultures. Section 2.1 of this paper showed that cultures could potentially have a large impact on human behaviors and decision-making processes. Furthermore, Briley et al. (2000) demonstrated that principles enjoining compromise are less salient in North American culture than in East Asian (Hong Kong Chinese and Japanese) cultures and the cultural variations in the tendency to select the compromise alternatives are larger when participants are required to give reason for their choice. This finding suggested that cultures might influence the compromise effect in consumer behaviors. This paper, therefore, aims at providing a better perspective on compromise effect, under the influence of both accountability (choosing for others) and justification, in consumer behaviors across cultures by involving two less familiar countries: Italy and Vietnam.

Since there is also not much previous research regarding cultural variations in consumers' tendency to defer decisions (as seen in section 2.3.4 and section 2.4.5 of this paper), another aim of the paper is to analyze the effect of accountability and justification on the selection of the delay option across cultures.

Vietnamese and Italian participants were chosen because, despite also respectively being collectivistic and individualistic, easterners and westerners, their differences are much less drastic compared to Chinese/Japanese versus North Americans. For instance, both cultures are considered to be high-context (as opposed to high-context Chinese/Japanese versus low-context Americans) (Copeland & Griggs, 1986; Hall & Hall, 1990). Moreover, Italy and Vietnam have multi-active and reactive cultures respectively, whereas the United States and China/Japan have linear-active and reactive cultures respectively (Lewis, 2006) (see Figure 7). Hence, comparisons of the former pair can be expected to generate different results from the previous comparative research on the latter pair.

### 3.2. Research questions and hypotheses

In details, this research aims at answering two main research questions, which correspond to six main hypotheses, as follows:

**Question 1:** What are the influences of accountability (choosing for others) on compromise effect across cultures when justification is required versus when it is not?

- **Hypothesis 1a:** There is a difference in the tendency to select the compromise alternatives when participants choose for others compared to when they choose for themselves
- **Hypothesis 1b:** There is a difference in the tendency to select the compromise alternatives when participants choosing for others are required to explain their decision compared to when they are not.
- **Hypothesis 1c:** There is a difference in the tendency to select the compromise alternatives across cultures, especially when participants are required to choose for others and to justify their choice.

**Question 2:** What are the influences of accountability (choosing for others) on deferred decisions across cultures when justification is required versus when it is not?

- **Hypothesis 2a:** There is a difference in the tendency to defer decision when participants choose for others compared to when they choose for themselves
- **Hypothesis 2b:** There is a difference in the tendency to defer decision when participants choosing for others are required to explain their decision compared to when they are not.
- **Hypothesis 2c:** There is a difference in the tendency to defer decision across cultures, especially when participants are required to choose for others and to justify their choice.



## **4. Methodologies**

The paper implemented quantitative research through the means of online questionnaires via Qualtrics survey platform.

### **4.1. Data collection process – Experiment design**

The data collection process involved three questionnaires: one for the controlled group, one for the group treated with accountability (choosing for others), and one for the group treated with both accountability and justification (choosing for others and explaining the choice). Immediate family and immediate family members were used as “others” in the choosing-for-others treatments since the family (or the household) is considered to be the most important consumer unit in marketing and consumer behavior research (Lantos, 2015). Participants were assigned randomly to the questionnaires, so that there were an approximately equal number of respondents for each survey. Each questionnaire takes only approximately five to ten minutes to be completed.

Beside the shared demographic questions, each survey consists of six main questions: the first four are manipulated by compromise effect and the last two are under the influence of the no-choice option. In the first four questions, participants were asked to make a choice (a purchase decision) among three alternatives: (1) low quality and low price (Low-Low), (2) medium quality and medium price (Compromise), or (3) high quality and high price (High-High). On the other hand, in the last two questions, participants were presented with three options: (1) purchase a low quality and low price product (Low-Low), (2) purchase a high quality and high price product (High-High), or (3) wait a week and learn more about the products before making a buying decision (Delay). Since Lichters et al. (2016) showed that the greater cognitive effort spent on buying decisions regarding durables (compared to decisions regarding FMCG) enhances the compromise effect, all the six questions mentioned above involve products that are durables, including: smartphones, televisions, rice cookers, moka coffee machines, blenders, and washing machines. The rice cookers and mokas were added in the questionnaires as they are culturally sensitive products: rice cookers are familiar to Vietnamese but not Italians, while Mokas are familiar to Italians but not Vietnamese. These items, when act as culturally unfamiliar products, could increase preference uncertainty, thus could potentially enhance compromise effect and be interesting for the purpose of this research. The full questionnaires could be found in Appendix A of this paper.

To control for biases, the questionnaires were introduced as a part of a cross-cultural consumer behavior research without any mention of compromise effect, delay option, accountability, or justification. Additionally, for the survey with only multiple-choice questions (control survey and accountability-treated survey), one validity-test question was put at the end to ensure participants' comprehension and attention while taking the survey. For the survey with open-ended justification sections (accountability- and justification- treated survey), the minimum number of characters for each open answer was limited at 25. Finally, to avoid biases, U.S. Dollar was the currency used in the surveys as it is a foreign currency for both Italian and Vietnamese participants.

#### **4.2. Targeted participants**

The targeted research participants were university students and could be divided into three main categories: Vietnamese students studying in Vietnam, Italian students studying in Italy, and Vietnamese students studying in Italy.

The surveys were shared to university students with the help of professor Massimo Warglien from Ca' Foscari University of Venice (Italy) and Dr. Hoang Gia Thu and Ms. Nguyen Thi Minh Hieu – lecturers of Hanoi University (Vietnam). In addition, the surveys were also shared on social media platforms created by students of these universities, for instances, class groups on Facebook, WhatsApp, or Telegram. In order to reach the Vietnamese students currently studying in Italy, the questionnaires were also published on a very popular and active student network (a Facebook group) of all Vietnamese students in Italy.

#### **4.3. Data analysis methods**

The paper used simple statistics and hypothesis testing methods, with the support of the IBM's SPSS Statistics software, to interpret the collected data from closed multiple-choice questions in the surveys. As the research focuses on behaviors of participants coming from diverse cultural backgrounds and the collected data are nominal/categorical, this paper does NOT assume normal distribution and thus adopts non-parametric tests, including Kruskal-Wallis H Tests and Mann-Whitney U Tests, for analyzing the surveys' results. These tests are often used to detect if there are statistically significant differences between two (Mann-Whitney U Tests) or more (Kruskal-Wallis H Tests) groups of a categorical independent variable on a continuous or ordinal dependent variable. Hence, they are highly suitable for testing the paper's proposed hypotheses.

## 5. Results

### 5.1. Descriptive analysis

**Table 1: Questionnaires' result summary table - in percentage (%)**

		Survey 1 Control			Survey 2 Accountability-treated			Survey 3 Accountability- & Justification-treated		
Compromise effect		Low-Low	Compromise	High-High	Low-Low	Compromise	High-High	Low-Low	Compromise	High-High
Smart phone	Italian students in Italy	13.46%	50.00%	36.54%	45.59%	41.18%	13.24%	50.00%	38.33%	11.67%
	Vietnamese students in Italy	20.00%	50.00%	30.00%	41.18%	41.18%	17.65%	50.00%	20.00%	30.00%
	Vietnamese students in Vietnam	16.39%	60.66%	22.95%	41.30%	45.65%	13.04%	45.65%	45.65%	8.70%
	Others	25.00%	37.50%	37.50%	0.00%	100.00%	0.00%	16.67%	50.00%	33.33%
	Total	16.31%	53.90%	29.79%	42.22%	44.44%	13.33%	46.97%	38.64%	14.39%
TV	Italian students in Italy	42.31%	46.15%	11.54%	13.24%	42.65%	44.12%	8.33%	46.67%	45.00%
	Vietnamese students in Italy	55.00%	30.00%	15.00%	11.76%	52.94%	35.29%	30.00%	50.00%	20.00%
	Vietnamese students in Vietnam	42.62%	40.98%	16.39%	17.39%	58.70%	23.91%	13.04%	52.17%	34.78%
	Others	12.50%	62.50%	25.00%	0.00%	50.00%	50.00%	0.00%	50.00%	50.00%
	Total	42.55%	42.55%	14.89%	14.07%	49.63%	36.30%	12.88%	49.24%	37.88%
Rice cooker	Italian students in Italy	36.54%	34.62%	28.85%	22.06%	38.24%	39.71%	30.00%	28.33%	41.67%
	Vietnamese students in Italy	25.00%	55.00%	20.00%	5.88%	58.82%	35.29%	5.00%	40.00%	55.00%
	Vietnamese students in Vietnam	16.39%	59.02%	24.59%	2.17%	52.17%	45.65%	2.17%	41.30%	56.52%
	Others	50.00%	12.50%	37.50%	0.00%	25.00%	75.00%	0.00%	33.33%	66.67%
	Total	26.95%	46.81%	26.24%	12.59%	45.19%	42.22%	15.15%	34.85%	50.00%
Moka	Italian students in Italy	25.00%	38.46%	36.54%	10.29%	32.35%	57.35%	15.00%	10.00%	75.00%
	Vietnamese students in Italy	65.00%	20.00%	15.00%	17.65%	41.18%	41.18%	35.00%	20.00%	45.00%
	Vietnamese students in Vietnam	59.02%	22.95%	18.03%	23.91%	41.30%	34.78%	26.09%	28.26%	45.65%
	Others	12.50%	12.50%	75.00%	0.00%	0.00%	100.00%	33.33%	16.67%	50.00%
	Total	44.68%	27.66%	27.66%	15.56%	35.56%	48.89%	22.73%	18.18%	59.09%
Delay effect		Low-Low	High-High	Delay	Low-Low	High-High	Delay	Low-Low	High-High	Delay
Blender	Italian students in Italy	28.85%	19.23%	51.92%	17.65%	30.88%	51.47%	23.33%	16.67%	60.00%
	Vietnamese students in Italy	25.00%	15.00%	60.00%	23.53%	23.53%	52.94%	25.00%	15.00%	60.00%
	Vietnamese students in Vietnam	22.95%	18.03%	59.02%	19.57%	39.13%	41.30%	21.74%	23.91%	54.35%
	Others	37.50%	25.00%	37.50%	0.00%	50.00%	50.00%	16.67%	33.33%	50.00%
	Total	26.24%	18.44%	55.32%	18.52%	33.33%	48.15%	22.73%	19.70%	57.58%
Washing Machine	Italian students in Italy	32.69%	38.46%	28.85%	19.12%	42.65%	38.24%	21.67%	40.00%	38.33%
	Vietnamese students in Italy	50.00%	5.00%	45.00%	11.76%	17.65%	70.59%	20.00%	30.00%	50.00%
	Vietnamese students in Vietnam	34.43%	26.23%	39.34%	23.91%	39.13%	36.96%	28.26%	28.26%	43.48%
	Others	37.50%	37.50%	25.00%	25.00%	50.00%	25.00%	16.67%	16.67%	66.67%
	Total	36.17%	28.37%	35.46%	20.00%	38.52%	41.48%	23.48%	33.33%	43.18%

In total, the research collected 516 responses, of which 108 responses were invalid. Invalid responses are those where respondents (1) are not students, (2) gave an incorrect answer to the validity-test question, or (3) completed the entire survey in less than two minutes. Among the 408 valid responses, the majority of the participants were female (approximately 71.8%) and were university students from economic- or management- related background (around 76%). For the purpose of this research, the participants were categorized in four main groups: Italian students studying in Italy (180 valid responses), Vietnamese students studying in Vietnam (153 valid responses), Vietnamese students studying in Italy (57 valid responses), and Others (18 valid responses). This research will focus primarily on the behaviors of the first three groups due to the insignificant number and diverse cultural backgrounds of participants in the group “Others”. The number of participants assigned to survey 1 (control), survey 2 (accountability-treated), and survey 3 (accountability- and justification-treated) were 52, 68, and 60 respectively for Italian students in Italy, 61, 46, and 46 respectively for Vietnamese students in Vietnam, 20, 17, and 20 respectively for Vietnamese students in Italy, and 8, 4, and 6 respectively for Others. In total, 141 participants were assigned to survey 1, 135 were assigned to survey 2, and 132 were assigned to survey 3.

Table 1 above presents the numerical summary of all the valid responses in percentages (see Appendix B for the summary of all the valid responses in numbers of participants). As stated in the research methodology, the experiment comprises three surveys: the controlled survey (survey 1), the survey treated with accountability (survey 2), and the survey treated with both accountability and justification (survey 3). Each of these three surveys consists of six main questions. The first four questions involve a purchase decision among three main alternatives – low quality low price (Low-Low), medium quality medium price (Compromise), or high quality high price (High-High) – of four different product categories: smartphone (question 1), TV (question 2), rice cooker (question 3), and moka (question 4). On the other hand, the last two questions involve a choice of whether to purchase a low quality low price product (Low-Low), to purchase a high quality high price product (High-High), or to wait a week and research more about the products before making a buying decision (Delay). The product categories used in these two questions are blender (question 5) and washing machine (question 6). For each question of each survey, the percentage of participants selecting each alternative (Low-Low, Compromise, High-High; or Low-Low, High-High, Delay) were calculated and presented in Table 1. For instance, 53.90%, 44.44%, and 38.64% of participants selected the compromise alternative in the smartphone question for survey 1, 2, and 3 respectively. More specifically,

50.00%, 41.18%, and 38.33% of Italian students in Italy chose the compromise option in the smartphone question for survey 1, 2, and 3 respectively. Table 1 could be read similarly for all other alternatives, all other student groups, in all questions/product categories, and of all surveys. The collected data is better visualized in the following graphs (see Figure 16 and 17).

**Figure 16: Percentages of participants choosing the compromise alternative**



**Figure 17: Percentages of participants delaying decision**

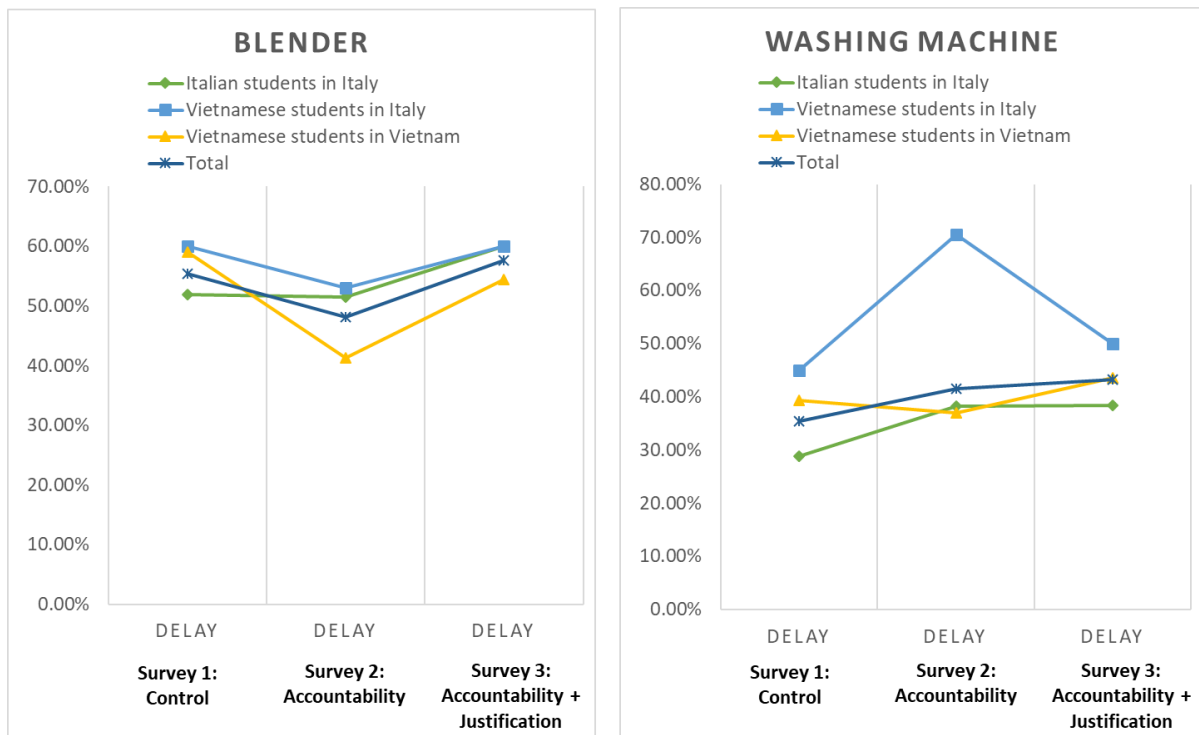


Figure 16 and 17 illustrated mixed and unclear trends in the tendency to select the compromise alternative and the delay option across student groups as well as across surveys. Hence, for more concrete conclusions to be made, the next section of this paper is dedicated to performing statistical and hypothesis testing analysis.

## 5.2. Quantitative analysis - Hypothesis testing

Regarding quantitative analysis, several non-parametric tests, including multiple Kruskal-Wallis H tests and Mann-Whitney U tests, were performed during this research.

**Table 2: Selection of compromise alternative and delay option – Kruskal-Wallis H tests:**  
**Testing statistical differences among student groups**  
 (Italian students in Italy vs. Vietnamese students in Italy vs. Vietnamese students in Vietnam)

<b>SURVEY 1 – CONTROL TREATMENT</b>						
<b>Test Statistics<sup>a,b</sup></b>						
	Smartphone	TV	Rice cooker	Moka	Blender - delay	Washing Machine - delay
Kruskal-Wallis H	1.503	1.549	6.990	4.125	.694	2.135
df	2	2	2	2	2	2
Asymp. Sig.	.472	.461	.030	.127	.707	.344
a. Kruskal Wallis Test						
b. Grouping Variable: Student Group						
<b>SURVEY 2 – ACCOUNTABILITY-TREATED</b>						
<b>Test Statistics<sup>a,b</sup></b>						
	Smartphone	TV	Rice cooker	Moka	Blender - delay	Washing Machine - delay
Kruskal-Wallis H	.242	2.891	3.455	1.112	1.310	6.530
df	2	2	2	2	2	2
Asymp. Sig.	.886	.236	.178	.574	.519	.038
a. Kruskal Wallis Test						
b. Grouping Variable: Student Group						
<b>SURVEY 3 – ACCOUNTABILITY- AND JUSTIFICATION-TREATED</b>						
<b>Test Statistics<sup>a,b</sup></b>						
	Smartphone	TV	Rice cooker	Moka	Blender - delay	Washing Machine - delay
Kruskal-Wallis H	3.861	.319	2.180	5.821	.380	.890
df	2	2	2	2	2	2
Asymp. Sig.	.145	.852	.336	.054	.827	.641
a. Kruskal Wallis Test						
b. Grouping Variable: Student Group						

Firstly, Kruskal-Wallis H tests were used to test the statistical differences in the tendency to select the compromise alternative and the delay option between student cultural groups: Italian students in Italy, Vietnamese students in Italy, and Vietnamese students in Vietnam (see Table

2). The paper used an  $\alpha$  of 0.05 for these tests as it is the most commonly used  $\alpha$  value in statistic testing. As can be seen from Table 2, overall, except for the rice cooker question, there was no significant difference among cultural groups in the tendency to select the compromise alternative and delay option in the control condition of survey 1 (except for the rice cooker case, the test statistics of all other product categories were larger than 0.05). Regarding survey 2, except for the washing machine case, also no significant difference could be found (the test statistics of all product categories except washing machine were larger than 0.05). In addition, for survey 3, there was no significant difference among cultural groups in all product categories (the test statistics of all product categories were larger than 0.05).

For the exception cases – the rice cooker and washing machine questions, further tests (Mann-Whitney U tests) were carried out comparing the cultural groups pair-wise (Italian students in Italy versus Vietnamese students in Italy, Vietnamese students in Italy versus Vietnamese students in Vietnam, and Italian students in Italy versus Vietnamese students in Vietnam) in order to determine more precisely where the differences arose. As there were three pairs to be compared, the  $\alpha$  for these Mann-Whitney U tests needed to be adjusted and equaled  $0.05/3 = 0.01667$ . As can be seen in Table 3, in the rice cooker case of survey 1, the differences in the tendency to select the compromise alternative arose between group 1 and 3 – between Italian students in

Italy and Vietnamese students in Vietnam (the test statistic was 0.010, smaller than 0.01667). Regarding the washing machine question of survey 2, Table 4 showed that the differences in

**Table 3: Mann-Whitney U tests - Survey 1, Rice cooker question**

<b>Test Statistics<sup>a</sup> - SURVEY 1</b>			
	<b>Group 1 vs. 2</b>	<b>Group 2 vs. 3</b>	<b>Group 1 vs. 3</b>
	Rice cooker	Rice cooker	Rice cooker
Mann-Whitney U	414.000	585.500	1199.000
Wilcoxon W	1792.000	795.500	2577.000
Z	-1.569	-.314	-2.577
Asymp. Sig. (2-tailed)	.117	.754	.010

a. Grouping Variable: Student Group  
 Group 1: Italian students in Italy  
 Group 2: Vietnamese students in Italy  
 Group 3: Vietnamese students in Vietnam

**Table 4: Mann-Whitney U tests - Survey 2, Washing machine question**

<b>Test Statistics<sup>a</sup> - SURVEY 2</b>			
	<b>Group 1 vs. 2</b>	<b>Group 2 vs. 3</b>	<b>Group 1 vs. 3</b>
	Washing Machine - delay	Washing Machine - delay	Washing Machine - delay
Mann-Whitney U	391.000	259.500	1544.000
Wilcoxon W	2737.000	1340.500	2625.000
Z	-2.386	-2.358	-.138
Asymp. Sig. (2-tailed)	.017	.018	.891

a. Grouping Variable: Student Group  
 Group 1: Italian students in Italy  
 Group 2: Vietnamese students in Italy  
 Group 3: Vietnamese students in Vietnam



the tendency to defer decision seemed to emerge primarily between group 1 and 2 (Italian students in Italy and Vietnamese students in Italy) and between group 2 and 3 (Vietnamese students in Italy and Vietnamese students in Vietnam). However, these differences were very close to but still not significant considering that the test statistics (0.017 and 0.018 respectively) were still not smaller than the adjusted  $\alpha$  of 0.01667. The differences among cultural groups demonstrated in Table 3 and 4 are also well-depicted in the line graphs above (see Rice cooker graph of Figure 16 and Washing machine graph of Figure 17).

**Table 5: Selection of compromise alternative and delay option – Kruskal Wallis H tests:  
Testing statistical differences among survey conditions**  
(control vs. accountability-treated vs. accountability- and justification-treated)

<b>ITALIAN STUDENTS IN ITALY</b>						
<b>Test Statistics<sup>a,b</sup></b>						
	Smartphone	TV	Rice cooker	Moka	Blender - delay	Washing Machine - delay
Kruskal-Wallis H	1.654	.246	1.404	13.272	1.116	1.429
df	2	2	2	2	2	2
Asymp. Sig.	.437	.884	.496	.001	.572	.489
a. Kruskal Wallis Test						
b. Grouping Variable: Survey Condition						
<b>VIETNAMESE STUDENTS IN VIETNAM</b>						
<b>Test Statistics<sup>a,b</sup></b>						
	Smartphone	TV	Rice cooker	Moka	Blender - delay	Washing Machine - delay
Kruskal-Wallis H	3.285	3.433	3.280	4.275	3.387	.417
df	2	2	2	2	2	2
Asymp. Sig.	.194	.180	.194	.118	.184	.812
a. Kruskal Wallis Test						
b. Grouping Variable: Survey Condition						
<b>VIETNAMESE STUDENTS IN ITALY</b>						
<b>Test Statistics<sup>a,b</sup></b>						
	Smartphone	TV	Rice cooker	Moka	Blender - delay	Washing Machine - delay
Kruskal-Wallis H	3.992	2.393	1.486	2.711	.240	2.618
df	2	2	2	2	2	2
Asymp. Sig.	.136	.302	.476	.258	.887	.270
a. Kruskal Wallis Test						
b. Grouping Variable: Survey Condition						

Next, more Kruskal-Wallis H tests were performed to test the statistical differences in the tendency to select the compromise alternative and the delay option between the survey conditions: control condition of survey 1, accountability-treated condition of survey 2, and accountability- and justification-treated condition of survey 3 (See Table 5). Once again, an  $\alpha$  of 0.05 was used for these tests. As can be observed from Table 5, for Italian students in Italy, except for the Moka case, no significant difference in the tendency to select the compromise option could be found among the survey conditions (aside from the Moka case, the test statistics of all other product categories were larger than 0.05). Furthermore, for Vietnamese students in Italy and Vietnamese students in Vietnam, none of the test statistics came back significant (smaller than 0.05), meaning that there was also no statistically significant difference in the tendency to choose the compromising choice among survey conditions for these cultural groups. Regarding the tendency to defer decision, likewise, no statistically significant difference was found among survey conditions for all three cultural backgrounds (all the test statistics were larger than 0.05).

## **Discussion**

From the above statistical tests' results, it seems that most of the collected data suggests there was no statistically significant difference in the tendency to select the compromise alternatives when participants chose for others versus for themselves, or when they were required to explain their decision versus when they were not. Additionally, there also seems to be no statistically significant difference among cultural groups. The same could be stated regarding the tendency to defer decisions. This implies that all our proposed hypotheses (hypothesis 1a, 1b, 1c, and hypothesis 2a, 2b, 2c) were rejected.

Since there was not much previous research regarding cultural variations in deferred decisions, that hypothesis 2a, 2b, and 2c were rejected still indicates an interesting finding. On the one hand, it may imply that deferring decision is a phenomenon common and treated similarly in both Vietnamese and Italian cultures. Moreover, it suggests that, facing an option to delay, individuals behave similarly when they make choices for themselves or for others, when they must justify their decisions or when they must not. On the other hand, this result might also indicate that the implemented experiment has some important limitations that future research should address in order to improve its findings. These limitations will be further elaborated in the final section of this paper.

That the hypothesis 1a, 1b, and 1c on compromise effect were rejected, however, is really unexpected because it, to some extent, contradicts with the findings of past research including the work of Chang et al. (2012) on compromise effect in choosing for others and the article of Briley et al. (2000) in East-West cultural variations in the tendency to select the compromise alternative when justification is required. Therefore, the following section of this paper will be dedicated to examining the potential reasons leading to the unexpected statistical insignificance of the experiment's results.

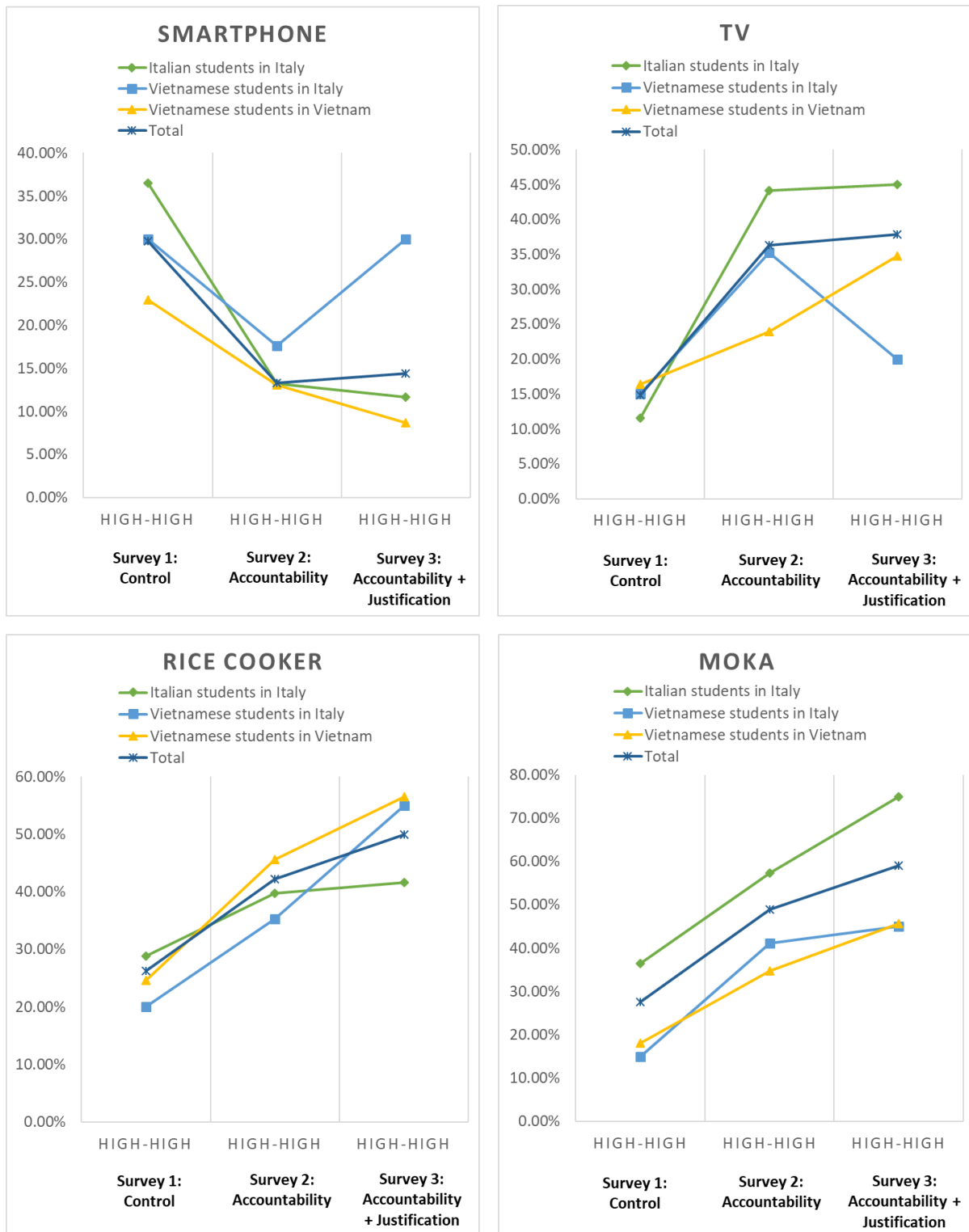
### 5.3. Potential reasons for insignificant results regarding compromise effect

Observing the collected data further, it seems that the differences in the tendency to select the Low-Low and High-High alternatives among the survey conditions were much more noticeable compared to that of the compromising choice (See Figure 18 and 19 for graphical illustrations).

**Figure 18: Percentages of participants choosing the Low-Low alternative**



**Figure 19: Percentages of participants choosing the High-High alternative**



Hence, further Kruskal-Wallis H tests and Mann-Whitney U tests were conducted aiming at verifying the statistical significance of these differences. Table 6 and 7 below demonstrated the test statistics results. Again, the  $\alpha$  value of 0.05 was used for Kruskal Wallis H tests and the adjusted  $\alpha$  of 0.01667 – rounding up to 0.017 – was used for the Mann-Whitney U tests.

As illustrated in Table 6, there were statistically significant differences in participants' tendency to select the Low-Low products among survey conditions: controlled condition, accountability-treated condition, and accountability- and justification- treated condition (the Kruskal-Wallis H test statistics were much smaller than 0.05 for all product categories). Moreover, the Mann-Whitney U tests between survey 1 and 2 and between survey 1 and 3 showed specifically that participants' tendency to select the Low-Low products significantly differed between the controlled condition and the accountability-treated condition, and between the controlled condition and the accountability- and justification-treated condition (all the test statistics were smaller than or equal to the rounded adjusted  $\alpha$  of 0.017). Nevertheless, there seemed to be no statistically significant

**Table 6: Selection of Low-Low alternative - Testing statistical differences among survey conditions**

<b>Kruskal-Wallis H test between survey 1, 2, and 3</b>				
<b>Test Statistics<sup>a,b</sup></b>				
	Smartphone	TV	Rice cooker	Moka
Kruskal-Wallis H	33.052	43.283	10.807	31.614
df	2	2	2	2
Asymp. Sig.	.000	.000	.005	.000

a. Kruskal Wallis Test  
b. Grouping Variable: Survey Condition

<b>Mann-Whitney U test between survey 1 and 2</b>				
<b>Test Statistics<sup>a</sup></b>				
	Smartphone	TV	Rice cooker	Moka
Mann-Whitney U	7051.500	6807.000	8151.000	6745.500
Wilcoxon W	17062.500	15987.000	17331.000	15925.500
Z	-4.734	-5.223	-2.980	-5.247
Asymp. Sig. (2-tailed)	.000	.000	.003	.000

a. Grouping Variable: Survey Condition

<b>Mann-Whitney U test between survey 2 and 3</b>				
<b>Test Statistics<sup>a</sup></b>				
	Smartphone	TV	Rice cooker	Moka
Mann-Whitney U	8487.000	8803.500	8682.000	8271.000
Wilcoxon W	17667.000	17581.500	17862.000	17451.000
Z	-.779	-.285	-.604	-1.488
Asymp. Sig. (2-tailed)	.436	.775	.546	.137

a. Grouping Variable: Survey Condition

<b>Mann-Whitney U test between survey 1 and 3</b>				
<b>Test Statistics<sup>a</sup></b>				
	Smartphone	TV	Rice cooker	Moka
Mann-Whitney U	6453.000	6544.500	8208.000	7263.000
Wilcoxon W	16464.000	15322.500	16986.000	16041.000
Z	-5.457	-5.435	-2.377	-3.818
Asymp. Sig. (2-tailed)	.000	.000	.017	.000

a. Grouping Variable: Survey Condition

difference in the tendency to select the Low-Low option between survey 2 and 3 as the Mann-Whitney U test statistics all came back very insignificant (much larger than 0.017). Overall, these results could be summed up in the following sentence: the tendency to select the low-quality low-price option changed when the participants chose for themselves versus for others no matter whether they were required to justify their choice or not.

The same results were observed for the High-High alternatives. As depicted in Table 7, there were highly statistically significant differences in participants' tendency to select the High-

High products among survey conditions: controlled condition, accountability-treated condition, and accountability- and justification- treated condition (the Kruskal-Wallis H test statistics were much smaller than 0.05 for all product categories). Furthermore, the Mann-Whitney U tests between survey 1 and 2 and between survey 1 and 3 demonstrated specifically that participants' tendency to select the High-High options significantly varied between the controlled condition and the accountability-treated condition, and between the controlled condition and the accountability- and justification-treated condition (all the relevant test statistics were much smaller than the rounded adjusted  $\alpha$  of 0.017). However, there seemed to be no statistically significant difference in the tendency to select the High-High products between survey 2 and 3 since the Mann-

**Table 7: Selection of High-High alternative - Testing statistical differences among survey conditions**

<b>Kruskal-Wallis H test between survey 1, 2, and 3</b>				
<b>Test Statistics<sup>a,b</sup></b>				
	Smartphone	TV	Rice cooker	Moka
Kruskal-Wallis H	15.007	21.901	16.868	28.488
df	2	2	2	2
Asymp. Sig.	.001	.000	.000	.000
a. Kruskal Wallis Test				
b. Grouping Variable: Survey Condition				
<b>Mann-Whitney U test between survey 1 and 2</b>				
<b>Test Statistics<sup>a</sup></b>				
	Smartphone	TV	Rice cooker	Moka
Mann-Whitney U	7951.500	7480.500	7996.500	7497.000
Wilcoxon W	17131.500	17491.500	18007.500	17508.000
Z	-3.307	-4.078	-2.795	-3.625
Asymp. Sig. (2-tailed)	.001	.000	.005	.000
a. Grouping Variable: Survey Condition				
<b>Mann-Whitney U test between survey 2 and 3</b>				
<b>Test Statistics<sup>a</sup></b>				
	Smartphone	TV	Rice cooker	Moka
Mann-Whitney U	8815.500	8769.000	8217.000	8001.000
Wilcoxon W	17995.500	17949.000	17397.000	17181.000
Z	-.250	-.267	-1.272	-1.669
Asymp. Sig. (2-tailed)	.802	.789	.203	.095
a. Grouping Variable: Survey Condition				
<b>Mann-Whitney U test between survey 1 and 3</b>				
<b>Test Statistics<sup>a</sup></b>				
	Smartphone	TV	Rice cooker	Moka
Mann-Whitney U	7873.500	7167.000	7095.000	6381.000
Wilcoxon W	16651.500	17178.000	17106.000	16392.000
Z	-3.046	-4.318	-4.040	-5.235
Asymp. Sig. (2-tailed)	.002	.000	.000	.000
a. Grouping Variable: Survey Condition				

Whitney U test statistics were all very insignificant (much larger than 0.017). Overall, like the Low-Low case, it could be said that the tendency to select the high-quality high-price option changed when the participants chose for themselves versus for others no matter whether they were required to justify their choice or not.

In a nutshell, the analysis of the participants' tendency to select the Low-Low as well as the High-High alternatives demonstrates that participants seem to have had a generally clear preference when making their choices, whether for themselves or for others. This argument

was made based on the seemingly preference-reversal observed. Even though the differences in participants' tendency to select the compromise option were not statistically significant, their tendency to select both the High-High and the Low-Low alternatives changed significantly across different survey treatments, suggesting preference-reversal. It appears that participants had different preferences, therefore made different choices, when they decided for themselves versus for others. This might be because of the high familiarity of the product categories (i.e. smartphones and televisions) or the low costs which lead to less mental effort being spent on consideration and comparison among alternatives (i.e. rice cookers and mokas). Additionally, when required to choose for others, participants were asked to make choices for their immediate family or immediate family members who they most likely have a close relationship with. Hence, it is very possible that the participants had a clear understanding of the family's or family members' preferences and made choices accordingly. In other words, choosing for an immediate family or an immediate family member entails a rather low preference uncertainty – consistent with the findings of Chang et al. (2012).

As mentioned in the literature review above, context effects usually do not have a strong influence on buying decisions of consumers when they have a clear preference (Simonson & Tversky, 1992). Therefore, the generally clear preferences, or low preference uncertainty, of the participants in this experiment could very potentially be the reasons why the changes in compromise effect across survey conditions (control versus accountability-treated versus accountability- and justification-treated) and across cultural groups (Italian students in Italy versus Vietnamese students in Italy versus Vietnamese students in Vietnam) were not statistically significant. In other words, these may be the reasons why the proposed research hypotheses on compromise effect (hypothesis 1a, 1b, and 1c) were rejected.



## **6. General Discussion and Implications**

### **6.1. General Discussion**

A large amount of research has been done to determine the influences of various cultures on individual's decision-making and behaviors. Among these research is the work of Briley et al. (2000) on compromise effect across cultures. Compromise effect suggests that an option tends to be more likely selected when it becomes the middle or compromise option in a set (Simonson, 1989). According to Briley et al. (2000), principles enjoining compromise are less salient in North American culture than in East Asian cultures and the cultural variations in the tendency to select the compromise alternatives are larger when participants are required to give reason for their choice. This finding indicates that cultures also influence the compromise effect in consumer behaviors. Chang et al. (2012) proposed that, when no justification is required, the compromise effect is larger when individuals make choices for others rather than for themselves especially if the relationship is distant rather than close; however, when justification is required, an opposite trend is observed: compromise effect is less significant when individuals make choices for others rather than for themselves. There is, nonetheless, not much previous research regarding the impacts of making choices for others (accountability) on compromise effects across cultures.

This paper, therefore, was initially set out to provide a better perspective on compromise effect, under the influence of both accountability and justification, in consumer behaviors across cultures by involving two less familiar countries: Italy and Vietnam. To do so, it conducted quantitative research through the means of online surveys, with three different survey treatments: controlled, accountability-treated (choosing for others), and accountability- and justification-treated (choosing for others and explaining choice). The targeted research participants were university students and could be divided into three main categories: Vietnamese students in Vietnam, Italian students in Italy, and Vietnamese students in Italy.

Unexpectedly, the experiment's results suggest that there was no statistically significant difference in the tendency to select the compromise alternatives when participants chose for others versus for themselves, or when they were required to explain their decision versus when they were not. Additionally, there also seems to be no statistically significant difference among cultural groups. These findings, to some extent, contradict with the results of previous research such as the work of Chang et al. (2012) and Briley et al. (2000) and imply that all the proposed hypotheses regarding compromise effect were rejected.

Nevertheless, further analysis of the participants' tendency to select the low-quality low-price and the high-quality high-price alternatives shows that participants seem to have had a generally clear preference when making their choices, demonstrating a preference-reversal tendency when making choices for themselves versus for others. In other words, participants seem to have switched their preferences when they chose for themselves versus for others, either from Low-Low to High-High, or vice versa. This rather clear preference might be the result of the high familiarity of the product categories used in the questionnaire (e.g. smartphones and televisions) or the low costs which lead to less mental effort being spent on comparison among alternatives (e.g. rice cookers and mokas). In addition, in the surveys treated with accountability, participants were asked to make choices for their immediate family members who they most likely have a close relationship with and know well. This entails a rather low preference uncertainty – consistent with the findings of Chang et al. (2012).

On the one hand, the preference reversal observed is a remarkably interesting finding on its own; it illustrates very well the differences in decisions of individuals when they make choices for themselves versus for others. On the other hand, it provides an explanation for the insignificance of the compromise effect. Compromise effect usually does not have a strong influence on buying decisions of consumers when they have a clear preference (Simonson & Tversky, 1992); hence, the rather clear preferences of the participants in this experiment could potentially be the reasons why the changes in compromise effect across survey conditions (control versus accountability-treated versus accountability- and justification-treated) and across cultural groups (Italian students in Italy versus Vietnamese students in Italy versus Vietnamese students in Vietnam) were not statistically significant.

Next, although a substantial amount of research has been conducted examining the impacts of cultures on individual's behaviors and decision-making, not many previous works mentioned cultural variations in deferred decisions – the decision to not buy anything, to delay buying, or to buy somewhere else.

Thus, this paper was also carried out in order to analyze the effect of accountability and justification on the selection of the delay option across cultures. It incorporated questions regarding defer decisions in the experiment structure mentioned above. The paper's results proposed that there was no statistically significant difference in the tendency to defer decisions when participants made choices for others versus for themselves, or when they were required to explain their decision versus when they were not. Furthermore, there also seems to be no

statistically significant difference among cultural groups. These findings may imply that deferring decision is a phenomenon common and treated similarly in both Vietnamese and Italian cultures. In addition, they suggest that, facing an option to delay, people behave similarly when they make choices for themselves or for others, when they must justify their decisions or when they must not. On the other hand, these results might also indicate that the implemented experiment has some important limitations that future research should address in order to improve its findings.

## **6.2. Implications**

Overall, even though all its initially proposed hypotheses were rejected, this research still provides valuable insights concerning cultural variations in the compromise effect and the tendency to defer decision, under the influence of accountability and justification. Especially, this paper demonstrated the differences in preferences and decisions of individuals when they make choices for others versus for themselves. It attempts to address a knowledge gap in previous research, hence, contributes to improve the body of theoretical and empirical knowledge on consumer behavior across cultures.

Despite recent claims of reversed globalization, international flows of trade, information, people, and capital all rose significantly in 2017 and the world has become more globalized than ever, according to the DHL Global Connectedness Index 2018 (Altman et al., 2019). In this increasingly interconnected world, gaining a better understanding of cultural diversities in consumer behaviors is crucial for firms in developing their sales and marketing strategies. This research, therefore, has relevant managerial implications considering the currently growing international business environment. Its findings could have important marketing implications for analyzing current competitive setting, for consumer choice prediction, for designing of competitive strategies, for product-positioning and presentation of alternative sets to consumers, and for improving communications and sale tactics (Simonson & Tversky, 1992).

## **7. Research Limitations and Possible Future Directions**

### **7.1. Research Limitations**

This research is subject to several limitations concerning the design of the experiment as well as the selection of targeted participants.

Regarding experiment design, the first limitation observed is the choice of product categories to be included in the questionnaires. This paper included products that are highly familiar such as smartphones, televisions, blenders, or washing machines. The original purpose of this selection was to contrast these common product categories with the more culturally sensitive products like rice cookers (familiar only to Vietnamese culture) and moka coffee maker (familiar only to Italian culture). Nevertheless, this selection resulted in participants having rather clear preferences and, thus, undermined the compromise effect under investigation. According to Simonson and Tversky (1992), context effects in general usually do not have a strong influence on buying decisions of consumers when they have a clear preference. Furthermore, for the culturally sensitive product categories, this paper involved items that are sufficiently interesting but are quite low in costs. The low costs led participants to spend less cognitive effort on evaluation and comparison among alternatives. As demonstrated by Lichters et al. (2016), the greater cognitive effort spent on buying decisions regarding durables (compared to decisions regarding FMCG) enhances the compromise effect. It could be inferred from this finding that selecting more expensive and long-lasting durables would have benefited the significance of this research's results.

Another limitation in terms of experiment design could be seen in the two surveys treated with accountability. In these surveys, participants were asked to make choices for their immediate family as the family (or the household) is considered to be the most important consumer unit in marketing and consumer behavior research (Lantos, 2015). However, choosing for immediate family members entails a rather low preference uncertainty – consistent with the findings of Chang et al. (2012); hence, it weakens the compromise effect and possibly also participants' tendency to defer decisions. In addition, in the justification-treated survey condition, the space for explanation was positioned below each question. Despite still being on the same page, this positioning might encourage participants to justify their “past” decisions instead of initiating the decision-making process with justification in mind. A solution to this limitation could be to put the space for explanation above the list of alternatives following the experiment of Briley et al. (2000).

The last limitation regarding experiment design refers to the fact that the experiment was strictly hypothetical and did not involve any real purchase, real money, or real financial consequence. Moreover, each question listed only three simple alternatives varying on only two dimensions (quality and price); this is very different from the real-world settings where customers often have a wide variety of products to choose from. This, therefore, lowered the practicality and the applicability of the research.

Concerning the targeted participants, the most significant limitation of this research is the limited sample size. The research collected in total 408 valid responses, of which 180 are from Italian students studying in Italy, 153 are from Vietnamese students studying in Vietnam, 57 are from Vietnamese students studying in Italy, and 18 are Others. This does not look like such a small sample; however, considering that there were three different surveys, the numbers appear much smaller. The number of participants assigned to survey 1, 2, and 3 were 52, 68, and 60 respectively for Italian students in Italy, 61, 46, and 46 respectively for Vietnamese students in Vietnam, 20, 17, and 20 respectively for Vietnamese students in Italy, and 8, 4, and 6 respectively for Others. Despite being adequate for statistic tests in most cases, these numbers are quite small for producing highly significant results.

Another limitation of the research is that the research participants were educated university students who may decide differently from an average consumer. Moreover, as students usually do not have a full-time job and a fixed stream of income, they are often not the buyers of the domestic durables mentioned in the survey like televisions or washing machines. Additionally, since the data of this research were mainly collected from Hanoi University and Ca' Foscari University of Venice, the majority of this research's participants comes from Northern Italy and Northern Vietnam. This is a notable limitation as there are significant cultural differences between the North and the South in both countries, making the generalization of the research into comparisons between Vietnamese and Italians somewhat less accurate.

## **7.2. Possible Future Directions**

First of all, future research should acknowledge and put effort in addressing the limitations mentioned above, for instances, by using less familiar and higher-in-value product categories, by redesigning and repositioning the questions of the surveys, by improving the practicality of the experiment through incorporating real purchase decisions with financial consequences, or by enlarging the sample size and involving participants of more diverse backgrounds rather than just university students.

Beside addressing the limitations, future studies could also be implemented on a larger scale involving more countries around the world and different types of context effects such as attraction and similarity effects. In terms of delay decisions, future research could examine the impacts of compromise effect in specific, or of context effects in general, on participants' tendency to defer decisions across cultures. These impacts could also be investigated under the influence of accountability and justification.

It would be interesting for future research to compare also cultural variations in group settings instead of examining only individuals.

Finally, aside from consumer behaviors, future cross-cultural research on context effects and deferred decisions could also emphasize other aspects, such as strategic choices in management decisions, negotiation behaviors, and so on.





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## APPENDICES

### Appendix A: Questionnaires

#### Consumer Behavior Research

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##### Start of Block: Privacy statement

Dear participant,

Thank you for agreeing to take part in this survey!

My name is Nguyen Thu Tra. I am a student of the Master of International Management at Ca' Foscari University of Venice. I would like to invite you to participate in my master thesis research on consumer behaviors across cultures.

This study is being conducted at the Department of Management, Ca' Foscari University of Venice. Its purpose is to understand how people from different cultures make buying decisions. You will be asked to answer some short questions (many of which are multiple-choice). The study should take approximately 5-10 minutes; however, there is no time limit. I kindly ask you to read each question carefully, answer honestly and to the best of your ability. Once again, thank you very much for your support.

*Participation in this study may be an interesting learning experience with insights into consumer's decision making. There are no anticipated risks associated with participating in this study. All data you provide will be strictly confidential and will not be connected to your email, IP address, or any other personal information. Your participation will remain anonymous. By participating in this survey, you provide consent that the information acquired can be used in this research project. Your participation in this study is completely voluntary. Should you decide to withdraw by exiting the questionnaire, your submitted answers up to the point may not be used for the study purposes. Participation in this study does not oblige you to participate in any further experiments.*

##### End of Block: Privacy statement

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##### Start of Block: General Information

Are you a university student?

Yes

No

*Skip To: End of Survey If Are you a university student? = No*

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Page Break

What is your nationality?

- Italian
- Vietnamese
- Others, please specify: \_\_\_\_\_

What is your gender?

- Male
- Female

Where are you studying?

- Italy
- Vietnam
- Other countries, please specify: \_\_\_\_\_

What is your study program?

- Economics/Management-related (e.g. Economics, Management, Marketing, Finance, Accounting, etc.)
- Others, please specify: \_\_\_\_\_

Are you living together with your family?

- Yes
- No

**End of Block: General Information**

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**Start of Block: Survey 1**



Your phone broke and you need to buy a new smart phone. At the store, 3 alternatives are available, which one would you choose? *(Except for the differences below, all the other features are the same in all 3 smart phones)*

- A phone with 8MP camera at \$199
- A phone with 12MP camera at \$249
- A phone with 20MP camera at \$349

You are moving into a new apartment that you just bought and you want to buy a TV for your living room. In the store, 3 options are available, which one would you choose? *(Except for the differences below, all the other features are the same in all 3 TVs)*

- A 32-inch TV at \$200
- A 43-inch TV at \$350
- A 55-inch TV at \$560

You want to buy an electric rice cooker. At the store, 3 options are available, which one would you choose? *(Except for the differences below, all the other features are the same in all 3 rice cookers)*

- A rice cooker with the inside made of aluminum alloy and NOT coated with non-stick Teflon (medium quality) at \$17
- A rice cooker with the inside made of aluminum alloy and coated with non-stick Teflon (high quality) at \$47
- A rice cooker with the inside made of non-stick cast iron (very high quality) at \$65

You want to buy a stove-top Moka coffee pot (an Italian-style coffee maker for the home). Three alternatives are available at the store, which one would you choose? *(Except for the differences below, all the other features are the same in all 3 Moka pots)*

- A Moka pot made of medium quality aluminum at \$14
- A Moka pot made of high-quality aluminum at \$24
- A Moka pot made of stainless steel (very durable) at \$30

You want to buy a blender and from your research you learnt that the higher the capacity of the blender (measured in Watts) the more powerful the blender is. You pass by a store that is having a one-day clearance sale and see that 2 types of blenders are available there, both are well below the list price. Which one would you buy? (*Except for the differences below, all the other features are the same in both blenders*)

- A blender with 300W maximum capacity at \$25
- A blender with 1200W maximum capacity at \$100
- You would prefer to wait a week and learn more about the various models before you decide

You need to buy a washing machine for your new apartment. You pass by a store that is having a one-day clearance sale and see that 2 types of washing machines are available there, both are well below the list price. Which one would you buy? (*Except for the differences below, all the other features are the same in both washing machines*)

- A washing machine with 6kg maximum capacity at \$300
- A washing machine with 6.5kg maximum capacity at \$350
- You would prefer to wait a week and learn more about the various models before you decide

Page Break

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Which item did NOT appear in the questionnaire you just took?

- Smart phone
- Moka coffee pot
- Electric Rice cooker
- Washing machine
- TV
- Air conditioner

End of Block: Survey 1

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Start of Block: Survey 2

Your mother needs a new smartphone but does not know which one to choose, so she asked you to buy one for her. At the store, 3 alternatives are available, which one would you choose for your mother? *(Except for the differences below, all the other features are the same in all 3 smart phones)*

- A phone with 8MP camera at \$199
- A phone with 12MP camera at \$249
- A phone with 20MP camera at \$349

Your family just fixed and redecorated the living room and needs a new TV. You are assigned the task of buying it. In the store, 3 options are available, which one would you choose for your family? *(Except for the differences below, all the other features are the same in all 3 TVs)*

- A 32-inch TV at \$200
- A 43-inch TV at \$350
- A 55-inch TV at \$560

Your family needs an electric rice cooker and asked you to go and buy it. At the store, 3 options are available, which one would you choose for your family? *(Except for the differences below, all the other features are the same in all 3 rice cookers)*

- A rice cooker with the inside made of aluminum alloy and NOT coated with non-stick Teflon (medium quality) at \$17
- A rice cooker with the inside made of aluminum alloy and coated with non-stick Teflon (high quality) at \$47
- A rice cooker with the inside made of non-stick cast iron (very high quality) at \$65

Your father asked you to go and buy a stove-top Moka coffee pot (an Italian-style coffee maker for the home) for him. Three alternatives are available at the store, which one would you choose for your father? *(Except for the differences below, all the other features are the same in all 3 Moka pots)*

- A Moka pot made of medium quality aluminum at \$14
- A Moka pot made of high-quality aluminum at \$24
- A Moka pot made of stainless steel (very durable) at \$30

The blender in your house just broke and your family assigned you the task to go and buy a new one. From your research you learnt that the higher the capacity of the blender (measured in Watts) the more powerful the blender is. You pass by a store that is having a one-day clearance sale and see that 2 types of blenders are available there, both are well below the list price. Which one would you buy for your family? *(Except for the differences below, all the other features are the same in both blenders)*

- A blender with 300W maximum capacity at \$25
- A blender with 1200W maximum capacity at \$100
- You would prefer to wait a week and learn more about the various models before you decide

Your family assigned you the task of buying a new washing machine for the house. You pass by a store that is having a one-day clearance sale and see that 2 types of washing machines are available there, both are well below the list price. Which one would you buy for your family? *(Except for the differences below, all the other features are the same in both washing machines)*

- A washing machine with 6kg maximum capacity at \$300
- A washing machine with 6.5kg maximum capacity at \$350
- You would prefer to wait a week and learn more about the various models before you decide

Page Break

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Which item did NOT appear in the questionnaire you just took?

- Smart phone
- Moka coffee pot
- Electric Rice cooker
- Washing machine
- TV
- Air conditioner

End of Block: Survey 2

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Start of Block: Survey 3

Your mother needs a new smartphone but does not know which one to choose, so she asked you to buy one for her. At the store, 3 alternatives are available, which one would you choose for your mother? **Please explain your answer in the box below.** (*Except for the differences below, all the other features are the same in all 3 smart phones*)

- A phone with 8MP camera at \$199
- A phone with 12MP camera at \$249
- A phone with 20MP camera at \$349

Please explain your answer here:

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Page Break

Your family just fixed and redecorated the living room and needs a new TV. You are assigned the task of buying it. In the store, 3 options are available, which one would you choose for your family? **Please explain your answer in the box below.** (*Except for the differences below, all the other features are the same in all 3 TVs*)

- A 32-inch TV at \$200
- A 43-inch TV at \$350
- A 55-inch TV at \$560

Please explain your answer here:

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Page Break

Your family needs an electric rice cooker and asked you to go and buy it. At the store, 3 options are available, which one would you choose for your family? **Please explain your answer in the box below.** *(Except for the differences below, all the other features are the same in all 3 rice cookers)*

- A rice cooker with the inside made of aluminum alloy and NOT coated with non-stick Teflon (medium quality) at \$17
- A rice cooker with the inside made of aluminum alloy and coated with non-stick Teflon (high quality) at \$47
- A rice cooker with the inside made of non-stick cast iron (very high quality) at \$65

Please explain your answer here:

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Page Break

Your father asked you to go and buy a stove-top Moka coffee pot (an Italian-style coffee maker for the home) for him. Three alternatives are available at the store, which one would you choose for your father? **Please explain your answer in the box below.** *(Except for the differences below, all the other features are the same in all 3 Moka pots)*

- A Moka pot made of medium quality aluminum at \$14
- A Moka pot made of high-quality aluminum at \$24
- A Moka pot made of stainless steel (very durable) at \$30

Please explain your answer here:

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Page Break

The blender in your house just broke and your family assigned you the task to go and buy a new one. From your research you learnt that the higher the capacity of the blender (measured in Watts) the more powerful the blender is. You pass by a store that is having a one-day clearance sale and see that 2 types of blenders are available there, both are well below the list price. Which one would you buy for your family? **Please explain your answer in the box below.** (*Except for the differences below, all the other features are the same in both blenders*)

- A blender with 300W maximum capacity at \$25
- A blender with 1200W maximum capacity at \$100
- You would prefer to wait a week and learn more about the various models before you decide

Please explain your answer here:

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Page Break

Your family assigned you the task of buying a new washing machine for the house. You pass by a store that is having a one-day clearance sale and see that 2 types of washing machines are available there, both are well below the list price. Which one would you buy for your family? **Please explain your answer in the box below.** (*Except for the differences below, all the other features are the same in both washing machines*)

- A washing machine with 6kg maximum capacity at \$300
- A washing machine with 6.5kg maximum capacity at \$350
- You would prefer to wait a week and learn more about the various models before you decide

Please explain your answer here:

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End of Block: Survey 3

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## Appendix B: Questionnaires' Result summary table – in number of participants

**Table 8: Questionnaires' Result summary table – in number of participants**

		Survey 1 Control			Survey 2 Accountability-treated			Survey 3 Accountability- & Justification-treated		
Compromise effect		Low-Low	Compromise	High-High	Low-Low	Compromise	High-High	Low-Low	Compromise	High-High
Smart phone	Italian students in Italy	7	26	19	31	28	9	30	23	7
	Vietnamese students in Italy	4	10	6	7	7	3	10	4	6
	Vietnamese students in Vietnam	10	37	14	19	21	6	21	21	4
	Others	2	3	3	0	4	0	1	3	2
	Total	23	76	42	57	60	18	62	51	19
TV	Italian students in Italy	22	24	6	9	29	30	5	28	27
	Vietnamese students in Italy	11	6	3	2	9	6	6	10	4
	Vietnamese students in Vietnam	26	25	10	8	27	11	6	24	16
	Others	1	5	2	0	2	2	0	3	3
	Total	60	60	21	19	67	49	17	65	50
Rice cooker	Italian students in Italy	19	18	15	15	26	27	18	17	25
	Vietnamese students in Italy	5	11	4	1	10	6	1	8	11
	Vietnamese students in Vietnam	10	36	15	1	24	21	1	19	26
	Others	4	1	3	0	1	3	0	2	4
	Total	38	66	37	17	61	57	20	46	66
Moka	Italian students in Italy	13	20	19	7	22	39	9	6	45
	Vietnamese students in Italy	13	4	3	3	7	7	7	4	9
	Vietnamese students in Vietnam	36	14	11	11	19	16	12	13	21
	Others	1	1	6	0	0	4	2	1	3
	Total	63	39	39	21	48	66	30	24	78
Delay effect		Low-Low	High-High	Delay	Low-Low	High-High	Delay	Low-Low	High-High	Delay
Blender	Italian students in Italy	15	10	27	12	21	35	14	10	36
	Vietnamese students in Italy	5	3	12	4	4	9	5	3	12
	Vietnamese students in Vietnam	14	11	36	9	18	19	10	11	25
	Others	3	2	3	0	2	2	1	2	3
	Total	37	26	78	25	45	65	30	26	76
Washing Machine	Italian students in Italy	17	20	15	13	29	26	13	24	23
	Vietnamese students in Italy	10	1	9	2	3	12	4	6	10
	Vietnamese students in Vietnam	21	16	24	11	18	17	13	13	20
	Others	3	3	2	1	2	1	1	1	4
	Total	51	40	50	27	52	56	31	44	57