DIALECTICISM, COLLECTIVISM, AND STEREOTYPE CHANGE

by

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THESIS

Presented to the Faculty of

The University of Houston-Clear Lake

In Partial Fulfillment

Of the Requirements

For the Degree

MASTER OF SCIENCE

in Psychology

THE UNIVERSITY OF HOUSTON-CLEAR LAKE

DECEMBER, 2022

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Dedication

This thesis is dedicated to my clients, past, present, and future. Each of you has given me a greater purpose and a reason to continue through my lowest moments.

Acknowledgements

ABSTRACT

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University of Houston-Clear Lake, 2022

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This study explores the relationship between cultural variables, individualism,

collectivism, and dialecticism, with the tendency to modify initial beliefs (i.e.,

stereotypes) after being presented with contradictory information. Using the Singelis et

al. (1995) Individualism and Collectivism Scale and the Spencer-Rodgers et al. (2015)

Dialectical Self Scale, as well as a Stereotyping Questionnaire adapted from the research

of Spencer-Rodgers et al. (2007), this study explores this relationship in three different

racial/ethnic cultures within the United States, as these populations theoretically differ on

these cultural variables. It was hypothesized that participants identifying as Asian (a

population theoretically relatively high on dialecticism and collectivism) will be more

likely to adjust their initial beliefs about a novel social group than participants identifying

as Latinx (theoretically high in collectivism, low in dialecticism) or White non-Latinx

(theoretically low in both collectivism and dialecticism). I found support for the concept

that cultural variables, independent of race or ethnicity, correlate with stereotype change,

although I did not find support for the hypothesis that these cultural groups would differ

in predictable ways according to the cultural constructs in question. This study attempts to address the lack of research about the influence of cultural variables on stereotyping processes, as well as compensate for the lack of cross-cultural studies which allow for the generalization of findings beyond Westernized, educated, industrialized, rich, and democratic (W.E.I.R.D) settings.

Keywords: stereotyping processes, stereotype change, individualism/collectivism, dialecticism, W.E.I.R.D.

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CHAPTER I:

INTRODUCTION

Context of the Problem

Intergroup relations, including prejudice, stereotyping, and discrimination, are

some of the most studied topics in social psychology, and there has been considerable

research on both the content of stereotypes and processes of stereotyping. However, there

is a growing awareness in the field that the populations typically sampled for

psychological research, W.E.I.R.D. (Western, educated, industrialized, rich, and

democratic) people, might not accurately represent the rest of the world and, therefore,

findings may not generalize to other cultures and countries (Henrich et al., 2010). This

likely holds true for the research on stereotyping; for instance, intergroup attitudes and

the ways that they are expressed among college students in the United States differ even

from those of non-student adults in the United States (Henry, 2008). This difference even

within the same country has implications for the broader standing research on intergroup

relations unless the potential impact of culture is specifically addressed in the literature.

Purpose of the Study

While there have been large cross-cultural comparisons of stereotype content

(Cuddy et al., 2009; Williams et al., 1999), the study of stereotyping processes has been

lacking this cultural element (Fiske, 2000; Spencer-Rodgers et al., 2007; Williams &

Spencer-Rodgers, 2010). As explained by Williams and Spencer-Rodgers (2010),

"research on stereotyping processes is incomplete without an investigation of both their

universality versus cross-cultural variability and their central role in cultural

communication" (p. 592). Therefore, the aim of this study is to contribute to filling this

gap and explore the role of culture in stereotyping processes. Specifically, how do

cultural variables of dialecticism and collectivistic/individualistic orientation, whether

through natural cultural predisposition or primed manipulation, impact a person's ability to change their stereotypes?

CHAPTER II:

LITERATURE REVIEW

Culture

Collectivism and Individualism

Collectivism and individualism are two of the most widely studied constructs in cultural psychology. They have been described as examples of a cultural syndrome, which is a "pattern of shared attitudes, beliefs, categorizations, self-definitions, norms, role definitions, and values that is organized around a theme that can be identified among those who speak a particular language, during a specific historic period, and a definable geographic region" (Triandis, 1996, p. 408). In general, individualism as a cultural syndrome includes valuing self-reliance, uniqueness, personal attitudes, competition, prioritization of personal goals, and independence from others; in contrast, collectivism is associated with interdependence, prioritization of group goals, conformity to group norms, and harmony with and feelings of duty towards group members (Green et al., 2005; Triandis, 2001).

Individualism and collectivism are often used as descriptors for countries, regions, continents, or cultures; for instance, North America is commonly described as being high in individualistic traits whereas Asia is described as more collectivistic (Triandis, 1996). Individualism and collectivism can also be measured at the individual level, although they are known to change according to the context when measured in this way (Triandis, 2001).

Dialecticism

Another construct that describes and explains cultural differences is dialecticism. It was originally defined as a way of thinking which is characterized by change, contradiction, and holism (Peng & Nisbett, 1999). More recent conceptualizations call it

a "constellation of lay beliefs" as opposed to a cognitive style (Spencer-Rodgers et al., 2010, p. 297), and it is grounded in the beliefs and symbols of Taoism, Buddhism, and Confucianism (Spencer-Rodgers & Peng, 2018). Whereas Westerners tend to be more linear in their logic, Chinese individuals tend to be more dialectical (Peng & Nisbett, 1999).

Stereotyping and Stereotype Change

Stereotype change as defined in this study is the magnitude of the change in stereotyping that occurs when people are given information about an individual that directly opposes a previously held belief about the individual and associated social group. An example of a situation which might elicit stereotype change would be if an individual is perceived to be adventurous based on their group membership, but it is then discovered that the person is more of a homebody (stereotype about an individual; stereotype change based on information about the individual). As another example, a person might go through the stereotype change process if a person perceives an individual to be adventurous based on their group membership, but then they find out that they are actually a member of a different group (with a different stereotype of being homebodies) than originally assumed (stereotype about an individual; stereotype change based on information about group membership). It is the last definition of stereotype change (in which the new information about the individual concerns their group membership) which is used in this study.

To my knowledge, no research has been conducted to directly explore how stereotype change differs according to cultural variables, specifically collectivism and individualism. However, there is research examining these cultural variables and other constructs that are related to stereotype change, specifically intergroup contact and

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attribution. Similarly, there are hypotheses about the relationship between dialecticism and stereotype change, although no studies that explore it directly.

Intergroup Contact and Individualism/Collectivism

Findings have shown that East Asians are more likely than Americans to associate individual traits with group membership (Spencer-Rodgers et al., 2007). Interestingly, Fiske (2000) speculated that people with a more individualistic orientation belong to more groups and have more opportunities for intergroup contact; therefore, they might have more opportunities to reduce bias but also more opportunities to demonstrate bias. In contrast, people with a more collectivistic orientation have fewer opportunities to demonstrate bias but also have fewer opportunities for it to be reduced in their daily lives (Fiske, 2000). Therefore, given the evidence that born-and-raised collectivists are more likely to stereotype (Spencer-Rodgers et al. 2007), it is also possible that they are less likely to change their stereotypes. However, this hypothesis is qualified by further research on stereotyping, cultural variables, and attributions.

Attribution and Individualism/Collectivism

Stereotypes can be compared with attributions, which are defined as "cause-and-effect explanations of why a specific individual or group behaved in a certain manner" (Brandt & Reyna, 2010, p. 2). Attributions differ across cultures and depending on different cultural constructs and syndromes. For instance, East Asians take more of the situation into account when searching for explanations of individuals' behaviors – called situationism or contextualism (Choi et al., 1999). Although collectivists are more likely to stereotype because they are more likely to attribute individual traits to the context of the group (Spencer-Rodgers et al., 2007), they also pay more attention to the social context when making evaluations about individuals (Spencer-Rodgers et al., 2010).

However, these comparisons are limited by the fact that they do not distinguish between attributions and stereotypes.

There is contradictory evidence which both supports and refutes the idea that the constructs of stereotypes and attributions are close enough to generalize between the two. Stereotypes carry attributional information (Brandt & Reyna, 2010); in fact, Williams and Spencer-Rodgers (2010) have argued that stereotyping can be conceptualized as a type of attribution. However, other researchers have argued that "attributing causes and ascribing dispositions are different psychological mechanisms, and stereotyping does not necessarily involve attributional analysis" (Spencer-Rodgers et al., 2007, p. 526). Therefore, attributional differences may not be a solid theoretical framework for hypothesizing about cultural differences in stereotyping (Spencer-Rodgers et al., 2007). Importantly, stereotypes are not just influenced by individualistic or collectivistic orientation; they also may vary according to dialecticism.

Stereotypes and Dialecticism

Spencer-Rodgers et al. (2012) have previously hypothesized that stereotyping is influenced by dialecticism. They suggested that it is possible that, because of the tolerance for contradiction and change that accompanies dialecticism, people high in this variable might be more likely to change the stereotypes that they hold (Spencer-Rodgers et al., 2012). Similarly, in their original study on dialectical thinking, Peng and Nisbett (1999) stated that "Chinese moderated their views when confronted with opposing propositions whereas Americans became more extreme" (p. 22). Overall, there is evidence, although it is limited, to suggest that dialecticism influences stereotyping and stereotype change.

CHAPTER III:

METHODOLOGY

This study examined whether individualism/collectivism and dialectical thinking, based on the culture in which someone is born and socialized, is associated with stereotype change. Participants were individuals from three cultures which were chosen for their different levels of each of these characteristics based on previous research: Asian (high in collectivism, high in dialecticism), Latinx (high in collectivism, low in dialecticism), and White non-Latinx (low in collectivism, low in dialecticism; Ma-Kellams et al., 2011). Originally, I hoped to recruit participants who were born and raised in different countries which reflect these three different levels of these cultural variables (i.e. participants from China, Chile, and the United States). However, the data collection process and the resources available to me constrained me to finding participants who were all from the United States who reflected these groups (i.e. Asian Americans, Latinx Americans, and White non-Latinx Americans).

Because Asian individuals were anticipated to have higher scores in dialecticism, they were expected to demonstrate a greater natural tendency towards stereotype change than the Latinx or White non-Latinx individuals. The effects of collectivism were separated from the effects of dialecticism by comparing the Asian sample (which was anticipated to have higher dialecticism scores) with the Latinx sample (which was anticipated to have lower dialecticism scores).

Participants

A total of 305 participants were recruited using Amazon's Mechanical Turk (MTurk). Two of the participant's data were removed because they did not complete the demographics information. For the remaining 303 participants, 102 (33.7%) were White non-Latinx, 97 (32.0%) were Latinx, 93 (30.7%) were Asian, and 11 (3.6%) were of

Other race/ethnicity. All of the participants spoke English; 192 (63.4%) spoke only English and 111 (36.6%) spoke at least one language in addition to English. All of the participants resided in the United States. Slightly more than half, 164 (54.1%) of the sample identified as cisgender man, 130 (42.9%) identified as cisgender woman, 2 (0.7%) identified as transgender woman, 4 (1.3%) identified as nonbinary or gender non-conforming, and 3 (1.0%) identified as other. The average participant age was 39.9 years.

For the purposes of data analysis, the "Other" racial/ethnic group (n = 11) was not included in analyses as this group was noticeably smaller than the three primary groups, and as this group did not represent the specific cultural groups of interest. Participants were classified as "other" racial/ethnic group based on their responses to the race/ethnicity questions; see Table 1. Specifically, the participants who marked themselves as being "South Asian" were recorded as being in the "Other" group in order to differentiate participants with Chinese heritage – China is known for having dialectical thinkers as a population – from participants from other areas of Asia.

Of the remaining 292 participants, 182 (62.3%) spoke only English and 110 (37.7%) spoke at least one language in addition to English. Slightly more than half, 160 (54.8%) of the sample identified as cisgender man, 124 (42.5%) identified as cisgender woman, 2 (0.7%) identified as transgender woman, 3 (1.0%) identified as nonbinary or gender non-conforming, and 3 (1.0%) identified as other. The average participant age was 40.0 years.

Table 1

Recoding Data

Recoded Value in "Race and Ethnicity" (n)	Original Data (n)
White (102)	• White, NonLatinx (102)
Asian (93)	• Asian, NonLatinx (93)
Latinx (97)	• White, Latinx (66)
	• Other, Latinx (11)
	• Black, Latinx (7)
	• American Indian, Latinx (4)
	• Black and American Indian, Latinx (1)
	• White and Black, Latinx (1)
	• White and American Indian, Latinx, (6)
	• White and Pacific Islander, Latinx (1)
Other (11)	• White and Black, NonLatinx (1)
	• White and Asian, NonLatinx (1)
	• Asian, Latinx (1)
	• Black, NonLatinx (5)
	• Asian and South Asian, NonLatinx (1)
	• South Asian, NonLatinx (1)
	• White and Black and Asian and Other, Latinx (1)

Materials

Stereotyping Task

Participants were presented with a passage that contained information about two fictional groups, the Snoets and Frints (Spencer-Rodgers et al., 2007). The participants read descriptions about how the Snoets and Frints possess distinct characteristics at the group level, with the Snoets being artistic and the Frints being scientific. The passage, originally published by Spencer-Rodgers, Williams, Hamilton, Peng, and Wang in 2007, is as follows:

> These two groups, called the Snoets and the Frints, are basically equal in social status and have been known by these terms for many generations. Snoet adults do not necessarily have Snoet offspring, although that sometimes happens. Frints do not necessarily have Frint offspring, although that sometimes happens. Snoets are traditionally known for their fine arts, distinctive regional cuisine, and sturdy dwellings. Frints, by contrast, are traditionally known for their advancements in science and agriculture, as well as their brightly colored garments. (p. 528)

Measures

Individualism and Collectivism

Participants' levels of individualism and collectivism were measured using the Individualism and Collectivism Scale (INCDOL; Singelis et al., 1995; Appendix A). The INDCOL has 32 items which assess these cultural constructs. Examples statements include "I often do 'my own thing'" and "It is important to maintain harmony within my group." Participants rated their agreement with each of the items on a Likert-type scale from never or definitely no (1) to always or definitely yes (9). Specific responses were reverse-scored as intended by the authors (Singelis et al., 1995), and then all the items were averaged according to four factors: Horizontal Individualism, Vertical

Individualism, Horizontal Collectivism, and Vertical Collectivism. Then, the two individualism scores were added together to create an overall Individualism score, and the two collectivism scores were added together to create an overall Collectivism score.

Dialecticism

Participants' levels of dialecticism were measured using the Dialectical Self Scale (DSS; Spencer-Rodgers et al., 2015; Appendix B). The DSS has three factors which distinguish between contradiction, cognitive change, and behavioral change (Spencer-Rodgers et al., 2015). Sample statements include "I often change the way I am, depending on who I am with," and "I can never know for certain that any one thing is true." Participants rated themselves on a Likert scale from strongly disagree (1) to strongly agree (7) in response to the 32 statements about their thoughts, behaviors, and emotions (Spencer-Rodgers et al., 2015). Specific items were reverse-scored as intended by the original authors (Spencer-Rodgers et al., 2015), and then all of the items were averaged to create an overal Dialecticism/DSS score.

Stereotyping

Consistent with previous research (Spencer-Rodgers et al., 2007), participants completed a set of questions related to the Snoets and Frints, here called the Stereotyping Questionnaire (Appendix C). The participants were asked to imagine that they met a member of the fictional society that they were told is a Snoet, and then asked how likely they were to possess each of three stereotypical traits (creative, adventurous, sophisticated), and three non-stereotypical traits (intelligent, ambitious, logical) on a Likert-type scale from 1 (extremely unlikely) to 7 (extremely likely). These six traits were presented in a random order. The mean score for all three stereotypical Snoet traits was calculated, as well as the mean score for all three non-stereotypical traits. The mean score for the stereotypical Snoet traits was used as the measurement of stereotyping.

Stereotype Change

   After the initial Stereotyping Questionnaire has been completed, the participants were given information that stated that a Snoet had become a member of the Frint group. Then, the Stereotyping Questionnaire was re-administered to measure stereotyping about this individual who switched groups (Appendix D). Two stereotype change scores (for stereotypic and non-stereotypic traits), conceptualized as the difference between post-change stereotyping and pre-change stereotyping in each of these trait sets, were calculating by subtracting the former from the latter. The variable Stereotype Change 1 is the difference between the agreement with stereotypic Snoet traits (creative, adventurous, and sophisticated) from when the participant thought the individual was a Snoet and then after they thought they were a Snoet-turned-Frint; I expected a positive change score as this would indicate higher endorsement of these traits when the individual was a Snoet. The variable Stereotype Change 2 is the difference between the agreement with nonstereotypic Snoet traits (intelligent, logical, ambitious) from when the participant thought the Snoet was a Snoet and then after they were a Snoet-turned-Frint; I expected a negative change score as this would indicate higher endorsement of these traits when the individual was a Snoet-turned-Frint.

Demographics

   Participants' demographic information (e.g., age, gender identity) were recorded using a questionnaire (Appendix E).

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Procedure

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   Participants were presented with an informed consent document. If participants agreed to participant, they first completed the INDCOL and DSS to determine their baseline scores of individualism/collectivism and dialecticism, respectively. The order of the INDCOL and DSS was counterbalanced across participants. Then, participants were

presented with information about fictional groups of people, called the Snoets and the Frints, created by Spencer-Rodgers et al. (2007). Participants' stereotyping of the Snoets was taken with the Stereotyping Questionnaire, first created by Spencer-Rodgers et al. (2007). Then, new information about the fictional groups was presented, stating that a Snoet had become a Frint. This information was meant to elicit a change in the stereotypes about a member of the fictional society. Stereotyping about this Snoet-turned-Frint was then remeasured with the Stereotyping Questionnaire. Finally, they completed demographics questions. They saw a message of gratitude for their participation, a brief debriefing statement, and were given the contact information for the researchers if they had any questions or concerns.

Data Analysis

Between-subjects one-way analysis of variance (ANOVA) analyses were used to examine differences between the Asian, Latinx, and White non-Latinx (for simplicity of labeling, will be refered to simply as White moving forward) samples in terms of individualism/collectivism and dialecticism. Based on previous research, I predicted that Asian and Latinx participants would have higher collectivism scores than White participants, whereas I predicted that White participants would be higher in individualism than Asian or Latinx participants. Further, I predicted that Asian participants would be higher in dialecticism than either Latinx or White individuals.

ANOVA analyses were also used to determine whether there were differences between the three samples in terms of stereotyping and stereotype change. Stereotyping was measured by averaging each participant's scores of endorsement of stereotypic traits about the initial Snoet character that was presented to them. Stereotype change was determined by comparing scores from before and after the new information was presented. Asian and Latinx individuals were expected to demonstrate a statistically

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significantly greater tendency to attribute individual traits to group membership (i.e., to stereotype), as measured by their baseline Stereotyping Questionnaire scores. Asian individuals were also anticipated to demonstrate a statistically significantly greater natural tendency towards changing stereotypes than the Latinx or White individuals.

In addition to the ANOVA analyses, correlation and regression analyses were conducted to examine the relationships between stereotype change and the cultural constructs of individualism/collectivism and dialecticism. I predicted a positive correlation between collectivism and stereotype change, as well as between dialecticism and stereotype change. I predicted that the multiple regressions would reveal that dialecticism accounts for more of the variability in stereotype change than collectivism/individualism scores, although there may be interaction effects, and these were to be explored.

CHAPTER IV:

RESULTS

ANOVA Analyses: Race/Ethnicity and Cultural Variables

The between-subjects one-way ANOVA analyses revealed that there were no statistically significant differences between the Racial/Ethnic groups in terms of collectivism ($F(2, 289) = 1.72$, $p = .181$) or individualism ($F(2, 289) = 1.39$, $p = .250$); see Table 2. These results mean that I failed to find evidence to support my predictions that Asian and Latinx participants would have higher collectivism scores than White participants and that White participants would be higher in individualism than Asian or Latinx participants.

I did find a significant difference between Racial/Ethnic groups in terms of dialecticism ($F(2, 289) = 3.67$, $p = .027$); however, Tukey post hoc analyses revealed that this difference was not in the way that I had expected. I had hypothesized that Asian participants would be higher in dialecticism than either Latinx or White individuals but, instead, the results showed that Latinx individuals had statistically significantly higher dialecticism scores ($M = 3.56$, $SD = .637$) than White participants ($M = 3.32$, $SD = .651$), $t(289) = -2.52$, $p = .032$. The calculated effect size was small-to-medium (Cohen's $d = .363$).

Table 2

Culture and Race/Ethnicity – Group Descriptives

	Race and Ethnicity	**N**	**Mean**	**SD**	**SE**
Individualism	White	102	11.40931	2.18930	0.21677
	Latinx	97	11.80412	2.24093	0.22753
	Asian	93	11.30914	2.08788	0.21650
Collectivism	White	102	12.16176	2.90136	0.28728
	Latinx	97	11.45490	2.42486	0.24621
	Asian	93	11.83737	2.71593	0.28163
DSS Score	White	102	3.32353	0.65118	0.06448
	Latinx	97	3.55767	0.63732	0.06471
	Asian	93	3.51848	0.67482	0.06998

ANOVA Analyses: Race/Ethnicity and Stereotyping and Stereotype Change

The results of the one-way ANOVA analyses indicated that there were no statistically significant differences between the three racial/ethnic groups in terms of stereotyping, $F(2, 289) = .604$, $p = .547$, Stereotype Change 1 $F(2, 289) = 1.34$, $p = .264$, or Stereotype Change 2, $F(2, 289) = 2.98$, $p = .052$; see Table 3. According to the data analyses, I failed to find evidence to support my hypotheses that Asian and Latinx individuals would demonstrate a statistically significantly greater tendency to attribute individual traits to group membership, and that Asian individuals would demonstrate a statistically significantly greater natural tendency towards changing stereotypes than the Latinx or White individuals.

Table 3

Culture and Stereotyping and Stereotype Change – Group Descriptives

	Race and Ethnicity	N	Mean	SD	SE
Stereotyping Mean	White	102	5.58170	1.02197	0.10119
	Latinx	97	5.41924	1.05330	0.10695
	Asian	93	5.49104	1.06162	0.11008
Stereotype Change 1	White	102	0.28431	1.11040	0.10995
	Latinx	97	0.27835	1.29429	0.13142
	Asian	93	0.02867	1.28599	0.13335
Stereotype Change 2	White	102	-0.61765	1.34106	0.13279
	Latinx	97	-0.40893	1.23744	0.12564
	Asian	93	-0.85305	1.16766	0.12108

Correlation Analyses

With the correlation analyses, I found a significant, small, positive correlation between individualism and collectivism ($r(290) = .300$, $p < .001$), although there was no other significant relationships between the three psychological variables; see Table 4. Additionally, athough I did not originally hypothesize about the relationship between these three cultural variables with initial stereotyping, I found a small, positive correlation for collectivism ($r(290) = .274$, $p < .001$), a small, positive correlation for dialecticism ($r(290) = .213$, $p < .001$), and a small, positive correlation for individualism ($r(290) = .120$, $p = .040$).

For Stereotype Change 1, I found a a positive correlation with dialecticism, ($r(290) = .186$, $p = .001$). Lending support to my hypothesis, there was a small, positive correlation between collectivism and Stereotype Change 2 ($r(290) = .182$, $p = .002$) as well as between dialecticism and Stereotype Change 2 ($r = .134$, $p = .022$). Although I

did not hypothesize about the relationship between individualism and stereotype change, I found a small positive relationship between this construct and Stereotype Change 2 ($r(290) = .116$, $p = .047$). .

Table 4

Correlation Matrix

		Individualism	Collectivism	DSS Score	Stereotyping Mean	Stereotype Change 1	Stereotype Change 2
Individualism	Pearson's r	—					
	p-value	—					
Collectivism	Pearson's r	0.30005 ***	—				
	p-value	<.00001	—				
DSS Score	Pearson's r	-0.05844	0.04729	—			
	p-value	0.31964	0.42077	—			
Stereotyping Mean	Pearson's r	0.12000 *	0.27431 ***	0.21286 ***	—		
	p-value	0.04045	<.00001	0.00025	—		
Stereotype Change 1	Pearson's r	0.00138	0.03508	0.18579 **	0.56000 ***	—	
	p-value	0.98120	0.55041	0.00143	<.00001	—	
Stereotype Change 2	Pearson's r	0.11619 *	0.18199 **	0.13445 *	0.08961	0.16901 **	—
	p-value	0.04730	0.00179	0.02156	0.12656	0.00377	—

Note. * p < .05, ** p < .01, *** p < .001

Regression Analyses

A stepwise multiple linear regression analysis was conducted to evaluate whether the cultural variables of individualism, collectivism, and dialecticism predicted Stereotyping. Collectivism and dialecticism significantly predicted Stereotyping in these participants ($F(2, 289) = 13.1$, $p < .001$), although individualism did not. The multiple correlation is found to be $R = .340$ for collectivism and dialecticism, meaning these variables accounted for 11.5% of the variance in Stereotyping scores.

A stepwise multiple linear regression analysis was then conducted to evaluate whether the cultural variables of individualism, collectivism, and dialecticism predicted

Stereotype Change 2. Collectivism and dialecticism significantly predicted Stereotype Change 2 ($F(2, 289) = 4.82$, $p = .029$), although individualism did not. The multiple correlation is found to be $R = .221$ for collectivism and dialecticism, meaning these variables together accounted for 4.90% of the variance in Stereotype Change 2 scores.

Summary

Overall, the data analyses did not support my hypotheses about cultural groups differing in individualism, collectivism, and dialecticism. In fact, the one signficant difference between groups told a much different story than what one might expect based on the standing literature. Specifically, Latinx individuals scored higher in dialecticism than White participants. However, I did find evidence to support my hypothesis that dialecticism, independent of race and ethnicity, correlates with the magnitude of stereotype change. This was validated using two measures of stereotype change. Additionally, I found evidence that dialecticism and collectivism correlate with and predict stereotyping, which is a conceptual replication of the findings of Spencer-Rodgers et al. (2007).

CHAPTER V:

DISCUSSION

Overview

This study hoped to clarify the relationship between stereotype change and the cultural constructs of individualism/collectivism and dialecticism. It included participants who identify with three different racial/ethnic groups to ensure that these findings are generalizable and not limited to the context of W.E.I.R.D. cultures. The current data support the hypothesis that more dialectical individuals would demonstrate a greater magnitude of stereotype change when presented with contradictory information than participants from two groups not theoretically categorized as dialectical. This research hoped to add to the current understanding of stereotype change processes by integrating cultural variables and moving beyond W.E.I.R.D samples.

Limitations

There were several limitations to this study. One was in the fact that it is a correlational study and, therefore, the causational relationship between cultural variables and stereotyping and stereotype change cannot be inferred.

Another significant limitation of this study was the fact that I was unable to obtain the participant group I originally had wanted at the beginning of this project. Due to constraints with MTurk, I was limited to participants from the USA, which restricted my sample to a group of people with, possibly, a more constrained range on cultural measures than if I had been able to compare participants from the USA, China, and Chile, for instance.

Another limitation of this study is its generalizability, which was sacrificed in some ways for experimental control and integrity. Because the materials utilized a novel social group rather than a existing one, it is worth considering whether the stereotype

change demonstrated is generalizable to real social groups. However, choosing to study a novel social group did decrease the likelihood that the participants would recognize the purpose of the study and therefore adjust their responses. Additionally, it was used in closely related previous research and was therefore a validated method of measuring stereotyping. One further limitation regarding the materials and procedure is that this study measured stereotype change in the short-term. Perhaps a worthwhile question for future study is how long the stereotype change is maintained after the intervention.

This study was also limited by its measures. The standing literature addresses the fact that cultural variables such as individualism and collectivism change when measured at the individual level (Triandis, 2001). Therefore, it is possible that these changes influenced the results. Researchers have warned that the Dialectical Self Scale is perhaps not the best scale for measuring dialecticism in every context (Spencer-Rodgers et al., 2015). However, the literature search did not find another measure of this cultural variable. Therefore, I was somewhat limited by the DSS and the three factors which it measures (behavior change, cognitive change, and contradiction; Spencer-Rodgers et al., 2015). Additionally, this study used an "explicit" measure of stereotyping rather an "implicit" measure and, therefore, it is possible that the results were influenced by social desirability bias, although using a novel social group was meant to mitigate this.

<div align="center">**Future Directions**</div>

There are several areas for potential future exploration. For instance, one intriguing avenue of research found that individualism and collectivism at the individual level can also be experimentally controlled through priming (Oyserman & Lee, 2008). This allows some level of causal inference to be made despite the potential for contextual variation with these variables. Similarly, dialecticism has been experimentally manipulated through priming in previous literature (Ma-Kellams et al., 2011). Again, this

<div align="center">21</div>

method could allow researchers to establish dialecticism's causal impact on stereotype change (Ma-Kellams et al., 2011). Priming procedures should allow for greater experimental control of and validity of findings about cultural variables which researchers have described as being implicit and difficult to disentangle from other constructs (Wong et al., 2018). In fact, as part of this thesis project, I designed and implemented an experimental study which used these priming procedures to study these cultural variables and their influence on stereotype change processes. However, due to the limitations of data collection, I was unable to include that study as part of this project.

Another potential avenue for future research would be in applying these findings to stereotypes about real, existing groups of individuals. Further, exploring how long stereotype change is maintained would be a valuable addition to this body of research. By determining more real-world applications for this line of research, I would perhaps be able to eventually make a meaningful contribution to the literature on how I can work to change people's sometimes stereotypical and often harmful opinions about groups of marginalized others.

Implications

One implication of this study which is not to be overlooked is that the results leave out multiracial and Black individuals although these groups might be able to provide valuable insight into the variables of interest here. Additionally, it is notable that I failed to replicate previous findings that Asian American individuals would be high in dialecticism and collectivism, Latinx Americans would be low in dialecticism and high in collectivism, and White non-Hispanic Americans would be low in dialecticism and low in collectivism. I hypothesized that this is possibly due to the relative levels of assimilation of Latinx and Asian Americans to White American culture, although my study did attempt to target individuals who have some level of connection to Asian or

Latinx culture (e.g., language, residence outside of the United States). Therefore, perhaps assimilation influenced the scores of the cultural variables that were found in the participants.

It is also possible that these results lend credence to the idea that cultural variables should be thought of as "syndromes" from which individuals can slip in and out, rather than easily distinguishable constructs which differ drastically according to group (Wong et al., 2018). This lends further support to the argument of certain researchers which states that using research about groups in order to address an individual would make one, ironically, guilty of stereotyping (Wong et al., 2018).

Conclusion

Here I have described a study which examines the relationship between cultural variables and the magnitude of stereotype change that occurs when people are faced with new information about group membership. Although this study was limited by its resources and the data collection processes on MTurk, and I therefore did not obtain the type of culturally diverse samples which I had originally intended, this study still managed reach beyond typical W.E.I.R.D. samples. Therefore, this study extended the research on stereotype change processes to be more generalizable. I found evidence to support my hypotheses that cultural variables, particularly dialecticism and collectivism, relate to stereotyping and stereotype change processes. This further supports the idea that the study of culture and cultural variables is vital in order to obtain the full picture in psychological research, rather than assuming that all findings are universal.

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HORIZONTAL AND VERTICAL INDIVIDUALISM AND COLLECTIVISM SCALE

BY SINGELIS ET AL., 1995

Listed below are a number of statements about your thoughts, feelings, and behaviors. Select the number that best matches your agreement or disagreement with each statement. Use the following scale, which ranges from 1 (no or definitely no) to 9 (always or definitely yes). There are no right or wrong answers.

Please indicate to what extent you agree with each of the following statements:

1. I often "do my own thing"

2. One should live one's life independently of others

3. I like my privacy

4. I prefer to be direct and forthright when discussing with people

5. I am a unique individual

6. What happens to me is my own doing

7. When I succeed, it is usually because of my abilities

8. I enjoy being unique and different from others in many ways

9. It annoys me when other people perform better than I do

10. Competition is the law of nature

11. When another person does better than I do, I get tense and aroused

12. Without competition, it is not possible to have a good society

13. Winning is everything

14. It is important that I do my job better than others

15. I enjoy working in situations involving competition with others

16. Some people emphasize winning; I'm not one of them

17. The well-being of my co-workers is important to me

18. If a co-worker gets a prize, I would feel proud

19. If a relative were in financial difficulty, I would help within my means

20. It is important to maintain harmony within my group

21. I like sharing little things with my neighbors

22. I feel good when I cooperate with others

23. My happiness depends very much on the happiness of those around me

24. To me, pleasure is spending time with others

25. I would sacrifice an activity that I enjoy much if my family did not approve of it

26. I would do what would please my family, even if I detested that activity

27. Before taking a major trip, I consult with most members of my family and many friends

28. I usually sacrifice my self-interest for the benefit of my group

29. Children should be taught to pace duty before pleasure

30. I hate to disagree with others in my group

31. We should keep our aging parents with us at home

32. Children should feel honored if their parents receive a distinguished award

DIALECTICAL SELF SCALE BY SPENCER-RODGERS ET AL., 2015

Listed below are a number of statements about your thoughts, feelings, and behaviors. Select the number that best matches your agreement or disagreement with each statement. Use the following scale, which ranges from 1 (strongly disagree) to 7 (strongly agree). There are no right or wrong answers.

1. I am the same around my family as I am around my friends. (reversed)

2. When I hear two sides of an argument, I often agree with both.

3. I believe my habits are hard to change. (reversed)

4. I believe my personality will stay the same all of my life. (reversed)

5. I often change the way I am, depending on who I am with.

6. I often find that things will contradict each other.

7. If I've made up my mind about something, I stick to it. (reversed)

8. I have a definite set of beliefs, which guide my behavior at all times. (reversed)

9. I have a strong sense of who I am and don't change my views when others disagree with me. (reversed)

10. The way I behave usually has more to do with immediate circumstances than with my personal preferences.

11. My outward behaviors reflect my true thoughts and feelings. (reversed)

12. I sometimes believe two things that contradict each other.

13. I often find that my beliefs and attitudes will change under different contexts.

14. I find that my values and beliefs will change depending on who I am with.

15. My world is full of contradictions that cannot be resolved.

16. I am constantly changing and am different from one time to the next.

17. I usually behave according to my principles. (reversed)

18. I prefer to compromise than to hold on to a set of beliefs.

19. I can never know for certain that any one thing is true.

20. If there are two opposing sides to an argument, they cannot both be right. (reversed)

21. My core beliefs don't change much over time. (reversed)

22. Believing two things that contradict each other is illogical. (reversed)

23. I sometimes find that I am a different person by the evening than I was in the morning.

24. I find that if I look hard enough, I can figure out which side of a controversial issue is right. (reversed)

25. For most important issues, there is one right answer. (reversed)

26. I find that my world is relatively stable and consistent. (reversed)

27. When two sides disagree, the truth is always somewhere in the middle.

28. When I am solving a problem, I focus on finding the truth. (reversed)

29. If I think I am right, I am willing to fight to the end (reversed).

30. I have a hard time making up my mind about controversial issues.

31. When two of my friends disagree, I usually have a hard time deciding which of them is right.

32. There are always two sides to everything, depending on how you look at it.

APPENDIX C:

STEREOTYPING QUESTIONNAIRE BY SPENCER-RODGERS ET AL., 2007

Please read the following passage about two fictional social groups. Then, complete the following questions based on what you have read. There are no right or wrong answers.

These two groups, called the Snoets and the Frints, are basically equal in social status and have been known by these terms for many generations. Snoet adults do not necessarily have Snoet offspring, although that sometimes happens. Frints do not necessarily have Frint offspring, although that sometimes happens. Snoets are traditionally known for their fine arts, distinctive regional cuisine, and sturdy dwellings. Frints, by contrast, are traditionally known for their advancements in science and agriculture, as well as their brightly colored garments.

Imagine that you met a Snoet. How likely do you think they would be to possess the following traits/characteristics?

Scale from 1 (extremely unlikely) to 7 (extremely likely)

1. Creative
2. Adventurous
3. Sophisticated
4. Intelligent
5. Logical
6. Ambitious

APPENDIX D:

STEREOTYPE CHANGE QUESTIONNAIRE, ADAPTED FROM SPENCER-

RODGERS ET AL., 2007

Please read the next prompt about these two fictional social groups. Then, complete the following questions based on the prompt and what you have read. There are no right or wrong answers.

Now, imagine a Snoet became a Frint. (The description of each group is provided below again for your convenience.)

These two groups, called the Snoets and the Frints, are basically equal in social status and have been known by these terms for many generations. Snoet adults do not necessarily have Snoet offspring, although that sometimes happens. Frints do not necessarily have Frint offspring, although that sometimes happens. Snoets are traditionally known for their fine arts, distinctive regional cuisine, and sturdy dwellings. Frints, by contrast, are traditionally known for their advancements in science and agriculture, as well as their brightly colored garments.

Imagine that you met someone who was previously a Snoet and had since become a Frint. How likely do you think they would be to possess the following traits/characteristics once they had become a Frint?

Scale from 1 (extremely unlikely) to 7 (extremely likely)

1. Creative
2. Adventurous
3. Sophisticated
4. Intelligent
5. Logical
6. Ambitious

DEMOGRAPHICS QUESTIONNAIRE

Please answer the following questions about yourself.

1. Which best represents your gender identity?

    a. Cisgender Man

    b. Cisgender Woman

    c. Transgender Woman

    d. Transgender Man

    e. Nonbinary

    f. Genderqueer/Gender non-conforming

    g. Other (please write below):

      _____

2. What is your age? _____

3. How would you describe yourself? Please select all that apply.

    a. White, Caucasian, or European American

    b. Black, African American, or African

    c. American Indian or Alaska Native

    d. Asian American or Asian

    e. Native Hawaiian or Pacific Islander

    f. South Asian

    g. Other

4. Do you identify culturally as Hispanic/Latinx/Chicano?

    a. Yes.

    b. No.

5. Do you currently reside in any countries other than the U.S.?

a. Yes.

    i. In what country or countries do you currently reside? (If more than one location, please write all of them from order of most to least time that you spend in each location.) _____

    ii. In what country or countries do you currently have citizenship? (If more than one, please write all.) _____

    iii. In what country did you spend the majority of your childhood?

    _____

b. No.

6. Are you fluent in any languages in addition to English?

    a. Yes.

        i. What languages in addition to English are you fluent in?

        ii. Of the languages in which you are fluent, which would you consider to be your primary language?

        iii. Of the languages in which you are fluent, which did you learn growing up in your household(s)?

    b. No.