EFFECTS OF INTERGROUP IDEOLOGIES ON WILLINGNESS TO ENGAGE IN INTERGROUP

CONTACT WITH ESSENTIALISM AS A MEDIATOR

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ผลของคตินิยมระหว่างกลุ่มต่อความสมัครใจที่จะปฏิสัมพันธ์กับบุคคลข้ามกลุ่ม โดยมีสารัตถนิยมเป็น
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น.ส.พิราอร สุวรรณเบญจกุล

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พิราอร สุวรรณเบญจกุล : ผลของคตินิยมระหว่างกลุ่มต่อความสมัครใจที่จะปฏิสัมพันธ์กับบุคคลข้าม
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งานวิจัยหลายงานค้นพบว่าการพบเจอคนต่างกลุ่มไม่ได้นำไปสู่การสานสัมพันธ์ที่ดีเสมอไป ใน
สังคมไทยปัจจุบัน เจตคติรังเกียจกลุ่มต่อคนเมียนมาร์ยังคงเป็นปัญหาที่ควรได้รับการแก้ไข ด้วยเหตุนี้ การนิยาม
ความหมายของวัฒนธรรมที่เน้นความเป็นกระบวนการต่อเนื่องของวัฒนธรรมจึงเป็นสิ่งที่อาจช่วยให้เกิดความ
เข้าใจที่สอดคล้องกับลักษณะของสังคมจริงและทำให้ความสัมพันธ์ระหว่างกลุ่มดีขึ้น การศึกษาแรกเป็นการศึกษา
แบบภาคตัดขวางที่ตรวจสอบคะแนนจากมาตรรายงานตนเอง ประกอบด้วยมาตรอเนกวัฒนธรรม ความสมัครใจ
ที่จะปฏิสัมพันธ์กับบุคคลข้ามกลุ่ม และสารัตถนิยมเป็นตัวแปรส่งผ่าน ผู้วิจัยกระจายแบบสอบถามออนไลน์ให้แก่
ทั้งนักเรียนมัธยมปลายและนิสิตนักศึกษาระดับมหาวิทยาลัย โดยมีจำนวนกลุ่มตัวอย่างทั้งสิ้น 112 คนที่นำไปใช้
ในการวิเคราะห์ ผลการวิเคราะห์ไม่พบอิทธิพลทางอ้อมอย่างมีนัยสำคัญ เนื่องจากไม่พบความสัมพันธ์ที่มี
นัยสำคัญระหว่างอเนกวัฒนธรรมและสารัตถนิยม การศึกษาครั้งที่สองเป็นการทดลองโดยสร้างการจัดกระทำคติ
มองข้ามสีผิว พหุวัฒนธรรม และอเนกวัฒนธรรมพร้อมกับกลุ่มควบคุม แบบสอบถามออนไลน์ประกอบด้วย
บทความชี้นำสำหรับแต่ละเงื่อนไข พร้อมด้วยมาตรสารัตถนิยมและความสมัครใจที่จะปฏิสัมพันธ์กับบุคคลข้าม
กลุ่ม การศึกษานี้มีกลุ่มตัวอย่างเป็นนักเรียนมัธยมปลายและนิสิตนักศึกษาระดับมหาวิทยาลัยจำนวน 200 คน ผล
การวิเคราะห์ความแปรปรวนไม่พบความแตกต่างอย่างมีนัยสำคัญระหว่างคะแนนความสมัครใจที่จะปฏิสัมพันธ์
กับบุคคลข้ามกลุ่มของแต่ละเงื่อนไข การวิเคราะห์ตัวแปรส่งผ่านโดยมีตัวแปรต้นเป็นตัวแปรหมวดหมู่ ผลพบว่า
อิทธิพลทางอ้อมไม่มีนัยสำคัญทางสถิติระหว่างตัวแปรที่ศึกษา ยกเว้นในคู่พหุวัฒนธรรมและอเนกวัฒนธรรมซึ่ง
อิทธิพลทั้งทางตรงและทางอ้อมมีนัยสำคัญทางสถิติ การศึกษาทั้งสองการศึกษานี้เป็นการเริ่มต้นศึกษาว่าคตินิยม
ใดที่เหมาะจะนำไปปลูกฝังแก่นักเรียนได้ดีที่สุด รวมถึงสิ่งที่ควรพิจารณาเมื่อต้องการพัฒนาสื่อเพื่อนำเสนอ
แนวคิดเหล่านี้เพื่อส่งเสริมความสัมพันธ์ระหว่างกลุ่มให้ดีขึ้น

สาขาวิชา	จิตวิทยา	ลายมือชื่อนิสิต ....
ปีการศึกษา	2564	ลายมือชื่อ อ.ที่ปรึกษาหลัก ....

Various studies have found that merely interacting with an outgroup does not necessarily lead to better intergroup relations. The prejudice against Myanmar in Thailand is still an issue that needs solving. Therefore, cultures should be understood as an ongoing process in the hope that it would be more consistent with the current social environment and improve intergroup relations. The first study was a cross-sectional study that examined the self-reported scores of polyculturalism and the willingness to engage in intergroup contact with essentialism as a mediator. The online survey was distributed, and 112 high-school and university students were included in the analysis. The simple mediation analysis result yielded no significant indirect effect due to the non-significant relationship between polyculturalism and essentialism. The second study experimentally manipulated colorblindness, multiculturalism, and polyculturalism together with a control group. The online survey contained priming messages for each condition, along with the essentialism and the willingness to engage in intergroup contact scale. The final 200 high-school and university students were the samples of this study. The ANOVA results compared the willingness to engage in intergroup contact scores across groups. No significant difference was found. The multicategorical mediation analysis showed no significant indirect effect between the studied variables, except in the multiculturalism and polyculturalism pair, where both direct and indirect effects were statistically significant. The two studies shed light on which ideology would be best introduced to students and what to consider when developing appropriate media to promote better intergroup contact.

ACKNOWLEDGEMENTS

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CHAPTER 1

INTRODUCTION

Background and Statement of Problem

The current flow of constant cultural exchanges has been made possible by globalization. People in contemporary societies around the world are experiencing the changes and being the changes during this process. As Robertson (1992) stated, globalization "is the compression of the world and the intensification of consciousness of the world as a whole" (Robertson, 1992). It reflects the global combination of cultural objects forming a complex system of cultures and people. International financial, communications, technological, ideological, and ethnological mobility make it possible for cultural objects of all kinds to travel from one place to another (Appadurai, 1990, 1996). This global exchange process allows people and cultures to introduce, incorporate, and even challenge not only their commodities but cultural values, norms, and beliefs with others.

Unfortunately, many research pieces found adverse effects people had on outgroup members even when people were made aware of cultural differences. For instance, extreme trait judgments of outgroups were higher in this group (Haslam et al., 2006; Levy & Dweck, 1999; Levy et al., 1998). Other consistent results were a higher level of prejudiced expressions toward different ethnicity (Hong et al., 2004), lesser willingness to interact with people who expressed only a few negative or neutral actions (Levy & Dweck, 1999), and offering less help to the disadvantaged (Karafantis & Levy, 2004). In the educational context (Bigler, 1999) found similar results in the student samples. The findings suggested that merely learning about cultures, specifically in a cultural psychology course (Buchtel, 2014), did not always lead to more cultural awareness, sensitivity, and surprisingly related to more endorsement of cultural stereotyping.

The globalization trend in Thailand has been making its dent in Thai society as much as anywhere else. One of the most noticeable results would be the number

of foreign workers coming to work in the country, especially from Myanmar. They have become the workforce the Thai economy could not do without. The total number of Myanmar workers as of December 2020 was the highest in Bangkok. Specifically, the area under the Bangkok Employment Office 2 and 3 held the highest population density, 96,862 people, according to the data collected by the Foreign Workers Administration Office (n.d.).

Even though Thailand economically welcomes more than half a million of them each month (Foreign Workers Administration Office, n.d.), prejudice towards this group has also prevailed or even expected. Thongpan (2020) incorporated 79 Thai research studies from 1997-2016 into a synthesis about migrant workers in Thailand. They noted that these workers have been experiencing the biased view from Thai citizens because of how they might have created fear among Thai communities. For the Thai government, they have also been viewed as a threat to national security. Migrant workers' rights have been violated because of their minority status within the country due to legal, social, cultural, and personal reasons. Particularly for Myanmar migrants, around half of the Thai respondents believed that Myanmar migrants pose a threat to their physical health (Sunpuwan & Niyomsilpa, 2012). Almost the same number of participants thought these migrants were disease carriers, competitors in the job market, as well as for land and resources.

One of the reasons was how centralized history was taught in schools. Thai history textbooks have mainly been nationalistic and treated Myanmar as its biggest rival and invader (Eawsriwong, 2006). This negative view toward this neighbor was heightened by how little regard was put into teaching students how culturally diverse Thai society has been (Wongwan et al., 2020).

Thai people's prejudice toward Myanmar people then became a subject favored by rigorous research (Jittijarunglarp, 2014; Sanraun, 2014). This line of reasoning advised us why Myanmar people should be selected as our target group to see if we can improve the people's willingness to engage in intergroup contact with this group. Due to educational, historical, and empirical background, the possibility of conflict pervaded the majority of Thais 'understanding of Thailand and Myanmar's relationship.

In order to promote better understanding, the Contact Hypothesis (Allport et al., 1954) proposed that interaction would be an important step toward improving this relationship. Before the actual interaction could happen, Thai people would need to be willing to do it first. Therefore, the willingness to engage in intergroup contact would be crucial to promote. In our study, we were particularly interested in how people's perceptions of cultures, in general, could affect this willingness. To specify, how people view cultures, or what academics call a lay theory and intergroup ideology, as static or malleable should provide different impacts on the willingness to engage in intergroup contact.

According to a modernity sociologist (Giddens, 1986), people's experiences and interactions with their cultural environments have been increasingly complicated. The explanation was that we, the cultural beings, could be continuously exposed to all kinds of cultures in the same place and time. The most direct ones people are most familiar with would be the countless 'national cultures ' and subcultures. (Morris et al., 2015) have proposed that expatriates would "form implicit representations of local cultural norms based on what they encounter day to day in the local environment." To build on this argument, it implied that local people would be exposed to their traditional cultures daily.

The nature of our current global networks through the internet, people, commerce, travel, and politics (Appadurai, 2013) has made it possible for the locals in their local environment to be exposed to various foreign cultural products in the same way as well. Even though one might be physically immobile, easy access to other cultures has been more than enough to create a personal impact on many people. Therefore, we may foster our preference toward other cultures exposed to us, mimic their cultural practices, and use their knowledge in our everyday lives.

Consequently, scholars suggested that culture should be viewed as a process (Naeim & Kelly, 1999; Urry, 2012), not a stable trait each country and its people uniformly possess throughout their history. Consistent with this approach, Hall (1980) defined culture as the shared 'common 'information and practices passing from one generation to another that are continually evolving. In psychology, culture has been acknowledged in the field as a major influence that could shape one's social

motivation, behavior, and cognition (Lehman et al., 2004). This process has been shaping the cultural surrounding as well as its people throughout history. It has implied viewing culture as an ongoing process of meaning-making, further facilitated by globalization.

Several scholars have recently studied what would be the most effective perspective one should take to best regard their own, others', and global cultures (Bernardo et al., 2016; Plaut et al., 2018; Rosenthal & Levy, 2012; Salanga & Bernardo, 2019). Contrary to the suggestion above, many mainstream cultural policies still treat cultures as static. It has been traditionally theorized that people's cultural knowledge, acceptance, and behavioral incorporations of cultural products were the key to being more ethnically egalitarian and globally inclusive (Bennett & Bennett, 1993). Knowing, accepting, and interacting more about other groups' characters should reflect beliefs and support for fundamental human rights. Despite their good intentions, it has not always been the case. Heine and Norenzayan (2006) criticized that simply attempting to recognize cultural differences or learning about cultural psychology might not be the best solution. Although crucial, the proposition may lead to more stereotyping and essentialistic thinking when considering a cultural group.

Aside from a surface-level misunderstanding, it may cause other unwanted consequences, specifically fostering essentialistic beliefs. A research study by Bernado and colleagues (2016) has shown concerning evidence about these approaches. It was conducted in multiple Thailand's neighboring countries, such as Malaysia. They found that they were still related to a high level of essentialism, ignoring or appreciating differences. It was consistent with researchers' previous concern about the problematic residual caused by the colorblind and multicultural approach to improving intergroup relations. The essentialist beliefs in race stereotypes could still be present even when they learned about cultural knowledge and differences.

It was suggested by the Thai government's 20-year roadmap draft from 2017 onwards (Ministry of Culture, n.d.). It stated that Thai people of all ages should be encouraged to adapt to the changing cultural landscape while upholding their

treasured cultural heritage, values, and identity. Several scholars also suggested a similar approach that schools should install cultural awareness activities and general in-class guidance due to having a fusion of religious and ethnic cultures in the classroom settings (Lumsombat, 2015; Maneephruek, 2017; Roikrong, 2013; Sa-ngawong, 2013).

Nonetheless, educational scholars (Warapongpipat, 2014) have examined that school teachers still have insufficiently encouraged cultural awareness despite having racially and religiously diverse students. One of the main reasons these policies were indulged was due to a political urgency in that specific area, specifically the Southern border provinces.

Not only insufficiently encouraged, but how it was done and will be done is a substantial issue to consider. Most, if not all, of the works (Nuktong, 2018) proposed a multicultural approach to foster understanding and appreciation for cultural diversity and each group's uniqueness for school students. The results were undeniably promising because the intervention activities increased the cultural sensitivity level, although not in all dimensions. Nevertheless, their approach was not consistent with how cultural transactions operate.

The World Health Organization (n.d.) specified adolescents as people between 10-19 years old. Adolescents experience various physical, psychological, and social transitions from childhood to adulthood. Developing social skills is one of the many challenges they need to overcome. Interpersonal interactions, initiations, and maintenance are all parts of social refinement. The brain also goes through the maturation stage at this age (Choudhury et al., 2006). Their brain plasticity would allow all the changes to take place for adolescents and decrease as they age. It is a substantial period for this group to learn and acquire knowledge about their social world, whether it is the relations with their ingroup or outgroup members.

Linking back to our current concern about culture's characteristics, the question here is whether thinking about cultures as being malleable could provide a similar impact on people's willingness to engage in intergroup contact as thinking about groups or not. The fundamental question for this work is whether there are any practical benefits from understanding cultures accurately. Confirming evidence in

a neighboring field that it could be beneficial already existed (Bernardo et al., 2019; Bernardo et al., 2016). Therefore, examining the idea in the Thai context could provide both conceptual and contextual evidence for the concern. Moreover, it could suggest a more accurate way to replace the existing cultural intervention in schools.

Literature Review

The current globalized landscape has given rise to many new intercultural contact opportunities. Ideally, we would want to foster a good relationship with one another. However, uncooperative relationships would likely be unavoidable because of the increased opportunity to meet or learn about new groups. How people have been taught to perceive people from other groups would be crucial to prevent negative interactions from happening. This literature review includes the concepts, theories, and related works used to form this present study's hypotheses.

The first part would provide details about what kind of negative intergroup relations could look like. Secondly, how it could be prevented or reduced. Following that, we proposed variables, our mediator and independent variable(s), dealing with how people perceive groups as our way to do it. The present review consisted of three parts:

1. Intergroup Relations and Willingness to Engage in Intergroup Contact
2. Lay Theories and Intergroup Ideologies
3. Essentialism

Intergroup Relations and Willingness to Engage in Intergroup Contact

According to (Tajfel, 1969), the '-group' in 'intergroup' could be any form of perceived group that separates one person from another. However, the most relevant study area to our current interest regarded this 'group' as separated by race, ethnicity, culture, or nationality. Gender, political subscription, or other kinds of the group would not be included here. Therefore, the scope of this review and this study extended only to racial, ethnic, and cultural groups, as well as nationality.

The problem concerned here is also a matter of people's perception of race and ethnicity and how they divide it. Four similar terms, culture, race, ethnicity, and nationality, should be clarified here. Culture has been mainly tied to national

boundaries and the biology of the people living in them when it is more of social construction that produces and teaches people ways of life that can change over time (Hall, 1980; Naeim & Kelly, 1999; Urry, 2012). Similarly, racial difference was thought to be rooted in genetic similarity within a group. It has been primarily used to divide groups by noting their physical similarities (Wade et al., 2020). Ethnicity was people's assumptions that group members shared, not only 'common descent 'but also a 'common culture' (Cartrite, 2003). Lastly, nationality was referred to as the group distinction based on the physical national boundaries where its members have a full claim on their political rights (Britannica, 2018; Whitley Jr. & Webster, 2019). The four group categories were all considered in this study.

In this current study, the willingness to engage in intergroup contact was selected to be our dependent variable. The willingness to engage in intergroup contact was defined as the intention to initiate a variety of interactions with an outgroup member (Esses & Dovidio, 2002). The original scale had Black as the target, but other researchers had adapted it to other marginalized groups as well. It could be a defining variable that could promise future interactions.

The reason why researchers aimed at increasing interactions between groups could be explained by the Contact Hypothesis (Allport et al., 1954). This widely studied reduction strategy for intergroup bias has also focused on creating more interactions between groups (Esses & Dovidio, 2002). It proposed that the more contact a person is exposed to people from the other group, the more likely they tend to form better intergroup relations. Therefore, the willingness to engage in intergroup contact construct would illustrate how well the person perceived an outgroup and planned their future behaviors.

One of many explanations of intergroup bias could be explained by the minimal group paradigm. The negative intergroup attitude might not require extensive knowledge about the target group before people form their negative attitude toward others. The social-cognitive studies that originated the minimal group paradigm have shown that the mere categorization process would be enough for people to have a bias toward their own ingroup (Tajfel, 1970; Tajfel, 1978). In these studies, participants were randomly assigned to groups. Then, their preference or

evaluation toward their ingroup or outgroup was measured. The result revealed that people still showed biased judgments even when the group division was random without anything at stake.

One of the reasons was the social categorization process (Brown, 2011). The tendency to categorize everyday information has been regarded as a cognitive process that could help people make sense of the world. When applying this knowledge structure to categorize the social world, it was referred to as social categorization. It provided people with a simplified version of complex social information.

Brown (2011) outlined the extent to which the categorization would happen. He put forward Campbell's (1958) and Rosch's (1978) factors that could reduce separate units of information into groups. Even though every stimulus was individually distinct, certain "...common fate, similarity, and proximity" were shared. In the social context, people who shared, for example, a language or geography, might get classified together. However, these were mere 'fuzzy 'approximations. Unfortunately, this still had the potential to lead to various biases.

Here, we briefly outlined three similar concepts in intergroup bias; prejudice, stereotype, and discrimination. This part was intended to clarify why it is our purpose to take the last behavioral component as our dependent variable.

Firstly, there have been various ways to describe **prejudice**. One of the most general definitions of prejudice (Brown, 2011) would refer to it as "any attitude, emotion, or behavior toward members of a group, which directly or indirectly implies some negativity or antipathy toward that group" (Tajfel, 1981). To parallel it with the attitude literature, prejudice included three components: cognitive, affective, and behavioral (Dovidio, 2013). The cognitive component was usually equated to a stereotype. The second component was defined more specifically as the prejudice itself, which included affective and evaluative responses. Thirdly, the behavioral component consisted of either the behavior or the tendency to behave.

Based on the definition given by Tajfel (1981), **stereotypes** were beliefs about the negative qualities of other people based on their group membership. More recently, stereotypes have been conceptualized as "traits we view as characteristic

of social groups, or of individual members of those groups, and particularly those that differentiate groups from each other" (Stangor, 2009). In other words, they would be "category-based generalizations that link category members to typical attributes" (Dovidio, 2013). The derivation from stereotypes can act as an informative mechanism used to understand other people and groups according to the assumptions made through social categorization. The consequences of having and using stereotypical knowledge as information to make assumptions about a person or a group could lead to overgeneralization, inaccuracy, and unfairness (Stangor, 2009).

The last component which was chosen as our dependent variable was the behavioral component. **Discrimination** has been regarded as the third behavioral component of prejudice. It was defined as the negative behavioral outcome directed toward a member of a group or the group. These behaviors also covered the intention or decision to act with the group member. A classic laboratory study by Weitz (1972) measured discrimination by seating distance. The farther the participant placed their chair from the group member, the more discrimination was implied. Another prototypical study by Schuman et al. (1983) employed a field observation technique to measure discrimination. They observed people's real-life behaviors toward Black and White couples in various restaurants.

Rattan et al. (2012) found an exciting variable, growth mindset, to tackle negative intergroup bias. Israeli and Palestinian have long conflicted with one another. Hence, Dweck conducted their research by choosing to apply a growth mindset as her independent variable to explore the issue. She reasoned that the growth mindset has a substantially positive impact on people's perception of other groups. Those with a higher level of growth mindset also tend to accept new information about other groups instead of rejecting it. This psychological process would allow them to understand that others could be subjected to other situational or psychological constraints. They would be more likely to not view others ' characters as fixed and reject the counter-stereotypic ones, leading to less stereotype endorsement.

Particularly, the participants were asked to rate how much they agreed on fixed mindset statements about groups. For example, "Groups can do things

differently, but the important parts of who they are can't really be changed." After that, Israeli and Palestinian participants' willingness to compromise was measured. To illustrate, these items were such as "Support for shared sovereignty over the holy places in Jerusalem." The results were in line with their expectations. Holding a fixed mindset about groups predicted less compromise.

The researcher took it to another level and employed this relationship experimentally. They gave her participants a reading task that depicted growth or fixed mindset idea without any specifics to group relations. The results were consistent with the previous study. Those who read the growth mindset article showed a higher willingness to make compromises than those who read the fixed mindset article. Not only that, another measure of willingness to interact with people from the other group was added to this study. The ones reading the growth mindset article were 70% more likely to express more willingness to interact with members from the other group. These were all promising results that understanding each group's malleability and its member could be a significant approach to improve intergroup relations.

Aside from its function, this variable had been studied together with our independent variable, intergroup ideology, and had shown promising results (Rosenthal & Levy, 2012). Therefore, how people perceive or form beliefs about other groups, or lay theories, could demonstrate why this happened. The belief that cultures are fixed should result in more biased reactions. On the other hand, believing that cultures are, in fact, malleable should present a different result in the willingness to engage in intergroup contact. Thus, adopting a certain lay theory has been a promising approach to heighten the willingness to engage in intergroup contact. For that reason, the next section would include details on how group lay theories could affect intergroup relations, specifically the willingness to engage in intergroup contact.

Lay Theories and Intergroup Ideologies

Lay theories, how people perceive the group characteristics, could play an essential role in increasing people's willingness to engage in intergroup contact. Originally generated from Kelly's idea in *The Psychology of Personal Constructs*

(Sechrest, 1963), the term 'lay 'has been widely used interchangeably with 'naive 'or 'implicit' (Levy et al., 1998; Plaks et al., 2005). The term described the lay people's theories about their social world used to shape their understanding and guide their actions (Hong et al., 2001).

However, certain scholars (Wegener & Petty, 1998) have outlined the three words' distinctions. The term 'naive 'theory or psychology was primarily used by (Heider, 1958). He proposed that lay people did not use the scientific approach to formulate their theories. Thus, their theories were regarded as 'naive.' Meanwhile, 'implicit theory 'was referred to as people's cognitive structures and predictions that reside within one's mind without their awareness, which could be used to dominantly generate their common views of the world (Sternberg, 1985). On the other hand, it has been coined 'implicit 'because it was assumed that people could rarely articulate it clearly, but most would still be able to answer when asked directly (Levy et al., 1998). The term 'lay theory', as defined by Hong and colleagues (2001), was used in this study due to its emphasis on these theories' structural and functional nature.

The definition of the term (Hong et al., 2001) referred to them as theories "that impose psychologically meaningful constraints on the infinite variety of interpretations available for a particular stimulus or event." These meaning constructions could provide people with a coherent system of beliefs and principles, which would not be merely random combinations of social information. Simply, lay theories could provide a structure for its adopter by implying causal links between an object and its potential origin. This way, people could use these references to organize their surroundings.

The primary functions of lay theories were to satisfy social, psychological, and personal needs to protect oneself from potential threats, facilitate relationships, and hold up their values (Hong et al., 2001). These lay theories have been used to describe people's personal and social theories that could enhance their epistemic security (Hong et al., 2001; Levy et al., 2006). Lay theories would be cognitive frameworks people have learned and used to make sense of the social worlds around them and direct their actions accordingly.

Similarly to scientific theories, these theories could also serve as a perceptual guide to understand, predict, and direct their thoughts and behaviors (Heider, 1958; Hong et al., 2001; Plaks et al., 2005). Additionally, these lay theories need not be accurate in the scientific sense (Heider, 1958; Hong et al., 2001; Sechrest, 1963). To illustrate, these theories could cover issues ranging from racial categorization to work ethics, either dynamic or fixed attributions of behaviors (Levy et al., 2006).

It is important to note that several lay theories could coexist in a single person's mind (Levy et al., 2006). The accessibility of the theories could play a crucial role in how people perceive their environment in each specific context. The cultural influences were presented as a factor that would determine which concepts would be activated (Menon et al., 1999). According to (Plaks et al., 2005), lay theories could be measured either as a trait or state.

As a potential personal tendency, lay theories endorsement could be directly operationalized and measured by, for example, the *Implicit Person Theories Measure* (Levy et al., 1998). On the other hand, this framework has been tested to also be malleable in experimental conditions (Chiu et al., 1997; Levy et al., 1998), for example, through reading a passage concerning opposing beliefs about dispositional traits (Rattan et al., 2012; Werhun & Penner, 2010). These two patterns of operationalization were claimed by scholars (Levy et al., 2006) that they would not produce stark differences in the results (Demoulin et al., 2006).

Intergroup Ideologies

Intergroup ideologies could be seen as one of many other lay theories. They referred to how people frame their beliefs about cultural groups and use them to distinguish those groups from one another. Intergroup ideology entails why prejudice occurs and how to conduct oneself to combat it (Rosenthal & Levy, 2010; Whitley & Webster, 2019). Distinct types of intergroup ideologies may be broken down into different types of necessary inference about groups. These groups referred to any kind of the following groups, including racial, ethnic, and cultural, as well as nationality.

The intergroup ideologies up to date include assimilation, colorblindness, multiculturalism, and polyculturalism. This study's research focused on

polyculturalism due to its emphasis on cultural interaction that corresponds to our concern. The two other ideologies, colorblindness and multiculturalism, will be presented here as their comparisons by noting each of their strengths and weaknesses. They were also often studied and compared with one another (Prashad, 2001; Rosenthal & Levy, 2010). Unlike these three, assimilation ideology, suggesting that groups should all adopt the mainstream culture, has never been academically reviewed in dept in comparison with polyculturalism. Thus, only colorblindness, multiculturalism, and polyculturalism, as discussed by Rosenthal and Levy (2010), were outlined here.

There also have been links between these ideologies and the psychological essentialism of race, specifically colorblindness and multiculturalism. Scholars' criticisms and suggestions on which approach might be the most fitting to apply in the current global societies will be presented in this section.

Colorblindness

Colorblindness approached stereotypes as stemming from irrelevant criteria that were used to categorize groups. Following this premise, their reduction strategy was to deemphasize the distinctions between groups and their memberships (Wolsko et al., 2000). It was similar to the decategorization technique used to reduce intergroup categorization, as Gaertner and colleagues (2000) reviewed. Based on the cognitive approach to stereotype formation and intergroup relations, there has been an argument that biased evaluations could be an unavoidable result of the categorization process, a cognitive technique people use to make sense of the world (Tajfel, 1969). Thus, a logical solution would be to avoid categorizing people into their ethnic groups, divert one's attention away from between-group distinctions, and focus on the shared between-group similarities instead.

One way to put it would be to emphasize individual uniqueness instead of group characteristics. If one tried to picture a situation where a minority was accepted into a school or workplace without doubting their race, it might not seem like a harmful approach to take. Hoping that the differences and stereotypes were not highlighted, people would ignore them and not initiate any discrimination. For instance, a study showed that police officers who scored lower in colorblind beliefs

were less likely to interact with youth of color (April et al., 2019). Other studies (Levin et al., 2012; Wolsko et al., 2000) also found results that went along the same line suggesting the favorable results colorblindness had on intergroup relations.

However, this intentional ignorance and avoidance of discussions about race and intergroup relationships were subjected to heavy criticism (Boutte et al., 2011; Park & Judd, 2005; Plaut et al., 2018; Rattan et al., 2012; Rosenthal & Levy, 2010). Park and Judd (2005) argued that it would be impossible for people not to categorize people or objects into categories because the categorization process could simplify and give meanings to almost all of the stimuli surrounding us (Rosch, 1978). Moreover, it was non-predictive of lower prejudice (Kohatsu et al., 2011). It also had a detrimental effect on people's cognitive performance (Apfelbaum et al., 2008; Holoien & Shelton, 2012) that would negatively affect later interpersonal interactions (Norton et al., 2006).

Its result might as well be short-term, and stereotypes were found to resurface after a certain period. The positive group attitude and behavior only endured temporarily due to the short-term suppression of seeing the visible distinctiveness or pretense not to notice (Schofield, 1986), which would require extra cognitive resources. After that, the negative attitude bounced back up higher than multiculturalism did, as measured by an implicit measurement (Correll et al., 2008).

Besides only looking for similarities, the adopters would ignore the physical differences, but these differences also include the group's valued identities. In a study by (Worthington et al., 2008), those who adopted a higher colorblind ideology were found to perceive fewer racial issues, thinking that the situation was more positive than others who scored lower in colorblindness. A similar effect was also found as educators reported lower implementations of inclusive teaching practices when they had scored higher in colorblind ideology (Aragón et al., 2017). Plus, the belief was also negatively related to the teacher's willingness to adapt their teaching techniques to accommodate diversity (Hachfeld et al., 2015). Therefore, marginalized individuals might be stripped of their cultural assets (Rosenthal & Levy, 2010) to be accepted in the broader society. As a result, the shared and adopted commonalities

the minorities had with the majority were primarily assimilations, an act of complying with the mainstream culture (Neville et al., 2000).

There have been several ways the scholars used to manipulate the colorblind ideology. In Apfelbaum and colleagues' (2008) study, participants completed a photo identification task in Study 1 and Study 2. Along with a partnering confederate, each participant was assigned either a questioner or an answerer in the first round. The questioner needed to ask the answerer four yes-no questions to identify which of the 30 photos of the individual with mixed racial and gender backgrounds on the desk between them was the one the answerer had held. Then they were instructed to switch their positions within their dyad after four trials. None of the confederates asked about race in the colorblind condition.

Meanwhile, the first out of four scripted questions asked by the confederates in the race-acknowledge condition was, "Is your person Black?" It was within the participants 'judgment whether to acknowledge and use the racial information presented to them. Thus, the objective of this paradigm was to see whether the participants would ask a race-related question to help them single out the target person among all the photos or not. Similarly, Study 3 instructed the participants to watch brief videos of actors completing the same task in Study 1 and Study 2. During the colorblind condition, the actor did not ask any questions depicting the people's race in the photos.

Apfelbaum and colleagues (2010) also did another kind of colorblindness manipulation with elementary school students. They instructed the students to review the digital illustrations on a laptop, presenting them as a part of a storybook, where the teacher promoted racial equality. For the colorblind condition, the scripts included sentences depicting colorblindness, such as, "We want to show everyone that race is not important and that we are all the same." The students then answered a series of questions on the main ideas of the storybook.

The most popular way to manipulate this ideology was through a reading task, which we will use in Study 2. First used by Wolsko and colleagues (2000), an approximately 200-word essay was written and read by the participants. The passage's main ideas included both the decategorization and recategorization

techniques. The sentences for decategorization were, for example, "We must look beyond skin color and understand the person within, to see each person as an individual…" Parallel to this, the recategorization notion finished the prior sentence with "…who is part of the larger group, 'Americans.'" The participants then continued to provide their arguments supporting the essay they had just read. Similarly, each participant in Levin and colleagues 'study (2012) read a faux published online news article. Each of them described a different consensus survey result showing that the American majority was "emphasizing their identities as separate individuals rather than as members of particular cultural groups or Americans as a larger group."

Multiculturalism

As a complete contrast from the colorblind approach, multiculturalism proposed highlighting each racial or cultural group's uniqueness. Rooted in the civil rights movement, this approach has aimed to respectfully acknowledge the minorities 'qualities instead of ignoring them (Banks, 2004). In a social-cognitive approach to categorization, it would be unlikely that humans could refrain from using one of the most fundamental cognitive processes like the colorblind approach suggested (Park & Judd, 2005). "Since no organism can cope with infinite diversity" (Rosch, 1978), it would be impossible to always employ colorblindness to look at ethnic diversity, both implicitly or explicitly. Plus, cognitive suppression would entail cognitive depletion that would later affect interactions between individuals (Vorauer, 2006).

According to the multicultural perspective, the attention given to a group's uniqueness may foster greater understanding and knowledge about that particular group. The prejudice research also proposed the importance of having them, as well as it has been drawn that prejudice came from the lack of racial or cultural knowledge and understanding. Therefore, this approach's main proposal was that prejudice could be reduced by increasing one's level of racial and cultural acknowledgments (Sleeter, 1991). This validation multiculturalism provided could be employed by seeing the "important differences" (Ryan et al., 2010) in a positive light or "appreciating contributions" from these various exceptional qualities.

Plus, multiculturalism could lead to the maintenance of one's cultures and traditions instead of trying to forget them, as colorblind suggested (Rosenthal & Levy, 2010). Empirically, multicultural beliefs had shown greater support for higher out-group tolerance in the Canadian samples, together with stronger commitment and attachment to Canada (Berry & Kalin, 1995). For instance, by practically adopting multicultural ideology toward ethnicity, teachers in this experimental condition reported higher implementation of inclusive teaching practices (Aragón et al., 2017). Similarly, the teacher's enthusiasm for teaching immigrant students, integrative career motives, and their reported willingness to adapt their teaching were reported to be positively related to multiculturalism, unlike colorblind beliefs (Hachfeld et al., 2015).

Nonetheless, this approach's criticisms have been presented, especially with its sensitivity to context (Guimond et al., 2014; Plaut et al., 2018; Rattan et al., 2012; Rosenthal & Levy, 2010; Sasaki & Vorauer, 2013). A higher level of group identification and the perceived threat was negatively associated with multiculturalism and intergroup attitude (Morrison et al., 2010). Even though multiculturalism was found to have a negative effect on generalized prejudice, it was only with some groups that carried existing valued and familiar characteristics acknowledged by the larger group (Levin et al., 2012).

Whitely and Webster's meta-analysis (2019) showed a vague negative relationship between multicultural ideology and prejudice when considering both the correlational and experimental studies together. The association was even lower in the experimental studies than in the correlational ones. The reason might be that once the uniqueness had been emphasized, the more visible the group distinctions became (Bigler, 1999; Prashad, 2001).

The results of having a multicultural ideology were sometimes found to contribute to one's in-group prejudice compared to the colorblindness or control group (Karafantis et al., 2010). Another experiment conducted by Gutiérrez and Unzueta (2010) suggested that multicultural ideology caused people to prefer minorities who carry traits consistent with their group stereotypes to those who had counter stereotypic traits.

Moreover, according to Ryan and colleagues (2007), this approach tended to be adopted by African American participants more than White participants. In the same study, the researchers also found that these African Americans reported a higher level of stereotype endorsement when they scored higher in multicultural than colorblind ideology. It has not been clear whether the positive effects multicultural programs had shown occurred because of the genuine support in the ideology or the increased opportunity to experience different cultures based on the intergroup contact principles.

In the educational context, most of the implemented multicultural programs were not properly evaluated, making it more complicated to interpret their effect on the learners (Rosenthal & Levy, 2010). It has been examined that when the group's distinctiveness was made salient, a person's perspective could be on the verge of nationalism and racism (Prashad, 2003). This could be the case because people could use the established cultural differences to reason that people could be originally different from the start by using ethnic distinctions in the same way one would use genetic make-up as a source of inherent individual differences. Even though this approach was popular, it could entail unwanted results while keeping racial stereotypes in place instead of reducing them.

For the majority of the time, multicultural ideology manipulations have been done similarly to colorblindness, aiming to increase the ideas' salience. Wolsko and colleagues 'essay (2000) has had a considerable influence and was used repeatedly. Their essay's content outlined the importance of ethnic issues and having a multicultural society while acknowledging each cultural group's uniqueness. The passage went;

> "...Recognizing this diversity would help build a sense of harmony and complementarity among the various ethnic groups. Each group has its talents, as well as its problems, and by acknowledging both these strengths and weaknesses, we validate the identity of each group and we recognize its existence and its importance to the social fabric..."

Some researchers also focused on the ideology's benefits (Karafantis et al., 2010) and sometimes feigned a consensus of that society, making the participants

believe that most of the people around them support such ideology (Levin et al., 2012). Cho and colleagues (2017) had written a magazine article format and provided several clear examples in the text while mentioning cultural historians and scientists. For example;

> "...Food is emblematic of cultural differences. Obviously, foods have different origins (red sauce originated in Italy; curry in India; champagne in France), but they also assume specific cultural values. Hindus in India and Nepal do not eat holy cows and Muslims consider the consumption of pork to be taboo. In China, long noodles symbolize longevity and are consumed on the New Year for good luck. Each dish has its own tradition and meaning, which makes it culturally significant..."

With content consistent with these reading passages, other researchers employed other manipulations, such as a video containing German footballers from various ethnic groups (Kauff et al., 2013), digital illustrations from a faux storybook (Apfelbaum et al., 2010), or proposing a school's initiative program (Cho et al., 2017).

Polyculturalism

Unlike the previous ideologies discussed above, the polycultural approach has not emphasized each culture's characteristics it has been possessing. Instead, it shifted the field's perspective to focus on the process of cultural development through dynamic and constant interactions. The polycultural ideology regarded groups as having a mutual influence (Naeim & Kelly, 1999; Prashad, 2001, 2003). The social-psychological definition of polyculturalism referred to it as "a network conception of culture in which cultural influence on individuals is partial and plural and cultural traditions interact and change each other" (Morris et al., 2015). Morris and colleagues (2015) further describe that polycultural ideology "...focuses on how people live coherent lives informed by multiple legacies, how they borrow from or react against foreign ways, with ripple effects within their communities."

To put it simply, it posed a view that there is no 'pure 'culture (Rosenthal & Levy, 2010). This approach has been more consistent with the study of globalization and contemporary societies as it has been argued that almost every member of any

society has always been interconnected by historical intersections to a certain extent (Naeim & Kelly, 1999). Thus, polyculturalism can shed light on people to see the links cultures have with one another without negatively assimilating any minority into mainstream cultures. One's identity could be appreciated through these existing influences (Rosenthal & Levy, 2010).

By adopting this intergroup perspective, research had found various positive results. For instance, it contributed to a greater appreciation for and comfort with differences and diversity and lower evaluative bias (Rosenthal & Levy, 2012). It was also associated with higher cultural creativity through greater inclusion of foreign ideas (Cho et al., 2018) and heightened preferences for culturally mixed experiences (Cho et al., 2017). Polyculturalism predicted cognitive empathy toward both teacher and students, highlighting the appropriateness of cultural accommodation in a classroom setting (Salanga & Bernardo, 2019). Accordingly, polyculturalism may enhance more "interest and comfort with intergroup contact" instead of disengaging oneself from others (Rosenthal & Levy, 2012).

Consistent with Naeim and Kelly (1999) and Prashad's definition (2001), (Rosenthal & Levy, 2012) developed the 5-item scale (α= .88), measuring the endorsement in polycultural ideology in Likert Scale format. It has been the only measurement of polycultural beliefs up to date and will be used in our first study. The content was neutral, with no positive or negative notion that could impair the belief. A sample of items was written as "Different cultures and ethnic groups probably share some traditions and perspectives because these groups have impacted each other to some extent over the years."

Polyculturalism has been manipulated by priming the participants with the ideology. The mock-up magazine article by Cho and colleagues (2017) pointed out polycultural ideas and real-life examples supported by cultural historians. One of the paragraphs went as follows;

> "...grammatical structures of language can be shaped by past
>
> interactions across cultures. Linguists find that Turkish and Korean
>
> have a striking degree of similarity in their syntax...Though we think
>
> globalization is a new phenomenon, a great deal of intercultural trade

and learning occurred via the Silk Road that connected Europe and

Asia for centuries..."

The scholar also increased the ideology salience in another study by employing a proposed school cultural initiative program that outlined how the school's cafeteria would serve students fusion food to improve their understanding and experience with polycultural ideas.

Comparing Colorblindness, Multiculturalism, and Polyculturalism

The last section of this literature review would be devoted to an overview of the three ideologies' relationships. It detailed the constructs 'correlational relationships first, followed by their different relationships with other variables.

Empirically, many studies that compared these three ideologies together provided consistent results (Bernardo et al., 2019; Bernardo et al., 2016; Bernardo & Presbitero, 2017; Cho et al., 2017; Cho et al., 2018; Rosenthal & Levy, 2012; Salanga & Bernardo, 2019). Starting with colorblindness, the studies reported either statistically insignificant correlations with both multiculturalism and polyculturalism (Cho et al., 2017) or significantly low negative correlations with them (Cho et al., 2018). In contrast, multiculturalism was found to significantly and repeatedly produce positive correlations with polyculturalism, usually with moderate to high correlations (Bernardo et al., 2019; Bernardo et al., 2016; Bernardo & Presbitero, 2017; Cho et al., 2017; Cho et al., 2018; Rosenthal & Levy, 2012). It seemed that colorblindness was not strongly related to the other two ideologies. Even so, it could still serve as an interpretative comparison to emphasize that the potential impact of polyculturalism would not happen because people ignored the differences.

In the earlier section of this literature review (see p. 8), we introduced a study done by Rosenthal and Levy (2012). We used this research and its findings as the starting point for our current research. The researchers measured all three of the intergroup ideologies described here together with various cognitive, affective, and behavioral variables. These variables were interest in diversity, appreciation for diversity, comfort with differences, and the only behavioral variable, willingness to engage in intergroup contact.

Correlationally, colorblindness showed no significant relationship with any of the variables, except a low significant negative correlation with the appreciation for diversity (r = -.10, p < .05). It was not a significant predictor of any of the variables. For multiculturalism, it had a low to moderate positive correlation with the cognitive and affective variables but not with the behavioral one. Plus, the result from their regression analysis showed that multiculturalism turned from not significantly correlated with willingness to engage in intergroup contact into its negative predictor (r = -.16) with the p-value level lower than .05.

In contrast, polyculturalism was the only ideology that showed a significantly moderate level of positive correlations on average with all affective, cognitive, and behavioral variables (r = .24 to .44) in the study. It had the only statistically significant positive correlation with the willingness to engage in intergroup contact while also being the only positive predictor of this behavioral variable (r = .36, p < .01).

These results proposed a further question on what the reason for this would be to happen and why polyculturalism affect the willingness to engage in intergroup quite differently than colorblindness or multiculturalism. Another kind of lay theory underlying all these three ideologies had the potential to explain this phenomenon.

Essentialism

The consequences of having lay theories to guide one's perceptions and behaviors have been concerned with intergroup relations, especially intergroup biases. The perspective presented here would be the psychological essentialism theory of race (Medin, 1989). Other researchers (No et al., 2008) also coined it as a 'lay theory of race, 'which was used to name their version of essentialism measure. According to No and colleagues (2008), this essentialist view of people "assume biological attributes such as skin color as indicative of fixed psychological characteristics and outcomes." It proposed that an essentialist mind would perceive group members as having a shared 'essence' that could not be changed. Their explanations could draw conclusions about group properties and characteristics from an unchangeable biological essence that they assumed every member possessed.

Simultaneously, a chosen social category could also perceptually signify a shared essence between the group members (Demoulin et al., 2006; Haslam et al.,

2006). For instance, the entity theory (Hong et al., 2001; Levy & Dweck, 1999; Levy et al., 1998) proposed that people would possess static traits that could not be changed or reconstructed. Along the same line, genetic determinism provided the logic that people or group members would have a fixed character in which their race or genetic-makeup was the source of their personality (Keller, 2005). This racial attribution also indulged the idea that a group would contain a high level of in-group homogeneity and low variance among its members. Based on a similar psychological essentialism idea (Medin, 1989), this view extended to cultural groups as well (Haslam et al., 2006). In a country where many racial groups live together, people might assume that these racially different peoples belong in the same cultural category bounded by their national border (Bernardo et al., 2016).

To avoid confusion on how essentialism and other similar constructs were conceptualized and measured, different approaches were described here. One of the first essentialism measurements was created by Levy, Stroessner, and Dweck (1998). The scale was used to determine entity and social constructivist theorists. The content was straightforwardly asking the participants to rate their agreement with the statements, such as, "The kind of person someone is, is something basic about them, and it can't be changed very much".

Before being distinct constructs, entitativity, natural kind-ness, and essentialism were treated as the same construct. Upon further investigation, Haslam, Rothschild, and Ernst (2000) followed their study results and identified entitativity and natural kind-ness as the two essentialism dimensions. They provided the participants with a number of different social groups and asked them to rate each group's characteristics by the elements written (e.g., discreteness, uniformity, and immutability). After that, Bastian and Haslam (2006) concluded a new relationship between the three constructs, describing each of them as related and separately predictive of stereotype endorsement. This structural study revealed that essentialism could be further assessed through smaller dimensions: biological basis, discreteness, and informativeness.

Demoulin, Leyens, and Yzerbyt (2006) also came up with another measure to separate essentialism from two similar ones, entitativity and natural kind-ness. They

asked their participants to rate the groups provided by five different essentialism dimensions (underlying reality, membership explanation, immateriality, deep explanation, and invisible link).

In our work, we chose the scale created by No and colleagues (No et al., 2008). They developed an essentialism scale by including two opposite subscales, social constructivism and genetic lay theory (α= .83). The first dimension reflected people's essentialist view, while the second half dealt with people's characteristics' malleability. The items in the first half were such as, "To a large extent, a person's race biologically determines his or her abilities and traits," while the rest were such as, "Racial categories are fluid, malleable constructs."

For the experimental operationalization, essentialism was mainly being manipulated by increasing its salience. To illustrate, No and colleagues (2008) also created a mock Times article supporting essentialist beliefs for their participants to read and, therefore, primed them with its ideas. The content included mentioned a study result observed by a cultural anthropologist stating that "these unique characteristics within each racial group formed the link among its members, increased group cohesion' ...race 'biologically determines an important part of an individual's dispositions."

Many studies reported that essentialism was linked with the tendency to look for confirming stereotype information (Plaks & Higgins, 2000) and socially categorized people (Bastian & Haslam, 2006; Levy & Dweck, 1999; Levy et al., 1998). Moreover, people may also racially categorize more and perceive racial categorization as a crucial informative cue when endorsing essentialistic thinking (Chao et al., 2013).

Levy and colleagues (2006) argued that these belief systems could have an inferential effect on social practices as much as they had on people meaning construction. There have been empirical examinations that showed negative intergroup implications concerning essentialistic beliefs. For instance, people expressed lower willingness to interact when they were met with a few bad or neutral behaviors (Levy & Dweck, 1999), more prejudice toward outgroups who were minorities (Hong et al., 2004), and also less likely to reach out to aid those who were disadvantaged (Karafantis & Levy, 2004).

Essentialism was the mediator of this study because it implied an ideological consequence of our understanding of cultures and their members. It could be possible that people view culture similarly to race, which they think of it as fixed and determined by biology. Therefore, scholars have proposed that this view could be altered by believing that cultures are malleable and constantly interacting.

We detailed the conceptual and empirical evidence for the role of essentialism here. Conceptually, culture, not biology, created the concept of race, according to Prashad (2003). Their take on this claim was that once people discovered the evidence that race was never determined by biology, they politically reattributed it to culture. Their reasoning being that the view that cultures have fixed and clear boundaries was the reason why we think that members of a race share a similar biological basis. To clear up this misled notion of culture and race, the polycultural approach was proposed. By regarding cultures as historically and continually mixed, our definition of race as a biological fact could be destabilized.

Empirically, intergroup ideology works (Bernardo et al., 2016; Cho et al., 2018) have explored this possibility. They found an empirical association between essentialism and some ways people conceptualize and treat cultural units, but not others. In Bernado and colleagues' study (2016), the researchers tested how essentialism could differentiate multiculturalism from polyculturalism by conducting a Confirmatory Factor Analysis (CFA) and regression analyses in six Asian countries' samples. The data from their university student samples were gathered through an online questionnaire containing self-report measures of essentialism, multiculturalism, and polyculturalism endorsement. The correlation results prior to the main analyses showed that essentialism was only positively and significantly related to polyculturalism in the Malaysian samples. The CFA results revealed that between multiculturalism and essentialism, the covariance was significant in all six cultural groups. Meanwhile, polyculturalism and essentialism factors showed a significant result in their covariance only in the Malaysian samples. The regression results suggested that multiculturalism was a significant predictor of essentialism in five out of six countries. On the other hand, polyculturalism only significantly predicted essentialism in the Malaysian samples. The association between the two

variables was non-significant in the other five countries. As we can see here, the results were mixed among the Asian samples. It was our intention to also explore the relationship between these variables with the Thai sample.

Contact Quality

The relationships among the variables described so far could be affected by their past experience with people from the other group. Aside from the main variables we intended to study, we decided to include contact quality as a control variable. As reviewed in an earlier section, the Contact Hypothesis (Allport et al., 1954) put an emphasis on creating more contact to improve intergroup relations. One factor that would be important to consider would be how well past contacts had been. Past research has found an association between contact quality, not contact quantity, and prejudice against the ethnic minority in Australia (Turoy-Smith et al., 2013). Healy and colleagues (2017) conducted a study on prejudice towards LGBI, TI, and refugees with polyculturalism and contact quality as their predictors. The correlational study found that contact quality was related to prejudice while contact quantity was not. At the same time, both contact quality and quantity were associated with polyculturalism. Therefore, we were interested in exploring contact quality's role in our study because of its promising association with prejudice and interesting link with polyculturalism, together with other intergroup ideologies as well.

Conclusion

As far as this literature review progressed, there were meaningful associations between these concepts (see Figure 1). The first two intergroup ideologies, colorblindness and multiculturalism, were found to have an association with essentialism. Polyculturalism was the only ideology with the least conceptual association with essentialism. However, the empirical evidence was still mixed. It is inarguable that this approach still suffers from the lack of empirical attention from researchers in the field.

Figure 1

Theoretical Framework

```
┌──────────────────┐      ┌──────────────┐      ┌─────────────────────┐
│ Intergroup Ideology │ ──→ │ Essentialism │ ──→ │ Willingness to Engage in │
│                  │      │              │      │ Intergroup Contact   │
└──────────────────┘      └──────────────┘      └─────────────────────┘
```

However, polyculturalism has been the only approach that takes cultural interactions into account. Its perspective has been the most consistent with other fields, such as globalization, mobility, history, and cultural studies. Their analysis suggested that we must treat cultures and their people as they are, an ongoing process. This constant process of interactions seemed to contradict with essentialistic beliefs about culture, ethnicity, and race. Therefore, it should be crucial to ascertain whether this claim is valid and explore a potential new approach to improve our intergroup relations.

CHAPTER 2

STUDY 1

Research Objectives

The first study's objective was to examine the relationships between the intergroup ideology, particularly polyculturalism, and essentialism, together with the willingness to engage in intergroup contact. Furthermore, it explored the impact polyculturalism may have on the willingness to engage in intergroup contact while having essentialism as the mediator in Bangkok high-school students (see Figure 2).

Figure 2

Conceptual Research Model
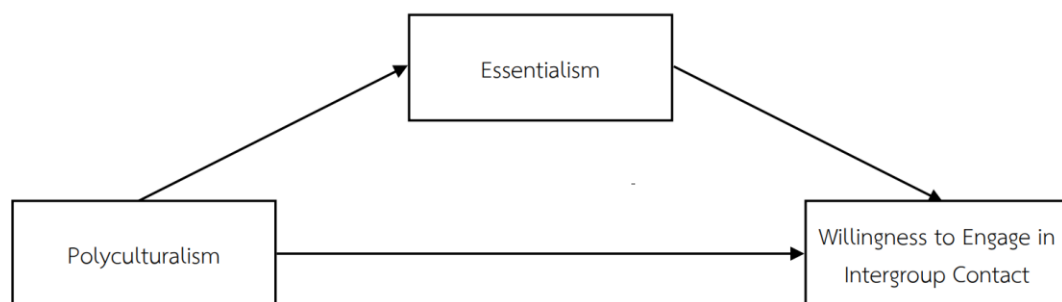
Conceptual and Operational Definitions

The **predictor** was the main intergroup ideology of interest which was polyculturalism. Polyculturalism is concerned with one's endorsement in the idea that groups have mutual influences on one another while regarding culture as a continual process. These constructs was measured by the polyculturalism subscale in the *Lay Theories of Culture Scale*. The score represented the participant's level of endorsement in polycultural ideology.

The **mediating variable** was essentialism, which concerned the belief that people's characteristics are not malleable. It was measured by having the

participants rate their agreement level for the items, each containing essentialistic content, from the *Lay Theories of Race Scale*. Higher scores reflected a higher tendency to endorse essentialistic beliefs.

The **criterion variable** was the willingness to engage in intergroup contact. Its definition referred to people's intention to behaviorally engage with a person from other groups than their own. This variable was measured by the *Behavioral Intentions Scale*, which asked the participants to indicate their level of intention to initiate the behavior. Higher scores reflected a higher willingness to interact with people from the target group.

The **control variable** was contact quality. How well past contact the participants had with the target group was measured directly by two items. Higher score reflected higher contact quality with the target group.

Research Hypotheses

Polyculturalism should have a distinguishing correlational patterns with essentialism and willingness to engage in intergroup contact, according to prior studies done in the other parts of the world, including several South East Asia countries.

Hypothesis 1: The intergroup ideology would positively correlate with willingness to engage in intergroup contact.

Hypothesis 2: There would be an indirect effect of the intergroup ideology on willingness to engage in intergroup contact through essentialism.

Methodology

Participants

   Bangkok was holding the highest density of Myanmar workers. Thus, the Thai high-school and university student in Bangkok area was selected to be our sampling pool because they are most likely to get exposed to Myanmar workers in the area according to the 2020 worker statistics (Foreign Workers Administration Office, n.d.).

   On this account, the student's perspective on intergroup relation and interactions could lead to numerous social consequences. It should be beneficial for students to learn about relationship between cultural groups to form appropriate understandings and behaviors as early as it could be taught. Therefore, the high-school students attending either science-maths or arts program, ranging between Mathayom 4 to 6, were recruited as samples due to the materials 'difficulty. Undergraduate university students enrolling in any faculty were recruited as well. The participants age range was expected to be between 15-25 years old.

   The researcher resorted to the convenience sampling technique and contacted two schools in Bangkok. The schools agreed to help distribute the survey to their students. These two schools are Nawaminthrachinuthit Triamudomsuksa Nomklao School and Mathayom Wat Makutkasat School. In addition, the online survey was also distributed through school authorities, online social media platforms, and promoted within the university.

   To clarify, this study's inclusion criteria conclude that the participant must be:

     1) a Thai high-school or university undergraduate student

     2) attending any Mathayom level from 4-6 or a university undergraduate level

     3) in either science-maths or arts program for high school students and any faculty for undergraduate students

   The researcher used the G*Power program to calculate the minimum number of samples needed for both multiple regression and correlation analysis. Having the power set at .8, it was suggested to have at least 84 samples. Another 10% of the number was added in case of missing data. The final minimum number of participants was 93 samples.

Ethical Considerations

Our research population largely consist of students aged under 18 years old. However, due to the spread of COVID-19, many schools in Bangkok were still conducting their classes online. The school authorities did voice their concerns over the difficulties to distribute the parental consent form to the parents as the majority of them could not be reached online. Therefore, we decided together with the school authority to ask for a parental consent waive.

The researcher provided a detailed research information to the school authorities and ask them to make an informed decision. Only the students who agreed to participate would pass our selection criteria and were included in the data collection process. The students were ensured of their voluntary decision to participate along with their privacy and confidentiality. The survey did not include any identity-related information.

The researchers detailed the participation benefits to the participants in the information sheet. It would have no direct personal gain for those who participate, except for the compensation, but would benefit the academic community and society at large. Moreover, they were informed of the minimal risks they might face when completing the survey because certain questions could be uncomfortable to answer. Chulalongkorn University's Ethical Committee and the Faculty of Psychology's Center for Psychological Wellness contact information was provided at the end of the document.

Materials and Measures

1. The *Lay Theories of Culture Scale* (Rosenthal & Levy, 2012), which was an intergroup ideology measurement, was translated into Thai and back-translated by a qualified English speaker (see Appendix A). The measure was included in a pilot study to ensure its validity and reliability with the Thai student samples. The scale consisted of three separate constructs with five items for each, including colorblind, multiculturalism, and polyculturalism. In this study, the participants indicated their level of agreement on the polyculturalism items in a 7-point Likert Scale, ranging from 1 (Strongly Disagree) to 7 (Strongly Agree).

The Thai polyculturalism items emphasize the on-going cultural process and neutral influence each culture has one another (α = .77), such as "Different cultural groups impact one another, even if members of those cultural groups are not completely aware of the impact." The positive score represented the participant's level of endorsement in polycultural ideology, while lower scores signified low endorsement in the ideology.

2. The *Lay Theories of Race Scale* (No et al., 2008) measuring essentialism, was translated into Thai and back-translated by a qualified English speaker (see Appendix B). The measure showed a moderate internal consistency level (α = .62) with the Thai sample. The scale consisted of four items on essentialism. The participants were asked to indicate their level of agreement on each item in a 7-point Likert Scale, ranging from 1 (Strongly Disagree) to 7 (Strongly Agree).

The four positively worded items directly represented the participant's level of endorsement in fixed beliefs and essentialist attributions about race. The items were such as "To large extent, a person's race biologically determines his or her abilities and traits."

3. The *Behavioral Intentions* Scale, developed by Esses and Dovidio (2002), which measured the willingness to engage in intergroup contact, was translated into Thai and back-translated by a qualified English speaker (see Appendix C). The measure was included in a pilot test to ensure its validity and reliability within the Thai student samples. This scale was used to assess the participant's behavioral intention to interact with people from any other outgroup member, specifically Black (α = .77). In this study, however, the target group for the scale was Myanmar. According to the Thai Foreign Workers Administration Office statistics (n.d.), the largest group of foreign workers currently residing in the country was from Myanmar.

The original scale consisted of 12 items, scoring in a 7-point Likert Scale format from 1 (not at all willing) to 7 (extremely willing). The positive score signified higher level of willingness to interact. The items were such as "If given the opportunity, how willing would you be to have a person from...as a neighbor?" Another item was added to provide more relatable content for our student samples.

This additional item was "If given the opportunity, how willing would you be to take a foreign exchange student from...as your buddy?" The adapted Thai version of the scale would ultimately consist of 13 items (α = .90)

4. The demographic measurements included questions asking for the participant's age, gender, and school year. The participants filled in their age in number format, while their gender and school year were selected from multiple choice questions.

In addition, the contact quality scale was included as well (see Appendix F). The contact quality measure (Healy et al., 2017) assessed participants' perceived experience with the *Behavioral Intentions Scale*'s target group. This translated two-item measure (α = .59) asked the participants to rate their experience with "Do you find the contact is...?" either "pleasant/unpleasant" and "positive/negative". The answers were collected using a 7-point Likert Sc ale with the mentioned two opposite words. Higher score reflected higher contact quality experienced by the participants.

Procedure

The researchers contacted two schools in Bangkok using a convenience sampling technique. The two schools were Nawaminthrachinuthit Triamudomsuksa Nomklao School and Mathayom Wat Makutkasat School. Then, the researchers informed and asked for the school's permission to collect the data. The school authorities were asked to help distribute the online survey to the students. Additionally, the survey was distributed online through various social media platforms and promoted to students from different faculties in the university.

The first page of the online survey contained the online consent form containing detailed information about this research and ethics guidelines. The document included details about the research purposes, procedure, and what we would do with the data. There was no item asking for their name or surname. This information about their anonymity was ensured in written form.

We also ensured the participants that their participation was entirely voluntary and they were free to end their involvement any time which would not

have any consequence of any kind. Moreover, the participants were informed that their answers would only be presented in general terms without revealing their individual identity. This part of information also explained that data would be kept on a computer for no more than three years where the researcher and the ethics committee would be the only people who can access it.

Only the students who gave their consent by clicking "Agree" in the consent form were guided to the next part of the survey. On the other hand, those who selected "Disagree" or failed to fully complete the survey were ruled out from further data analysis.

Those who agreed to participate were redirected to the survey's demographic section, asking them to fill out their age, gender, and year of high-school they are attending.

The next part included the polyculturalism measure. Next, it was followed by the essentialism and the willingness to engage in intergroup contact scale. The entire survey took approximately 20 minutes to complete. This participation was required only once. After their completion, the participants were thanked, debriefed through the passage written at the very end of the survey, and given a 50-baht e-coupon from GrabGifts as an exchange for their time. The compensation process required the participants to fill in their nickname and email.

Results

The first study was a correlational study, employing measures in Likert scale format to assess each variable. The participants completed the demographic questions, polyculturalism, essentialism, and willingness to engage in intergroup contact scale, respectively.

The data collected were first screened in Microsoft Excel for accuracy and univariate outliers. Then, they were later analyzed for multivariate outliers, assumption checks, and hypothesis testing in the Statistical Package for the Social Sciences (SPSS).

Sample Data and Data Screening

The expected number of participants in Study 1 was 94 according to the calculation from G*Power for correlation and multiple regression analysis. The

researcher contacted school authorities to help distribute the survey online to the students. We also decided to promote the survey online and on-site at the university.

Once downloaded from Qualtrics, the data was screened for accuracy. The initial number of responses was 216. The researcher checked and dropped the responses that were incomplete (78 cases), inattentive in which they took lesser than 3 minutes to complete the entire survey (eight cases), or came from duplicated IP addresses (four cases). The researcher also calculated the standard deviation of all the response items for each case. We calculated the standard deviation only for the measure with more than 10 items to identify random answers. This criterion was not used for the measures with four or five items. We consider it possible for the participant to select the same response in all the items, especially when there was no reverse-scored item. As a result, another 12 cases with a standard deviation of any measure equal to 0 were cut off as it also suggested inattentiveness. This resulted in the remaining 114 cases.

The data was further explored for univariate outliers. The researcher calculated the z-score for each variable to identify those with a z-score higher than 3. One case was found and excluded.

With SPSS, the Mahalanobis Distance value distributed as the Chi-squared distribution and its respective probabilities were calculated with df equaled to the number of variables (three). To identify the multivariate outliers, the alpha level used was .001. One case with a Mahalanobis distance value that has a probability lower than .001 was excluded. The total number left after these data cleaning steps was 112 cases, which exceeded the minimum requirement.

The assumption checks for linear regression were carried out. Firstly, the data was normally distributed with no skewness or kurtosis higher than 1 or less than -1. The P-P Plot showed that the score on each variable was relatively normally distributed. The Shapiro-Wilk test was not statistically significant for the main variables but was significant for the covariate, contact quality. Secondly, the scatter plots demonstrated the linear relationship between each pair of the four variables. Thirdly, this set of data showed homoscedasticity when looking at its residual scatter

plot. Lastly, there was no VIF value higher than 1 signifying no multicollinearity problem.

The mean age for the sample of this study was 16.99 years old with the minimum at 15 years old and maximum at 23 years old. The participants who completed the survey were 70.5% female ($n = 79$), 18.8% male ($n = 21$), 2.7% identified as others ($n = 3$), and 8% preferred not to say ($n = 9$). Out of all the student samples, 90 samples were high-school students (80.4%) and the other 22 samples were university students (19.6%).

Hypothesis Testing

The 2 hypotheses of the study were (1) the polyculturalism would be positively correlate with willingness to engage in intergroup contact and (2) there would be be an indirect effect of the polyculturalism on willingness to engage in intergroup contact through essentialism. These hypothesis tests would be described in the following section.

We analyzed the correlation between all variables (Table 1). Specifically for the first hypothesis, the correlation between polyculturalism ($M = 5.38$, $SD = .65$) and willingness to engage in intergroup contact ($M = 5.24$, $SD = .84$) was statistically significant at a low level ($r(112) = .33$, $p < .001$). This could imply that if a person belief that cultures were changeable and constantly interacting, they would likely to be willing to engage in a contact with people from Myanmar. The first hypothesis was supported.

The **second hypothesis referred to the simple mediation model** with polyculturalism as the predictor, willingness to engage in intergroup contact as the outcome, and essentialism as the mediator. The researcher also included contact quality as a covariate to control for its effect on essentialism and willingness to engage in intergroup contact. This overall hypothesis could be represented by five sub-hypotheses.

Path *c*: There is an effect of polyculturalism on willingness to engage in intergroup contact.

Path *a*: There is an effect of polyculturalism on essentialism.

Path *b*: There is an effect of essentialism on willingness to engage in intergroup contact.

Path *ab*: There is an indirect effect of polyculturalism on willingness to engage in intergroup contact through essentialism.

Path *c'*: There is an effect of polyculturalism on willingness to engage in intergroup contact after including essentialism as the mediator.

Table 1

Descriptive Statistics, Cronbach's Alpha (in diagonal parentheses), and Correlation Matrix

Variables	*M*	*SD*	PL	ESS	WLN	CTQ
PL	5.38	.65	(.59)			
ESS	3.33	.98	.05	(.63)		
WLN	5.24	.84	.33**	-.26*	(.90)	
CTQ	4.79	.96	.12	-.10	.38**	(.59)

Note. PL is short for polyculturalism, ESS for essentialism, WLN for willingness to engage in intergroup contact, and CTQ for contact quality.

* p < .05, ** p < .01, *** p < .001 (two-tailed)

Starting with the simple regression model where we examine the effect of polyculturalism on willingness to engage in intergroup contact on with contact quality as a covariate. The contact quality was statistically correlated with willingness to engage in intergroup contact (b = .30, *SE* = .07, *t*(109) = 4.09, p < .001), suggesting that participants who had positive experiences with Myanmar people are more willing to engage in such contact again. After controlling for contact quality, the effect of polyculturalism on willingness to engage in intergroup contact (path c) was still statistically significant (c = .37, *SE* = .11, *t*(109) = 3.37, p < .01, R^2 = .23). The result suggested that endorsing polycultural beliefs could positively affect the

person's willingness to engage in intergroup contact, regardless of how well their contact with Myanmar people had been in the past.

Next, we added essentialism to the model as a mediator. The contact quality was used as a covariate for both the willingness to engage in intergroup contact and essentialism. The result showed that contact quality was not significantly correlated with essentialism (b = -.11, SE = .10, t(109) = -1.10, p = .27). On the other hand, the contact quality still showed a significant positive influence on how willing a person would be to engage with someone from Myanmar. (b = .28, SE = .07, t(108) = 3.90, p < .001).

After controlling for contact quality, path a, which represented the effect of polyculturalism on essentialism was non-significant (a = .10, SE = .15, t(109) = .66, p = .51). The finding showed that those who believe that cultures are continually changing do not necessarily believe, or not believe, that people have fixed traits because of their ethnic group membership. Plus, this variation could not be explained by how well past contacts with Myanmar people had been.

The analysis further showed that the relationship between essentialism and willingness to engage in intergroup contact, path b, was negative and statistically significant (b = -.21, SE = .07, t(108) = -2.99, p < .01). It suggested that those who endorsed lower essentialist ideas about race tend to be more willing to engage with a person from Myanmar in various contexts.

The indirect effect (path ab) of polyculturalism on willingness to engage in intergroup contact with essentialism as a covariate appeared to be non-significant ($a*b$ = -.02, Boot SE = .03, Boot 95% CI [-.10, .03]). The 95% confidence interval did include 0. Therefore, it could be interpreted that there was no statistically significant indirect effect in the model.

Finally, path c' representing the relationship between polyculturalism and willingness to engage in intergroup contact was still statistically significant (c' = .39, SE = .11, t(108) = 3.68, p < .001) when essentialism was in the model as a mediator. This suggested that essentialism did not work as a significant mediator in the model.

Figure 3

Mediation Model
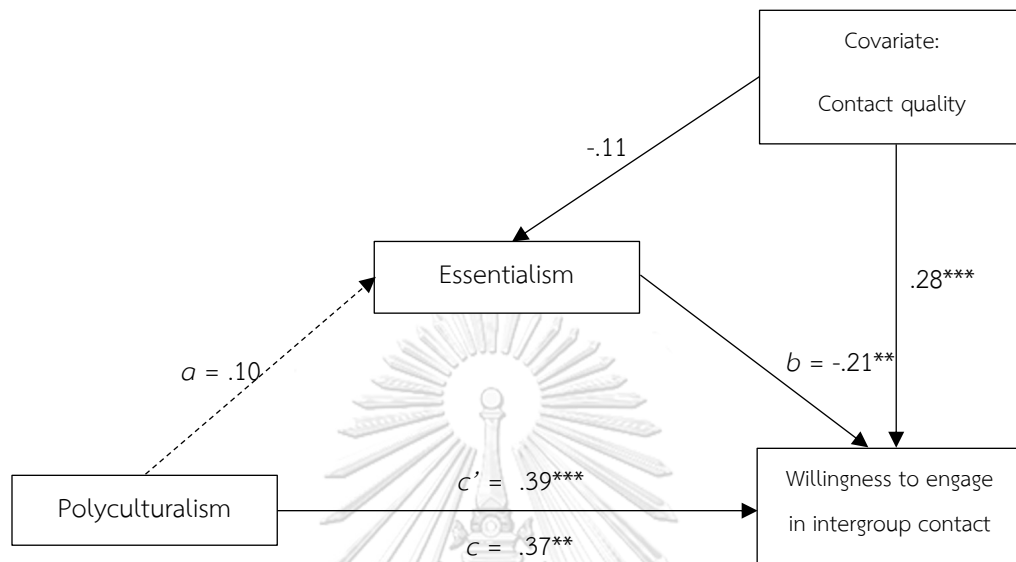
Altogether, the simple mediation analysis showed no indirect effect as hypothesized. Believing that cultures are not fixed (polyculturalism) did not lead to believing that people's racially determined characteristics are more malleable (lower essentialism). What was consistent with prior research was that those who endorsed essentialist beliefs would lead to lesser willingness to interact with people from another ethnic group. Meanwhile, the total and direct effect of polyculturalism were both statistically significant. This could mean that essentialism cannot help explaining the mechanism between polyculturalism and the willingness to engage in intergroup contact. In conclusion, the second hypothesis was not supported.

Discussion

This study focused on the initial association between the polyculturalism, essentialism, and the willingness to engage in intergroup contact. The correlational analysis was carried out. We further examined the mediating role of essentialism between polyculturalism and the willingness to engage in intergroup contact. The correlational survey design in this study provides a basis to explore these variables together which would be discussed below.

Correlation Between Polyculturalism and Willingness to Engage in Intergroup Contact

The **correlation** between polyculturalism and the willingness to engage in intergroup contact was hypothesized. We expected to find a positive correlation between these variables and **the result supported the first hypothesis**. There was a statistically significant moderate positive correlation between polyculturalism and the willingness to engage in intergroup contact.

The finding can be interpreted as those who believe that cultures are flexible and interchangeable would likely to be willing to interact with people from an outgroup. In contrast, those who disagree that cultures are changeable would tend to be less willing to engage with an outgroup member.

This is consistent with prior research. Rosenthal and Levy (2012) argued that this may be because having polycultural beliefs blurs the line between ingroup and outgroup. This could lead to noticing more connection between one's own cultural group and others' by disengaging oneself from a fixed cultural frame. They also found a moderate positive correlation between polyculturalism and the willingness to engage in intergroup contact among their university samples. The correlations varied from moderate to high when the researcher divided the samples into subgroups according to the participants' ethnicity, except for White Americans.

Mediating Role of Essentialism

The **second hypothesis** served as the next step to explore how polyculturalism could play a role in predicting intergroup relation. This was done with a potential mediator, essentialism. We hypothesized that essentialism would mediate the relationship between polyculturalism and the willingness to engage in intergroup contact. **The second hypothesis, however, was not supported**.

Our finding shows that polyculturalism did not significantly predict essentialism. It could mean that those who adopt high level of polyculturalism neither tend to adopt low or high level of essentialism. In other words, by knowing one's level of polyculturalism endorsement does not signify how much they would adopt an essentialist idea and vice versa. Even though both polyculturalism and essentialism could significantly predict the willingness to engage in intergroup

contact, the indirect effect did not occur. This led to the conclusion that polyculturalism does not have a significant indirect effect on willingness to engage in intergroup contact through essentialism.

Consistent with the previous work. In the multinational study (Bernado et al., 2016), polyculturalism only positively correlated with essentialism in the Malaysian samples ($r = .30$, p < .01), one out of six Asian countries. Similarly, polyculturalism only negatively predict essentialism in the Philippines samples ($b = .13$, p < .05). The results from the other five countries showed no significant association between polyculturalism and essentialism.

According to the existing literature and our results, the relationship between polyculturalism and essentialism is still inconclusive. The results varied across countries. Our hypothesis formulation may have overestimated the relationship between the two variables, but we were first to explore it in the Thai context.

Additional Analyses

Our results showed no mediation effect between polyculturalism and the willingness to engage in intergroup contact through essentialism. Therefore, we were interested in exploring essentialism as a moderator to understand the relationship between the studied variables better.

We ran an additional analysis for a simple moderation model with PROCESS, Model 1. Polyculturalism was entered as the predictor, essentialism as the moderator, willingness to engage in intergroup contact as the same criterion variable, and contact quality as the covariate. The results showed that the overall model was statistically significant ($F(4, 107) = 13.43$, $p < .001$, R2 = .33). The contact quality as a covariate had a significant positive correlation with willingness to engage in intergroup contact ($b = .29$, $SE = .07$, $t(107) = 4.18$, $p < .001$). After controlling for the effect of contact quality in the model, the positive effect of polyculturalism on the willingness to engage in intergroup contact was statistically significant ($b = .37$, $t(107) = 3.51$, $p < .001$). In contrast, the relationship between essentialism and the willingness to engage in intergroup contact was negative and statistically significant ($b = -.25$, $t(107) = -3.59$, $p < .001$).

Having essentialism as the moderator and polyculturalism as the predictor, the interaction effect (see Figure 4) was statistically significant (b = .31, $t(107)$ = 2.81, $p < .01$) as well as the change in the model ($F(1, 107)$ = 7.87, $p < .001$, R2 change = .05). The simple slopes analysis showed that polyculturalism did not have a significant positive effect on the willingness to engage in intergroup contact when essentialism was 1 standard deviation below the average (b = .06, $t(107)$ = .41, p = .682). Polyculturalism had a significant positive effect on the willingness to engage in intergroup contact when essentialism score was at its average (b = .37, $t(107)$ = 3.51, $p < .001$) and 1 standard deviation above the mean (b = .67, $t(107)$ = 4.69, $p < .001$).

The illustration for the moderating effect can be seen in Figure 4. How much polyculturalism can affect people's willingness depends on how much they initially consider a person as a member of an ethnic group, not as an individual independent of their ethnicity (essentialism).

First, when essentialism was low, the effect of polyculturalism on the willingness to engage in intergroup contact was non-significant. It could mean that those who already believe that people's characters are not fixed would not judge people by their ethnicity. Therefore, their level of willingness to engage in intergroup contact was comparably higher (blue line), no matter how much they believed that cultures were fluid or not (low or high polyculturalism). For example, a Thai person could believe that people anywhere do not have fixed character traits because of where they grew up, and there are differences in personality within every culture (low essentialism). This way, there would be no perceived group differences that created an imaginary wall between the Thais and Myanmar. They were already willing to interact with anyone, including the Myanmar people. Thus, believing whether cultures are mutually influencing one another or not would not make them any less or more likely to interact with others than they already are.

Figure 4

Moderating Role of Essentialism
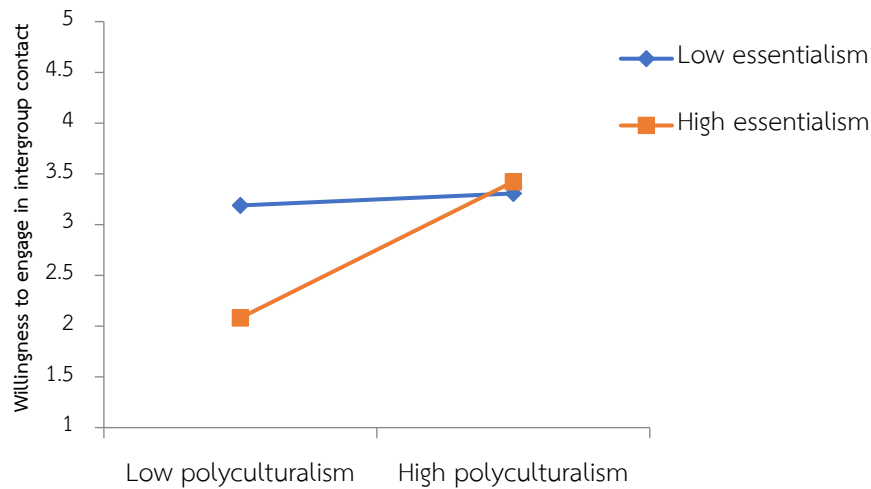
Secondly, polyculturalism only worked on the willingness to engage in intergroup contact when people derived people's characteristics from their ethnicity (essentialism). If they think that people are the way they are because of their ethnic membership (high essentialism) and do not believe that cultures are changeable (low polyculturalism), they would be less likely to interact with people from an outgroup. A Thai person could be focusing on the stark character differences between Thai and Myanmar, making them more hesitant to engage with Myanmar.

However, people could still think people's character is fixed to their ethnicity (high essentialism) and still believe that cultures are constantly changeable (high polyculturalism) simultaneously. Essentialism proposes that people's character traits are shaped by their culture, which is almost impossible to change. It might not necessarily mean the 'essence' that a group possesses will always lead to negative consequences in intergroup relations. If the 'essence' of an ethnic group favors open-mindedness in general, it would be rather difficult for the group members not to be open-minded. Their openness might help them be more likely to have a better attitude towards cultural exchange, which aligns with the polycultural idea. This results in a higher willingness to engage in intergroup contact than in the other instances.

We explored our data in more details to figure out alternative explanations and cautious interpretation to the current findings. There were two approaches we

used to reach our samples. One is through the school authorities and the other was through online platforms. Our contact with the schools provided us with high school samples (n = 91). The online distribution on different social media platforms mostly gave us university student samples (n = 22). Therefore, we wanted to see if there was any subgroup difference in the data.

Firstly, the researcher conducted separated reliability analysis for each student type, high-school and university. Instead of having equivalent Cronbach's alpha levels, we have a subgroup difference where the Cronbach's alpha is noticeably lower in high-school student samples (α = .458, n = 91) than in university students (α = .838, n = 22).

Consequently, we conducted an independent t-test with polyculturalism to see if there was a statistically significant difference between the two student types. The result shows that there was a statistically significant difference (t(27.48) = -2.94, p < .01) between the polyculturalism score in high-school (M = 5.29, SD = .59) and university student (M = 5.80, SD = .76) samples. When we compared the data from two main schools we contacted, there was no significant difference in polyculturalism score between them.

Taken this together, there might be an issue with polyculturalism scale's reliability with high-school student samples but not the university samples. The scale may only be reliable when used with university students and above.

CHAPTER 3

STUDY 2

Research Objectives

The previous study had reflected the relationship between polyculturalism, essentialism, and the willingness to engage in intergroup contact to a certain extent. We found that polyculturalism was not associated with essentialism. At the same time, essentialism was not a significant mediator in the model. The results were largely consistent with previous research that compared different intergroup ideologies together (Bernardo et al., 2016). Due to its correlational design, the causal link between the variables could not be proven. Therefore, the second study was designed with the aim to test the constructs experimentally in the hope that we would be able to continue studying the mechanism of intergroup ideology. Even though the additional analysis provided an interesting new look at the moderating relationship between the studied variables as well as the sub-group issue between high school and university student participants, we decided to maintain the parallel between Study 1 and 2 objectives. This way, we had hoped to ascertain how similar or different the construct would be across research designs and operationalizations. An experiment was conducted to test the effect of three different intergroup ideology constructs in association with essentialism, and willingness to engage in intergroup contact. A control condition was added, resulting in the total of four conditions. Colorblindness and multiculturalism interventions were hypothesized to have a positive effect on essentialism. Meanwhile, polyculturalism intervention was hypothesized to have a negative effect on essentialism. Then, essentialism as a mediator should negatively affect the willingness to engage in intergroup contact. Therefore, polyculturalism should have a positive indirect effect on willingness to engage in intergroup contact with essentialism as the mediator.

Conceptual and Operational Definitions

The **independent variable** was the intergroup ideologies. There were three experimental conditions: colorblindness, multiculturalism, polyculturalism, and a control condition. Participants in each experimental condition read an article

designed to enhance the salience of each belief. Participants in the control condition were be exposed to content unrelated to intergroup ideologies.

The **mediating variable** was essentialism, which concerned the belief that people's characteristics are fixed. Duplicating the first study, it was measured by having the participants rate their level of agreement for the items in the *Lay Theories of Race Scale*. Higher scores reflected higher tendency to endorse essentialistic beliefs.

The **dependent variable** was the willingness to engage in intergroup contact, referring to people's intention to engage with a person from other groups behaviorally. This variable was measured by the *Behavioral Intentions Scale*, which asked participants to indicate their level of willingness to engage in intergroup contact. Higher scores reflected higher willingness to interact with people from the target group.

The **control variable** was contact quality. How well past contact the participants had with the target group was measured directly by two items. Higher score reflected higher contact quality with the target group.

Research Hypotheses

Hypothesis 1: The willingness to engage in intergroup contact scores would not be the same in all groups

Hypothesis 2: Intergroup ideologies would positively predict the willingness to engage in intergroup contact.

Hypothesis 3: There would be an indirect effect of ideology manipulation on willingness to engage in intergroup contact through essentialism.

Methodology

Participants

Parallel to Study 1, the researcher used a convenience sampling technique and selected two schools located in Bangkok. These two schools are Bangkapi School and Prot Pittayapayat School. In addition, the online survey was also distributed through school authorities, online social media platforms, and promoted within the university.

To clarify, this study's inclusion criteria conclude that the participant must be:

1) a Thai high-school or university undergraduate student,

2) attending any Mathayom level from 4-6 or a university undergraduate level,

3) and in either science-maths or arts program for high school students and any faculty for undergraduate students

The G*Power program was used to calculate the required sample size. We planned to use ANOVA and a mediation analysis using hierarchical regression to test the hypothesis. We calculated the sample size for both and used the sample size from the method that require a larger sample size. For one-way ANOVA, the effect size was set at medium ($f = .25$), power at .8, $d = .05$, with 4 groups to compare. The recommended sample size was 180. An additional 10% of participants was added in case we need to drop cases with incomplete data, concluding at 198 participants for ANOVA.

For hierarchical regression, the effect size was set at medium ($f = .15$), power at .8, and $d = .05$. With five predictors, including three dummy variables for four conditions in the study and one variables, the calculation revealed 85 samples at the minimum. An additional 10% was added in case we need to drop cases with incomplete data, resulting in a sample size of 94.

The sample size calculation for ANOVA test yielded higher number of participants than hierarchical regression. Therefore, we expected to collect the data from at least 198 samples to meet the ANOVA requirement.

To ensure the participants' privacy, confidentiality, and voluntary participation, all of Study 1 selection criteria and procedures were carried out. The schools were contacted, and the online survey was distributed by the school authorities. The participant's information document and informed consent form containing similar content with Study 1 were distributed to the participants on the first page of the survey.

Materials and Measures

1. **Ideology manipulations** included three separate reading passages formatted as presentation slides, each describing each of the ideological concept, constructed by Cho and colleagues (2017). The translation from English to Thai was

back-translated by a qualified English speaker (see Appendix E). These passages were also approved by two experts to ensure the content validity of this material. The pilot study showed the content compatibility with the Thai students ensuring that the content was comprehensible in the Thai context.

The **colorblind** article described avoiding discussing racial categories, beginning the text with "Different cultures share a common origin, as people everywhere are really all the same at the core. All cultural practices have common goals and purposes to satisfy human beings' needs and desires."

For **multiculturalism**, the passage emphasized recognizing each culture's uniqueness by stating that "every culture has its own unique and unchangeable characteristics. The distinct cultural traditions have been preserved and appreciated over history."

The **polyculturalism** passage described the lack of real authenticity of cultural formation and highlighted the dynamic influences the cultures around the world caused. The writing started with "Cultural groups continually influence each other's traditions and perspectives due to interaction and contact. It is through this intercultural exchange that cultures dynamically change and evolve."

In the **control** condition, the participants received the Thai version of a National Geographic article, *"This iceberg is perfectly rectangular—here's why"*. The article was translated and posted online by National Geographic Thailand.

Additionally, **manipulation check** items were included. After every couple of slides, a yes-no question would be placed at the end of the page asking if the statement corresponded to the content in the slides or not. These question acted as the attention check items. Plus, the participants were required to answer a multiple-choice question, asking what they think was the main idea of the passage. The choices were include all three of the intergroup ideology ideas. The first choice stated, "Different cultural characteristics are merely superficial variances as people are all the same at the core." The second choice contained, "Each cultural group possesses unique ideas and customs" As for the last choice, "Cultures are not static and separated." The participant needed to select the choice that correspond to their article's message to score on this item. For the control condition, the participants

were also required to answer what they think were the main ideas of the passage. The choices included: "The ice shelf is small enough for us to look smoothly rectangular from far away," "The ice shelves are actually full of cracks, " and "Global warming did not caused these breaks." The participant had to select the second choice in order to score on this item. Another item asked them to rate their level of agreement on the article's message. All of these items were rated from 1 (strongly disagree) to 7 (strongly disagree) in a Likert scale format.

2. The translated *Lay Theories of Race Scale* (No et al., 2008), measuring essentialism and used in Study 1 were also included in Study 2 (see Appendix B). The measure showed a moderate internal consistency level (α = 62). The scale consisted of four items on essentialism. The participants were asked to indicate their level of agreement on each item in a 7-point Likert Scale, ranging from 1 (Strongly Disagree) to 7 (Strongly Agree).

The four positively worded items directly represented the participant's level of endorsement in fixed beliefs and essentialist attributions about race. The items were such as "To large extent, a person's race biologically determines his or her abilities and traits" while the following 4 are such as "Racial categories are fluid, malleable constructs."

3. The *Behavioral Intentions Scale* (Esses & Dovidio, 2002) Thai version (α = .90), measuring the willingness to engage in intergroup contact, used in Study 1 was also employed in this study (see Appendix C). The 13 items were used to assess the participants' behavioral intention to interact with people from any other outgroup member. In Study 2, the target group was the Myanmar people, the same as in Study 1. The items asked the participants to rate their intention to initiate each of the ten selected behaviors on a Likert scale from 1 (not at all willing) to 7 (extremely willing). Higher scores represented higher tendency to engage in intergroup contact with people from.

3. The demographic data was measured in the same way with Study 1. The participant's age, gender, and school year were asked. The participants filled in their age in a number format, while their gender and school year were selected from

multiple choice questions. Then, the contact quality items assessing their experience with the Myanmar people were used. The measure was two item long. Higher scores for both measures signified higher contact quality (see Appendix D).

Procedure

The two schools selected by a convenience sampling technique, Suksanareewittaya School and Taweethapisek School. Then, the researchers informed and asked for the school's permission to collect the data. The school authorities were asked to help distribute the online survey to the students. Additionally, the survey was also distributed online through various social media platforms and promoted to students from different faculties in the university.

The first page of the online survey contained the consent form describing that this study aims to test their reading comprehension. Other information included the procedure, ethics guidelines, and what we would do with the data. There was no item asking for their name or surname. This information about their anonymity was be ensured in written form.

We also ensured the participants that their participation was entirely voluntary and they were free to end their involvement any time which would not have any consequence of any kind. Moreover, the participants were informed that their answers would only be presented in general terms without revealing their individual identity. This part of information also explained that data would be kept on a computer for no more than three years where the researcher and the ethics committee would be the only people who could access it.

Only the students who gave their consent by clicking "Agree" in the consent form were guided to the next part of the survey. On the other hand, those who selected "Disagree" or failed to fully complete the survey were ruled out from further data analysis. If the participants agreed to participate, they were redirected to the survey's demographic section, asking them to fill out their age, gender, and year of high-school they were attending.

Next, the survey redirected them to the manipulation section of the experiment. The researcher was set a randomizer on Qualtrics to randomly assign the participants to one of the four conditions. The first condition group read the passage

on colorblindness, the second on multiculturalism, the third on polyculturalism, and a National Geographic article for the control condition. The program was set to evenly assign equal number of people into each condition.

Throughout the presentation slides section, the survey asked the participant to answer seven manipulation check questions to check their understanding of the article. Additionally, another item asked them to rate their level of agreement of the article they received. The control condition included one manipulation check item. The participants were required to answer what they think were the main ideas of the passage.

The next page contained the essentialism measure, then, the willingness to engage in intergroup contact measure to indicate their answers in a 7-point Likert Scale format. The entire survey took 20 minutes to complete. This participation was required only once. Lastly, they were thanked and debriefed through the passage written at the very end of the survey. Every participant received 50-baht e-coupon from GrabGifts as an exchange for their time. The compensation process required the participants to fill in their nickname and email.

Results

The second study was an experimental design with four conditions. The participants in the first three groups began with the reading task that primed either one of the three different intergroup ideologies, i.e., colorblindness, multiculturalism, or polyculturalism. The fourth group is the control condition. Then, they went through manipulation check items along with the essentialism and willingness to engage in intergroup contact measures, respectively.

The data obtained were screened for accuracy and univariate outliers in Microsoft Excel. Later, the researcher conducted an analysis to determine multivariate outliers in SPSS. The main analyses were also carried out in SPSS.

Sample Data and Data Screening

The minimum requirement was 198 samples for analyzing ANOVA and simple mediation model with a categorical independent variable containing four levels. The participants were recruited the same way as those in Study 1. The school authorities

helped distributed the survey online while the researcher did the same online and on-site to university students.

The data was collected on Qualtrics and downloaded to begin the data screening process. Four hundred and sixty-two participants started the survey but only 299 of them provided complete responses. There were 41 inattentive responses that took less than 5 minutes to complete the survey. Another 40 inattentive cases had a standard deviation of items within at least one measure equaled to zero. Three other cases had duplicated IP address. These cases were excluded.

Furthermore, 15 participants who gave more than four incorrect answers out of seven manipulation check items were left out of the analysis. The z-score for each variable in the model was calculated to identify the univariate outlier. The case with z-score higher than 3 would be considered as a univariate outlier. None were found. There was also no multivariate outlier in this data set as the Chi-squared probability for the Mahalanobis Distance was not lower than .001 in any case. The final number of cases for Study 2 was 200, exceeding the minimum requirement.

Next, the linear regression assumptions were tested. For the normality test, none of the variables has skewness or kurtosis higher than 1 or lower than -1. The Shapiro-Wilk test for essentialism was not significant (p = .087), suggesting it was normally distributed. Meanwhile, Shapiro-Wilk test showed significant results in the case of willingness to engage in intergroup contact (p < .05) and contact quality (p < .001). However, the Shapiro-Wilks test could be sensitive to large sample size, making it easier to produce a significant result. Taken together, the normality of this data should not create major concern during the main analyses. The scatter plots for each pair of the variables displayed a linear relationship between the variables in the model. For homoscedasticity, the residual values were evenly distributed on the scatter plot. Lastly, the VIF value for the variables were all lower than 1, suggesting that there was no multicollinearity problem.

This study's samples had an average age of 17.35, while the minimum was 15 and maximum was 29. In terms of gender, most of our participants (63.5% or n = 127), were female. Among the rest of the participant, 32% (n = 64) were male, 2.5% (n = 5) chose "others" as a response, and 2% preferred not to say (n = 4).

The descriptive statistics and correlation matrix for the continuous variables in this study were shown in Table 2. Essentialism still negatively correlated with the willingness to engage in intergroup contact significantly ($r(200) = -.23$, $p < .01$). The results revealed that the correlations were consistent with the previous study.

Table 2

Descriptive Statistics, Cronbach's Alpha (in diagonal parentheses), and Correlation Matrix

Variables	*M*	*SD*	ESS	WLN	CTQ
ESS	3.88	1.33	(.82)		
WLN	4.95	.98	-.23**	(.93)	
CTQ	4.58	1.51	-.17*	.46***	(.78)

Note. ESS is short for essentialism, WLN for willingness to engage in intergroup contact, and CTQ for contact quality.

* p < .05, ** p < .01, *** p < .001 (two-tailed)

Hypothesis Testing

The main hypotheses for Study 2 were (1) the willingness to engage in intergroup contact scores would not be the same in all groups, (2) intergroup ideologies would positively predict the willingness to engage in intergroup contact, (3) and there would be an indirect effect of ideology manipulation on willingness to engage in intergroup contact through essentialism. The following sections describe each hypothesis.

Effects of Intergroup Ideology Manipulation

This part of the study concerned whether there was a difference in willingness to engage in intergroup contact score between four experimental conditions. To test this hypothesis, the Analysis of Variance (ANOVA) test was carried

out to compare the effects of four types of intergroup ideology manipulations, colorblindness, multiculturalism, polyculturalism, and the control condition.

The mean scores of the willingness to engage in intergroup contact in each condition were roughly consistent. The highest score was in the multiculturalism condition (M = 5.19, SD = .94), colorblindness (M = 5.05, SD = .90), and then polyculturalism (M = 4.87, SD = 1.08), respectively. These average scores were all at a moderate level on the 7-point scale. All of them was also greater than the control condition (M = 4.73, SD = .92).

Table 3 shows the descriptive statistics described above and the ANOVA results. It suggested that there was no statistically significant difference in the dependent variable scores between 4 conditions (F(3, 195) = 2.24, p = .085). The intergroup ideology manipulations did not lead to differences in how willing a person would be to interact with people from Myanmar. **The first hypothesis was not supported.**

Table 3

Descriptive and ANOVA Statistics for Willingness to Engage in Intergroup Contact

Condition	n	WLN		ANOVA		
		M	SD	F	p	Partial h^2
CB	42	5.05	.90	2.24	.085	.03
MT	50	5.19	.94			
PL	55	4.87	1.08			
CNTRL	53	4.73	.92			

Note. CB is short for colorblindness, MT for multiculturalism, PL for polyculturalism, ESS for essentialism, and WLN for willingness to engage in intergroup contact.

Mediation Analysis with Multicategorical Independent Variable

This hypothesis dealt with whether different levels of the independent variable could positively affect the dependent variable.

The five sub-hypotheses were as followed.

Path *c*: There is an effect of intergroup ideology on willingness to engage in intergroup contact.

Path *a*: There is an effect of intergroup ideology on essentialism.

Path *b*: There is an effect of essentialism on willingness to engage in intergroup contact.

Path *ab*: There is an indirect effect of intergroup ideology on willingness to engage in intergroup contact through essentialism.

Path *c'*: There is an effect of intergroup ideology on willingness to engage in intergroup contact after including essentialism as the mediator.

To test the hypothesis, we used PROCESS, Model 4, to analyze the simple mediation model (see Figure 5). To explain the variance in the dependent variable—willingness to engage in intergroup contact—intergroup ideology with different levels was entered as the independent variable. These four levels of the independent variable were dummy coded with the polyculturalism condition as the reference group. Essentialism was included as the mediator. Contact quality was added as a covariate to control for its potential effect on essentialism and willingness to engage in intergroup contact.

Figure 5

Multicategorical Mediation Model
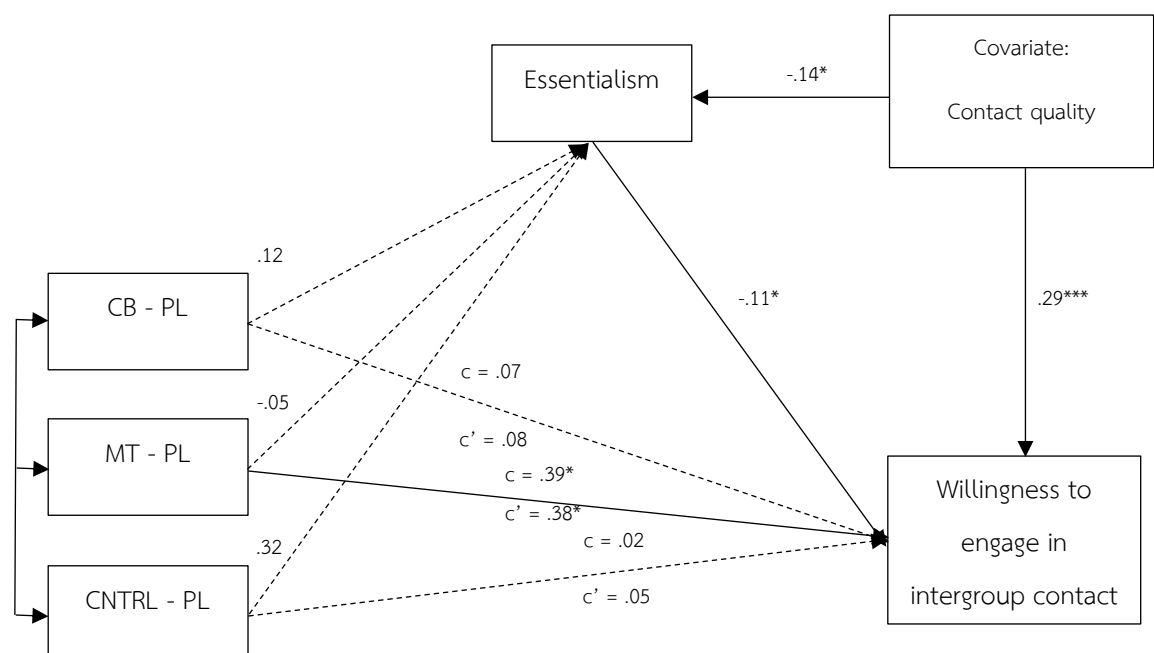
First, we explored the effect of the intergroup ideology on willingness to engage in intergroup contact without the mediator (see Table 4). The contact quality was a statistically significant covariate for the model ($b = .30$, $SE = .04$, $t(195) = .7.33$, $p < .001$). After controlling for contact quality, path c represented the relative effect of different intergroup ideologies on the between-group difference in the level of willingness to engage in intergroup contact. Participants in polyculturalism and colorblindness conditions did not differ in their willingness to engage in intergroup contact score ($c_1 = .07$, $SE = .18$, $t(195) = .39$, $p = .695$). Similarly, there was no significant difference of the willingness score between participants in the polyculturalism and those in the control group either ($c_3 = .02$, $SE = .17$, $t(195) = .12$, $p = .909$). However, the willingness to engage in intergroup contact scores significantly differed between the polyculturalism and multiculturalism conditions ($c_2 = .39$, $SE = .17$, $t(195) = 2.29$, $p < .05$). The willingness to engage in intergroup contact was .39 unit higher in the multicultural condition than in the polycultural condition.

Thus, believing that cultures are changeable (polyculturalism) and believing that there are fixed cultural traits to preserve (multiculturalism) could have a different impact on how willing a person was to engage with Myanmar people (willingness to engage in intergroup contact). According to our data, multiculturalism appeared to have a greater positive effect on the participant's willingness than polyculturalism did. Meanwhile, being primed with polyculturalism did not make a difference in how willing they would be to interact with Myanmar people, compared to those who were led to believe that we should ignore cultural differences (colorblindness condition) or those who were not primed with any ideology (control condition).

Table 4

Unstandardized Regression Coefficients

Path	b	SE	t	p	LLCI	ULCI
CB – PL (*c*)	.07	.18	.39	.695	-.28	.42
MT – PL (*c*)	.39	.17	2.30	.023	.05	.72
CNTRL – PL (*c*)	.02	.17	.12	.909	-.31	.35
CTQ (*c*)	.30	.04	7.33	.000	.22	.38
CB – PL (*a*)	.12	.27	.46	.646	-.41	.66
MT – PL (*a*)	-.05	.26	-.18	.856	-.553	.46
CNTRL – PL (*a*)	.32	.25	1.26	.208	-.18	.82
CTQ (*a*)	-.14	.06	-2.22	.028	-.26	-.02
ESS (*b*)	-.11	.05	-2.33	.021	-.20	-.02
CB – PL (*c'*)	.08	.18	.47	.637	-.26	.43
MT – PL (*c'*)	.38	.17	2.29	.023	.05	.71
CNTRL – PL (*c'*)	.05	.17	.33	.745	-.27	.38
CTQ (*c'*)	.29	.04	6.95	.000	.21	.37

Note. CB is short for colorblindness, MT for multiculturalism, PL for polyculturalism, CNTRL for control, ESS for essentialism, and CTQ for contact quality.

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Next, essentialism was included in the model as the mediator. The contact quality was entered into this mediation model as a covariate and was found to significantly predict essentialism (b = -.14, SE = .06, $t(195)$ = -2.22, $p < .05$). With the effect of contact quality controlled for, we then examine the effect of intergroup ideologies on essentialism (path a). Results showed that different levels of the independent variable had no effect on the mediator. The difference in essentialism between the colorblindness (1) and polyculturalism (0) conditions was not statistically different (c_1 = .12, SE = .27, $t(195)$ = .46, p = .646). The second pair, i.e., multiculturalism (1) and polyculturalism (0) conditions, showed no difference in essentialism (c_2 = -.05, SE = .26, $t(195)$ = -.18, p = .856). The third pair, which was the comparison between the control (1) and polyculturalism (0) conditions, also did not

differ in their level of essentialism (c_3 = .32, *SE* = .25, *t*(195) = 1.26, *p* = .208). Different beliefs about culture did not lead to different levels of essentialism.

Path *b* had the mediator, essentialism, predicting the dependent variable with statistical significance (*b* = -.11, *SE* = .05, *t*(194) = -2.33, *p* < .05). The negative relationship means that by thinking people possessed fixed character traits because of their ethnicity, they would be less likely to have the willingness to interact with people from Myanmar.

The indirect effect of being in the colorblindness versus polyculturalism condition on the willingness to engage in intergroup contact with essentialism as a mediator was not statistically significant (*b* = -.01, Boot SE = .03, Boot 95% CI [-.09, .04]). The same instance happened with the polyculturalism versus multiculturalism condition (*b* = .01, Boot SE = .03, Boot 95% CI [-.05, .07]), and polyculturalism versus control condition (*b* = -.03, Boot SE = .03, Boot 95% CI [-.11, .03]). The bootstrapping results for all the three pairs showed that the 95% confidence interval included zero. Thus, it was inconclusive whether the indirect effect was statistically significant. This cannot be used to infer that intergroup ideology work through essentialism to the willingness to engage in intergroup contact.

Path *c'* showed the relative direct effects of different levels of independent variable when there were indirect effects in the model. The contact quality as the covariate was still a statistically significant predictor after including the mediator (*b* = .29, *SE* = .04, *t*(194) = 6.95, *p* < .001). The only statistically significant difference between experimental conditions, after controlling for the contact quality and the indirect effect through essentialism, occurred in the polyculturalism and multiculturalism pair (c'_2 = .38, *SE* = .17, *t*(194) = 2.29, *p* < .05). Participants in the multicultural condition scored .38 higher in willingness to engage in intergroup contact than those in the polycultural condition.

To reiterate, we only found a significant difference in willingness to engage in intergroup contact between participants in polyculturalism condition and multiculturalism condition. The effect was present both with and without the mediator. However, **the second and third hypothesis were not fully supported**

because polyculturalism did not lead to higher willingness than multiculturalism as expected.

Discussion

The second study was designed as an experimental study to compare the effects of 3 intergroup ideologies, colorblindness, multiculturalism, and polyculturalism. Continually from Study 1, we still aimed to study the mediating role of essentialism as a mechanism for intergroup ideology's role in intergroup relation in this study as well. Each conceptualization of culture was expected to convince the participants of each ideology and, consequently, influence the willingness to engage in intergroup contact differently. However, we did not find the expected results, both for the intervention and the mediation analysis. The absence of these effects is discussed below.

Effects of Different Intergroup Ideology Manipulations on the Willingness to Engage in Intergroup Contact

According to the analysis results, there was no statistically significant differences between each condition's willingness to engage in intergroup contact scores. The reading tasks were intended to increase the salience for colorblindness, multiculturalism, and polyculturalism, separately in each condition. Consequently, it was expected to influence how willing they are to interact with people from Myanmar differently. Unfortunately, the willingness to engage in intergroup contact scores was not statistically different across conditions. **The first hypothesis was not supported**.

The findings in this study were not entirely consistent with the previous experimental study. Cho and colleagues' study (2018) examined the same three intergroup ideology manipulations. Having the inclusion of foreign ideas and recipe creativity as the outcome variables, they reflected the general openness to accept and incorporate foreign ideas into a person's everyday task. Although the variable was parallel to the willingness to interact as polyculturalism is expected to highlight what is shared between cultures which could lead to better intergroup attitude, our study did not create a similar result.

The multiculturalism condition in our study showed the highest willingness to engage in intergroup contact than the other three conditions. It was also the only condition that produced a significantly different effect on the dependent variable when compared to the polyculturalism condition during the mediation analysis. This instant is worth exploring because it contradicts with the previous research that compared these two ideologies together where polyculturalism manipulation had mostly associated with intergroup attitude scores more than other ideologies (Bernardo et al., 2019; Bernardo et al., 2016; Bernardo & Presbitero, 2017; Cho et al., 2017; Cho et al., 2018; Rosenthal & Levy, 2012; Salanga & Bernardo, 2019).

A plausible explanation lies in the way polyculturalism undermines the importance of group identity. By overlooking each group's identity and replacing it with the idea of constant change, polyculturalism may cause the participants to perceive the idea as a threat to their group identity. With Myanmar workers in Thailand being a minority group, they are expected to respect the dominant Thai culture. Steffens and colleagues (2017) found that the participants who regard their ingroup's as more prototypical than the outgroup perceived diversity as a threat more. In this case, if a Thai person in Thailand perceived Thai culture as more prototypical than Myanmar culture, polyculturalism might pose a threat to their cultural identity as a Thai.

Furthermore, once the social distinction was removed, the group's unique and favorable elements were not acknowledged and assured to have equal weight with the other groups. This contradicts with how the mutual intergroup differentiation model proposed ways to minimize threat and improve intergroup attitude (Hornsey & Hogg, 2000). The original group's salience is no longer preserved when the contact is imagined. If members of a community feel that the contributions of their group to society have been ignored or devalued, extreme polycultural beliefs could damage their sense of pride (Rosenthal & Levy, 2013). With multiculturalism, the group salience is still maintained. Meanwhile, polyculturalism aims to erase the salience. Therefore, multiculturalism may have had more positive association with the willingness to interact than polyculturalism in this context.

Not only that the group distinction is ignored, but the polycultural idea might invoke negative memory or attitude towards outgroup more than multiculturalism could. Even though the passage content was tailored to be positive and valence-free by making sure the participants are focused on the positive side of the concept, their direct perception about Myanmar people might differ. Their actual contact with or historical information about Myanmar could include both positive and negative, or a combination of both. Consequently, it is imaginable that someone could harbor more antipathy against other racial and ethnic groups if they exclusively focus on the detrimental interactions that have had an impact on their culture (Rosenthal & Levy, 2013).

The result might be due to the variable level we studied as well. The willingness to interact is interpersonal while the inclusion of foreign ideas and recipe creativity are intrapersonal. Our intergroup ideology manipulations focused on manipulating the group-level beliefs about cultures. These might not lead to a change in their essentialist belief about a smaller focus on people's personal characters. The target for the willingness to interact variable is also more personal. It concerns with an interpersonal judgement about a person one would directly interact with. As a result, the variables included in this study all have different sizes of focus, intergroup ideology deals with beliefs about culture at a macro level while essentialism and willingness to engage in intergroup contact have smaller focus at an intergroup and interpersonal level.

Additionally, other variables may also have influenced the willingness to engage in intergroup contact. These may include various possible confounds, which can range from a person's situation factor, cognitive evaluation, and emotional awareness. Similar to our study's covariate, contact quantity has been found to influence how willing people were to interact with out-group members (Gaunt, 2011). There was a significant negative correlation between the minority population percentage and prejudice from the majority group. The study also showed that when people perceived the out-group as conflicting with their own, they would also be less willing to interact with them. An experimental study by Esses and Dovidio (2003) found that when the participants were instructed to focus on what they felt while

watching a video on discrimination, their willingness to interact with the discriminated group was highest compared to the thought-focus and control condition.

Multicategorical Mediation Analysis

The total and direct effect of different levels of intergroup ideology were hypothesized to positively influence the willingness to engage in intergroup contact. **The findings partially supported the hypotheses.** The results showed only a statistically significant difference in willingness to engage in intergroup contact score between polyculturalism and multiculturalism condition.

Participants who received the reading task containing content about polyculturalism had lower willingness to engage in intergroup contact with Myanmar people than those who read about multiculturalism. This is unlike the previous research by Rosenthal and Levy (2012). In their study, polyculturalism predicted willingness to interact despite controlling for all other variables. Meanwhile, multiculturalism only negatively predicted willingness when polyculturalism was controlled. The results of our second study suggested that multiculturalism was a better predictor than polyculturalism instead of having a negative effect as found by the previous research.

The second and third hypothesis of this study concerned the mediation effect of essentialism between intergroup ideology and the willingness to engage in intergroup contact. **The results did not support the second and third hypotheses.** There was no indirect effect of intergroup ideology manipulation on willingness to engage in intergroup contact through essentialism. Similar to Bernado and colleagues' study (2019), essentialism only relate to polyculturalism in Malaysian and Philippines samples. The other ethnic groups, Macau and Hong Kong, showed only low or moderate correlations between multiculturalism and polyculturalism. This pattern also occurred in the other four Asian countries as well (Bernado et al., 2016). The mediation hypothesis formulation appeared to overestimate the relationship strength between the studied variables due to the inconclusive evidence that varied across the countries of study.

Limitations

The absence of the difference might be due to several study limitations as followed.

Firstly, we noted that during the data cleaning process, younger participants had more incorrect answers for the manipulation check items. More high-school students were cut out of the analysis than university students. Plus, the manipulation check criteria required the participants to give at least four correct responses instead of all six correct responses. This means that many participants did not have a full understanding of the manipulated content. The concepts might be too abstract for younger participants to immediately grasp and adopt in only a few minutes.

This is not to say that it is impossible to develop an intervention on intergroup ideology in younger participants. In contrast, we hope to emphasize the need to formulate a more suitable intervention that will work on this population. The characteristics, societal context, appropriate medium, and relevant content unique to this group need to be thoroughly considered.

An important context where the experiment was conducted could be another factor. The researcher chose to employ an online survey to carry out the experiment. However, there are certain weaknesses that should be noted. The participant's attention and engagement are extremely crucial. The surrounding environment was out of a researcher's control when it comes to online survey taken at the participant convenience. Lengthy reading task might not be the most compatible with online survey format. It can be challenging for the participants to stay fully focused for 8-10 minutes straight. Thus, using an online survey might not be able to foster active participation as much as a paper-based one could.

CHAPTER 4

CONCLUSION

Globalization has been the key to social change and cultural exchange at an increasing rate. It allows people of different cultures to meet and interact physically and virtually. Many studies have found that meeting different people does not always lead to 'favorable intergroup relation. In the Thai society today, prejudice against people from Myanmar is still a problem that should be addressed. This group of people has been an essential mechanism to the country's economy. School education about the history and culture between the two countries plays a vital role in fostering appropriate and respectful interaction. However, the current educational system about cultural differences is insufficient to prevent prejudiced attitudes towards Myanmar people.

The Contact Hypothesis has suggested that the more interactions between groups, the more likely people will have a positive attitude towards the other group. The willingness to engage in intergroup contact was selected to as an outcome variable of the study. It is conceptualized as the intention to engage in various kinds of contact with an outgroup member. This variable was chosen because it could reflect both the current attitude and imply promising intergroup behaviors in the future.

One of many interesting factors that could improve the willingness to interact with an outgroup would be how the layperson define culture, including its people. Intergroup ideologies referred to the different views of culture and how to view its members. Previously known intergroup ideologies that have been widely adopt in national policies and academia are, such as, colorblindness and multiculturalism. Colorblindness proposed that people should ignore the cultural differences and focus on the shared human similarities instead. In contrast, multiculturalism suggested that people should explicitly acknowledge the differences and maintain those cultural elements that are unique to the group. Nonetheless, scholars have

pointed out that these two forms of intergroup ideology are more prone to endorse stereotype formation because both ideas aim to emphasize social categories.

It is recently proposed to view and study culture as a process of interactions between cultures. Intergroup ideology like polyculturalism could potentially increase willingness to interact with an outgroup more than the other two ideologies mentioned earlier. It focuses on the cultural interactions across groups unlike any other ideologies.

Therefore, school education should avoid teaching a perspective or ideology that will lead to an understanding of the nature of culture in a way that is inconsistent with the current cultural environment, especially the perception that people's characters and culture are unalterable.

The mechanism in which these ideologies operate was also studied. Essentialism is a belief that the group member possesses a unique "essence" that cannot be changed. Their view explains group characteristics and traits by assuming that each ethnic group member has an unchangeable biological essence. This variable could help explain how different colorblindness, multiculturalism, and polyculturalism operate. The first two ideologies were more consistent with essentialist idea due to its fixed conceptualization of culture and people. On the other hand, it was expected that polyculturalism would provide a more open mindset about culture and, thus, might negatively associate with essentialism.

Therefore, our two studies were intended to study the relationship between intergroup ideologies, essentialism, and the willingness to engage in intergroup contact. The first study was a correlational study that incorporated the main intergroup ideology of interest, polyculturalism, with essentialism and the willingness to engage in intergroup contact. The second study employed an experimental design to further examine the causal effects of different ideologies on the outcome variable.

For the first study, we distributed the survey online, containing the polyculturalism, essentialism, willingness to engage in intergroup contact, and contact quality scale. There were total of 112 samples which comprised of both high-school and university students in Bangkok.

We then ran the correlation and simple mediation analyses with the data. Polyculturalism positively correlated with the willingness to engage in intergroup contact as hypothesized. However, the results revealed that there was no statistically significant indirect effect of essentialism between polyculturalism and the willingness to engage in intergroup contact unlike what we hypothesized. This could be due to the insignificant relationship between the predictor variable (polyculturalism) and mediator (essentialism) in the model. Even though the results did not support the hypothesis, the findings corresponded to other previous work. The relationship between the variables we studied are still inconclusive for the studies conducted in Asian countries, unlike in North America.

For Study 2, we examined these relationships again with an experimental design with four conditions. We intended to explore how to manipulate each intergroup ideology and, also, how differently each would affect the willingness to engage in intergroup contact.

Similarly, the survey was distributed online. We randomized the priming reading tasks, containing either content about colorblindness, multiculturalism, or polyculturalism for each participant. Another condition presented them with an unrelated content as a control condition. After that, the participants completed the essentialism, willingness to engage in intergroup contact, and contact quality measure. The final number of participants included in the main analyses was 200. There were both high-school and university students who completed the survey.

We ran an Analysis of Variance (ANOVA) to compare each experimental condition and a multicategorical mediation analysis in PROCESS to test the model. The ANOVA results showed no significant difference between the willingness to engage in intergroup contact score in each condition. Next, the multicategorical mediation analysis results did not present a significant indirect effect where essentialism was a mediator between all intergroup ideologies and the willingness to engage in intergroup contact. The only pair that created a statistically significant difference was the multiculturalism and polyculturalism condition. Those who were primed with multicultural ideas scored higher in the willingness to engage in intergroup contact than with polyculturalism.

The correlational relationships between the studied variables in both Study 1 and 2 were mostly as expected. The non-significant correlation between polyculturalism and essentialism shed a light on how the constructs differ for the Thai samples in comparison to other Asian countries and, especially, North America. According to the ANOVA results, the priming passages did not create significant differences in our willingness to engage in intergroup contact like other previous works. The lack of the significant indirect effect also showed how the constructs were related to one another in the Thai samples in comparison to the other studies with other Asian countries sample.

The insignificant results that failed to support the hypotheses were suspected to stem several reasons. We suspected that it was due to how the experiment targeted culture as an umbrella concept in contrast to a specific prejudice target like Myanmar people. Plus, the intergroup ideology concepts were rather abstract and difficult to take in all at once for younger participants. The surveys were also distributed online for the participants to complete by themselves which might have made it more difficult to concentrate on the concepts than to have it arranged in a controlled environment.

However, no studies have compared different ideologies with high-school students or Thai sample. There have been only a few studies that studied these concepts with Asian samples. Study 1 and 2 provided the first look at how younger Thai participants would have endorsed the intergroup ideologies as well as their potential relationships with other intergroup attitude variables.

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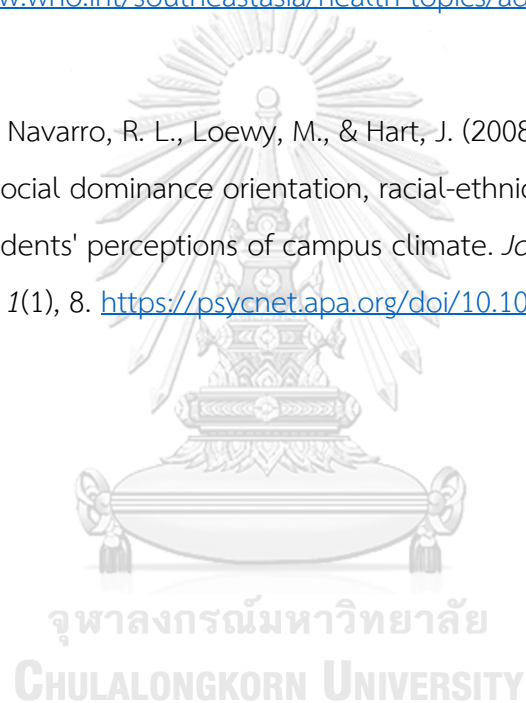
APPENDICES

APPENDIX A

1. Polyculturalism scale from the Lay Theories of Culture Scale

The polyculturalism subscale from *Lay Theories of Culture Scale* was taken from Rosenthal and Levy (2010). The original English items and translated Thai are shown in Table 5. The translation has been back-translated and rated on its comparability of language and similarity of interpretation by two experts using Sperber's guideline (2004).

Table 5

Original and Thai Version of the Polyculturalism Subscale from Lay Theories of Culture Scale

Item	Lay Theories of Culture Scale (Polyculturalism subscale)	
	English	Thai
1	Different cultural groups impact one another, even if members of those groups are not completely aware of the impact.	กลุ่มวัฒนธรรมที่แตกต่างกันส่งผลกระทบต่อกันและกัน ไม่ว่าสมาชิกของกลุ่มเหล่านั้นจะรู้ตัวหรือไม่ก็ตาม
2	Although ethnic groups may seem to have some clear distinguishing qualities, ethnic groups have interacted with one another and thus have influenced each other in ways that may not be readily apparent or discussed.	ถึงแม้ว่าจะดูเหมือนมีคุณลักษณะที่แตกต่างกันอย่างชัดเจน กลุ่มชาติพันธุ์ต่าง ๆ ก็เคยมีปฏิสัมพันธ์ซึ่งกันและกัน ทำให้ต่างมีอิทธิพลต่อกันในทางที่อาจไม่สามารถมองเห็นหรือพิจารณาอย่างชัดเจนได้โดยทันที
3	There are many connections between different cultures.	วัฒนธรรมต่าง ๆ มีความสัมพันธ์เชื่อมโยงซึ่งกันและกันเป็นจำนวนมาก
4	Different cultures and ethnic groups probably share some traditions and perspectives because these groups have impacted each other to some extent over the years.	วัฒนธรรมและชาติพันธุ์ต่าง ๆ อาจมีประเพณีและมุมมองที่เหมือนกัน เพราะกลุ่มเหล่านี้ได้รับอิทธิพลจากกันและกันมาบ้างไม่ว่ามากหรือน้อยในช่วงเวลาที่ผ่านมา
5	Different racial, ethnic, and cultural groups influence each other.	กลุ่มเชื้อชาติ ชาติพันธุ์ และวัฒนธรรมต่างๆ ต่างมีอิทธิพลต่อกันและกัน

2. Polyculturalism Scale Development

The scale development procedures were:

2.1 Participants were recruited online via convenience sampling technique through social media and school authorities. The total 157 Thai high-school students, attending Mattayom 4-6 in Bangkok participated in the Qualtrics survey and 117 participants completed this particular measure.

2.2 Measures

2.2.1 Demographic data covered age, gender, academic level, school type (public or private), and school name.

2.2.2 The polyculturalism subscale from the *Lay Theories of Culture Scale* (Rosenthal & Levy, 2010) was translated from English to Thai. There were 5 items in total with no reverse scoring item. The content represents the polycultural ideology which considered cultures as a perpetual process of exchange and change accordingly. For instance, "Different cultural groups impact one another, even if members of those groups are not completely aware of the impact." All items were in Likert-scale format scoring from 1 (strongly disagree) to 7 (strongly agree).

2.3 Procedure

2.3.1 The researcher reviewed related literatures to determine the conceptual and operational definition of polyculturalism and accompanying constructs.

2.3.2 The search for an adequate measurement was carried out.

2.3.3 Rosenthal and Levy's *Lay Theories of Culture Scale* (2010) was the only self-report measurement for polyculturalism and, thus, selected to incorporate in Study 1.

2.3.4 The minimum number of the required sample size for ANOVA and factor analysis was 25-50 samples with 5-10 samples per item (Hair et al., 2014). The pilot study successfully managed to meet this suggestion.

2.3.5 The online survey was distributed through various social media platforms and school authorities to potential participants who were students attending Mattayom 4-6 in Bangkok.

2.3.6 Upon clicking on the Qualtrics survey link, each participant was shown an information page detailing the inclusion criteria, purpose of the research, ensured anonymity and confidentiality, approximate time to complete the survey, researcher's contact information, and a question asking if they consent to take the survey or not. The following pages of the survey contained the polyculturalism measure and other related materials.

2.3.7 Only the complete responses with no random answers in this particular scale were included in the next phase to analyze the measurement's psychometrics properties.

2.4 Factor Structure

2.4.1 Two different results emerged from two tests addressing the scale appropriateness for conducting a factor analysis. Kaiser-Meyer-Olkins (KMO) measure of sampling adequacy yielded .793 suggesting an average level. The Bartlett's Test of Sphericity was statistically significant ($p < .001$) suggesting that the data could be ideal.

2.4.2 The Exploratory Factor Analysis was carried out employing the Principle Axis Factoring (promax).

2.4.3 The result presented only one factor corresponding to the variable conceptualization. All of the items had a factor loading more than .300.

2.4.4 No item was excluded from the polyculturalism scale according to this factor analysis result.

2.5 Reliability Analysis

2.5.1 The internal consistency for all 5 items was tested to determine the reliability of the measure. The 5 items produced the Cronbach's alpha at .77

2.5.2 The Corrected Item-Total Correlations (CITC) was analyzed and all of the items showed values higher than the cutoff value at .300.

2.6 Validity Analysis

2.6.1 The construct validity of the measure was assessed by testing the convergent and discriminant validity with other constructs. The convergent validity was conducted to determine the correlation between polyculturalism scale and its related construct, specifically, multiculturalism. According to previous works (Bernardo et al., 2019; Bernardo et al., 2016; Bernardo & Presbitero, 2017; Cho et al., 2018; Rosenthal & Levy, 2012; Salanga & Bernardo, 2019), polyculturalism has positively correlated with multiculturalism at a moderate level in culturally diverse samples. In the present analysis, the 5-item multiculturalism subscale from the *Lay Theories of Culture Scale* (Rosenthal & Levy, 2010) was chosen to test its convergent validity. Also, the participant's age was used to test the discriminant validity, which was initially collected as a part their demographic data.

2.6.2 The multiculturalism subscale from the *Lay Theories of Culture Scale* (Rosenthal & Levy, 2010) and the participant's age question were included as part of the pilot study.

2.6.3. The correlation analysis shown a statistically significant positive correlation ($r(117) = .52$, $p < .01$) between polyculturalism ($M = 5.23$, $SD = 0.84$) and multiculturalism ($M = 5.13$, $SD = 0.90$) as expected. This result represented the convergent validity of the polyculturalism scale as these two constructs often

overlapped. Those who adopt a polycultural ideology about cultures would not tend to ignore the cultural characteristics while acknowledging their malleable quality. On the other hand, the participant's age (M = 16.66, SD = 0.92) did not significantly correlate with the polyculturalism score (r(117) = -.05, p = .558). The non-significant result signified the discriminant validity for this polyculturalism scale.

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APPENDIX B

1. Lay Theories of Race Scale

The *Lay Theories of Race Scale* was taken and translated from No and colleagues (2008). The Thai version has been back-translated and rated by two experts using Sperber's (2004) guideline (see Table 6).

Table 6

Original and Thai Version of Essentialism From Lay Theories of Race Scale

Subscale	English	Thai
Essentialism	To a large extent, a person's race biologically determines his or her abilities and traits.	เชื้อชาติของบุคคลหนึ่งเป็นตัวบ่งชี้ทางชีวภาพถึงความสามารถและคุณสมบัติของบุคคลนั้นได้อย่างมาก
	Although a person can adapt to different cultures, it is hard if not impossible to change the dispositions of a person's race.	ถึงแม้ว่าบุคคลคนหนึ่งจะสามารถปรับตัวให้เข้ากับวัฒนธรรมที่แตกต่างได้ แต่การเปลี่ยนนิสัยที่เกิดจากเชื้อชาติของเขาเป็นสิ่งที่ยากหรือเป็นไปไม่ได้เลย
	How a person is like (e.g., his or her abilities, traits) is deeply ingrained in his or her race. It cannot be changed much.	การที่บุคคลคนหนึ่งเป็นอย่างไร (เช่น ความสามารถหรือคุณสมบัติต่าง ๆ) มีสาเหตุลึก ๆ มาจากเชื้อชาติของเขา ซึ่งเปลี่ยนแปลงไม่ได้มากนัก
	A person's race is something very basic about them and it can't be changed much.	เชื้อชาติของคน ๆ หนึ่ง ถือเป็นสิ่งพื้นฐานของเขาอย่างมาก และไม่สามารถเปลี่ยนแปลงได้มากนัก

2. Essentialism Scale Development

The scale development procedures were:

2.1 Participants were recruited online via convenience sampling technique through social media and school authorities. The total 157 Thai high-school students, attending Mattayom 4-6 in Bangkok participated in the Qualtrics survey and 67 participants completed this particular measure. 34 of which also completed the scale used to test the scale's convergent validity.

2.2 Measures

2.2.1 Demographic data covered age, gender, academic level, school type (public or private), and school name.

2.2.2 The essentialism measure from the *Lay Theories of Race Scale* (No et al., 2008) was translated from English to Thai. The scale consisted of 4 items on essentialism and another 4 items for social constructivism. The participants were asked to indicate their level of agreement on each item in a 7-point Likert Scale, ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). The first 4 items represented the person's essentialistic belief while the last 4 items assessed its opposite construct, social constructivism. Therefore, the latter 4 items needed to be reversely scored to represent the essentialism construct.

2.3 Procedure

2.3.1 The researcher reviewed related literatures to determine the conceptual and operational definition of essentialism and accompanying constructs.

2.3.2 The search for an adequate measurement was carried out.

2.3.3 No and colleagues' *Lay Theories of Race Scale* (2008) was used in their study to pair with the same independent variable of this study and, thus, selected to incorporate in Study 1 and 2.

2.3.4 The minimum number of the required sample size for ANOVA and factor analysis was 40-80 samples with 5-10 samples per item (Hair et al., 2014). The pilot study successfully managed to meet this suggestion.

2.3.5 The online survey was distributed through various social media platforms and school authorities to potential participants, specifically who were students attending Mattayom 4-6 in Bangkok.

2.3.6 Upon clicking on the Qualtrics survey link, each participant was shown an information page detailing the inclusion criteria, purpose of the research, ensured anonymity and confidentiality, approximate time to complete the survey,

researcher's contact information, and a question asking if they consent to take the survey or not. The following pages of the survey contained the essentialism measure and other related materials.

2.3.7 Only the complete responses with no random answers in this particular scale were included in the next phase to analyze the measurement's reliability. On the other hand, only the participants who completed both the Thai *Lay Theories of Race Scale* and the measure assessing its convergent validity construct were included to test the scale validity.

2.4 Factor Structure

2.4.1 Two different results emerged from two tests addressing the scale appropriateness for conducting a factor analysis. Kaiser-Meyer-Olkins (KMO) measure of sampling adequacy yielded .672 suggesting a mediocre level. The Bartlett's Test of Sphericity was statistically significant ($p < .001$) suggesting that the data could be ideal.

2.4.2 The Exploratory Factor Analysis was carried out employing the Principle Axis Factoring (promax).

2.4.3 The result presented 2 factors corresponding to the variable conceptualization, essentialism and social constructivism. All of the items had a factor loading more than .300 except the first item that did not load on any factor.

2.5 Reliability Analysis

2.5.1 The internal consistency was tested twice to determine the reliability of the measure. The full 8-item scale produced the Cronbach's alpha at .67. The essentialism subscale with 4 items produced the Cronbach's alpha at .62. Once the first item with no factor loading on any of the factors was dropped, the Cronbach's alpha value increased to .65. Meanwhile, the social constructivism subscale produced higher Cronbach's alpha at .79.

2.5.2 The Corrected Item-Total Correlations (CITC) was analyzed and all of the items showed values higher than the cutoff value at .300.

2.6 Validity Analysis

2.6.1 The construct validity of the measure was assessed by testing the convergent and discriminant validity with other constructs. The convergent validity was conducted to determine the correlation between essentialism scale and its related construct, specifically, multiculturalism. According to previous works (Bernardo et al., 2016; Cho et al., 2018; Salanga & Bernardo, 2019), essentialism has positively correlated with multiculturalism at a moderate level. In the present analysis, the 5-item multiculturalism subscale from the *Lay Theories of Culture Scale* (Rosenthal & Levy, 2010) was chosen to test the convergent validity. Also, the participant's age was used to test the discriminant validity, which was initially collected as a part their demographic data.

2.6.2 The multiculturalism subscale from the *Lay Theories of Culture Scale* (Rosenthal & Levy, 2010) and the participant's age question were included as part of the pilot study.

2.6.3. The correlation analysis showed a significant positive correlation ($r(34) = .52$, $p < .05$) between essentialism subscale ($M = 5.23$, $SD = 0.84$) and multiculturalism ($M = 5.13$, $SD = 0.90$) as expected. This significant result, however, did not occur with the full 8-item scale ($r(34) = .31$, $p = .072$) when the scores for social constructivism subscale were reversed ($M = 3.45$, $SD = 0.86$). The social constructivism subscale alone ($M = 4.20$, $SD = 1.26$) also did not correlate significantly with multiculturalism ($r(34) = -.13$, $p = .464$). This result represented only the convergent validity of the essentialism subscale and not the full scale or the social constructivism subscale. This could be because social constructivism might not be the complete opposite of essentialism. Therefore, simply reversing their scores

would not turn them into the other construct. On the other hand, the participant's age (M = 16.66, SD = 0.92) did not significantly correlate with the score from essentialism subscale (r(67) = .072, p = .564). The non-significant result signified the discriminant validity for this essentialism subscale.

2.7 Conclusion

The first 4 items from the *Lay Theories of Race Scale* (No et al., 2008) that directly represent the essentialism construct would be included in the main studies. The factor analysis results show that the first item did not load on any of the 2 factors, but since the KMO results showed only a mediocre level of suitability, the researcher decided to keep the item in the scale. Moreover, the internal consistency results before and after dropping the first item out did not differ much. The convergent and discriminant validity also showed acceptable results for the 4-item essentialism subscale. In conclusion, the first item would be kept in the scale for exploratory purposes and extra attention would be paid during the main studies' analysis interpretation.

APPENDIX C

1. The Behavioral Intention Scale

The original English version of the *Behavioral Intention Scale* (Esses & Dovidio, 2002) was translated into Thai and then back-translated (Table 7). Its content was originally aimed at Black people which was changed into Myanmar people. Each item was also rated by two experts according to Sperber's guideline (2004).

Table 7

Original and Thai Version of the Behavioral Intention Scale

Item	English	Thai
	If given the opportunity, how willing would you be to have a person from…as a neighbor?	หากมีโอกาส คุณสมัครใจที่จะ…มากน้อยเพียงใด
1	Marry a Black person	แต่งงานกับคนเมียนร์มาร์
2	Have an intimate relation with a Black person.	มีความสัมพันธ์ใกล้ชิดฉันท์คู่รักกับคนเมียนร์มาร์
3	Accept a Black person as a family member through marriage.	ยอมรับบุคคลจากเมียนมาร์เข้ามาเป็นสมาชิกครอบครัวผ่านการแต่งงาน
4	Have a Black person as a close friend.	เป็นเพื่อนสนิทกับคนเมียนมาร์
5	Confide in a Black person.	เชื่อใจบุคคลจากเมียนมาร์
6	Accept a Black person as a neighbor.	ยอมรับบุคคลจากเมียนมาร์.เป็นเพื่อนบ้าน
7	Invite a Black person as a guest to your home.	เชิญบุคคลจากเมียนมาร์มาเป็นแขกที่บ้านของคุณ
8	Visit a Black person in his or her home.	ไปหาบุคคลจากเมียนมาร์ที่บ้านของเขา
9	Accept a Black person as a work colleague.	ยอมรับบุคคลจากเมียนมาร์เป็นเพื่อนร่วมงาน
10	Have a Black person as a casual acquaintance.	เป็นคนรู้จักแบบผิวเผินกับบุคคลจากเมียนมาร์
11	Accept a Black person as your boss.	ยอมรับบุคคลจากเมียนมาร์เป็นหัวหน้าของคุณ
12	Attend a cultural activity sponsored by a Black organization.	เข้าร่วมกิจกรรมทางวัฒนธรรมที่ได้รับการสนับสนุนจากองค์การของคนเมียนมาร์
13		เป็นบัดดี้ให้กับเด็กแลกเปลี่ยนจากเมียนมาร์

Notes: Item 13 was added in addition to the original 12-item scale.

2. Behavioral Intention Scale Development

The scale development procedures were:

2.1 Participants were recruited online via convenience sampling technique through social media and school authorities. The total 157 Thai high-school students, attending Mattayom 4-6 in Bangkok participated in the Qualtrics survey and 60 participants completed this measure and its convergent validity measure.

2.2 Measures

2.2.1 Demographic data covered age, gender, academic level, school type (public or private), and school name.

2.2.2 The *Behavioral Intention Scale* (Esses & Dovidio, 2002) was translated from English to Thai. There were 12 items in total with no reverse scoring item. The content represent the how willing one would be to initiate each presented behavior. For instance, "If given the opportunity, how willing would you be to accept a Black person as a family member through marriage." An additional item was added to cover another school-related aspect, If given the opportunity, how willing would you be to take a foreign exchange student from Myanmar as your buddy?" All items were in Likert-scale format scoring from 1 (strongly disagree) to 7 (strongly agree).

2.3 Procedure

2.3.1 The researcher reviewed related literatures to determine the conceptual and operational definition of willingness to engage in intergroup contact and accompanying constructs.

2.3.2 The search for an adequate measurement was carried out.

2.3.3 Esses and Dovidio's *Behavioral Intention Scale* (2002) was adopted by prior work that also studied polyculturalism as an independent variable (Rosenthal & Levy, 2010) and, thus, selected to incorporate in Study 1 and Study 2 as the mediator.

2.3.4 The minimum number of the required sample size for ANOVA and factor analysis was 65-130 samples with 5-10 samples per item (Hair et al., 2014). The pilot study did not meet this suggestion by 5 samples.

2.3.5 The online survey was distributed through various social media platforms and school authorities to potential participants, specifically who were students attending Mattayom 4-6 in Bangkok.

2.3.6 Upon clicking on the Qualtrics survey link, each participant was shown an information page detailing the inclusion criteria, purpose of the research, ensured anonymity and confidentiality, approximate time to complete the survey, researcher's contact information, and a question asking if they consent to take the survey or not. The following pages of the survey contained the measure and other related materials.

2.3.7 Only the complete responses with no random answers in this particular scale were included in the next phase to analyze the measurement's psychometric properties.

2.4 Factor Structure

2.4.1 Two similar results emerged from two tests addressing the scale appropriateness for conducting a factor analysis. Kaiser-Meyer-Olkins (KMO) measure of sampling adequacy yielded .820 suggesting a meritorious level. The Bartlett's Test of Sphericity was statistically significant ($p < .001$) suggesting that the data was ideal for factor analysis.

2.4.2 The Exploratory Factor Analysis was carried out employing the Principle Axis Factoring (promax).

2.4.3 The result presented 2 factors. The first 3 items referred to a closer relationship than the rest (as a family member or an intimate partner). All of the items, including the added item, had a factor loading more than .300 in both

factors. However, the number of items in these 2 factors were substantially different (3 and 10 items) and no other factor emerged. It was decided to treat the scale as unidimensional as done with the original scale by Esses and Dovidio (2002).

2.4.4 No item was excluded from the adapted Thai scale.

2.5 Reliability Analysis

2.5.1 The internal consistency for all 13 items was tested to determine the reliability of the measure. The 5 items produced the Cronbach's alpha at .90.

2.5.2 The Corrected Item-Total Correlations (CITC) was analyzed and all of the items showed values higher than the cutoff value at .300.

2.6 Validity Analysis

2.6.1 The construct validity of the measure was assessed by testing the convergent and discriminant validity with other constructs. The convergent validity was conducted to determine the correlation between *Behavioral Intention Scale* and its related constructs, specifically, explicit attitude towards Myanmar people. According to previous works (Sanraun, 2014), imagined intergroup contact had positively predicted explicit attitude at a moderate level. In the present analysis, the 8-item E*xplicit Attitude toward Myanmar People Scale* by (Pornprasit, 2017) was chosen to test the convergent validity. Also, the participant's age was used to test the discriminant validity, which was initially collected as a part their demographic data.

2.6.2 The *Explicit Attitude towards Myanmar People* scale (Pornprasit, 2017) was included as part of the pilot study. Higher score on this scale represents more prejudice towards the target population.

2.6.3. The correlation analysis shown a significant negative correlation (r(60) = -.49, p < .01) between willingness to engage in intergroup contact (M = 5.59, SD = 0.80) measured by the *Behavioral Intention Scale* (Esses & Dovidio, 2002) and

explicit attitude towards Myanmar people (*M* = 2.57, *SD* = 0.81) as expected. This result represented the convergent validity of the *Behavioral Intention Scale* (Esses & Dovidio, 2002). Those who were willing to engage in behaviors with Myanmar people would reflect a lower negative attitude towards them. On the other hand, the participant's age (*M* = 16.66, *SD* = 0.92) did not significantly correlate with the score from the scale ($r(60)$ = -.15, *p* = .244).

APPENDIX D

1. Contact Quantity and Quality Scale

The original English version of the contact quantity and contact quality scale (Healy et al., 2017) were translated into Thai and then back-translated (Table 8). Each item was also rated by two experts according to Sperber's guideline (2004).

Table 8

Original and Thai Version of the Contact Quantity and Contact Quality Scale

Item	English	Thai
Contact Quantity Scale	How much contact have you had with Myanmar people?	คุณเคยมีปฏิสัมพันธ์กับคนเมียนมาร์มากน้อยเพียงใด
Contact Quality Scale	Do you find the contact is...(pleasant/unpleasant)?	คุณคิดว่าการปฏิสัมพันธ์นั้น...(น่าพอใจ/ไม่น่าพอใจ)?
	Do you find the contact is...(positive/negative)?	คุณคิดว่าการปฏิสัมพันธ์นั้นเป็นไปใน (แง่บวก/แง่ลบ)?

2. Contact Quantity and Contact Quality Scale Development

The scale development procedures were:

2.1 Participants were recruited online via convenience sampling technique through social media and school authorities. The total 157 Thai high-school students, attending Mattayom 4-6 in Bangkok participated in the Qualtrics survey and 66 participants completed this measure.

2.2 Measures

2.2.1 Demographic data covered age, gender, academic level, school type (public or private), and school name.

2.2.2 The contact quantity and contact quality scale (Healy et al., 2017) was translated from English to Thai. A single-item contact quantity scale represented how much contact the participant had with Myanmar people. The item

asks the participants to rate on a 7-point Likert Scale from 0 (none) to 6 (a lot).

Higher score reflects higher level of contact quantity experienced by the participants.

The contact quality measure assessed how they evaluate their experience with

Myanmar people. The 2 items ask the participants to rate their experience with "Do

you find the contact is...?" either "pleasant/unpleasant" and "positive/negative".

The answers will be collected using a 7-point Likert Scale with the mentioned two

opposite words. Higher score will reflect higher contact quality experienced by the

participants.

2.3 Procedure

2.3.1 The researcher reviewed related literatures to determine the

conceptual and operational definition of contact quantity and contact quality.

2.3.2 The search for an adequate measurement was carried out.

2.3.3 Healy and colleagues' scale (2017) was adopted by prior work

that also studied polyculturalism as an independent variable (Rosenthal & Levy,

2012) and, thus, selected to incorporate in Study 1 and Study 2 as the control

variable.

2.3.4 The online survey was distributed through various social media

platforms and school authorities to potential participants, specifically who were

students attending Mattayom 4-6 in Bangkok.

2.3.5 Upon clicking on the Qualtrics survey link, each participant was

shown an information page detailing the inclusion criteria, purpose of the research,

ensured anonymity and confidentiality, approximate time to complete the survey,

researcher's contact information, and a question asking if they consent to take the

survey or not. The following pages of the survey contained the contact quantity,

contact quality measure and other related materials.

2.3.6 Only the complete responses with no random answers in this particular scale were included in the next phase to analyze the measurement's psychometric properties.

2.4 Reliability Analysis

2.4.1 The internal consistency for the 2 contact quality items was tested to determine the reliability of the measure. The 2 items produced the Cronbach's alpha at .78.

2.4.2 The Corrected Item-Total Correlations (CITC) was analyzed and all of the items showed values higher than the cutoff value at .300.

2.5 Validity Analysis

2.5.1 The construct validity of the measure was assessed by testing the convergent and discriminant validity with other constructs. The convergent validity was conducted to determine the correlation between contact quantity and quality together with its related construct, specifically, prejudice. According to a previous work (Healy et al., 2017) contact quantity and quality has negatively correlated with prejudice. In the present analysis, the 8-item E*xplicit Attitude toward Myanmar People Scale* by Pornprasit (2017) was chosen to test the convergent validity. Also, the participant's age was used to test the discriminant validity, which was initially collected as a part their demographic data.

2.5.2 The *Explicit Attitude towards Myanmar People* Scale (Pornprasit, 2017) was included as part of the pilot study.

2.5.3. The contact quantity item ($M = 2.85$, $SD = 1.62$) did not have a statistically significant correlation ($r(66) = -.131$, $p = 0.294$) with explicit attitude towards Myanmar people ($M = 2.57$, $SD = 0.81$). The contact quality ($M = 5.42$, $SD = 1.26$) shown a significant negative correlation ($r(66) = -.32$, $p < .01$) with explicit attitude towards Myanmar people ($M = 2.57$, $SD = 0.81$) as expected. This result

represented the convergent validity of the contact quality scale but not the contact quantity item. Those who tend to engage with Myanmar people would reflect a lower negative attitude towards them. On the other hand, the participant's age (M = 16.66, SD = 0.92) did not significantly correlate with the score from the contact quality scale (r(66) = -.06, p = 620).

2.6 Conclusion

The contact quantity scale did not have a statistically significant relationship with its convergent validity variable, prejudice. Therefore, the contact quantity item was excluded from the study. As a result, only the 2 contact quality items were included to represent the control variable.

APPENDIX E

1. Intergroup Ideology Manipulations

        The reading task included the Thai version of the intergroup ideology manipulations created by (Cho et al., 2017). This original content that gave supporting evidence to support each of the ideologies was back-translated. Then, two experts were contacted to carry out the content validation procedure. The manipulation format used in this study was adapted into presentation slides instead of the original magazine format. This change was decided after getting feedbacks from the first rounds of the pilot data collection. The current format was designed to make it easier for high-school readers to comprehend and remember the details. The adapted Thai version of colorblindness (Figure 6-8), multiculturalism (Figure 9-11), polyculturalism (Figure 12-14), and control passage (Figure 15-16) are shown below.

2. Manipulation Development

The scale development procedures were:

        2.1 Participants were recruited online via convenience sampling technique through social media and school authorities. The total 129 Thai high-school students, attending Mattayom 4-6 in Bangkok completed the Qualtrics survey and the manipulation check items.

        2.2 Materials

        2.2.1 Demographic data covered age, gender, academic level, school type (public or private), and school name.

        2.2.2 The *Lay Theories of Culture Scale* (Rosenthal & Levy, 2012) was translated into Thai and back-translated by a qualified English speaker. The measure was included in this pilot study to act as the manipulation check with the Thai student samples. The scale consisted of 3 separate constructs with 5 items for each, including colorblind, multiculturalism, and polyculturalism. The participants were

asked to indicate their level of agreement on each item in a 7-point Likert Scale, ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). The positive score will represent the participant's level of endorsement to each of the constructs. The Thai *colorblind* items (α = .84) emphasized both the uniqueness and commonalities possessed by each person, such as "Racial and ethnic group memberships do not matter very much to who we are." The *multicultural* items refer to recognitions of different racial and ethnic qualities (α = .7), such as "All cultures have their own distinct traditions and perspectives." The *polycultural* items emphasize the on-going cultural process and neutral influence each culture has one another (α = .73), such as "Different cultural groups impact one another, even if members of those cultural groups are not completely aware of the impact."

      2.2.3 The measure for the study's dependent variable, willingness to engage in intergroup contact, which is the *Behavioral Intention Scale* (Esses & Dovidio, 2002) was translated from English to Thai. There were 12 items in total with no reverse scoring item. The content represented the how willing one would be to initiate each presented behavior. For instance, "If given the opportunity, how willing would you be to accept a Black person as a family member through marriage." An additional item was added to cover another school-related aspect,   If given the opportunity, how willing would you be to take a foreign exchange student from Myanmar as your buddy?" All items were in Likert-scale format scoring from 1 (strongly disagree) to 7 (strongly agree).

      2.2.4 Additional attention checks item asked participants to answer "Yes" or "No" to each statement whether they think it corresponded to the main idea detailed in the slides throughout the section or not.

    2.3 Procedure

2.3.1 The online survey containing the manipulations, manipulation check and other related measures was distributed through various social media platforms and school authorities to potential participants, specifically who were students attending Mattayom 4-6 in Bangkok.

2.3.6 Upon clicking on the Qualtrics survey link, each participant was shown an information page detailing the inclusion criteria, purpose of the research, ensured anonymity and confidentiality, approximate time to complete the survey, researcher's contact information, and a question asking if they consent to take the survey or not. The following pages of the survey randomized the participants into 1 of the 4 conditions, colorblindness, multiculturalism, and polyculturalism. Each condition contained 1 of the 4 ideology manipulations and other related measures.

2.3.7 Only the complete responses with no random answers in this particular scale were included in the next phase to analyze the manipulation quality.

2.4 Analysis and Results

The descriptive statistics for the measures that assessed colorblindness, multiculturalism and polyculturalism were detailed below (Table 9). The results showed that in the condition where an ideology was manipulated, the score for that particular construct was highest comparing to the rest.

Additionally, an ANOVA analysis comparing the willingness to engage in intergroup contact scores was carried out since it is the study's dependent variable. The results were statistically significant ($F(3, 115) = 3.096$, $p < .05$). The results signified that each group responded to the manipulations differently.

It should be interesting to note that the ANOVA analysis for each ideology scale that directly assessed whether the participant agreed with each ideology's statement or not was not statistically significant. The results were neither statistically significant in colorblindness score ($F(3, 125) = 0.308$, $p = .819$), multiculturalism score

Table 9

Descriptive Statistics for Lay Theories of Culture Scale by Condition

Score	Condition	N	Mean	SD
Colorblindness	Colorblindness	31	4.41	1.353
	Multiculturalism	31	4.19	1.202
	Polyculturalism	32	4.48	1.42
	Control	35	4.26	1.469
Multiculturalism	Colorblindness	31	5.17	0.867
	Multiculturalism	31	5.47	0.851
	Polyculturalism	32	5.11	0.795
	Control	35	5.39	0.704
Polyculturalism	Colorblindness	31	5.69	0.771
	Multiculturalism	31	5.52	0.777
	Polyculturalism	32	5.88	0.725
	Control	35	5.55	0.716

(F(3, 125) = 1.456, p = .230), nor polyculturalism score (F(3, 125) = 1.435, p = .222). The reason might be that these ideology constructs have been shown to correlate one another at a moderate level in past literatures (Bernardo et al., 2019; Bernardo et al., 2016; Bernardo & Presbitero, 2017; Cho et al., 2017; Cho et al., 2018; Rosenthal & Levy, 2012; Salanga & Bernardo, 2019). Due to these existing relationships with one another, the non-significant results were not unusual.

Taken these results together, the manipulation passages appeared to be able to convince the participant to adopt the ideology they were exposed to at an acceptable level. The adapted versions of each passage would be included in the main studies.

Figure 6

Colorblindness Manipulation Slides in Thai (page 1-4)

Figure 7

Colorblindness Manipulation Slides in Thai (page 5-8)

Figure 8

*Colorblindness Manipulation Slides in Thai (page 9-11)*

Figure 9

Multiculturalism Manipulation Slides in Thai (page 1-4)

Figure 10

Multiculturalism Manipulation Slides in Thai (page 5-8)

Figure 11

Multiculturalism Manipulation Slides in Thai (page 9-11)
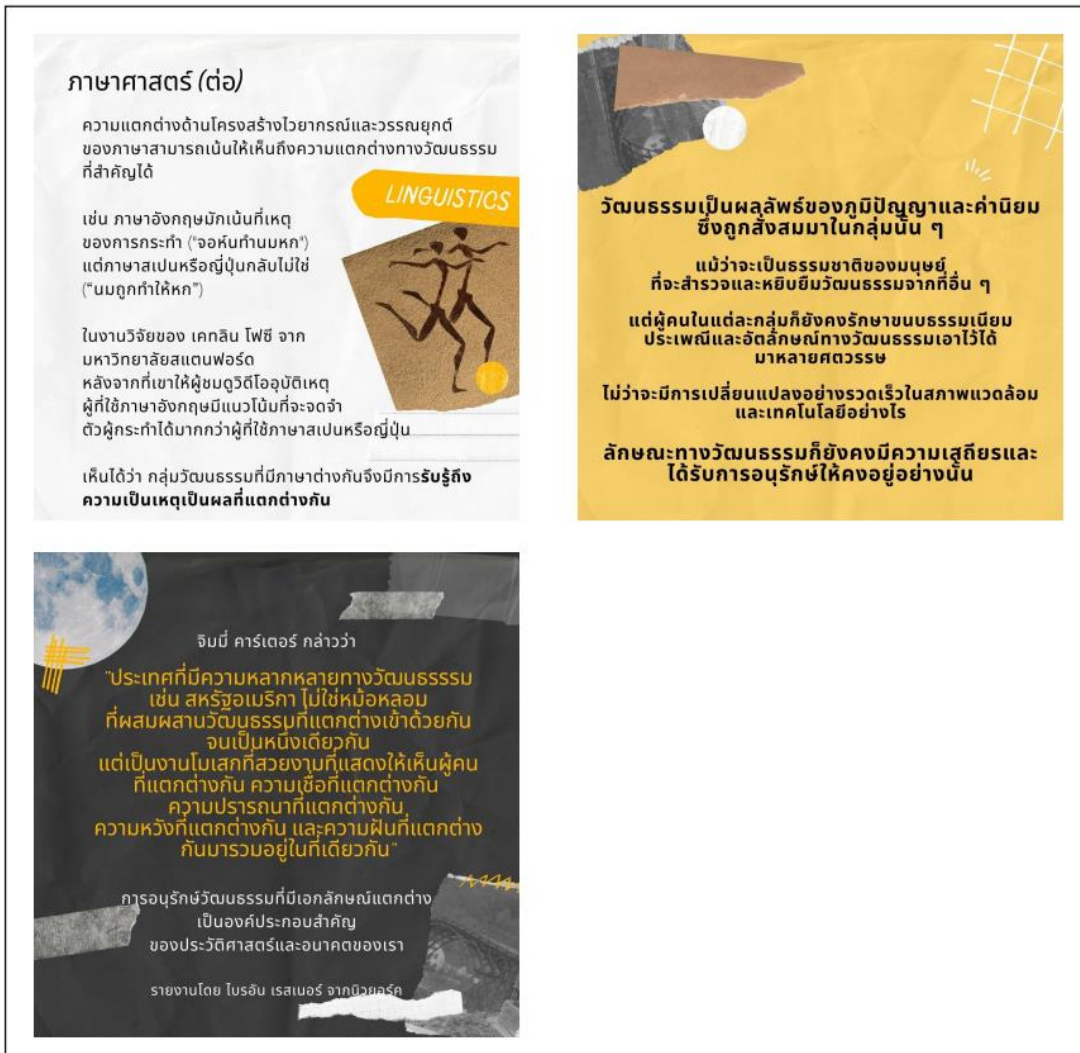
Figure 12

Polyculturalism Manipulation Slides in Thai (page 1-4)

Figure 13

Polyculturalism Manipulation Slides in Thai (page 5-8)

Figure 14

Polyculturalism Manipulation Slides in Thai (page 9-12)

Figure 15

Control condition slides in Thai (page 1-4)

Figure 16

Control condition slides in Thai (page 5-8)

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