

Dependency of Political Opinion on Political Conformity in Hong Kong, Mediating Effects of Self-Esteem, Conservatism and Personality Traits and Dependency of Political Conformity on Culture

Sabina Rahees (20631693)

An Honours Project Submitted in Partial Fulfillment of the Requirements for the Degree of Bachelor of Social Sciences (Honours) in Psychology

Hong Kong Baptist University

May 20, 2022

#### DECLARATION

I declare that the work in this honours project is original except where indicated by special reference in the text.

Any views expressed in the honours project are those of the author and in no way represent those of the bachelor degree programme in Psychology, Hong Kong Baptist University.

Signed:

Sabina

Date:

May 18, 2022

#### Abstract

Currently, there is little to no understanding of how political conformity can affect individuals political opinion in Hong Kong and if political conformity is affected by culture. The current understanding we have is that conformity can have effects on a person's political behaviour such as voting and that cultures such as collectivism and individualism can affect conformity differently. It is also known that personality traits can also affect political opinion. This study is conducted to see if political opinion of an individual is dependent on political conformity in Hong Kong, as the understanding about political conformity is scarce and also to see if political conformity is dependent on culture. To do that, an experiment was carried out with political conformity included in the treatment group and without it in the control group. A questionnaire was also conducted to see the level of self-esteem, conservatism and the Big Five personality traits. As for political conformity and culture, data from this study was compared to another study in the USA. The results found that political opinion is dependent on political conformity in Hong Kong. Out of all the personality traits only neuroticism is seen as an influential factor and that political conformity is not dependent on culture. This means the political opinion of an individual in Hong Kong can be affected by political conformity, neuroticism can also influence the political opinion and that there was no difference found for political conformity between the USA and Hong Kong.

目前,對於政治一致性如何影響香港個人的政治觀點以及政治一致性是否受文 化影響,目前幾乎沒有了解。我們目前的理解是,從眾可以對一個人的政治行為 (例如投票)產生影響,而集體主義和個人主義等文化會對從眾產生不同的影響。 眾所周知,人格特質也會影響政治觀點。這項研究旨在了解個人的政治觀點是否取 決於香港的政治一致性,因為對政治一致性的理解很少,並且還要了解政治一致性是 否取決於文化。為此,在治療組中包含政治一致性的情況下進行實驗,而在對照組 中不包含政治一致性。並且還進行了問卷調查,以了解自尊、保守主義和大五人格 特質的水平。至於政治一致性和文化,本研究的數據與美國的另一項研究進行了比 較。結果發現,政治觀點取決於香港的政治一致性。在所有人格特徵中,只有神經 質被視為一個影響因素,並且政治一致性不依賴於文化。這意味著香港個人的政治 觀點會受到政治一致性的影響,神經質也會影響政治觀點,美國和香港之間沒有發現 政治一致性的差異。

## ACKNOWLEDGEMENTS

I would like to thank my supervisor, Joey Cham, for guiding me throughout the entire study. Special thanks are also extended to all my lecturers for teaching me immense understanding and knowledge about research and psychology throughout these years which has helped me greatly for this project.

# List of Tables

 Page

 Table 1
 Descriptives for self-esteem, Big Five personality and 35

 conservatism

# List of Figures

Figure 1	Change of Political Opinion of Participants in the Control	33
	group and Treatment group	
Figure 2	Change of Political Opinion of Participants between the United States	34
	and Hong Kong	
Figure 3	Self-Esteem Score of Participants Who Changed and Who Didn't	36
	Change Their Political Opinion	
Figure 4	Social Conservatism Score of Participants Who Changed and	36
	Who Didn't Change Their Political Opinion	
Figure 5	Economic Conservatism Score of Participants Who Changed	37
	and Who Didn't Change Their Political Opinion	
Figure 6	Extraversion Score of Participants Who Changed and Who Didn't	38
	Change Their Political Opinion	
Figure 7	Agreeableness Score of Participants Who Changed and Who Didn't	39
	Change Their Political Opinion	
Figure 8	Neuroticism Score of Participants Who Changed and Who Didn't	39
	Change Their Political Opinion	
Figure 9	Conscientiousness Score of Participants Who Changed and	40
	Who Didn't Change Their Political Opinion	
Figure 10	Openness Score of Participants Who Changed and Who Didn't	40
	Change Their Political Opinion	

Page

	Table of Contents	
CHAPTER ONE	Introduction	10
	Situation in Hong Kong	12
	Research gap	13
	Research rationale	14
	Research questions	14
CHAPTER TWO	Literature review	14
	Conformity in political context	16
	Conformity in Hong Kong and in Chinese society	19
	Conformity and culture	20
	Other factors affecting conformity	24
	Research hypotheses	26
CHAPTER THREE	Method	27
	Participants	27
	Procedure	27
	Design	29
	Materials	30
CHAPTER FOUR	Results	33
	Political conformity and political opinion change	34
	Culture and political conformity	35
	Political Opinion change and self-esteem	36
	Political Opinion change and conservatism	37
	Political Opinion change and personality	38
CHAPTER FIVE	Discussion	42
	Previous researches and current study	43

POLITICAL CONFORMITY & OPINI	ON, CULTURE, PERSONALITY	9
Pra	actical implications	46
Lin	nitations	47
Fu	ture research suggestion	47
Со	nclusion	48
References		50
Appendices		60

Conforming to group norm is a practice that has been seen worldwide. Conformity is the act of going along with the majority group (Coultas & Leeuwen, 2015). Extensive studies have been done on conformity including the well known study of Asch (1951), where it was found that people will conform to the group norm even when they don't agree with the group, as individuals have a desire to be accepted and be liked by others, that is to say they conform due to the normative influence. Sherif (1935), found that one of the reasons individuals will change their opinions is because they think other people are more informed or more knowledgeable than themselves and this is called informational influence. While in both cases people conform to the group, it is usually through informational influence that an individual results in private acceptance, that is, an individual changes or updates their existing knowledge, beliefs or opinions because of the new information provided.

Political conformity is defined as individuals conforming to the political group norms (Edelman, 1967). There are many instances when studies found political conformity is happening, such as, the study of Gerber et al (2018). They tried to understand how political conformity affects voter turnout (the number of eligible individuals participating in an election) and found there is a higher voter turnout rate when social pressure is applied. Another instance is when a person learns political attitudes through conforming to others and their personality (Palma & McClosky, 1970). While there is an understanding of how political conformity affects politics, including voter turnout and political attitudes, as stated above, there was little knowledge on why such political conformity takes place as political ideologies, attitudes and opinions are value-laden, complicated and bound by cultural norms and they are difficult to change (Zuckerman, 2005, as cited in Mallinson & Hatemi, 2018).

To understand this, a study was conducted by Mallinson and Hatemi in 2018, at Penn State University in the USA, to find out whether opinion change in political context is done because of new information provided or does it happen because of conformity in political context or does it happen because of both of them. They used a discussion based experiment to carry out the study with pre-test and pro-test survey to see their opinions before and after the experiment for both experimental and control group. The findings showed that conformity has an effect on the change of opinion of an individual in the political context, 38% of their participants had changed their opinion in the experimental group after receiving the treatment which is conformity and new information (in the state of counter-arguments) and only 8% changed in the control group, where no conformity was present and only had new information (the counter-arguments). The study also found that neuroticism, conscientiousness and conservatism had a significant effect on the change of an individual's opinion in the political context. Same as every other study this study too has it's own limitations, which is the sample size. This study has a small sample size, as conducting the study is complicated and time-consuming and therefore it makes it hard to recruit and study a larger sample size and thus as said in their study as well, the study should be replicated.

Also, there are understanding of existence of conformity and how conformity is playing a factor in different settings of Hong Kong and other Chinese societies, including the study where they tried to understand the effects of conformity to norms about masculinity in Hong Kong (Rochelle, 2018), the effects of conformity on entrepreneurship in China (Chen & Touve, 2011) and the study for pressurized conformity in regards to the law for pharmaceutical patentship in Hong Kong (Mercurio, 2020).

Moving on, different values are found in different cultures and numerous studies have shown that there are cultural differences between the United States and Hong Kong. One of the most prominent differences is that the US tends to be more on the individualistic side and Hong Kong tends to be on the more collectivist side. An early but very important study carried out by Bond and Smith (1996), found a higher level of conformity in collectivist countries rather than in individualistic countries. Hong Kong has been shown to have a rank lower in extraversion and higher in introversion. The reasons noted for such ranking in the study is due to the emphasis of Asian cultures on compliance, tradition and conservatism (Chon 2014; McCrae, 2004).

#### **Situation in Hong Kong**

In this subsection, detail regarding the current pandemic situation and policy is explained. On 16th of November 2020, the government of Hong Kong introduced an app, where the citizens can record the places they have visited in order to curb the spread of Covid-19; Covid-19 is known to be a new strain of virus which wasn't identified before, it causes respiratory problems in individuals and can even lead some to death. It is symptomise by having fever, cough, sore throat and loss of taste to name a few. Covid-19 was first identified in 2019 and was declared as pandemic in 2020. For this reason, the LeaveHomeSafe app was introduced, as this app makes it easier to trace individuals who are closely connected to the Covid-19 patients in Hong Kong.

On the 1st of November 2021, the government of Hong Kong made it compulsory for all Hong Kong citizens to scan the QR code provided on the location of visit using the LeaveHomeSafe app and also forbidden the use of paper methods to write down the individual's information for keeping the record of visit. Exemptions were only given to individuals who are either under 12 or aged 65 or above and to those individuals with disabilities which may make it hard for them to use. Examples of the premises where the usage of the app is compulsory are: all government premises, markets, restaurants, bars, public hospitals and many other places.

The LeaveHomeSafe app helps curb the spread of the Covid-19 in the community by helping the government keep track of people so that when a case appears at the place where individuals have visited, those individuals can be informed early about it and that precautionary measures can be taken such as Covid-19 testing. While there are pros of making it compulsory to use the LeaveHomeSafe app, there are cons to making it mandatory to use. One of the cons is that it created inconvenience for the homeless people, according to sources (Hong Kong Free Press [HKFP], 2021), homeless people found it very unfair and troublesome as they couldn't afford to buy smartphones and to use the paper forms they had to prove their reasons, which was very inconvenient to them. Furthermore, making the use of the app compulsory have also been shown to affect businesses, to name two, restaurants and supermarkets have seen an impact on their business, as they see it suffer since some customers didn't want to use the app and some didn't have the means too; the customers then ended up not going to restaurants and those supermarkets.

Since it is compulsory to use the app almost everywhere, and a policy discussion topic for the experiment was needed, I used this recent policy for the discussion. I suppose that most people already know about it and have experience related to it whether it be a good or bad experience or opinion regarding the "LeaveHomeSafe" app. Furthermore, since Covid-19 is still prevalent in the society and have even rose in numbers these days, so it can be deduced that people are well known of this policy moreover, as said before it is also political charged such that some people find it unfair to make it compulsory and some agrees with it as it is meant to protect us. Thus, I concluded using this policy as my topic for discussion, since it is in the political context, has salience, is a recent incident and is connected to people in Hong Kong. This is just an introduction about the situation in Hong Kong. Further about the design of the experiment and discussion is mentioned in the design of method section for further understanding.

#### **Research Gap**

While there are studies done on political conformity in the west there isn't much of an understanding about it in the Hong Kong political context, we have little to no study done to understand what is the situation of political conformity in Hong Kong, though we know conformity exists in Hong Kong too. Secondly, at-present we know there are cultural differences that exist around the globe and have an effect on conformity but till now we don't know if there are cultural differences that affect or have any influence on political conformity.

## **Research Rationale**

The rationale for carrying out this study is that we can have an understanding about political conformity in Hong Kong, can see if political conformity has it's presence in Hong Kong in regards to the political opinion of an individual about Hong Kong policies such as the LeaveHomeSafe app. Along with understanding if factors such as self-esteem, conservatism and the Big Five personality trait affect the level of political conformity in those individuals. Lastly, conducting this study in Hong Kong can help give us an insight if culture has influence in the political context too, as in regarding political conformity.

## **Research Questions**

The study will revolve around the following questions, including, are changes in political opinion and political conformity independent in Hong Kong. Is political conformity dependent on culture? Lastly, Does self-esteem, conservatism and the five personality traits including extraversion, agreeableness, conscientiousness, neuroticism and openness have an effect on change in political opinion.

## **Literature Review**

Apart from the desire to be accurate or the desire to blend in with the group (Asch, 1951; Sherif, 1935), other reason for why individuals conform is because they feel uneasy in a setting where people hold view that are opposite of their own and therefore they change their own view to match those with the group (Carlson & Settle, 2016). The other reason why individuals may want to conform is to have a good and favorable self-concept. Cialdini and Goldstein (2004) did a literature review and found that one of the reasons why people want to conform is that they want to have and show that they have favorable self-concept. The

thought of not having a free will also leads one to conform (Alquist et al, 2013). In addition to all these factors, the trust factor is also one of the reason why a person may conform. Salomons et al. (2018) carried out a study to see if people will conform to the robots, and it found that individuals were more conforming to the robots when they trusted the robots, however, when the individuals found the robots to be wrong and not worthy to be trusted upon, the individual stopped conforming to the robots. Thus, showing trust also plays an important role in the reasons why individuals conform.

There is a sizable amount of understanding regarding the effects of conformity on a wide range of areas, conformity in the medical setting is one of the studied areas (Beran, 2015). It found that individuals in a medical setting are having conformity to peer pressure, where members of the health care teams were affected by it, as the team members would avoid taking risk to give out their opinion against the opinion of their group and thus affected the quality of the health care provided. To avoid such occurrences, it is very important for the medical schools to teach their students effective skills for teamwork to avoid such problems. The other studied area is conformity in children, study found that children had a tendency to conform but only for a limited amount of time (Lago et al., 2019). Conformity in consumerism is also one of the studied aspects, a study found a correlation between conformity and high-end products and services (Nora, 2017). Furthermore, the study of Zhirkov et al. (2021) is also worth mentioning. The study was carried out to have a better understanding on how conformity to the elite political groups can shape an individual's mind towards prejudice to the immigrants. It found that individuals valuing conformity, conforms to the view of the elite group in that area, whether it be being high in prejudice or low in prejudice towards the immigrants, the ideology of the prejudice can be conveyed and accepted from the elite groups to individuals through normative influence.

#### **Conformity in political context**

Numerous studies carried out by researchers have demonstrated the effect of conformity on an individual's political behaviour (Abu-Rabia-Queder, 2008; Coleman, 2004; Putri & Akhrani, 2019; Vaes et al., 2011). Gerber and Rogers (2009) have found out that social pressure has the potential to increase the probability of a person coming out to vote as voting is broadly perceived as a social norm that individuals wish to comply with. Gerber et al. (2016) also showed similar results where the voting social norms and the voter turnout across the country were found to be correlated. The latest study conducted in 2021 by Blais and Hortala-Vallve found out that individuals who had a higher total sum on the scale of social conformity were more inclined to vote when it was in their knowledge that the majority of the people also voted. In simple words, a high level of voter turnout encourages individuals to vote, as voters who conform have a tendency to follow the majority of the people, in this case, the voters. The above findings showed that social norms do play a role in the level of voter turnout.

In 2018, Perez-Truglia did a study where they proposed that in places where individuals have a social environment with similar thinking, they are politically more functioning as they will conform to each other. In the study, 45,000 individuals were picked out from the administrative data who had played a contribution to the 2008 presidential campaign of Barack Obama and then have changed their place of domicile. The study was carried out to look into whether the political popularity of the place they live in can have a higher contribution to that political party. The results showed that conformity played a very significant role economically, and can be useful to understand the polarization of politics geographically.

To see if there are any differences to how a person receives social pressure in different age groups, Panagopoulos and Abajno (2014) carried out a study and found that older individuals were more receptive to social pressure when compared to younger people.

While there is a difference in receptivity among older and younger individuals, no difference was found in the receptivity of social pressure regarding political participation between men and women (Weinschenk et al., 2018).

According to Van-Bavel and Pereira (2018), individuals have a desire to blend in with the ingroup peers and they also want to have a social identity. This desire to blend in and wish to have a social identity can overshadow the individual's wish to be accurate. Although individuals have a predisposition to have their behaviours to be modified to conform to their group norms, these desires, as stated above, have a larger effect on the individuals to change their behaviours. Especially when the ingroup norms are very noticeable, conformity has great values when it clashes with the individual's existing values and behaviors (Terry & Hogg, 1996).

While previous studies were done to understand more about conformity happening in ingroups and outgroups (Tajfel et al., 1971; Terry & Hogg, 1996), there was little to no understanding regarding the effects of ingroup and outgroup norms on conformity, and therefore due to lack of understanding Pryor et al. (2019) carried out a study to understand this. They tried to understand how the descriptive norms of outgroups and in-groups can affect conformity practices, particularly they wanted to understand what happens to conformity practices when a person doesn't relate themselves to another political group, such as a person from the Democrats or the Republicans. Descriptive norms here are expressed as people doing things the same as others when they know most of the individuals in a group or vicinity do the same things. The study found that people from an ingroup tend to follow the outgroup beliefs if the beliefs are deemed as famous and popular. For instance, if a person is from the Democrat political party, they will follow the thoughts and beliefs of people from the Republican group.

In regard to the transmission of political information and the reliability of such information, studies have found that people use their social circles such as their friends and family members to gain political information (Bond et al., 2012; Levinsen & Yndigegn, 2015; Janmaat & Hoskins, 2021). But while accessibility is an advantage, the reliability of such information has been questioned. It was found that political information gained through one's social groups can be biased as the sender of the information may tend to spread the political information according to his or her likes and dislikes, such that the information will be changed or adjusted to the sender's preference rather than what it actually was (Ahn et al. 2014).

A study was done to understand if political attitudes are affected by conformity and if so, will it internally change the attitude of those individuals (Levitan & Verhulst, 2015). The study found that people had a higher tendency to conform to a group where all of the group members had the same consensus on an attitude. Nonetheless, whether there was high consensus or lower consensus, in general individuals were more likely to conform to the surrounding groups and individuals. Moreover, the study found that individuals who outwardly changed their attitudes to the surrounding individuals, had inwardly and privately changed their attitudes too, which lasted even more than one week.

Many studies have been carried out in regards to information transmission (Coronel et al., 2019; Thorne et al., 2006), however in these studies the authors usually used numerical information to carry out the research. On the other hand, researchers have also focused on analyzing the content of the conversations as in the words, to see how the information takes new forms by being altered as it is communicated from one person to another. An example of such study is the study of Moussaïd et al. (2015), they found that when conversation regarding a disputable antibacterial agent was transmitted from one person to the next person, it resulted in less accurate information being socially transmitted.

Political opinions of a person can be influenced by certain factors such as how it is transmitted, how reliable is the information being transmitted, how strong are their values such as are they willing to conform to others opinion to comply with the political norms or they believe in holding their own views, all of this is discussed in the session above (Blais and Hortala-Vallve, 2021; Bond et al., 2012; Levinsen & Yndigegn, 2015; Janmaat & Hoskins, 2021; Pryor et al., 2019; Van-Bavel & Pereira, 2018).

#### Conformity in Hong Kong and in Chinese society

Jia et al (2009) carried out a study to see the correlation between the level of burnout with the conformity values of Confucianism in Hong Kong. The participants of the study were Hong Kong Chinese architecture students. The results suggest that there does happen to be a relationship between them. Another study tried to understand how a student's school performance is affected by the Chinese parents and their activities, in addition to seeing how conformity, self-efficacy and self-esteem a child has for it's parents can affect the child's educational performance. The study found that when parents support their children, it projected children conforming to their parents and showing self-esteem. And that in turn projected motivation for education and educational performance (Shen, 2011).

It is found that Chinese men have an inclination to not voice out their emotions (Chia et al, 1994; Hsu, 1981). Based on this Yeung et al in 2015 carried out a study in Hong Kong to see the conformity effect of Chinese men not expressing themselves and how it impacts their mental well-being. It found that Chinese men in Hong Kong who conformed to the norm of controlling and not expressing their emotions had lower mental well-being.

Cheung and Prendergast in 2006 studied how conformity motivates buyers to buy products which are pirated in Hong Kong and in Shanghai, along with understanding the buyers attitude about materialism and their behavior of purchasing the products. They found that while attitudes about materialism didn't have any difference for their behavior of buying the products, in Hong Kong conformity was an influential factor for people to buy VCDs which are pirated. Another study tried to understand if warmer or cooler temperatures may be an influential factor for conformity. Several experimental studies were conducted to study this including the experiment in Hong Kong, to see people's behavior of betting for the horse races and they found that when the temperature was warm, the people betting were more probable to conform to the opinion of the majority in that vicinity (Huang et al., 2014).

Cultural factor is one of the factors which can determine how willing a group of people is to change their opinion and that will be discussed in the following section.

#### **Conformity and culture**

Culture is defined as a group of behaviors, social norms, attitudes and beliefs that are prominent in a group of people of a particular geographical area (Varnum & Grossman, 2017). There are two very well known types of culture, which are individualism and collectivism (Darwish & Huber, 2003). Individualistic culture is defined as a practice of putting the needs and beliefs of oneself over the needs and beliefs of other people in the community. They advocate being independent, having their own privacy, their own identity and they place great emphasis on having personal autonomy such that they believe in making their own decisions for themselves rather than being influenced by the views and values of other people. The United States, Australia and Canada are some of the examples where the society holds individualistic views in the community.

On the other hand, collectivist culture is defined as a practice where emphasis is placed on the community as a whole, where the people in the community tend to be interdependent, they share the beliefs and attitudes among each other (Darwish & Huber, 2003). They have less personal privacy compared to individualism as collectivist beliefs in sharing information and principles. Collectivism believes that a group's attitude and values are greater than the attitude and values of the individual and therefore, it should be put at the forefront of the individual's values. Their belief is that putting the needs and values of the group at the forefront can help in reaching a harmony in the community. Hong Kong, China, Japan, Pakistan and India are some of the countries with collectivist culture. Studies showed that people with individualism are less likely to conform as they value their own individual thoughts and are more likely to go according to it. On the contrary, people from the collectivist culture are more prone to conforming, as they want to have harmony and cohesiveness in the community (Bond & Smith, 1996; Darwish & Huber, 2003). In regards to political conformity, individuals from collectivist culture tend to value other people's opinion in decision making when compared to people from individualistic culture (Laban, 2014).

There were studies investigated, to understand how culture affects conformity in the community. One of them is the study of Horita and Takezawa (2018). They tried to understand how the environmental pressure may have played a role in the development of cultural differences. To do this, they studied how pathogen stress may have led to the development of group oriented norms and behaviours, such as having in-group conformity and collectivism. Infectious diseases are seen as environmental hazards from early on in the history till now, which needs adaptive behavioral and psychological responses to be combated. And so when people were confronted with infectious diseases, they would start to stay away from having relations with the out-group individuals whose identity was unknown. It was argued that this might have been an adaptive behavioral and psychological response to the environment as being outgoing and socially active with everyone who pose a much higher risk in the spread of the infectious diseases. And then adhering to these social norms were also seen to be a very beneficial act in such a situation. Firstly, adhering to these norms would help fight the infectious disease. Secondly, by adhering to these social norms would help individuals be exposed to more supportive acts from their in-group peers. This can show how the environment may have influence on the culture of the community and it's values.

Such as being bound to one's own community when disease arises, and then how that affects the conformity behavior in that community such as staying with in-group members and avoiding out-group members, as that can help in reducing the spread of infectious disease and can help gain more acceptance from their community.

Another study also found similar results, where they also tried to find and understand the genesis of cultural differences in regard to conformity (Murray et al., 2011). It was hypothesised in the study that the prevalence of infectious diseases may have caused the cultural differences. As, in the places where the disease causing pathogen had higher prevalence rate, the more likely it was for the cultural norms to emerge from it, causing more conformity in the community. These studies can to an extent convey the message that there can be cultural differences in different geographical areas, and it can be deduced from these studies that having a different environment can lead to different cultures and thus different levels of conformity.

Kim and Markus carried out a study in 1999 which is a real-life example of how different cultures can affect conformity differently. They examined advertisements from Korea and the United States, to see how each country leverages their advertisements to attract customers, such as what approaches they use in each country. After analyzing, they found out that Korea tends to use conformity approaches such as stating "8 out of 10 people use our product" to attract customers, which reflects the use of conformity and collectivism. The advertisements from the United States tend to use approaches which emphasize the customers to be unique such as stating "choose your own perspective", this reflects them using individualistic approaches for advertisement. As shown in this study, different cultures use different approaches for their community.

Apart from studies being carried out to understand how culture can have an effect on conformity and how different behaviors are formed in response to that cultural conformity such as using different marketing approaches (Kim & Markus, 1999), studies were also carried out to understand the basic cognitive styles in the East and the West (Cheng , 2020; Lacko et al., 2020). One of the recent studies carried out by Ma-Kellams in 2020, mentioned in her research paper that there is a contrast in the thinking patterns of individuals in the West when compared to individuals in the East. In the West, individuals engage in focal, linear and analytical thinking. However, in the East, individuals tend to have a more holistic, intuitive and analytical thinking. One of the intriguing parts in this study is that, while there are cultural differences in the thinking styles of the East and the West, there are fewer differences seen in regards to the cognitive biases both of them have, to name one of the cognitive biases is hindsight bias. Though there are limited studies on it and needs further research to be carried out.

In regards to the brain structures and neural functionings, it is found that when an experience is continued for a lengthened amount of time, it can have an effect on the brain function and the brain structure of an individual (Greenough et al., 2002; Johnson et al., 2009; Kolb & Gibb, 2011; Schmidt et al., 2021). And based on this understanding, Park and Huang in 2010 carried out a study where they hypothesized that being exposed to cultural experiences for an extended period of time will affect neural functioning. Their findings support their hypothesis, they found that culture can have an effect on a person's neural function, especially in the ventral visual cortex of an individual. Another study also found differences in the orientations for information processing between the East Asians and the Westerns, different cultural values are believed to be the reason for it, as it's found that the experiences of learning interdependent and independent orientations was involved in the regional brain volumes (Huang et al, 2019).

To sum up, cross culture researches have shown how groups and cultures can differ in terms of their brain mechanisms and function. It also showed the different values each culture has, the different cognitions and how different strategies are utilized to serve people of different cultures. While differences in culture is one of the major differences for why some people are more prone to conforming and why some people are not, individual differences also account for some of the reasons for why some people are more likely to conform to the majority and some not. This will be discussed in the following part.

## Other factors affecting conformity and opinion change

Other than the variations listed above in the literature review, there are other individual differences which can affect the level of conformity and opinion change among each individual. The first difference is the difference in personality in every person. A study was conducted to see the relationship between conformity and personality (Oyibo & Vassileva, 2019). They found that people who have high scores in neuroticism are more prone to be influenced by the following three strategies, which are social comparison, social learning and social proof. These three strategies are used to persuade people to engage in certain beneficial activities. Secondly, in the study they also found that individuals who have lower scoring in conscientiousness are in a degree more vulnerable to being influenced to social proof and social learning when compared to individuals having high ratings in conscientiousness. This study shows that personality has an effect on how one conforms in a social environment and changes their opinion. Moreover, agreeableness has also been seen to affect how susceptible one is to conformity, individuals who are high in agreeableness are more likely to change their opinion when confronted as compared to individuals who are low in agreeableness (Herringer, 1998). As for extraversion, it is found that conformity and extraversion had no relationship with each other (Singh & Akhtar, 1973; DeYoung et al., 2002), and had no relationship with openness too (DeYoung et al., 2002).

The other factor which affects how one conforms is self-esteem. Levonian (1968) found that self-esteem was related to change in opinion. Individuals who have lower self-

esteem are more susceptible to change their opinions when compared to individuals who are high in self-esteem (Kurosawa, 1993). The other study carried out by Pool et al. (1998) is worth to be noted. The study found that the self-esteem of the subjects was reported as low, after knowing that the majority of the people who are respected and cherished in the group has an opinion that clashed with the individual's opinion, on a topic that concerned with attitudes. Another relatively recent study showed that when the subjects who had lower selfesteem were asked to recall certain events with their co-witness, they had higher conformity rate when compared to individuals with higher self-esteem (Tainaka et al., 2014).

Ideology is also one of the factors that can affect the level of conformity and opinion change among each individual. Conservatism is defined as being resilient to the shifting of their attitudes, beliefs, culture, values, so-forth and retain their traditional values, beliefs and retain the status quo (O'Leary, 2007). On the other hand liberalism is the opposite of conservatism and it emphasizes on the individual, including caring for their freedom and safeguarding their rights as an individual (Bell, 2014). Moderates are individuals who do not entirely advocate liberalism or conservatism, it falls in between (Reiss et al., 2019). The study of Sistrunk and Halcomb (1969) is comparatively old but the findings are attention grabbing, it studied about the conformity rates among the liberals, conservatives and the moderates. The study found that individuals with conservatism ideology had higher conformity rates when compared to individuals with moderate and liberal ideology. As for individuals with moderate ideology, they conformed more than individuals with liberal ideology. To give the main idea of the study, it found individuals with conservative ideology the most conforming and individuals with liberal ideology the least conforming. However, for the individuals with moderate ideology, it was also found that whether they conform or not, was dependent on the context of the situation. Jost el al. (2018) also found that conservatives give more importance to conformity, the unanimity of the group and the traditional values, when compared to

liberals. Another study was done to understand whether the thoughts and values of liberal individuals can affect the thoughts and values of conservative individuals (Kaikati et al., 2017). They hypothesized that when the conservatives are placed with or are explicable to liberals who advocate generosity and donations, the conservatives are more likely to increase their donations, as conservatives have a higher tendency to conform. The findings support the hypothesis, however, only if the action of donating is deemed to be unaffiliated with the political ideologies.

To reiterate the knowledge gap, it is understood that conformity exist in Hong Kong and is playing an influential part in many aspects but the understanding for political conformity in Hong Kong is scarce, especially the understanding and existence of political conformity in regards to it's effects on change in political opinion for the Hong Kong policies. And to understand if political conformity is dependent on culture, as it is understood that conformity is affected by culture, so it's worth understanding if the same goes for political conformity.

The main focus of this study will be whether the change of political opinion in participants in Hong Kong is dependent on persuasion through providing political conformity. Secondly, compare the personality traits, ideology and self-esteem of those individuals who changed their political opinion and who didn't, to see if there are any effects of these factors on individuals who changed their political opinion in this study, as it's understood from the literature review that there are other individual factors which can affect the change of opinion and conformity in an individual. Thirdly, will political conformity be dependent on culture.

## **Research hypotheses**

As for the hypotheses, based on the current understanding, it is hypothesized that in Hong Kong, change in political opinion and political conformity is dependent. Secondly, it is also hypothesized that conservatism, conscientiousness, agreeableness, neuroticism and selfesteem has an effect on change in political opinion while extraversion and openness does not. Lastly, it is hypothesized that political conformity is dependent on culture.

#### Methodology

#### **Participants**

A total of 70 participants were recruited. 91% of the participants were of Chinese ethnicity (N= 64) and the remaining 9% participants from other ethnicities (N= 6) such as South Asians but all of the participants were born in Hong Kong. Around 96% of the participants were either a university student or a graduate (N= 67). There were 37 female participants in the study and 33 male participants and for the age, 84% (N= 59) of the participants ranged from age 18 to 25 and 26 to 39. There were 35 participants in the treatment group and 35 participants in the control group. Emails and text messages were sent out using snowball sampling to recruit participants.

#### Procedure

The first step of the study was to recruit the participants. Non-probability snowball sampling was used to recruit participants, as the time was limited, this was the best approach for recruitment. I started inviting individuals for the study by email and text messages. Students were emailed using their university student emails and other people whose emails were available; that was the main method of recruiting participants. Other than that, text messages were also sent to people whose contacts were available, in addition to inviting them to the study, they were also requested to send the invitation for participation in this study further in their contacts, as to speed up the recruiting process. After recruiting the participants for the study, individuals were then randomly assigned to either the control group or the treatment group.

#### **Control group**

A link of the google form was sent to the participants in the control group to take an online questionnaire. They were first provided with an online consent form, to have their agreement to participate in the study. Then the pre-test questionnaire was provided, after that the information sheet was provided, followed by the counter-arguments sheet. After the participants finished reading the information sheet and the counter-arguments sheet, they were then provided with a post-test survey, where the participants answered if they still agree or disagree with the stance "Should LeaveHomeSafe app be mandatory in Hong Kong" on a 5-point Liker scale. And lastly, they were debriefed about the study.

## Treatment group

Same as the control group, a link was sent to the participants in order to take the online pre-test questionnaire. Firstly, the consent form was provided, to take the approval of the participants to take part in the study. After that, the participants carried out the pre-test questionnaire. After finishing the pre-test questionnaire, they were then contacted to schedule a discussion session on the topic via zoom; all of the participants in the study were scheduled separately, such that there was only one actual participant in the discussion group and all the others were confederates. Before the start of the discussion, all of the individuals were reminded of the "purpose" of the discussion which is to see what people think about the political measures in Hong Kong. They were also told that their topic for discussion was randomly selected out of the five topics and that their topic for discussion would be "Should LeaveHomeSafe app be mandatory in Hong Kong?". They were then given the information sheet about the LeaveHomeSafe app and then were told to verbally give out their political opinion on the topic and the actual participant was always asked to give out their opinion first, followed by the confederates. During the discussion, the confederates would oppose the opinion of the participant with the use of the pre-planned counter-arguments (which is the same as the counter-arguments of the control group). All of the groups for the discussion

were given around 30 minutes, but if they wanted to go beyond 30 minutes or were done with the discussion earlier than 30 minutes, they were allowed to do so as to ensure the quality of the discussion. After the discussion session finished, the groups were then asked to express their political opinion on the topic using an anonymous ballot through google form. Lastly, the participants were debriefed about the study.

#### Design

A between subject experiment was carried out with a control group and treatment group, which the participants were randomly assigned to. The experiment is carried out with a discussion on a policy which is "the LeaveHomeSafe" app and conducted through questionnaire and zoom discussion. For the treatment group, a pre-test questionnaire was handed out first and then the rest materials were given out during the zoom discussion. For the control group, everything was given out at one time through a google form questionnaire and there was no zoom discussion.

The difference between the control group and the treatment group is that political conformity is included in the treatment group not included in the control group. For the control group, the counter-arguments are given non-verbally while for the treatment group, they are communicated through the confederates, which is verbally.

The independent variables of the study are political conformity and new information (given in the state of counter-arguments in this study). The dependent variable of the study is the political opinion. Some of the extraneous variables were also identified when conducting the literature review, which has the possibility of affecting the level of conformity and opinion change in an individual, including an individual's self-esteem, conservatism and the Big Five personality trait. Therefore, these factors were also studied in the pre-test questionnaire which was given out to the participants to measure their self-esteem, conservatism and the Big Five personality traits.

The actual reason for the study was hidden from the participants, as letting the participants know the actual purpose of the study would have hindered the responses from the participants and thus affected the study. So deception was used in the study but they were then debriefed after the study.

As for the recruitment of the confederates, they were recruited from the control group. Since time was the major constraint, it would have been very hard to first find and recruit, then train them, therefore the participants from the control group were invited to take part in the study as confederates, after they were finished with the control group experiment. As by then they were already familiar with the study, so it was easier to train them. A total of 4 participants volunteered to be the confederates.

## Design for culture and conformity

For the question, is political conformity dependent on culture? After collecting the data for experiment of question one which is, in Hong Kong, are change in political opinion and political conformity independent, the data of the treatment group was used to compare the data from the study of Mallinson and Hatemi (2018) which was conducted in the United States, the design of that study and this study is similar, as reference was taken to that study for the design of this study.

#### Materials

In the materials part, for the pre-test questionnaire and the post-test questionnaire reference was taken from the study of Mallinson and Hatemi (2018). The materials for this study includes a consent form, pre-test questionnaire, information sheet, counter-arguments, post-test survey and debriefing sheet for the control group.

## Pre-test questionnaire

For the pre-test questionnaire, it is divided into a few sections, the first section is Section A. It starts by collecting basic information about the participants, for instance, their year of birth, age, gender, educational background, ethnicity and so forth. Collecting the basic information of the participants provides an insight about the characteristics of the participants. There was some background information in the study of Mallinson and Hatemi (2018) which was deemed unrelated to the current study and therefore, were excluded. Information such as, which hand you use, how often you visit religious places, have children or not and so forth.

The next section is section B, the ideology of the participants is measured using the 12 item Social and Economic Conservatism Scale (Everett, 2013). There are 12 items in this measure. The scale uses two subscales which are social and economic scale, to measure the political ideology of the participants. The internal consistency of these scales are cronbach alpha .70 and .87 for economic and social conservatism. Examples of the items are: traditional marriage, religion and traditional values, which the participants need to answer on a scale of 0 to 100, 0 here stands for *very negative* and 100 for *very positive*. The scores were required to be answered in multiples of ten such as 10, 20, 30, 40, 50 and so on. Responses were averaged separately for social and economic subscale. The higher the average, the higher the political conservatism is in the individual.

After that, comes Section C, in this section Rosenberg's scale (1965) was used to measure the participant's self-esteem. This measure has ten items of question and it uses a Likert scale format to answer the questions, with 5 points to answer from, which are strongly agree, agree, disagree and strongly disagree. As for the scoring, *strongly agree* is scored as 3, *agree* is scored as 2, *disagree* is scored as 1 and *strongly disagree* is scored as 0; however for question 2, 5, 6, 8 and 9, the reversed scoring was needed, so that was done accordingly. After scoring, the scores were then added up. Participants who had higher total scores meant that they had higher self-esteem. By this method the level of self-esteem in the participants was measured.

The next section is Section D. In this section the participant's personality was measured in terms of the Big Five Dimensions: Agreeableness, Extraversion, Openness, Conscientiousness and Neuroticism. To do this, the Big Five Inventory is used which has 44 items of question in it and is answered using a 5 point Likert scale which spans from strongly agree to strongly disagree (John & Donahue, 1991). For the scoring of this scale, it scales from 1 for *strongly disagree* to 5 for *strongly agree*. But for question 2,6, 8, 9, 12, 18, 21, 23, 24, 27, 31, 34, 35, 37, 41 and 43 the items need to be scored reversed, where score 1 needs to be changed to 5, 2 to 4, 5 to 1 and 4 to 2. After scoring, the mean of the questions were computed, with each question under it's dimension, for example, for Openness, question 5, 10, 15, 20, 25, 30, 35, 40, 41 and 44 were summed up and divided by the total number of items in the dimension, to see how open a person is to experience. The higher the score, the higher he/she is to Openness.

In the last section, Section E, participants were asked about their opinions on some policy topics that are related to them (Hong Kong citizens). A total of 5 different policies were mentioned, so that the participants aren't aware what the actual topic for discussion is . The five topic questions are: (1) "Election should be carried out in this pandemic", (2) "Hong Kong shouldn't be that strict with the quarantine policies", (3) " The use of LeaveHomeSafe app should be mandatory", (4) "The Hong Kong government should do more for HK citizens who are severely affected in this pandemic" and (5) "The liberal studies subject should still be taught in schools". The participants answered it using a 5 point Likert Scale, it spanned from strongly disagree to strongly agree.

#### Information sheet and counter-arguments

A information sheet was given to participants which had information written related to the LeaveHomeSafe app and then for the control group a counter-argument sheet was provided, for example, if the participants strongly agreed or agreed to have the LeaveHomeSafe app mandatory, counter-arguments will be provided to them for why it shouldn't be mandatory and if the participants chose neutral, then both supporting and counteracting arguments were provided. As for the treatment group, counter-arguments were given out verbally and therefore, a counter-argument sheet wasn't needed for them. The counter-arguments made verbally and through the written form for the treatment group and control group respectively are the same, there is no difference in the counter-arguments.

#### Post-test survey

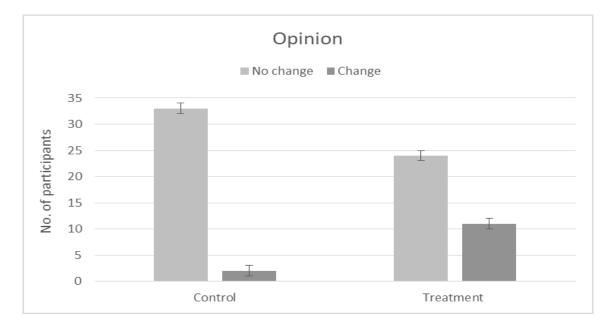
After the end of the study, participants were again questioned, to see if they still agree or disagree to make LeaveHomeSafe mandatory on a 5-point Likert scale ranging from strongly disagree to strongly agree.

## Debriefing

After conducting the experiments, the participants were debriefed. They were informed of the actual purpose of the study, explained the reasons for the deception and the points where the deception was carried out in the study.

#### Results

#### Figure 1



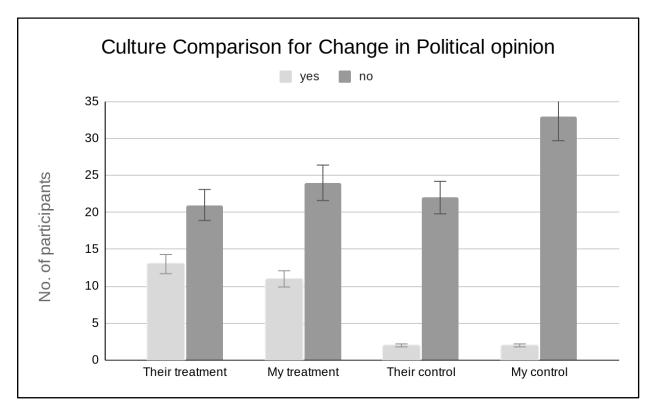
Change of Political Opinion of Participants in the Control group and Treatment group

*Notes. Error bar shows =/- 1 SEM.* 

#### Political conformity and opinion change

To understand if an individual's political opinion regarding a Hong Kong policy is dependent on political conformity, Chi-square test was used. Figure 1, shows the number of participants who changed in political opinion for both treatment group and control group. For the treatment group, 31% of the participants changed their political opinion, which is 11 of the participants changing and 69% of the participants which is 24 participants in total who didn't change their political opinion. For the control group, only 6% of the participants changed their political opinion which accounts for 2 participants in total and 94% which accounts for 33 participants who didn't change their political opinion. The percentage of change for the participants in both treatment group and the control group was significantly different for the observed and expected frequencies,  $X^2$  (1, N=70) =7.65, p<.006.

## Figure 2



Change of Political Opinion of Participants between the United States and Hong Kong

Notes. The above figure shows the difference between the study of Malinson and Hatemi (2018) (which is marked as "their" on the x axis) and this study which is carried out in The United States and Hong Kong Respectively. Error bar shows =/- 1 SEM.

## Political conformity and culture

To see if political conformity is dependent on culture, data from the study of Mallinson and Hatemi (2018) which is conducted in the United States and data from this study which is carried out in Hong Kong is used. Figure 2 shows the number of participants who changed and who didn't change their political opinion for both treatment group and control group, it shows a comparison between the study of Mallinson and Hatemi (2018) and this study. It can be seen that their isn't much difference between the treatment group of Mallinson and Hatemi and this study which has political conformity involved.

Chi-square test was carried out to see if political conformity is dependent on culture. The percentage of change for the participants in both treatment group and the control group was not significant for the observed and expected frequencies,  $X^2 (1, N=69) = 0.35$ , p<.553.

#### Table 1

Descriptives for Self-Esteem	, Big Five	Personality and	Conservatism
------------------------------	------------	-----------------	--------------

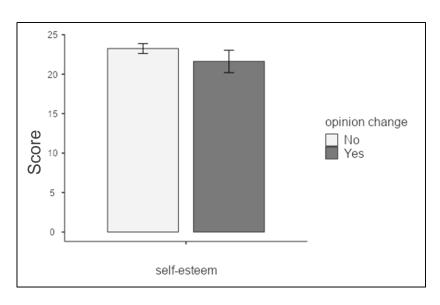
Yes (N=13) No (N=57)	Mean		Standard Deviation		Minimum		Maximum	
Opinion change	Yes	No	Yes	No	Yes	No	Yes	No
Self-esteem	21.62	23.25	5.12	4.71	13	10	29	29
Extraversion	3.66	3.42	0.82	0.81	2	1.38	4.73	4.75
Agreeableness	4	4.09	0.59	0.6	2.78	2.78	4.56	5
Conscientiousness	3.18	3.74	0.75	0.67	2	2	4.56	4.67
Neuroticism	3.8	2.22	0.41	0.64	3.25	1.13	4.76	3.75
Openness	3.68	3.67	0.57	0.44	2.6	2.5	4.4	4.4
Social conservatism	55.78	55.34	8.72	9.56	44.86	34.29	73.43	75.71
Economic conservatism	58.54	56.7	8.22	6.86	42	38	69	68

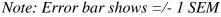
The above Table 1 is the descriptive data for reference, for self-esteem, conservatism and the Big Five personality traits.

#### Figure 3

Self-Esteem Score of Participants Who Changed and Who Didn't Change Their Political

Opinion





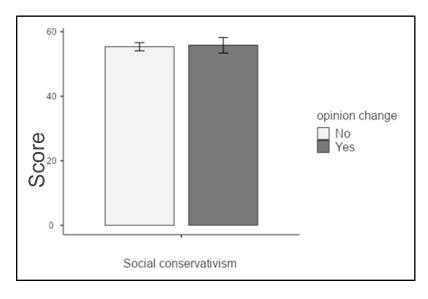
## **Opinion change and Self-esteem**

Between subjects independent t-test was conducted to see the mean difference for self-esteem between participants who changed their political opinion (N= 13) and participants who didn't (N=57). There was no statistically significant difference found for self-esteem between the group who didn't change their political opinion (M=23.25, SD=4.71) and the group who changed their political opinion (M=21.62, SD=5.12), t(68)=1.11, p=.272. The Levene's Homogeneity of Variances test was also conducted as the sample size was uneven and the Levene's Homogeneity of Variance test is statistically not significant, F(1,68)= 0.47, p=.496. Figure 2 illustrates the self-esteem score difference for the group who changed their political opinion and the group who didn't.

## Figure 4

Social Conservatism Score of Participants Who Changed and Who Didn't Change Their

Political Opinion

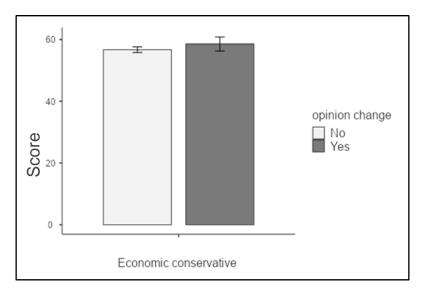


*Note: Error bar shows =/- 1 SEM* 

## Figure 5

Economic Conservatism Score of Participants Who Changed and Who Didn't Change Their

## Political Opinion



*Note: Error bar shows =/- 1 SEM* 

# **Opinion change and Conservatism**

Between subjects independent t-test was carried out to see the mean difference for social and economic conservatism between the group who changed (N= 13) and those who

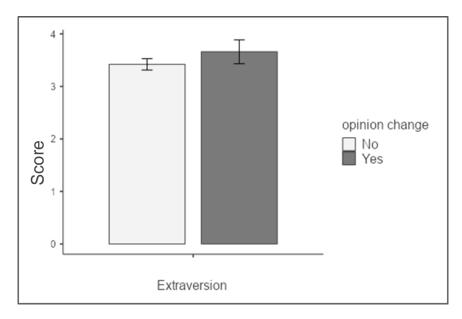
didn't change (N=57) their political opinion. For social conservatism, no statistically significant difference was found between the group who didn't change (M=55.34, SD=9.56) and the group who changed their political opinion (M=55.78, SD=8.72), t(68)= -0.15, p=.878. The Levene's Homogeneity of Variances test was also conducted as the sample size was uneven. The Levene's Homogeneity of Variances test is found to be statistically not significant, F(1,68)= 0.23, p=.630. For economic conservatism, for those who didn't change (M=56.70; SD= 6.86) and those who changed (M=58.54; SD=8.22), no statistically significant difference was found, t(68)= -0.84, p=.404. The Levene's Homogeneity of Variances test was uneven and the Levene's Homogeneity of Variances test was uneven and the Levene's Homogeneity of Variances test is found to be statistically of Variances test was also conducted as the sample size was uneven and the Levene's Homogeneity of Variance test is found to be statistically not significant, F(1,68)= 0.66, p=.420. Figure 3 and 4 illustrates the social and economic score difference for the group who changed their political opinion and the group who didn't.

### **Opinion change and Personality**

A between subjects independent t-test was conducted to see the mean difference for personality between participants who changed their political opinion (N=13) and participants who didn't change (N=57). For every personality trait, the Levene's Homogeneity of Variance test was also conducted as the sample size was uneven.

#### Figure 6

Extraversion Score of Participants Who Changed and Who Didn't Change Their Political opinion

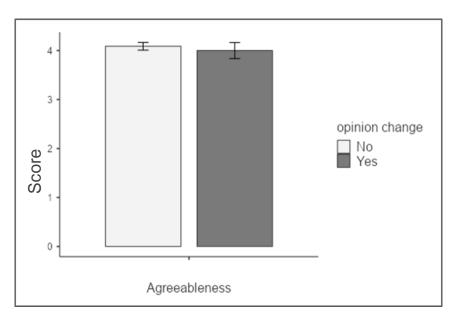


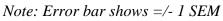
*Note: Error bar shows =/- 1 SEM* 

# Figure 7

Agreeableness Score of Participants Who Changed and Who Didn't Change Their Political

Opinion

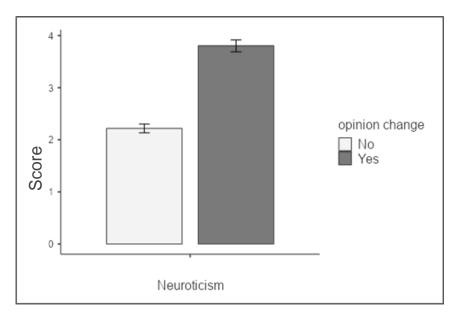




# Figure 8

Neuroticism Score of Participants Who Changed and Who Didn't Change Their Political

Opinion

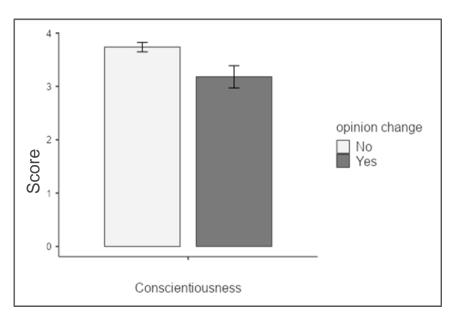


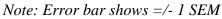
*Note: Error bar shows =/- 1 SEM* 

# Figure 9

Conscientiousness Score of Participants Who Changed and Who Didn't Change Their

# Political Opinion

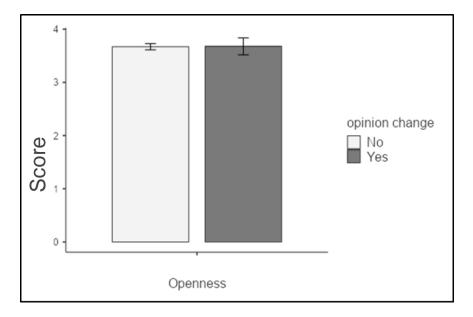




# Figure 10

Openness Score of Participants Who Changed and Who Didn't Change Their Political

Opinion



#### *Note: Error bar shows =/- 1 SEM*

**Extraversion.** There was no statistically significant difference found for extraversion between the group who didn't change (M=3.42, SD=0.81) and the group who changed their political opinion (M=3.66, SD=0.82), t(68) = -0.93, p=.343. The Levene's Homogeneity of Variances test is statistically not significant, F(1,68)= 0.01, p=.903. Figure 5 illustrates the extraversion score difference for the group who changed their political opinion and the group who didn't.

**Agreeableness.** There was no statistically significant difference found for agreeableness between the group who didn't change their political opinion (M=4.09, SD=0.82) and the group who changed their political opinion (M=4.00, SD=0.59), t(68)=0.48, p=.633. The Levene's Homogeneity of Variances test is statistically not significant, F(1,68)= 0.00, p=.969. Figure 6 illustrates the agreeableness score difference for the group who changed their political opinion and the group who didn't.

**Neuroticism.** There was a statistically significant difference found for neuroticism for the group of participants who didn't change their political opinion (M=2.22, SD=0.64) and the group of participants who changed their political opinion (M=3.80, SD=0.41), t(68) = -8.54, p<.001, however Levene's test for assumption of equal variances was violated, F(1,68)=4.06,

p=.048, therefore Welch's test was used. Welch's test showed a statistically significant difference for neuroticism between the group of participants who didn't change their political opinion and the group who changed, t(26.89)=-11.14, p<.001. Figure 7 illustrates the neuroticism score difference for the group who changed their political opinion and the group who didn't.

**Conscientiousness.** There was no statistically significant difference found for conscientiousness between the group who didn't change their political opinion (M=3.78, SD=0.67) and the group who changed their political opinion (M=3.18, SD=0.75), t(68)=2.66, p=.010. The Levene's Homogeneity of Variances test is statistically not significant, F(1,68)= 0.01, p=.929. Figure 8 illustrates the conscientiousness score difference for the group who changed their political opinion and the group who didn't.

**Openness.** There was no significant difference found for openness between the group who didn't change their political opinion (M=3.67, SD=0.44) and those who changed their political opinion (M=3.68, SD=0.57),t(68) = -0.5, p=.962. The Levene's Homogeneity of Variances test is statistically not significant, F(1,68)= 0.74, p=.393. Figure 9 illustrates the openness score difference for the group who changed their political opinion and the group who didn't.

#### Discussion

There were three questions for this study to ponder on, firstly, is change in political opinion and political conformity independent in Hong Kong. Secondly, will participants who change their political opinion have higher or lower self-esteem, conservatism and the five personality trait including extraversion, agreeableness, conscientiousness, neuroticism and openness when compared to participants who didn't change their political opinion. Lastly, is political conformity dependent on culture. This study was able to answer these questions, it found that change in political opinion of the participants is dependent on political conformity

and that a higher percent of participants changed their political opinion when placed in the treatment group when compared to the control group, which is 31% and 6% of the participants changing respectively. The result of this study is as predicted in the hypothesis that in Hong Kong, change in political opinion and political conformity is dependent. These findings also suggest that political conformity also exists in Hong Kong.

For change in political opinion and self-esteem, this study has found no significant difference for self-esteem between participants who changed their political opinion and participants who didn't change their political opinion. As for openness, agreeableness, extraversion and conscientiousness, no significant difference was found for these personality traits between participants who changed their political opinion and participants who didn't change their political opinion. As for the neuroticism personality trait, there was a significant difference found for participants who changed their political opinion and participants who didn't change their political opinion, that means neuroticism has an effect on change in political opinion, as can be seen in Table 1, for the group who changed their opinion had higher mean of 3.8 when compared to the group who didn't change who had a mean of 2.22. While the findings for extraversion, openness and neuroticism are as predicted in hypothesis, the findings for conservatism, conscientiousness, agreeableness and self-esteem is not as predicted in hypothesis. It was hypothesized that conservatism, conscientiousness, agreeableness, agreeableness, neuroticism and self-esteem has an effect on change in opinion while extraversion and openness does not.

Lastly, for the findings of the third question, it is found that political conformity is independent of culture. This finding is not as predicted in the hypothesis, in the beginning of the study it was hypothesized that political conformity is dependent on culture, based on the previous understanding about conformity and different culture.

### Previous researches and the current study implications

To encapsulate, in Hong Kong change in political opinion is dependent on political conformity, neuroticism has an effect on change in political opinion in individuals and political conformity is independent of culture. Firstly, the finding that change in opinion is higher when political conformity is more in a group is consistent with the findings of Mallinson and Hatemi (2018). Moreover, it is also similar to findings where it showed conformity can have an effect on politics (Blais and Hortala-Vallve, 2021; Perez-Truglia, 2018).

Secondly, the neuroticism trait having an effect on change in political opinion is consistent with the previous research (Oyibo & Vassileva, 2019; Mallinson & Hatemi, 2018). As for extraversion and openness having no effect on change in opinion of an individual is also consistent with the previous findings (Singh & Akhtar, 1973; DeYoung et al., 2002). However, for conscientiousness, agreeableness, self-esteem and conservatism, the current study is inconsistent with these previous studies (Sistrunk & Halcomb, 1969; Kurosawa, 1993; Herringer, 1998; Pool et al., 1998; Tainaka et al., 2014; Kaikati et al., 2017; Jost et al., 2018; Oyibo & Vassileva, 2019). The reasons for these results may be because of the political opinion on the LeaveHomeSafe app policy is very strong as the pandemic situation is about life and death, about one's health and about the economy and health safety of Hong Kong and so that is why maybe they were less susceptible to be influenced by these factors. Here in this study, we may understand that if the political opinion of a person is strong, it is less susceptible to change by other factors such as personality, ideology and self-esteem except for neuroticism. Apart from people with neuroticism being more likely to conform (Oyibo & Vassileva, 2019), the other reason for why neuroticism and not the other traits maybe an influential factor in the change of political opinion of the participants, could be because of the pandemic situation in Hong Kong which could have affected the people in Hong Kong and

personality trait for neuroticism, as the study was conducted when the Covid-19 was prevalent in Hong Kong.

As for why such finding was found for culture and political conformity, one of the reason for such result maybe because of the current pandemic situation in Hong Kong, as earlier studies mentioned one of the reasons for genesis of cultural norms and differences is the occurrence of infectious disease, people will stay away from the outgroup people whose identity is unknown as this can help slow the spread of infectious disease and so cultural norms such as conformity, individualism and collectivism was produced (Horita & Takezawa 2018; Murray et al., 2011). However, since the world is more globalized now and people come together from different backgrounds it maybe hard for them to recognize or know everyone when compared to before globalization. For instance, in Hong Kong apart from the apparent people who can clearly be seen as an outgroup member such as Americans, South Asians and Africans, even the local Chinese people may not familiar with each other, because of the increased and free mobility around Hong Kong such as when you travel, eat outside surrounded by different strangers and so-forth, so this may have caused an emergence of a relectancy to conform to unknown people whose identity your unfamiliar with and therefore, in this study, most of the participants may also form a relectancy to conform to the confederates in the discission group, this may be an explanation for the finding of political conformity being independent of culture, as based on the previous understanding that people with collectivistic culture are more likely to conform when compared to individualistic culture and since Hong Kong being a collectivistic country, the United States being an individualistic country, based on this understanding political conformity should have been dependent on culture, there should have been some difference between the United States and Hong Kong, such as Hong Kong having clearly higher rates of conformity than the united States(Bond & Smith, 1996; Darwish & Huber, 2003).

### **Practical implications**

Apart from the implications stated above there are practical implications for the question "Is change in political opinion and political conformity independent in Hong Kong" too which are worth mentioning. Firstly, for the first finding which is, political opinion is dependent on political conformity in Hong Kong, according to this study we have an understanding that political conformity exists in Hong Kong and this has both positive and negative practical implications. For the positive implication, since we know political conformity exists in Hong Kong, we can leverage and utilize it to help with the promotion and publicity of government policies which are beneficial to the community and needs the support and action from the community, for example, the LeaveHomeSafe app, this app was designed to help combat the pandemic situation in Hong Kong and therefore, needed support from Hong Kong people to use this app to record there movement to help better trace the Covid-19 situation. The government can help transmit the message of using this LeaveHomeSafe app through proper channels and leveraging it with political conformity. The negative impact of having political conformity in Hong Kong would be that it can be used wrongly either intentionally or unintentionally, such that it can transmit wrong or harmful political beliefs one may have about the government to another person. For instance, using the example of the LeaveHomeSafe app, people may become a subject to political conformity and may conform to the negative perception other individuals may have, who think negatively about this app and promote it as useless and thus, is just a waste of time. If people are started to be subjected to such political conformity, it can negatively impact the society and the policy which was made to improve a situation. Therefore, understanding how to leverage and positively use political conformity is very important, in addition to understanding how the existence of political conformity and how it can impact the

community. It is even more important for policy makers and government to understand this, so that they can figure out the best way to serve the community.

### Limitations

One of the limitations of the study is that the collected information is specified to a certain age group, with around N=59 participants mainly from 18 to 25 and 26 to 39 ; and that most of the participants are college students and or are graduates. So the generalizability of these results to individuals older than 39 years of age and to those individuals who are not educated is constrained. Therefore, it should be noted that since the sample of the study is limited, the above practical implication of the study can only be drawn on the specified population.

### **Suggestions for future research**

Further studies can be done to expand this study to individuals who are uneducated or less educated and to individuals aged over 40. Furthermore, further research can also be done to have a better understanding as to why conscientiousness, agreeableness and conservatism may not have any difference on one's political opinion, further research or replication of this study in Hong Kong can help explain if in Hong Kong conscientiousness, agreeableness and conservatism does not affect one in regards to change in opinion or is it just political opinion which is not susceptible to change by these factors. Last but not the least, understand why political conformity was not dependent on culture as earlier studies found different culture can have an effect on conformity differently (Bond & Smith, 1996; Darwish & Huber, 2003), so is it different for political conformity or are there other mediating factors?

Based on this study, new questions are also proposed for further study and solving them can give a better insight into the new arised knowledge gap according to the findings of this study. To understand why political conformity was not dependent on culture, the following research question is proposed: is the culture difference between Hong Kong and the West is diminishing? As right now we know Hong Kong and the United States have cultural difference and that Hong Kong is a collectivistic country and the United States is an individualistic country (Darwish & Huber, 2003) and so this research question and further research regarding this can help us see if new culture norm is being developed in Hong Kong, as before when infectious disease was seen in places, new cultural norms were build (Murray et al., 2011; Horita & Takezawa, 2018) and so it is very interesting to have further knowledge and understanding about this.

#### Conclusion

While it is known that conformity exists in Hong Kong, it was also worth understanding if political conformity had it's presence in Hong Kong too, in regards to the political opinion of an individual about Hong Kong policies such as the LeaveHomeSafe app. Along with understanding if factors such as self-esteem, conservatism and the Big Five personality trait affect the level of political opinion change in those individuals. Lastly, as we know different cultures such as individualism and collectivism can affect conformity differently, it is also worth understanding the role culture has in political conformity. According to his study, it suggested that change in political opinion is dependent on political conformity and that neuroticism in those who changed their opinion as in conformed was higher as for other traits no significant difference was found. In addition, it is found that political conformity is not dependent on culture. Based on these findings, it can be seen that political conformity has a relationship with change in political opinion of a person and that having higher neuroticism is associated with more changes in political opinion. As for culture and political conformity, it can be seen that culture and political conformity have no relationship. Based on these findings, policy makers in Hong Kong can keep in mind the existence of political conformity and thus when making policies can keep in mind how

changes in political opinion can be affected by political conformity, in addition, it is also worth further studying for why there was no relationship found.

#### References

- Abu-Rabia-Queder, S. (2008). Politics of conformity: Power for creating change. Ethnology. 47. 209-225.
- Ahn, T.K., Huckfeldt, R., & Ryan, J.B. (2014). Experts, Activists, and Democratic Politics: Are Electorates Self-Educating? Cambridge Studies in Public Opinion and Political Psychology Cambridge University Press
- Alquist, J. L., Ainsworth, S. E., & Baumeister, R. F. (2013). Determined to conform:
  Disbelief in free will increases conformity. *Journal of Experimental Social Psychology*, 49(1), 80–86. https://doi.org/10.1016/j.jesp.2012.08.015
- Asch, S.E. Effects of Group Pressure Upon the Modification and Distortion of Judgments. In:Guetzkow H, editor. Groups, leadership and men; research in human relations.Oxford, England: Carnegie Press
- Bell, D. (2014). What Is Liberalism? *Political Theory*, 42(6), 682–715. http://www.jstor.org/stable/24571524
- Beran, T. (2015). Research Advances in Conformity to Peer Pressure: A Negative Side Effect of Medical Education. *ScienceDirect*, http://doi.org/10.1016/j.hpe.2015.11.004
- Blais, A., & Hortala-Vallve, R. (2021). Conformity and Individuals' Response to Information About Aggregate Turnout. Political Behavior. 43. 10.1007/s11109-020-09595-5.
- Bond, R. M., Fariss, C. J., Jones, J. J., Kramer, A. D., Marlow, C., Settle, J. E., & Fowler, J.
  H. (2012). A 61-million-person experiment in social influence and political
  mobilization. *Nature*, 489(7415), 295–298. https://doi.org/10.1038/nature11421
- Bond, R., and Smith, P. (1996). Culture and Conformity: A Meta-Analysis of Studies Using Asch's (1952b, 1956) Line Judgment Task. Psychological Bulletin. 119. 111-137.
  10.1037/0033-2909.119.1.111.

- Carlson, T. N., & Settle, J. E. (2016). Political chameleons: An exploration of conformity in political discussions. *Political Behavior*, 38(4), 817–859. https://doi.org/10.1007/s11109-016-9335-y
- Chen, Y., Touve, D. (2011). Conformity, political participation, and economic rewards: The case of Chinese private entrepreneurs. *Asia Pac J Manag* 28, 529–553 https://doi.org/10.1007/s10490-009-9171-2
- Cheng , L. (2020). The Development of Cognitive Styles Among American and Chinese Children. Retrieved from https://nrs.harvard.edu/URN-3:HUL.INSTREPOS:37365834.
- Cheung, W.-L., & Prendergast, G. (2006). Exploring the materialism and conformity motivations of Chinese pirated product buyers. *Journal of International Consumer Marketing*, 18(3), 7–31. https://doi.org/10.1300/j046v18n03\_02
- Chia, R. C., Moore, J. L., Lam, K. N., Chuang, C. J., & Cheng, B. S. (1994). Cultural differences in gender role attitudes between Chinese and American students. *Sex Roles*, 31, 23–30. http://dx.doi.org/10.1007/ BF01560275
- Chon, A. (2014). Asia and America: How Cultural Differences Create Behavioral. *Social Impact Research Experience (SIRE)*, 26, https://repository.upenn.edu/sire/26
- Cialdini, R. B., & Goldstein, N. J. (2004). Social Influence: Compliance and conformity.
   Annual Review of Psychology, 55(1), 591–621.
   https://doi.org/10.1146/annurev.psych.55.090902.142015
- Coleman, S. (2004). The Effect of Social Conformity on Collective Voting Behavior. *Political Analysis*, *12*(1), 76–96. http://www.jstor.org/stable/25791755
- Coronel, J. C., Poulsen, S., & Sweitzer, M. D. (2019). Investigating the generation and spread of numerical misinformation: A combined eye movement monitoring and social

transmission approach. *Human Communication Research*, 46(1), 25–54. https://doi.org/10.1093/hcr/hqz012

- Coultas, J. C., & van Leeuwen, E. J. (2015). Conformity: Definitions, types, and evolutionary grounding. *Evolutionary Perspectives on Social Psychology*, 189–202. https://doi.org/10.1007/978-3-319-12697-5\_15
- Darwish, A. E., & Huber, G. L. (2003) Individualism vs Collectivism in Different Cultures: A cross-cultural study, *Intercultural Education*, 14:1, 47-56, DOI: 10.1080/1467598032000044647
- DeYoung, C. G., Peterson, J. B., & Higgins, D. M. (2002). Higher-order factors of the big five predict conformity: Are there neuroses of health? *Personality and Individual Differences*, 33(4), 533–552. https://doi.org/10.1016/s0191-8869(01)00171-4
- Edelman, M. (1967). Myths, metaphors, and political conformity<sup>†</sup>. *Psychiatry*, 30(3), 217–228. https://doi.org/10.1080/00332747.1967.11023511
  Everett, J.C. (2013) The 12 Item Social and Economic Conservatism Scale (SECS).
  PLoS ONE 8(12): e82131. https://doi.org/10.1371/journal.pone.0082131
- Gerber, A.S, Green, D.P and Larimer, C.W. (2018). Social pressure and voter turnout: Evidence from a large-scale field experiment. *American Political Science Review*, 102(1):33–48.
- Gerber, A., Huber, G., Doherty, D., & Dowling, C. (2016). Why People Vote: Estimating the Social Returns to Voting. British Journal of Political Science, 46(2), 241-264. doi:10.1017/S0007123414000271
- Gerber, A., & Rogers, T. (2009). Descriptive social norms and motivation to vote: Everybody's voting and so should you. Journal of Politics, 71(1), 178– 191.10.1017/S0022381608090117

- Greenough, W. T., Black, J. E., & Wallace, C. S. (2002). Experience and brain development. In M. H. Johnson, Y. Munakata, & R. O. Gilmore (Eds.), *Brain development and cognition: A reader* (pp. 186–216). Blackwell Publishing.
- Herringer, L. G. (1998). Relating Values and Personality Traits. Psychological Reports, 83(3), 953–954. https://doi.org/10.2466/pr0.1998.83.3.953

HKFP. (2021). Covid-19: How Hong Kong's Homeless Are Struggling to Adapt to New Smartphone Contact-Tracing Rules. Retrieved from https://www.scmp.com/news/hong-kong/hong-kongeconomy/article/3158968/coronavirus-demand-cheap-smartphones-spikes.

- Horita, Y., & Takezawa, M. (2018). Cultural Differences in Strength of Conformity Explained Through Pathogen Stress: A Statistical Test Using Hierarchical Bayesian Estimation. https://doi.org/10.3389/fpsyg.2018.01921
- Hsu, F. L. K. (1981). Americans and Chinese: Passages to differences. Honolulu, HI: University Press of Hawaii.
- Huang, C.M., Doole, R., Wu, C., Huang, H.W., & Chao, Y.P. (2019). The effects of collectivistic and individualistic values on structure of the brain: A cross-cultural voxel-based morphometry study.
- Huang, X. I., Zhang, M., Hui, M. K., & Wyer, R. S. (2014). Warmth and conformity: The effects of ambient temperature on product preferences and financial decisions. *Journal of Consumer Psychology*, 24(2), 241–250. https://doi.org/10.1016/j.jcps.2013.09.009
- Janmaat, J. G., & Hoskins, B. (2021). The changing impact of family background on political engagement during adolescence and early adulthood. *Social Forces*. https://doi.org/10.1093/sf/soab112

- Jia, Y. A., Rowlinson, S., Kvan, T., Lingard, H. C., & Yip, B. (2009). Burnout among Hong Kong Chinese architecture students: The paradoxical effect of Confucian conformity values. *Construction Management and Economics*, 27(3), 287–298. https://doi.org/10.1080/01446190902736296
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). Big Five Inventory (BFI). APA PsycTests. https://doi.org/10.1037/t07550-000
- Johnson, S. B., Blum, R. W., & Giedd, J. N. (2009). Adolescent maturity and the brain: The promise and pitfalls of neuroscience research in adolescent health policy. *Journal of Adolescent Health*, 45(3), 216–221. https://doi.org/10.1016/j.jadohealth.2009.05.016
- Jost, J. T., van der Linden, S., Panagopoulos, C., & Hardin, C. D. (2018). Ideological asymmetries in conformity, desire for shared reality, and the spread of misinformation. *Current Opinion in Psychology*, 23, 77–83. https://doi.org/10.1016/j.copsyc.2018.01.003
- Kaikati, A. M., Torelli, C. J., Winterich, K. P., & Rodas, M. A. (2017). Conforming conservatives: How salient social identities can increase donations. *Journal of Consumer Psychology*, *27*(4), 422–434. https://doi.org/10.1016/j.jcps.2017.06.001
  Kim, H., & Markus, H. R. (1999). Deviance or uniqueness, harmony or conformity? A cultural analysis. *Journal of Personality and Social Psychology*, *77*, 785–800.
- Kolb, B., & Gibb, R. (2011). Brain plasticity and behaviour in the developing brain. *Journal* of the Canadian Academy of Child and Adolescent Psychiatry = Journal de l'Academie canadienne de psychiatrie de l'enfant et de l'adolescent, 20(4), 265–276.
- Kurosawa K. (1993). Shinrigaku kenkyu : The Japanese journal of psychology, 63(6), 379– 387. https://doi.org/10.4992/jjpsy.63.379

- Laban, J. (2014). Culture and Risk-Sharing Networks. In Laban, J., The Influence of Culture on Decision Making under Risk and Uncertainty. PhD Thesis. The University of Exeter.
- Lacko, D., Šašinka, Č., Stachoň, Z., Lu, W.-lun, & Čeněk, J. (2020). Cross-cultural differences in cognitive style, individualism/collectivism and map reading between Central European and East Asian University students. *Studia Psychologica*, 62(1). https://doi.org/10.31577/sp.2020.01.789
- Lago , O., Rodriguez, P., Escudero, A., Dopico, C., and Enesco, I. (2019). Children's learning from others: Conformity to Unconventional Counting . *International Journal of Behavioural Development*. https://doi.org/http://doi.org/10.1177/0165025418820639
- Levinsen, K., & Yndigegn, C. (2015). Political discussions with family and friends:
  Exploring the impact of political distance. *The Sociological Review*, 63(2\_suppl), 72–91. https://doi.org/10.1111/1467-954x.12263
- Levitan, L. C., & Verhulst, B. (2015). Conformity in groups: The effects of others' views on expressed attitudes and Attitude Change. *Political Behavior*, 38(2), 277–315. https://doi.org/10.1007/s11109-015-9312-x
- Levonian, E. (1968). Self-esteem and opinion change. *Journal of Personality and Social Psychology*, 9(3), 257–259. https://doi.org/10.1037/h0021253
- Mallinson, D. J. and Hatemi, P. K. (2018). The effects of information and social conformity on opinion change. https://doi.org/ https://doi.org/10.1371/journal.pone.0196600
- Ma-Kellams, C. (2020). Cultural Variation and Similarities in Cognitive Thinking Styles Versus Judgment Biases: A Review of Environmental Factors and Evolutionary Forces, 24(3), 238–253. https://doi.org/https://doi.org/10.1177/1089268019901270
- McCrae, R. (2004). Human Nature and Culture: A Trait Perspective. Journal of Research in Personality, 38, 3-14. 10.1016/j.jrp.2003.09.009.

- Mercurio, B. (2020). Challenging coerced conformity in pharmaceutical patent law:
   Promoting a Holistic Review. *IIC International Review of Intellectual Property and Competition Law*, 51(3), 330–340. https://doi.org/10.1007/s40319-020-00924-z
- Moussaïd, M., Brighton, H., & Gaissmaier, W. (2015). "The Amplification of Risk in Experimental Diffusion Chains." Proceedings of the National Academy of Sciences 112(18):5631–5636.
- Murray, D. R., Trudeau, R., & Schaller, M. (2011). On the origins of cultural differences in conformity: four tests of the pathogen prevalence hypothesis. https://doi.org/10.1177/0146167210394451
- Nora, M. L. (2017). Marketing to the Majority: Interactions among Conformity, Belonging, and Material Consumerism. Retrieved from http://arks.princeton.edu/ark:/88435/dsp018k71nk71m.
- O'Leary, Z. (2007). Conservatism. *The Social Science Jargon Buster*, 47–48. https://doi.org/10.4135/9780857020147.n23
- Oyibo, K., & Vassileva, J. (2019). The relationship between personality traits and susceptibility to social influence.

https://doi.org/https://doi.org/10.1016/j.chb.2019.01.032

- Palma, G., and McClosky, H. (1970). Personality and Conformity: The Learning of Political Attitudes. *American Political Science Review*, 64(4), 1054-1073. doi:10.2307/1958357
- Panagopoulos, C., & Abrajano, M. (2014). Life-cycle effects on social pressure to vote. *Electoral Studies*, 33, 115–122.10.1016/j.electstud.2013.07.019
- Park, D. C., & Huang, C.-M. (2010). Culture wires the brain: A cognitive neuroscience perspective. Perspectives on Psychological Science, 5(4), 391–400. https://doi.org/10.1177/1745691610374591

- Perez-Truglia, R. (2018). Political Conformity: Event-Study Evidence from the United States. *The Review of Economics and Statistics*; 100 (1): 14–28. https://doi.org/10.1162/REST\_a\_00683
- Pool, G. J., Wood, W., & Leck, K. (1998). The self-esteem motive in social influence: Agreement with valued majorities and disagreement with derogated minorities. *Journal of Personality and Social Psychology*, 75(4), 967–975. https://doi.org/10.1037/0022-3514.75.4.967
- Pryor, C., Perfors, A., & Howe, P. D. (2019). Conformity to the descriptive norms of people with opposing political or social beliefs. *PLOS ONE*, *14*(7). https://doi.org/10.1371/journal.pone.0219464
- Putri, D. A., & Akhrani, L. A. (2019). Political Experiment: The Effect of Conformity to Political Participation On Beginner Voters. Retrieved from https://interaktif.ub.ac.id/index.php/interaktif/article/view/207.
- Reiss, S., Klackl, J., Proulx, T., & Jonas, E. (2019). Strength of socio-political attitudes moderates electrophysiological responses to perceptual anomalies. *PLOS ONE*, 14(8). https://doi.org/10.1371/journal.pone.0220732
- Rochelle, T. L. (2018). Cross-cultural differences in the relationship between conformity to masculine norms and health behaviour among men in Hong Kong. *British Journal of Health Psychology*, *24*(1), 159–174. https://doi.org/10.1111/bjhp.12345
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: PrincetonUniversity Press.
- Salomons, N., van der Linden, M., Strohkorb Sebo, S., & Scassellati, B. (2018). Humans conform to robots. *Proceedings of the 2018 ACM/IEEE International Conference on Human-Robot Interaction*. https://doi.org/10.1145/3171221.3171282

Schmidt, S., Gull, S., Herrmann, K.-H., Boehme, M., Irintchev, A., Urbach, A., Reichenbach, J. R., Klingner, C. M., Gaser, C., & Witte, O. W. (2021). Experience-dependent structural plasticity in the Adult Brain: How The Learning Brain Grows. *NeuroImage*, 225, 117502. https://doi.org/10.1016/j.neuroimage.2020.117502

Shen, Y.-L. (2011). Effects of Chinese parental practices on adolescent school outcomes mediated by conformity to parents, self-esteem, and self-efficacy. *International Journal of Educational Research*, 50(5-6), 282–290. https://doi.org/10.1016/j.ijer.2011.09.001

- Sherif, M. (1935). A study of some social factors in perception. *Archives of Psychology* (*Columbia University*), 187, 60. https://psycnet.apa.org/record/1936-01332-001
- Singh, U. P., & Akhtar, S. N. (1973). Extraversion, neuroticism and conformity. *Manas*, 20(2), 125–132.
- Sistrunk, F., & Halcomb, C. G. (1969). Liberals, Conservatives, and conformity. *Psychonomic Science*, *17*(6), 349–350. https://doi.org/10.3758/bf03335275
- Tainaka, T., Miyoshi, T., & Mori, K. (2014). Conformity of witnesses with low self-esteem to their co-witnesses. *Psychology*, 05(15), 1695–1701. https://doi.org/10.4236/psych.2014.515177
- Tajfel, H., Billig, M. G., Bundy, R. P., & Flament, C. (1971). Social categorization and intergroup behaviour. *European Journal of Social Psychology*, 1(2), 149–178. https://doi.org/10.1002/ejsp.2420010202
- Terry, D. J., & Hogg, M. A. (1996). Group norms and the attitude–behavior relationship: A role for group identification. *Personality and Social Psychology Bulletin*, 22(8), 776–793. https://doi.org/10.1177/0146167296228002
- Thorne, S., Hislop, T. G., Kuo, M., & Armstrong, E.-A. (2006). Hope and probability: Patient perspectives of the meaning of numerical information in cancer communication.

*Qualitative Health Research*, *16*(3), 318–336. https://doi.org/10.1177/1049732305285341

- Vaes, J., Paladino, M. P., & Magagnotti, C. (2011). The human message in politics: The impact of emotional slogans on subtle conformity. *The Journal of Social Psychology*, *151*(2), 162–179. https://doi.org/10.1080/00224540903510829
- Van-Bavel, J., & Pereira, A. (2018). The Partisan Brain: An Identity-Based Model of Political Belief. Trends in Cognitive Sciences. 22. 10.1016/j.tics.2018.01.004.
- Weinschenk, A., Panagopoulos, C., Drabot, K., & Linden, C.V., D. (2018). Gender and social conformity: Do men and women respond differently to social pressure to vote?, *Social Influence*, 13:2, 53-64, DOI: 10.1080/15534510.2018.1432500
- Yeung, N. C., Mak, W. W., & Cheung, L. K. (2015). Conformity to the emotional-control masculine norm and psychological well-being among Chinese men in Hong Kong:
  The mediating role of stress appraisal for expressing tender emotions. *Psychology of Men & Masculinity*, *16*(3), 304–311. https://doi.org/10.1037/a0038578
- Zhirkov, K., Verkuyten, M., & Ponarin, E. (2021). Social Conformity and prejudice toward immigrants: The role of Political Messaging. *Social Influence*, 16(1), 65–77. https://doi.org/10.1080/15534510.2021.1989028

# Appendices

		Page
Appendix 1	Consent form	61
Appendix 2	Pre-test questionnaire	62
Appendix 3	Post-test questionnaire	68
Appendix 4	Information sheet	69
Appendix 5	Counter-arguments	70
Appendix 6	Debriefing	74

#### **Consent Form**

You are invited to participate in a study that is conducted by Sabina Rahees. This study is carried out in partial fulfillment of the requirements for the degree of Bachelor of Social Sciences (Honours) in Psychology. The objective is to understand Hong Kong people's perspective on Hong Kong policy in regards to personality. In this experiment, you will be required to carry out a pre-test questionnaire, then read some information sheets and then do a post-test survey. This experiment should take around 25 - 35 minutes approximately.

This study should not be causing any psychological or other problems, though you may feel fatigue due to the duration of the study and for that you can take some rest if you need, your work will be automatically saved.

Your participation is on a voluntary basis, you can withdraw from the study whenever you want without any negative consequences and also disagree to participate in it. All the information collected will be kept confidential and will be used for research purposes only.

If you have any questions regarding this study or have any issue, you are welcome to email to 20631693@life.hkbu.edu.hk.

### Declaration

I declare that I understand the procedure of the study and I <u>agree/disagree</u> to participate in the study.

# **Pre-test Questionnaire**

# Section A: Demographics

1.What is your age?

	Under 18	18-25	26-39	40-64	65 or older	
2. Please specify :		Male/Female/prefer not to say				
3.Where were	you born ?					
	South Asia					
	Japan					
	North America					
	South East Asia	a				
Others:						
4. What is your ethnic background?						
Chinese Filipino						
	Indonesian					
Pakistani						
Thai						

American

Indian

Others:

# 5.Marital Status: Are you currently?

	Married	()
	Living with Partner	()
	Divorced or separated	()
	Widowed	()
	Single	()
7.What year a	re you in school?	
	Secondary school	()
	First Year	()
	Second Year	()
	Third Year	()
	Fourth Year	()
	Fifth Year	()
	Graduate Student	()
	None of these	()

# Section B: Political Ideology (The 12 Item Social and Economic Conservatism Scale)

"Please indicate the extent to which you feel positive or negative towards each issue. Scores of 0 indicate greater negativity, and scores of 100 indicate greater positivity. Scores of 50 indicate that you feel neutral about the issue."

"Please indicate it in the multiple of tens, such as 10, 20 and so on"

1. Abortion.	
2. Limited government.	
3. Military and national security.	
4. Religion.	
5. Welfare benefits.	

6. Gun ownership.	
7. Traditional marriage.	
8. Traditional values.	
9. Fiscal responsibility.	
10. Business.	
11. The family unit.	
12. Patriotism.	

# Section C: Rosenberg's self-esteem scale

Here is a set of statements that may or may not describe how you feel about yourself. Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement.

1. On the whole, I am satisfied with myself.

Strongly Agree	Agree	Disagree	Strongly Disagree	
2. At times I think I am no g	ood at all.			
Strongly Agree	Agree	Disagree	Strongly Disagree	
3. I feel that I have a number	of good qualities.			
Strongly Agree	Agree	Disagree	Strongly Disagree	
4. I am able to do things as well as most other people.				
Strongly Agree	Agree	Disagree	Strongly Disagree	
5. I feel I do not have much to be proud of.				
Strongly Agree	Agree	Disagree	Strongly Disagree	
6. I certainly feel useless at times.				
Strongly Agree	Agree	Disagree	Strongly Disagree	
7. I feel that I'm a person of worth, at least on an equal plane with others.				
Strongly Agree	Agree	Disagree	Strongly Disagree	

Strongly Agree	Agree	Disagree	Strongly Disagree
9. All in all, I am inclined to	feel that I am a failure	2.	
Strongly Agree	Agree	Disagree	Strongly Disagree
10. I take a positive attitude	toward myself.		
Strongly Agree	Agree	Disagree	Strongly Disagree

# 8. I wish I could have more respect for myself.

### Section D: Politics and Personality (The Big Five Dimensions)

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement.

Disagree	Disagree	Neither agree		Agree	Agree
strongly	a little	nor disagree		a little	strongly
1	2	3		4	5
I see Myself a	as Someone Wh	10			
1. Is talkative			23	. Tends to be la	azy
2. Tends to find fault with others			24. Is emotionally stable, not easily upset		
3. Does a thorough job		25. Is inventive			
4. Is depressed, blue		26	. Has an asserti	ve personality	
5. Is original, comes up with new ideas		27. Can be cold and aloof			
6. Is reserved		28. Perseveres until the task is finished			
7. Is helpful and unselfish with others		29. Can be moody			
8. Can be somewhat careless		30	. Values artistic	c, aesthetic experiences	
9. Is relaxed, handles stress well		31. Is sometimes shy, inhibited			

10. Is curious about many things	32. Is considerate and kind to almost
everyone	
11. Is full of energy	33. Does things efficiently
12. Starts quarrels with others	34. Remains calm in tense situations
13. Is a reliable worker	35. Prefers work that is routine
14. Can be tense	36. Is outgoing, sociable
15. Is ingenious, a deep thinker	37. Is sometimes rude to others
16. Generates a lot of enthusiasm	38. Makes plans and follows through with
them	
17. Has a forgiving nature	39. Gets nervous easily
18. Tends to be disorganized	40. Likes to reflect, play with ideas
19. Worries a lot	41. Has few artistic interests
20. Has an active imagination	42. Likes to cooperate with others
21. Tends to be quiet	43. Is easily distracted
22. Is generally trusting	44. Is sophisticated in art, music, or literature

# **Section E: The five policies**

Please state your opinion on a set of policies. Please indicate your preference.

1. Elections should be carried out in this pandemic.

- A. Strongly Agree
- B. Agree
- C. Neutral
- E. Disagree
- F. Strongly Disagree
- 2. Hong Kong shouldn't be that strict with the quarantine policies.

A. Strongly Agree

- C. Neutral
- E. Disagree
- F. Strongly Disagree

3. The use of the LeaveHomeSafe app should be mandatory.

- A. Strongly Agree
- B. Agree
- C. Neutral
- E. Disagree
- F. Strongly Disagree

4. The Hong Kong government should do more for HK citizens who are severely affected in this pandemic.

- A. Strongly Agree
- B. Agree
- C. Neutral
- E. Disagree
- F. Strongly Disagree

5. There should be a citywide compulsory testing in Hong Kong.

- A. Strongly Agree
- B. Agree
- C. Neutral
- E. Disagree
- F. Strongly Disagree

# **Post-test questionnaire**

1. Please state you opinion on the stance "The use of LeaveHomeSafe app should be

mandatory." Please indicate your answers.

A. Strongly Agree

B. Agree

C. Neutral

E. Disagree

F. Strongly Disagree

#### **Information sheet**

Towards the end of december 2019 a new infectious disease was identified called Covid-19 which slowly started to spread around the globe and on around march was classified as a pandemic. Covid-19 is known to be a new strain of virus which wasn't identified before, it causes respiratory problems in individuals and can even lead some to death. It is symptomise by having fever, cough, sore throat and loss of taste to name a few. Multiple actions were taken to control and prevent the spread of this infectious disease, including social distancing, quarantining people from high risk countries, keeping good personal hygiene and the use of LeaveHomeSafe app to trace individuals who are closely connected to the Covid-19 patients in Hong Kong, so that they can be informed in advance and preventive measures can be taken to curb the further spread of the disease.

Though initially both the use of LeaveHomeSafe app and paper form were used to collect data such that if a person finds it convenient to use the paper format they could have used that or if they found the LeaveHomeSafe app convenient they could use that. However, recently the use of paper form was forbidden except for some cases such as people who are either under 12 or aged 65 or above and to those individuals with disabilities which may make the use of the app hard for them to use and on the 1st of November 2021, the government of Hong Kong made it compulsory for all Hong Kong citizens to scan the QR code provided on the location of visit using the LeaveHomeSafe app.

There were mixed opinions, where some people said it is a compelling and wellthought plan to help reduce the spread of the Covid-19 and some people opposed the fact of making the usage of the app compulsory. Some of the reasons for opposing includes, inconvenient, affecting businesses, unaffordability for the homeless and more.

### **Counter-Arguments**

#### **Strongly Agree/ Agree**

The following are some arguments the discussion group discussed regarding the topic. Please read.

- People's businesses are being affected, they are having losses because some customers don't want to use the app and some don't have the means to use it. To name two, restaurants and supermarkets have seen an impact on their business.
- The policy is useless as the people who are more vulnerable to the infectious disease as in the elderlies, are exempted from the use of the app.
- Some of the older people who are not familiar with the smartphones but are required to use the LeaveHomeSafe app find it very uncomfortable, inconvenient and hard to use, why do they have to go through so much difficulty, why not enable people to use the paper format or just not make it mandatory but rather voluntary.
- An actual incident of losing phone and therefore not be able to use the QR code-"What about the people who lost their phone, those that mean they can't enter any premises; this policy is very unreasonable, inconvenient and troublesome and at times make my life very hard"
- Thought the government have denied of this, people still think that the government will use the app to gain the individual's personal information " I still think the government will try to the LeaveHomeSafe app do collect my data; why does the app need so many unnecessary permissions, even after updating to fewer permissions, it's all because they want to access our personal date "

#### Strongly disagree and disagree

70

The following are some arguments the discussion group discussed regarding the topic. Please read.

- "This app is a means to hold back the Covid-19 from increasing in Hong Kong, as it can help locate the possible spreading of the Covid-19"
- Neither is this app very time-consuming or hard to use, so why go against the implementation
- "They did the right thing by banning the use of paper methods and making the use of the app mandatory for Hong Kong people -except for the ones exempt-, as this can help reduce the accumulation of paper waste and thus pollution; in addition to help control the infectious disease."
- Using the LeaveHomeSafe app can make it a lot easier to gather data and help give out information to relevant persons regarding their visit to their places of visit.
- "The government making LeaveHomeSafe compulsory in Hong Kong is the right decision as Hong Kong has a large population and it is a must to at least try to trace where the infectious disease can have a link, to stop further spread of the infectious disease, as it can be devastating if nobody traces the spread of the infection and it keeps on spreading, so therefore the use of LeaveHomeSafe app must be compulsory."

## Neutral

The following are some arguments the discussion group discussed regarding the topic. Please read.

-Points of those who strongly Agree/ Agree

• People's businesses are being affected, they are having losses because some customers don't want to use the app and some don't have the means to use it. To name two, restaurants and supermarkets have seen an impact on their business.

- The policy is useless as the people who are more vulnerable to the infectious disease as in the elderlies, are exempted from the use of the app.
- Some of the older people who are not familiar with the smartphones but are required to use the LeaveHomeSafe app find it very uncomfortable, inconvenient and hard to use, why do they have to go through so much difficulty, why not enable people to use the paper format or just not make it mandatory but rather voluntary.
- An actual incident of losing phone and therefore not be able to use the QR code-"What about the people who lost their phone, those that mean they can't enter any premises; this policy is very unreasonable, inconvenient and troublesome and at times make my life very hard"
- Thought the government have denied of this, people still think that the government will use the app to gain the individual's personal information "I still think the government will try to the LeaveHomeSafe app do collect my data; why does the app need so many unnecessary permissions, even after updating to fewer permissions, it's all because they want to access our personal date "

-Points of those who strongly disagree and disagree

- "This app is a means to hold back the Covid-19 from increasing in Hong Kong, as it can help locate the possible spreading of the Covid-19"
- Neither is this app very time-consuming or hard to use, so why go against the implementation
- "They did the right thing by banning the use of paper methods and making the use of the app mandatory for Hong Kong people -except for the ones exempt-, as this can help reduce the accumulation of paper waste and thus pollution; in addition to help control the infectious disease."

- Using the LeaveHomeSafe app can make it a lot easier to gather data and help give out information to relevant persons regarding their visit to their places of visit.
- "The government making LeaveHomeSafe compulsory in Hong Kong is the right decision as Hong Kong has a large population and it is a must to at least try to trace where the infectious disease can have a link, to stop further spread of the infectious disease, as it can be devastating if nobody traces the spread of the infection and it keeps on spreading, so therefore the use of LeaveHomeSafe app must be compulsory."

### Debriefing

Thank you for your time to participate in this study. I would now like to debrief you about the actual topic of study for this research, the points where the deception was carried out in the study and why deception was needed and used.

You were misinformed about the actual purpose of the study, you were told that the purpose of the study is to understand Hong Kong people's perspective on Hong Kong policy in regards to personality while the study is done to understand the dependency of political opinion on political conformity in Hong Kong, the mediating effects of self-esteem, conservatism and personality traits and the dependency of political conformity on culture.

Deception was used because letting you know they actual purpose of the study would have hindered the responses from you and thus the affect the study.

If you have any further questions or problems, please feel free to email at 2063693@life.hkbu.edu.hk.