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Student name: Adam Conneely	Student number: x16325101
School: School of Business	Course: BAHPSYCH
Degree to be awarded: B.A. (Honours) in Psycholog	gy
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Effects of Frequency of Contact and Group Salience on Attitudes Towards Immigrants			
Adam Conneely			
B.A. (HONS.) in Psychology			
National College of Ireland	2019		
School of E	Business		
National College of	Treland		
	2019		

Abstract

Anti-immigrant political parties and rhetoric have gained prominence in recent years across many countries (Georgiadoua, Rori, and Roumanias, 2018). Within an Irish context, Irish people have been found to have highly negative attitudes towards immigrants and quite low amounts of contact with immigrants (McGinnity, Grotti, Russell, and Fahey, 2018). A crosssectional survey was conducted to analyse the relation between frequency of contact with immigrants and prejudicial attitudes towards immigrants. The relationship of group salience with prejudicial attitudes and frequency of contact was also analysed. It was hypothesized that more frequent contact with immigrants would have a positive correlation with less prejudicial attitudes towards immigrants. It was also hypothesized that group salience would positively correlate with lower levels of prejudicial attitudes and less frequent contact. Neither hypothesis was supported. Group salience showed no significant relationship with prejudice and frequency of contact. Prejudicial attitudes only showed significant differences at the lowest level of contact, with higher levels of prejudice. Implications on future research in Ireland are discussed, along with need for the amalgamation of various factors, such as frequency of contact, group salience, and the nature of contact, into wider multivariate designs in future research.

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1. Introduction

Ireland is in a unique position in regards to its culture as it is a place that has remained relatively monoethnic until recently, now changing at a fast pace. The percentage of people in Ireland identifying themselves ethnically as white Irish went from 87.4% in 2006 (Central Statistics Office, 2006) down to 82% in 2016 (Central Statistics Office, 2016). Notably, Ireland now has the 5th highest non-native born population in the EU as a proportion of each country's total population (Eurostat, 2016). As this is the case it is reasonable to ask questions of Irish people's attitudes towards immigrants and people of different ethnicities to them. Such information is vital to analyse societal views on immigrants and formulate views on the level of discrimination immigrants may face. As such, knowing the factors that may influence such negative attitudes is important in efforts to tackle discrimination.

In an international sense, research into attitudes towards immigrants is of particular interest due to the rise of anti-immigrant, far-right political parties in many countries around the world. In The past decade, far-right wing and anti-immigration parties and politicians have experienced a rise in electoral support in countries including the United States, Sweden, Germany, and France (Georgiadoua, Rori, and Roumanias, 2018). As of January 2019, within Western Europe, Southern Europe, and Scandanavia, Norway, Austria, and Italy have governments that include far-right parties with Denmark's far-right party playing a supporting role in their government (Georgiadoua, Rori, and Roumanias, 2018). The election of Donald Trump in the United States and the United Kingdom's vote to leave the European Union, both in 2016, have been seen as indicators of this trend (Bhambra, 2017). The most extreme end of anti-immigrant and far-right views shows an increase in terrorist attacks in the past decade. Right-wing terrorism has been on the rise within the United States within the past decade (Southern Poverty Law Center, 2019), while anti-muslim hate crimes have been on the rise

within the United Kingdom (Tell MAMA, 2017). While these are the most extreme end of anti-immigrant views and ideologies, such information provides more context for why research into attitudes towards immigrants and xenophobia is so necessary, and why it is necessary in all places.

Firstly, when analysing Irish people's views on different racial and ethnic groups, recent research would suggest that Ireland has some of the most negative views of everywhere in Western Europe towards the aforementioned groups (European Social Survey, 2017; McGinnity, Grotti, Russell, and Fahey, 2018). 58% of participants indicated support for immigration of people of the same ethnic group as the majority of Ireland, which dropped to 41% support for Muslims and 25% support for Romani people (McGinnity, Grotti, Russell, and Fahey, 2018). That same study found that 45% of participants agreed with the idea that some races and/or ethnic groups are born naturally harder working than others, and 15% agreed that some races are naturally born less intelligent (McGinnity, Grotti, Russell, and Fahey, 2018). Research has also shown that Irish people are generally that Irish people are less supportive of immigration than their counterparts from other Western European countries, with this holding true across age and income groups (European Social Survey, 2017). This provides solid evidence that Ireland is a place with a high amount of xenophobia and would suggest that immigrants, particularly ones of different races of the majority of Ireland, may be at risk of discrimination.

Due to the relatively high levels of xenophobia and opposition to immigration in Ireland (European Social Survey, 2017; McGinnity, Grotti, Russell, and Fahey, 2018), and the risks these pose to immigrants, it is important to look at factors which may influence these attitudes. McGinnity, Grotti, Russell, and Fahey (2018) found that more frequent contact with people of a different ethnicity or race to them was positively associated with more positive

attitudes towards immigrants. This intersects with the fact that only one in four participants had significant contact with someone of a different ethnicity or race on a daily basis (McGinnity, Grotti, Russell, and Fahey, 2018).

Much psychological research into factors affecting attitudes towards immigrants has focused on more personality focused factor (Gallego and Pardos-Prado, 2014) and, in regards to interaction, has focused on the effect of the perception of one's interaction with immigrants as good or bad (Florack, Piontkowski, Rohmann, Balzer, and Perzig, 2003; Amir, 1969), rather than specifically the frequency of interactions. While it can be hard to the variance of personality traits or nature of interaction with immigrants based on country, or if they vary based on that at all, frequency of interaction with immigrants has a clear link to nation and community. Ireland in particular is of interest as there is evidence that, despite having a sizeable and growing immigrant population (Central Statistics Office, 2016), most ethnically Irish people do not have significant daily contact with someone of a different ethnic group or race than themselves (McGinnity, Grotti, Russell, and Fahey, 2018). Research in other countries has also found that more frequent interaction predicts more positive attitudes to immigrants (Voci and Hewstone, 2003). From this we can predict that the research at hand will also find that more frequent interaction with immigrants is a predictor of more positive attitudes towards immigrants.

Contact with immigrants is known to have a varying effect depending on the nature and context of the contact, with contact one perceives as positive leading to more positive view on immigrants and more negative contact leading to negative views (Amir, 1969). This theory of intergroup contact having an effect is known as the contact hypothesis (Amir, 1969). Research has found that intergroup contact is a predictor of reduced prejudice towards immigrants and a predictor of pro-immigration policy preferences (Pettigrew, 1997). In particular, friendship

with immigrants has been found to be one of the strongest predictors of pro-immigrant attitudes and reduced prejudice (Hayes and Dowds, 2009; Pettigrew, 1997).

Some similar studies on attitudes towards immigrants have also looked at group salience, which is one's cognizance and conscious awareness of their membership of groups, and of the differences and similarities of groups in the context of intergroup contact (Harwood, Hewstone, and Raman, 2006; Voci and Hewstone, 2003). Higher levels of group salience are, on average, a predictor of more positive attitudes towards immigrants, with group salience also being found to mediate the relationship between contact and attitudes towards immigrants (Vezzali, Capozza, Stathi, and Giovannini, 2012; Voci and Hewstone, 2003). Levels of group salience were found to have a positive correlation with frequency of interaction with immigrants, with higher levels correlating with more frequent contact (Vezzali, Capozza, Stathi, and Giovannini, 2012; Voci and Hewstone, 2003). As such, when doing research on frequency of interaction with immigrants, it would be advised to also take group salience into account, to analyse both effects by themselves, and to analyse the complex interaction between the two. Voci and Hewstone (2003) utilized a scale for measured group salience in relation to interactions with immigrants. This was used in conjunction with Pettigrew and Meertens' (1995) scale which measures attitudes and prejudice towards immigrants (Voci and Hewstone, 2003). From this previous research it can be predicted that participants with higher levels of group salience will show more positive attitudes towards immigrants, and also that higher levels of group salience will be associated with more frequent attitudes towards immigrants.

Previous research has shown, as is perhaps expected, that prejudice towards certain groups, such as immigrants, is not all the same, does not always have the same influencers, and does not all manifest in the same way (Meertens and Pettigrew, 1997). In this case, a distinction

can be drawn between blatant prejudice and subtle prejudice (Pettigrew and Meertens, 1995; Voci and Hewstone, 2003). Blatant prejudice is often what one first thinks about when it comes to prejudice, as it refers to things such as outright beliefs and aversions about particular groups, such as whether one would approve of their child dating a person of a different race (Meertens and Pettigrew, 1997). Subtle prejudice is a less overt, often implicit or unconscious form of prejudice which often, though not necessarily always, manifests through implicit associations and beliefs (Meertens and Pettigrew, 1997; Pettigrew and Meertens, 1995). The distinction between these two is important as most people believe they are not prejudiced, and as such, only looking at the more traditional blatant prejudice can miss out on vital information on how certain groups are viewed in society and miss out on important facets of prejudice (Meertens and Pettigrew, 1997; Pettigrew and Meertens, 1995). This makes both an important inclusion in research on prejudice. From this research it would be expected that subtle prejudice would be higher on average than blatant prejudice (Meertens and Pettigrew, 1997; Pettigrew and Meertens, 1995; Voci and Hewstone, 2003). Pettigrew and Meertens (1995) developed such a scale for assessing both subtle and blatant prejudice towards people of other races and immigrants, particularly within a western European context, which has been used in research on attitudes towards immigrants (Pettigrew and Meertens, 1995; Voci and Hewstone, 2003).

While much of the research throughout the review has focused on more singular or specific causes of certain attitudes towards immigrants, some research has suggested that a multilevel theory incorporating multiple factors is more beneficial in research (Berg, 2015). As such it is further justification for the benefits of include factors such as group salience and frequency of interaction in the study, especially as these in particular have unique interactions with each other (Vezzali, Capozza, Stathi, and Giovannini, 2012; Voci and Hewstone, 2003). Research

varies in regards to what combination and model should be used (Ward and Masgoret, 2006) however they do show similar results, with more frequent interaction with immigrants being a predictor of more positive attitudes towards immigrants (Ward and Masoget, 2006).

Research on why frequency of contact may affect attitudes towards immigrants has shown that more frequent interaction with immigrants leads to decreases in anxiety between groups and decreases in perception of immigrants as a threat (Ward and Masoget, 2006). This is similar to the effects that group salience has on intergroup anxiety and threat perceptions (Vezzali, Capozza, Stathi, and Giovannini, 2012; Voci and Hewstone, 2003). This reduction in levels of anxiety and perception of immigrants as a threat, as a result of more frequent contact, is shown to lead to more positive attitudes towards immigrants (Ward and Masoget, 2006).

Much research on factors which affect attitudes towards immigrant are known to be divided into personal and situational factors (Ward and Masoget, 2006). Personal factors are more commonly studied in relation to psychology, as they include things such as personality types, personal characteristics, and ideology (Ward and Masoget, 2006), whereas situational factors relate to things such as contact with immigrants (Voci and Hewstone, 2003; Ward and Masoget, 2006). For the purpose of research, frequency of contact with immigrants is deemed a situational factor, and one's level of group salience is a personal factor. The interaction between the two types of factors can vary, and investigating how they interact is backbone of pushing research into practical areas (Vezzali, Capozza, Stathi, and Giovannini, 2012; Voci and Hewstone, 2003; Ward and Masoget, 2006). As such, the interaction between such factors should always be noted and investigated. In this case, higher levels of group salience have been found in previous research to be a mediating factor in the effect of frequency of contact

on attitudes towards immigrants (Vezzali, Capozza, Stathi, and Giovannini, 2012; Voci and Hewstone, 2003).

Initial research into the contact hypothesis in relation to immigrants focused mainly on what effect contact alone had, and what effects positive or negative contact had, on attitudes (Amir, 1969). This focus on certain situational factors is in contrast with more recent research which, as mentioned previously, looks to find the effects of the interaction of numerous factors, both personal and situational, which include frequency of interaction and group salience (Esses, Jackson, Armstrong, 1998; Voci and Hewstone, 2003; Ward and Masoget, 2006).

For research, we can devise a number on research aims, which are: 1) To find what effect frequency of contact with immigrants has on one's attitude towards immigrants. In the review of previous literature, it can be seen that contact with immigrants alone does have an effect on attitudes towards them (Amir, 1969; Florack, Piontkowski, Rohmann, Balzer, and Perzig, 2003). In regards to frequency of contact specifically, more frequent contact appears to be predictor of more positive attitudes towards immigrants (McGinnity, Grotti, Russell, and Fahey, 2018; Voci and Hewstone, 2003). From this, for the purpose of research, it can be hypothesized that more frequent contact will be positively correlated of less prejudicial attitudes towards immigrants.

The second research question is: 2) To investigate what relation group salience has with frequency of contact with immigrants, and to find what effect it has on attitudes towards immigrants. Higher levels of group salience have, in previous research, been found to positively correlate with more frequent contact with immigrants (Vezzali, Capozza, Stathi, and Giovannini, 2012; Voci and Hewstone, 2003). Higher levels of group salience have also been found to predict more positive attitudes towards immigrants, and to mediate the

relationship between frequency of contact and attitudes to immigrants (Vezzali, Capozza, Stathi, and Giovannini, 2012; Voci and Hewstone, 2003). From this it can be hypothesized that higher levels of group salience will have a positive correlation with more frequent contact with immigrants, and also that higher levels of group salience will have a positive correlation with more positive attitudes, less prejudicial towards immigrants.

2. Methods

2.1. Participants

Participants were included based on the criteria that they were Irish citizens and aged 18 or over. The study received 90 responses overall. However, one participant answered only the consent question an no other question. As such they will not be included in the data. As a result, there were 89 participants who completed the survey. There were 27 male participants and 60 female participants. There were 2 participants who are either of another gender or who declined to give their gender. 20 participants (22.5%) were aged 18-24, 18 participants (20.2%) were aged 25-34, 19 participants (21.3%) were aged 35-44, 18 participants (20.2%) were aged 45-44, 12 participants (13.5%) were aged 55-64, and 2 participants (2.2%) were aged 65 and above (Appendix 6.). Participants were primarily obtained using convenience sampling, primarily through the 3rd year NCI Psychology course and through family members of the researcher.

2.2. Design

The study was quantitative, and used a cross-sectional design to compare results across groups. Attitudes towards immigrants were surveyed, and these results are compared across people of varying levels of group salience, and of varying frequency of contact with immigrants. Levels of group salience were also compared across frequency of contact with immigrants.

2.3. Materials

The scale developed by Pettigrew and Meertens (1995) was used to measure participants attitudes towards immigrants (Appendix 4.), and has previously been shown to be both a reliable and valid method of measuring such attitudes (Pettigrew and Meertens, 1995; Voci

and Hewstone, 2003). The scale takes responses on a Likert scale ranging from 1 to 4 and is broken down into two sub-scales measuring blatant prejudice (Section 3a and 3b) and subtle prejudice (Section 4a, 4b, and 4c) respectively (Appendix 4.). Answers of 1 are scored as 5, answers of 2 scored as 4, answers of 3 are scored as 2, and answers of 4 are scored as 1. This scoring is used for all of section 3 and 4, apart from questions 2, 3 and 4 in section 3b, and question 1 and 2 in section 4c. For these questions the inverse of the regular scoring will be used, meaning that an answer of 1 will be scored as 1, 2 will be scored as 2, 3 will be scored as 4, and 4 will be scored as 5. Each sub-scale contains 10 questions, giving a total possible score range of 10 to 50. Higher scores on both scales indicate higher levels of prejudice towards immigrants, whereas lower scores indicate lower levels of prejudice.

A scale developed by Voci and Hewstone (2003) was used to measure the levels of group salience, which has proved to be a reliable and valid scale in measuring group salience (Voci and Hewstone, 2003). The scale has two questions, answered using a Likert scale ranging from 1 to 5 (Section 2.) (Appendix 3.). The scores for the two questions are averaged, which creates a score range of 1-5. Higher scores indicate higher levels of group salience, and lower scores indicate lower levels.

The survey also included general demographic questions and, importantly, a question about how frequently participants had contact with immigrants (Appendix 2.).

2.4. Procedure

Participants received the survey through either the NCI 3rd year Psychology group, or directly through email from the researcher. Through both ways, participants would click on a link bringing them to the Google Forms page for the survey. Participants were first shown a consent form (Appendix 1.) presenting information about the study and the terms of

participation. They are informed that they may withdraw participation at any time during the study prior to completion, that they should only complete the study if they are aged 18 or over and a citizen of Ireland, and they are given the contact information of the researcher should they have any related questions. They are required to click "I agree" if they wish to continue to the study. This is deemed as obtaining the participants consent to participate and use the information provided for research purposes.

Participants complete general demographic questions in section 1, then complete questions measuring levels of group salience in section 2, then complete questions measuring blatant prejudice towards immigrants in sections 3a and 3b, and then complete questions measuring subtle prejudice towards immigrants in sections 4a, 4b, and 4c. Participants then submit the survey after completing all questions. They must have answered all questions in order to be able to submit the survey. This will end their participation in the study. Participation takes approximately between 10 and 15 minutes, from clicking on the link to the survey to submitting their completed response.

3. Results

3.1. Descriptive statistics

Table 3.1.

Descriptive statistics of all continuous variables

	Mean (95% Confidence	Std. Error	Median	SD	Range
	Intervals)	Mean			
Group Salience	2.79 (2.58-3.00)	.11	3.00	1.01	1-5
Total Score					
Blatant	20.93 (19.01-22.85)	.97	18	9.11	10-45
Prejudice Total					
Score					
Subtle	27.33 (25.53-29.13)	.91	26.5	8.50	11-47
Prejudice Total					
Score					

A Kolmogorov-Smirnov test for normality of distribution was carried out on all three continuous variables. The total score for group salience was found to be non-normally distributed. The total scores for blatant and subtle prejudice was found to be normally distributed. All three continuous variables were positively skewed.

3.2. Inferential Statistics

A chi-square test of independence was performed to examine the relationship between group salience and frequency of interaction with immigrants. The relation between these variables was not found to be statistically significant, p=.28. A chi-square test of independence was also performed to examine the relationship between group salience and blatant prejudice, and group salience and subtle prejudice. The relationship between group salience and blatant prejudice was not found to be statistically significant, p=.14. The relationship between group salience and blatant prejudice was also not found to be statistically significant, p=.18

A one-way between groups ANOVA was conducted to determine if there were differences in blatant prejudice and subtle prejudice respectively based on how frequency participants interacted with immigrants. There was a statistically significant difference in levels of blatant prejudice across groups F(2, 85) = 3.60, p = .02. The effect size indicated a medium sized difference in blatant prejudice scores (eta squared = .11).

Post-hoc comparisons using the Tukey HSD test indicated that the mean score for the "once per month or less" group (M = 28.91, SD = 11.5) was not significantly higher in blatant prejudice (p = .74) than the "a few times per month" group (M = 23.55, SD = 10.40) or the "a few times per week" group (p = .09; p = .09;

There was a statistically significant difference in levels of subtle prejudice across groups F (3, 84) = 5.84, p = .001. The effect size indicated a large difference in criminal thinking scores (eta squared = .17).

Post-hoc comparisons using the Tukey HSD test indicated that the mean score for the "once per month or less" group (M=35.36, SD=8.48) was not significantly higher in subtle prejudice (p=.14) than the "a few times per month" group (M=29.00, SD=7.43), however they were significantly higher than the "a few times per week" group (p=.001; M=24.33, SD=8.82) and the "multiple times per day" group (p=.01; M=26.38, SD=8.50). The "a few times per month group" was not found to be significantly higher in blatant prejudice than the "a few times per week" group (p=.16) or the "multiple times per day" group (p=.69). There was no statistically significant difference in blatant prejudice between the "a few times per week" group and the "multiple times per day" group (p=.77).

4. Discussion

In the introduction section a number of research aims and hypothesizes were posed based on reviews of previous literature and research in the area. The study conducted was geared towards these. The first research aim presented was to find the effect, if any, frequency of contact with immigrants has on one's attitude towards immigrants. In regards to this, it was hypothesized that more frequent contact with immigrants would be positively correlated more positive attitudes towards immigrants. For subtle, frequency of contact only showed a significant effect between the group with the lowest frequency of contact, defined as "once per month or less", and the two most frequent groups, defined as "a few times per week" and "multiple times per day". There were no statistically significant differences when comparing subtle prejudice between any other groups. For blatant prejudice, frequency of contact showed only a significant difference between the "once per month or less group" and the "multiple times per day" group, the lowest and highest groups respectively in terms of frequency of contact with immigrants. No statistically significant differences were found between any other groups.

When looking at the results for the effect of frequency of contact on attitudes towards immigrants, there appears to be mixed results. When taking a deeper interpretation, the results appear to suggest that frequency of contact was only a relevant factor when there is very little contact, defined as "once per month or less". There was no relation between frequency of contact and attitudes towards immigrants past the lowest levels of contact frequency. This would indicate there is some relationship between frequency of contact and prejudicial attitudes towards immigrants, however it does not indicate the relationship that was hypothesized or may have been expected. As such, overall it can be concluded that the results do not support the hypothesis This may line up more with the original contact hypothesis,

where it is the type of contact with immigrants that has the most noticeable effect, with frequency of contact having little effect (Amir, 1969; Florack, Piontkowski, Rohmann, Balzer, and Perzig, 2003). However, the results of do not suggest that there is no relationship between frequency of contact and attitudes. They may in fact suggest a more complex and nuanced relationship. Results showed that there was a significant difference in prejudicial attitudes between the lowest and highest levels of frequency, with the lowest level of frequency showing higher levels of prejudice. This may indicate that frequency of contact does have an effect at lower levels, however that there may be some threshold level where the frequency of contact no longer has a significant effect. Such a threshold would require more research in the area. It should be a recommended consideration to be investigated and included in any future research into effects of frequency of contact with immigrants on prejudice towards immigrants.

The second research aim presented was to find what kind of relation group salience has with one's frequency of contact with immigrants, and also to find out what effect it has on attitudes towards immigrants. Based on the review of previous research, it was hypothesized that higher levels of group salience would have a positive correlation with more frequent contact with immigrants. It was also hypothesized that higher levels of group salience would be positively correlated more positive attitudes towards immigrants among participants. Results indicated that there was no statistically significant relationship between group salience frequency of contact with immigrants. Results also indicated that there was no significant relationship between group salience and blatant or subtle prejudice respectively. This result is in direct opposition to the hypothesis, and as such does not support the hypothesis. In regards to previous research, this result is in opposition to most previous findings on group salience and attitudes towards immigrants (Vezzali, Capozza, Stathi, and Giovannini, 2012; Voci and

Hewstone, 2003). Within Ireland, virtually no research has been carried out on group salience in regards to immigrants. This provides a position to suggest further research to infer solid implications within the area. Further research should be carried out on how group salience relates to frequency of contact with immigrants and attitudes towards immigrants in order see if such results are valid, and how unique it is to Ireland. If the current results are validated it should lead to further research into why this differs in Ireland compared to other countries (Vezzali, Capozza, Stathi, and Giovannini, 2012; Voci and Hewstone, 2003).

In a broad sense, the findings of this research on frequency of contact and attitudes towards immigrants are relatively novel. Most previous research has indicated a much stronger relationship between frequency of contact and attitudes towards immigrants (Vezzali, Capozza, Stathi, and Giovannini, 2012; Voci and Hewstone, 2003). The reason for this, and any possible implications, would require further research. However, there could also be suggestions within the research which should be considered when contextualising it within research on attitudes towards immigrants. The age distribution of the participants is skewed with a much higher number of younger participants, and a relatively small number of older participants, particularly compared to the Irish population in general (Central Statistics, 2018; Appendix 6.). Participants aged 18-24 made up about 22.5% of participants (Appendix 6.), compared to less than 12.5% in Ireland's general population (Central Statistics Office, 2018). Participant aged 65 and above only made up 2.2% of total participants (Appendix 6.), which is compared to about 13.8% of the total population of Ireland (Central Statistics Office, 2018). This may be significant as increased age is known to be a predictor of more prejudicial and negative attitudes towards immigrants (Hernes and Knudsen, 1992; Mayda, 2006). Also, within Ireland, though attitudes towards immigrants have been found to be quite negative in general (McGinnity, Grotti, Russell, and Fahey, 2018), attitudes among young Irish people

towards other ethnic groups and immigrants have been found to be more positive (Tormey and Gleeson, 2012). The gender distribution is also heavily skewed towards female, with women making up 67.4% of participants and men making up 30.3% (Appendix 6.), compared to a near 50/50 split between male and female in the general population (Central Statistics Office, 2018). Gender is also known to be a predictor of attitudes towards immigrant, with women on average showing more positive attitudes than men (Hernes and Knudsen, 1992; Mayda, 2006). These factors could explain partly why there isn't much significant relation between frequency of contact and attitudes towards immigrant, as the attitudes in this sample may be more positive across frequencies than usual. Such confounding factors may have influenced the results and should be considered. However, this is speculative and would require further research into Irish attitudes towards immigrants. These could be considered limitations of the study in regards to its generalizability to the wider population of Ireland and beyond.

In the context of other theories, the results may support the contact hypothesis of prejudice towards immigrants (Amir, 1969), as the results may indicate that, as previous research has indicated (Amir, 1969; Florack, Piontkowski, Rohmann, Balzer, and Perzig, 2003), contact with immigrants alone has been found to be a predictor of more positive attitudes towards immigrants. The results do appear to align with such research in the contact hypothesis. However, the findings in their entirety may not neatly fit into any current theory. Taken at face value these results appear to suggest that no contact or very infrequent contact with immigrants is a predictor of negative attitudes towards immigrants, but that with increased frequency of contact beyond that there is little significant difference in prejudice. In short, a primary factor may be whether or not one has any contact with immigrants rather strictly the frequency, with frequency of contact only showing significant relation with prejudice at lower

levels of contact. With future research in mind, this may indicate the need for the development of a new theory on the effect of contact on attitudes towards immigrants. However, the consideration of previous research (Amir, 1969; Florack, Piontkowski, Rohmann, Balzer, and Perzig, 2003; Pettigrew and Meertens, 1995; Vezzali, Capozza, Stathi, and Giovannini, 2012; Voci and Hewstone, 2003) with the current research may instead indicate the need for a combined theory, taking aspects of all research in the area to present a unified theory of how various aspects of contact affect attitudes towards immigrants. While this may appear to present a problem with some possibly minor conflicting aspects of the varying research, a unified model may also be uniquely equipped to tackle this. Research on attitudes towards immigrants, and particularly in regards to the effects of aspects of contact, can often be quite specific and focused on a small number of factors. This can run the risk of having a lot of data about various factors in attitudes towards immigrant and how contact may affect attitudes, but also having very little knowledge of the interaction between there varying factors, such as frequency of contact, perception of contact, area of residence, age, gender, income, and many others (Amir, 1969; Hernes and Knudsen, 1992; Mayda, 2006; Vezzali, Capozza, Stathi, and Giovannini, 2012; Voci and Hewstone, 2003; Ward and Masoget, 2006). Incorporating varying factors, particularly of contact, into one model within research has a huge benefit of being able to analyse the effects, interactions, and relationships of the various factors with each other. The incorporation of the present study into such a model with further research could provide a more nuanced understanding of the effect of frequency of contact on attitudes towards immigrants, rather than a purely linear relationship as may have been thought previously.

For specific future research there are a number of suggestions based on the current study. A primary aim should be, as mentioned previously, to investigate the precise nature of the

relationship between frequency of contact and attitudes towards immigrants, rather than primarily investigating the existence of a relationship. This should build on the suggestion within the current paper of the possibility of a threshold of frequency, where frequency of contact makes little significant difference on attitudes after exceeding such a threshold. It is important that such research be carried out within Ireland, as the findings of the current study are in opposition to most previous research in the area (Vezzali, Capozza, Stathi, and Giovannini, 2012; Voci and Hewstone, 2003). This will provide further evidence to whether these results are unique to Ireland, which, if validated, may be a cause for even more future research in itself. Future research should investigate possible mediating factors in the relationship between, including area of residence (i.e. Rural, urban, etc.), education level, and type of contact. It is important to also investigate the effects of types of contact (i.e. Whether a person perceives their contact with immigrants to be positive or negative) to investigate its intersection with frequency of contact, not just because it wasn't analysed in the current study, but because it can amalgamate and bridge the gap between previous research into the contact hypothesis (Amir, 1969) and the current research relating to frequency of contact.

There are also limitations present within the research. The majority of the limitations relate to the generalizability of the findings and of the sample. As mentioned earlier, the sample is skewed towards younger people, is lacking in older participants, and is heavily female (Appendix 6.). Both age and gender are known to be predictors of attitudes towards immigrants (Hernes and Knudsen, 1992; Mayda, 2006). As such, this may make the sample and the research less generalizable to that target population of Ireland. Participants were primarily obtained through convenience sampling, primarily through the National College of Ireland and through family. This could also lessen its wider generalizability. Upon receiving feedback from participants through email, as provided (Appendix 1.), some indicated that they

had different feelings about different immigrant groups, and as such only gave an approximate answer. This indicates that it may be of interests to research what influences particular attitudes towards different immigrant groups, as research in Ireland has shown that different immigrant groups suffer differing levels of prejudice (McGinnity, Grotti, Russell, and Fahey, 2018)

When taking an overall conclusion, it was found that the hypotheses were not supported, in that levels group salience showed no significant relationship with prejudicial attitudes or frequency of contact with immigrants, and that prejudicial attitudes only significantly differed between the lowest level and two highest levels of frequency of contact. While this does indicate some relationship between frequency of contact and prejudicial attitudes, it doesn't validate the near linear relationship as expected, as there is no relation between frequency of contact and attitudes past the lowest level of contact. This may suggest some sort of broad frequency of contact threshold, meaning that frequency does have an effect, but over certain level of frequency of contact, the amount of contact is no longer a significant factor. This is however, speculative and reliant on investigation through further research, particularly to investigate the results within an Irish context, as such results are in opposition to most previous research (Vezzali, Capozza, Stathi, and Giovannini, 2012; Voci and Hewstone, 2003). More implications within future research are the need for more multivariate designs when looking at factors which affect people's attitudes towards immigrants, including a broad range of factors, not just limited to those mentioned in this study, to analyse the intersection of such factors and how they interact. Future research should also take include levels of group salience so as to investigate the validity of the current findings within Ireland, particularly as it is not supported by previous research elsewhere (Vezzali, Capozza, Stathi, and Giovannini, 2012; Voci and Hewstone, 2003). Research into the specific factors and contexts which

influence prejudice towards immigrants is a necessary step in creating approaches to tackling such prejudice, particularly in policy-making and education. With Ireland's growing immigrant population (Central Statistics Office, 2006; Central Statistics Office, 2016), this illustrates why future research is needed to build on this research and tackle such issues.

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6. Appendicies

6.1. Appendix 1.

Questionnaire

Please only partake in this study if you are an Irish citizen aged 18 or over.

You are being invited to participate in a research study titled "Frequency of interaction with immigrants and attitudes towards immigrants". This study is being done by Adam Conneely of the National College of Ireland.

If you agree to take part in this study, you will be asked to complete an online survey/questionnaire. This survey/questionnaire will ask general demographic questions, questions regarding group salience, and questions about attitudes towards immigrants. It will take you approximately 10 minutes to complete.

There are no known risks associated with this research study; however, as with any online related activity the risk of a breach of confidentiality is always possible. To the best of our ability your answers in this study will remain confidential. We will minimize any risks by not recording any personally identifiable information. The data will be stored safely by the researcher and will not be publicly available until the study is published.

Nothing will be published on any social media account as a result of your participation and this study is not linked to social media sites in any way. Data collected through this study will be accessed for research purposes only.

Your participation in this study is completely voluntary and you can withdraw at any time until you submit your questionnaire. You must answer all questions in the study.

This survey includes two questions which are sexual in nature.

If you have questions about this project or if you have a research-related problem, you may contact the researcher, Adam Conneely, email: x16325101@student.ncirl.ie.

By clicking "I agree" below you are indicating that you are at least 18 years old, have read and understood this consent form and agree to participate in this research study. Please print a copy of this page for your records.

o I agree

6.2. Appendix 2.

Section 1.

Q 1. What is your gender?

- o Male
- o Female
- o Other/Prefer not to answer

Q 2. What is your age?

- o 18-24
- o 25-34
- o 35-44
- o 45-54
- o 55-65

0	65-74
О	75+
Q 3. A	Are you an Irish citizen?
О	Yes
O	No
Q 4. V	Which of the following most accurately describes your current area of residence?
О	Urban
0	Suburban
o	Rural
Q 5. C	On average, how frequently do you interact with an immigrant living in Ireland? (Please
only i	nclude interactions that involve verbal, in person contact)
0	Multiple times per day
o	A few times per week
0	A few times per month
0	Once per month or less

6.3. Appendix 3.

Section 2.

Please give your response to the following statements/questions. Give your answer on a scale of 1 to 5 as indicated.

When, at work or school, you meet people coming from countries outside the EU, ...

- 1. How aware are you that you belong to different national groups? (1 = Not at all, 5 = Very)
- 2. How often do you refer, during conversations, to your different cultures?
- 6.4. Appendix 4.

Section 3a.

Please give your response to the following statements/questions. Give your answer on a scale of 1 to 4 as indicated.

- 1. Immigrants have jobs that the Irish should have. (1 = Strongly agree, 4 = Strongly disagree)
- 2. Most immigrants living here who receive support from the welfare state could get along without it if they tried. (1 = Strongly agree, 4 = Strongly disagree)

- 3. Irish people and immigrants can never be really comfortable with each other, even if they are close friends. (1 = Strongly agree, 4 = Strongly disagree)
- 4. Most politicians in Ireland care too much about immigrants and not enough about the average Irish person. (1 = Strongly agree, 4 = Strongly disagree)
- 5. Many immigrants come from less able races and this explains why they are not as well off as most Irish people. (1 = Strongly agree, 4 = Strongly disagree)
- 6. In terms of how honest they are, how different or similar do you think the average immigrant living here is to the average Irish person? (1 = Very different, 4 = Very similar) Section 3b.

Please give your response to the following statements/questions. Give your answer on a scale of 1 to 4 as indicated.

1. Suppose a child of yours had children of very different colour and physical characteristics than your own. Do you think you would be very bothered (1), bothered (2), bothered a little (3), or not bothered at all (4), if your grandchildren did not physically resemble the people on your side of the family? (1 = Very bothered, 2 = Bothered, 3 = Bothered a little, 4 = Not bothered at all)

- 2. I would be willing to have a sexual relationship with an immigrant. (1 = Strongly agree, 4 = Strongly disagree)
- 3. I would not mind if a suitably qualified immigrant was appointed as my boss. (1 = Strongly agree, 4 = Strongly disagree)
- 4. I would not mind if an immigrant who had a similar economic background as mine joined my close family by marriage. (1 = Strongly agree, 4 = Strongly disagree)

 Section 4a.

Please give your response to the following statements/questions. Give your answer on a scale of 1 to 4 as indicated.

- Immigrants living here should not push themselves where they are not wanted. (1 = Strongly agree, 4 = Strongly disagree)
- 2. Many other groups have come to Ireland and overcome prejudice and worked their way up. Modern immigrants should do the same without special favour. (1 = Strongly agree, 4 = Strongly disagree)
- 3. It is just a matter of some people not trying hard enough. If immigrants would only try harder, they could be as well off as Irish people. (1 = Strongly agree, 4 = Strongly disagree)

4. Immigrants living here teach their children values and skills different from those required to be successful in Ireland. (1 = Strongly agree, 4 = Strongly disagree)

Section 4b.

How different or similar do you think the average immigrant living in Ireland is to the average Irish person in regards to ... (1 = Very different, 2 = Somewhat different, 3 = Somewhat similar, 4 = Very similar)

- 1. The values they teach their children.
- 2. Their religious beliefs and practices.
- 3. Their sexual values or sexual practices.
- 4. The languages the speak.

Section 4c.

Please give your response to the following statements/questions. Give your answer on a scale of 1 to 4 as indicated.

1. How often have you felt sympathy for immigrants living in Ireland? (1 = Very often. 2 = Fairly often, 3 = Not too often, 4 = Never)

- 2. How often have you felt admiration for immigrants living in Ireland? (1 = Very often.
- 2 = Fairly often, 3 = Not too often, 4 = Never)

6.5. Appendix 5.

Please click "submit" to complete your participation in this study.

Once submitted you may not withdraw your data from the study.

Submit

The survey is now complete. Thank you for your participation. If you have questions about this research or if you have a research-related problem, you may contact the researcher, Adam Conneely, email: x16325101@student.ncirl.ie.

6.6. Appendix 6., Table 6.1 Frequencies for the current sample of on each demographic variable (N = 89)

Variable	Frequency	Valid Percentage	
Gender			
Male	27	30.3	
Female	60	67.4	
Other/Prefer not to say	2	2.2	
Age			
18-24	20	22.5	
25-34	19	21.3	
35-44	18	20.2	
45-54	18	20.2	
55-64	12	13.5	
65+	2	2.2	
Frequency of Contact with			
Immigrants			
Once per month or less	11	12.4	
A few times per month	20	22.5	
A few times per week	33	37.1	
Multiple times per day	25	28.1	