

Improving Dutch adolescents' evaluations of
Muslims through intergroup contact frequency
and the moderating effect of intergroup
cooperation



Neeradj Baldewsingh – s0727172

Bachelorthesis

Supervisor: Mitch van Geel

July 2014

Abstract

This study aimed to identify whether native Dutch adolescents' contact frequency with Muslims at school is positively associated with more positive evaluations of Muslims, and if the willingness to cooperate acted as a moderator of the effect of intergroup contact frequency on the evaluation of Muslims. As expected, findings posited that increased contact frequency and the willingness to cooperate with Muslims were indeed significantly related to increases of positive evaluations of Muslims. Additionally, the willingness to cooperate acted as a moderator of the effect of intergroup contact frequency on the evaluation of Muslims, having a facilitative effect. The present study attests to the effectiveness of the facilitative conditions through direct contact, as depicted by Allport's (1954) intergroup contact theory.

Keywords: Intergroup cooperation, intergroup contact frequency, outgroup evaluations, native Dutch adolescents, Muslims, classrooms.

Introduction

Surveys conducted over the past ten years, on the subject of intergroup relations between native Dutch and Muslims in The Netherlands, have reported that about one out of two natives hold negative views of Islamic minorities (Velasco González, Verkuyten, Weesie & Poppe, 2008; SCP, 2004). Ever since the terrorist attacks on September 11, 2001, media attention regarding Muslim fundamentalism has spurred an increase in nationwide anti-Islamic attitudes among the Dutch. This was illustrated by a reported increase in hostility towards Muslims in The Netherlands following 9/11 (Allen & Nielsen, 2002). The notion of widespread anti-Islamic dispositions among the Dutch should however not be limited to being a reaction to recent Muslim fundamentalism. The Netherlands Institute for Social Research has reported an increasing trend of negative dispositions towards Muslims, ever since the mid nineties of the 20th century (SCR, 1998). Explicitly, The Netherlands Institute for Social Research has elucidated that increases in discrimination prevalence were largely attributed to unemployment as a result of the deteriorating economic climate, and the notion of competition from immigrants among the lower educated unemployed natives (SCP, 2004).

While economic conditions are susceptible to changes over time, increasing cultural diversification of the Dutch population has been an on going process for decades (SCP, 2004). In regards to the Dutch Muslim population, the Islam is one of the fastest growing religions of the 21st century, and it is estimated that over one out of ten people living in the larger

urbanized areas of The Netherlands have an Islamic background (SCP, 2004). Given the reoccurring pattern of intolerance these past decades, the notion that multiculturalism in Western Europe is expanding with new generations of residing minorities, postulates the need to explore how positive intergroup relations can be promoted among younger generations (Ford, 2008; Van Geel & Vedder, 2010).

This study is therefore focused on how native Dutch adolescents' evaluations of Muslims may improve through contact experiences with Muslim peers at school. Verkuyten and Thijs (2002) had specifically stressed the importance of studying multiculturalism among adolescents as it offers us insights in the current generation's attitudes regarding this subject. Also, peers are said to be of great significance in influencing an adolescent's attitude towards multiculturalism. Van Geel and Vedder (2010) proposed positive intergroup relation strategies should be focused on promoting intergroup contact at schools, as more ethnically diverse classrooms have proven to be associated with more positive attitudes towards multiculturalism by native Dutch adolescents. Adding to this notion is the understanding that the next generation of policy makers will be comprised of today's adolescents (White et al., 2009). Positive interactions with Muslims should therefore underline the importance of improving intergroup relations between these groups. Thus implementing contact strategies to improve intergroup liking among adolescents could be essential to breaking the currently increasing trend of negative dispositions by natives towards Muslims in The Netherlands.

While many studies to date were focused on reducing prejudice by means of increasing contact, enabling contact strategies to reduce prejudice may prove difficult in everyday life. This is because prejudiced people have an increased propensity to avoid intergroup contact (Gieling, Thijs, Verkuyten, 2014). Nevertheless, Dovidio, Gaertner and Kawakami (2003) posited that reducing prejudice increases outgroup liking, and outgroup liking reduces prejudice. In line with this notion, the degree of positive evaluations will be assessed in this study, that is, the degree to which one rates Muslims as likeable. The ingroup refers to a social group one identifies with on the basis of shared characteristics, while the outgroup is generally signified as a group one does not identify him- or herself with (Tajfel, Billig, Bundy, & Flament, 1971). Intergroup contact thus signifies contact between ingroup and outgroup members. In this study, native Dutch adolescents are referred to as the ingroup, while Muslims are referred to as the outgroup.

Despite it being suggested that cooperative contact at school may lead to an increase in positive outgroup evaluations among adolescents (White et al., 2009), no research to date has tested if cooperation facilitates intergroup contact frequency as a moderator in attaining more

positive outgroup evaluations in this specific social context. It is proposed in this study the willingness to cooperate precedes the actual act of cooperation. This is evidenced by jigsaw learning techniques, where different group members benefited from intergroup cooperation to succeed on collective goals (Aronson, Bridgeman & Geffner, 1978). This success ultimately enhanced outgroup liking. Cooperative learning thus incites different group members to cooperate; they become willing to cooperate because they each depend on each other to reach collective goals. The willingness to cooperate is therefore defined as cooperation in this study, because group members' willingness to cooperate is indicative of cooperative intergroup behaviour.

Therefore, the central question of this study is whether native Dutch adolescents' contact frequency with Muslims at school is positively associated with more positive evaluations of Muslims, and if cooperation acts as a moderator of the effect of intergroup contact frequency on the evaluation of Muslims. Allport's (1954) contact hypothesis depicted that direct contact between different ethnic groups would lead to a reduction of prejudices, and an increase of positive intergroup contact effects. The prerequisite conditions to establish this were that the conditions of equal status in the social context, intergroup cooperation on mutual goals, and support of governing institutions or authorities are present. Additionally, Pettigrew and Tropp's (2006) meta-analytic findings have confirmed that Allport's conditions indeed promote positive intergroup contact effects.

In everyday Dutch classrooms, teachers represent authority figures, while the schools and legislation warrant equal status. Furthermore, intergroup contact in relatively diverse classrooms should result to at least a small degree of contact exposure between cultural groups, if not, the opportunity for direct contact. However, it is argued intergroup cooperation may be avoided in everyday classroom contact situations, subsequently undermining the condition for mutual goals. Ingroup members generally show a preference for teaming up with other ingroup members, as opposed to outgroup members. This is because they expect ingroup members to behave more reciprocal in cooperative contexts, and on the basis of perceived similarities, intragroup behaviours are expected to be more predictable and similar to the individual's own behaviour (Tajfel et al., 1971). In the average everyday Dutch classroom, where Muslims are likely underrepresented, Dutch pupils might prefer cooperating with Dutch peers rather than Muslim peers, possibly avoiding Muslim peers if possible.

Thus, while Allport's conditions are said to coincide to promote positive intergroup outcome effects (Pettigrew & Tropp, 2006), ingroup members might not necessarily be

willing to cooperate with outgroup members, hindering the effects of cooperation strategies. This could especially apply to societies, like the Dutch, where negative stereotypes and perceived outgroup homogeneity are relatively prominent (Allport, 1954). Therefore, cooperation, that is, native Dutch adolescents' willingness to cooperate with Muslim peers is assessed as a moderator in this study. By improving the quality of contact, the willingness to cooperate might enhance the positive effects of frequent contact on evaluations of Muslims.

Intergroup contact frequency

Pettigrew (1998) elucidated that experiencing positive intergroup interaction may lead to generalizations of the perceived positive experience to other situations and contexts of intergroup contact, and may result in more positive feelings towards outgroup members. Allport's (1954) contact hypothesis postulated that direct contact, under facilitating conditions, between different cultural groups would lead to a reduction of prejudices and an increase in positive attitudes towards the outgroup. Contact was specified as direct in this definition because it implies the requirement for personal, preferably face-to-face contact. Pettigrew and Tropp's (2006) meta-analytic findings have confirmed that Allport's conditions indeed promote positive intergroup contact effects. In addition, positive intergroup contact may also guard the individual or group against negative experiences in intergroup contexts.

Bornstein (1989) depicted that contact frequency, that is, being frequently exposed to outgroup members, leads to more positive inclinations and feelings towards the outgroup. While frequent contact with the outgroup does not necessarily imply contact experiences will be pleasant, a non-mediated effect of contact quantity was found on prejudice in previous research (Tausch, Tam, Hewstone, Kenworthy & Carns, 2007). In addition, Schneider (2004) confirmed that intergroup contact reduces negative stereotyping, which in turn could result to an increase in interest and knowledge regarding the outgroup. Also, generalizations of salient negative stereotypical information to the entire outgroup might decrease (Velasco González et al., 2008; Pettigrew, 1998). Considering negative stereotyping is an element of prejudice and reducing prejudice is said to increase outgroup liking (Dovidio et al., 2003), it is argued that increasing contact frequency indeed promotes positive outgroup evaluations. This would likely be a result of positive contact experiences while negative contact experiences, as a result, are more likely to be attributed to the individual rather than to being an outgroup member. Therefore, it was expected that native Dutch adolescents' increased contact frequency with Muslims at school would be related to an increase in positive evaluations of

Muslims (H1).

Intergroup cooperation

Cooperation is viewed as a valuable strategy to overcome intergroup conflict, and to improve positive intergroup interaction (Kuchenbrandt, Eyssel & Seidel, 2013; Aronson et al., 1978; Allport, 1954; Sherif, Harvey, White, Hood & Sherif, 1961). Intergroup cooperation strategies are generally typified as either cooperative, signifying positive interdependence, or competitive, signifying negative interdependence (Sherif et al., 1961). Cooperation is defined as the willingness to cooperate and produces positive inclinations and attitudes towards the outgroup. In contrast, competitiveness signifies an unwillingness to cooperate and produces negative inclinations and attitudes towards the outgroup.

The Common Ingroup Identity Model depicted that intergroup cooperation enhances positive outgroup evaluations, because cooperating members change their perspectives on outgroup members, where they see them as belonging to their own group rather than belonging to 'another' group (Gaertner & Dovidio, 2000). This is in accordance with Allport's (1954) notion, which proposes intergroup interdependence is established by the forming of teams between members from different groups. This notion does not necessarily imply these interacting members relieve themselves of their current group status to form new groups in order to cooperate, but instead poses they manage dual identities in order to reach mutual goals in the cooperative intergroup context, while maintaining their current ingroup identity (Gaertner & Dovidio, 2000). A similar finding was posited by the effect of jigsaw learning, where pupils from different ethnic backgrounds were required to form a new group, and each pupil contributed to the ultimate success on the group goal (Aronson et al., 1978). This success ultimately enhanced outgroup liking. Each pupil acquired a unique piece of information, which was then presented to the other group members. Cooperative learning made group members willing to cooperate because they each depended on each other to succeed on the collective goal.

These findings suggest ingroup members who were willing to cooperate with outgroup members made implicit changes in regards to their group status in order to effectively cooperate with outgroup members. This implies their willingness to cooperate preceded actual cooperative behaviour, as maintaining group status would likely have widened the proverbial

gap of perceived group differences, and would have led to more competitive inclinations towards the outgroup. In accordance with this knowledge, it was expected that native Dutch adolescents' willingness to cooperate with Muslim peers would be related to an increase in positive evaluations of Muslims (H2).

Cooperative intergroup contact

Several studies measured the degree to which ingroup members were willing to cooperate with outgroup members to assess the quality of the contact experience, thus leading to better outgroup evaluations. For example, a study on contact between Muslims and Hindus in Bangladesh by Islam and Hewstone (1993) depicted increased contact frequency with the outgroup resulted to notions of more outgroup member variability, and positive contact experiences led to more positive outgroup evaluations. Additionally, the degree to which participants rated the contact experience as cooperative, relative to competitive, enhanced the quality of the contact experience.

Kuchenbrandt et al. (2013) showed that imagining an intergroup cooperation scenario resulted to a higher degree of contact quality when compared to merely imagining a positive contact experience. Specifically, the imagined contact scenario yielded more positive evaluations of the outgroup when it was imagined as cooperative. These findings depict that the expectation that individuals, who do not belong to the same group, would be willing to cooperate with ingroup members were seen as more likeable, thus improving the quality of the intergroup contact experience.

Furthermore, findings by Wolsko et al. (2003) depicted that intergroup contact generally led to an enhancement of positive outgroup evaluations when contact was cooperative and deemed pleasant by participants. In line with the effect of intergroup contact frequency, it was suggested that an increase in quantity of contact experiences that ranged from positive to neutral would indeed increase positive outgroup evaluations.

These findings suggest that cooperation could indeed facilitate the effect of intergroup contact frequency on positive evaluation. Although there is evidence that frequent contact exposure is positively related to better evaluations of the outgroup (Bornstein, 1989), this does not preclude that the ingroup member's contact experience could be negative. It is

thereby beneficial to the effects of contact frequency that the contact experiences are cooperative. By improving the quality of contact through the addition of cooperation, this facilitating construct might enhance the positive effects of frequent contact on outgroup evaluations. Therefore, it was expected the willingness to cooperate would act as a moderator of the effect of intergroup contact frequency on the evaluation of Muslims, increased willingness to cooperate having a facilitative effect (H3).

Current study

This study examined whether native Dutch adolescents' increased contact frequency with Muslims at school, enhances positive evaluations of Muslims, and if their willingness to cooperate increases the positive effect of contact frequency on positive evaluations of Muslims.

While recent findings have demonstrated direct intergroup contact increases positive outgroup evaluations (Bornstein, 1989), Allport's conditions have proven to enhance the effect of mere contact exposure (Pettigrew & Tropp, 2006). Whilst the conditions of equal status, and support from authorities are present in Dutch classrooms, the preference to cooperate with ingroup members rather than outgroup members might undermine the opportunity for actual cooperation on mutual goals to occur. Thus, the prerequisite for intergroup cooperation to occur, requires native Dutch adolescents' to be willing to cooperate with Muslim peers. Therefore it was expected that both increased intergroup frequency and native Dutch adolescents' willingness to cooperate with Muslims at school would be positively associated with positive evaluations of Muslims. In addition, it was expected that the willingness to cooperate facilitates the positive effect of intergroup contact frequency as a moderator on the evaluations of Muslims.

To assess whether participants would opt to cooperate or compete with Muslim peers, a reversal of the Prisoner's dilemma game was used. Orbell et al. (1994) postulated self-report on questionnaires is often less reliable when predicting certain behavioural outcomes compared to actual behavioural measures. Instead of using questionnaires to assess the degree of participants' willingness to cooperate, this study therefore opted for the use of behavioural measures.

Method

Participants

The data for this study were collected as part of a larger study from five secondary schools across The Netherlands. For the analyses of this study only native Dutch pupils were selected from the total sample of the larger study. The selection of the participants was in accordance with the definition used by the Dutch Central Bureau of Statistics, which requires both the individual's parents to be born in The Netherlands (SCR, 1998). A total of 43 pupils from two secondary schools were eventually selected. The sample was comprised of 25 females and 18 males with ages varying from 13 to 16 years old. Their mean age was 13.98 ($SD = 0.83$). All participants attended preparatory secondary vocational education (VMBO-G/TL).

Measures

A slight adaptation to the original Prisoner's dilemma game was made for this experiment. The original prisoner's dilemma game was used to simulate social interactions during cooperation or conflict experiments (Forsyth, 2010). Players were required to make either cooperative or competitive choices. Players who participated in the original prisoner's dilemma game had the objective to minimize negative outcomes, like punishment or loss, as a result of their choices during the game. This version of the prisoner's dilemma experiment depicts a reversal of that objective, as it requires participants to focus on acquiring maximum gains, that is, a maximum amount of points for themselves. Maximum gains could be acquired by making a cooperative choice, that is, maximum gains for both themselves as well as the other player. Additionally, making a competitive choice, that is maximum gains for themselves while risking a competitive choice by the other player in return, may result to a decrease of acquired gains.

The game served as an instrument to assess participants' willingness to cooperate with an unknown Muslim peer. Participants were paired with a fictive partner and played a computer game, with the goal to achieve the highest possible score. To determine whether the participant would be matched with a fictive Muslim or Dutch player, a short survey was presented preceding the game, to determine both the participant's parents' places of birth. Prior to the start of the game, participants were presented with a name that implied their partner for the game would be an Islamic peer from another school. The game consisted of a

total of five trials. During each trial participants were offered the choice to either cooperate with the other player, which required them to click on the yellow button, or not to cooperate, which required them to click on the red button. If both players chose to cooperate with each other they were each awarded three points. If one of the players chose to cooperate and the other chose not to, the cooperative player was awarded one point and the uncooperative player was awarded five points. If both players chose not to cooperate with each other, they were both awarded two points. A 'tit for that' strategy was used to simulate the fictive player's choice for each trial (Forsyth, 2010). The fictive player would initially choose to cooperate for the first trial, and for the following trials, imitate the participant's choice in the preceding trials.

A digital questionnaire regarding the participant's contact frequency with Muslims at school followed after the game. Participants responded on a 5-point Likert Scale to the question: "How often do you interact with Muslims at school?" Scores ranged from 'never' (1) to 'very often' (5).

An evaluation slide bar was used to assess to what degree the participant viewed Muslims as likeable. The presented question was: "How would you rate Muslims in general?" The bar ranged from 0 to 100, with higher values representing more positive evaluations of Muslims. The questionnaire was designed in Qualtrics, a web-based survey tool.

Procedure

The experiment was conducted in the pupils' classroom during regular class hours. Each classroom was equipped with computers to allow for pupils to participate in the experiment individually. Prior to the experiment, participants were given brief instructions in order to be able to play the game. They were also told it would be imperative they did not consult with classmates, and that questions about the experiment could be directed to the research assistants present at that time. Additionally, participants were informed that all data would be collected anonymously and that they could end their participation at any desired time. The duration of the experiment for each class varied from 10 to 15 minutes.

After the experiment all participants were debriefed by the research assistants, who elucidated on the goal of the experiment and explained why it was necessary for the participants to be deceived in order for the data be collected effectively.

Results

A one-way ANOVA was performed with contact frequency as a between-subjects factor and evaluation as the dependent variable, to investigate whether increased contact frequency was associated with better evaluations of Muslims. A significant effect of contact frequency with Muslims at school on evaluation was found, $F(1,39) = 7.92, p = .008$. Native Dutch adolescents' contact exposure to Muslims at school increased their liking for Muslims in general. Thus, the expectation that native Dutch adolescents' increased contact frequency with Muslims at school is related to an increase of positive evaluations of Muslims (H1) was confirmed.

Next, a one-way ANOVA was performed with the willingness to cooperate as a between subjects factor and evaluation as the dependent variable. A significant effect of cooperation on evaluation was found, $F(1,39) = 6.47, p = .015$. The expectation that native Dutch adolescents' willingness to cooperate with Muslim peers would be related to an increase of positive evaluations of Muslims (H2) was thereby confirmed. That is, native Dutch adolescents' willingness to cooperate with Muslim peers indeed increased their liking for Muslims in general.

Lastly, we added cooperation as a covariate to investigate the moderating effect of cooperation on the relationship between contact frequency and evaluation. A significant interaction effect of contact frequency by cooperation was found, $F(1,39) = 5.63, p = .023$. It was expected the willingness to cooperate would act as a moderator of the positive effect of intergroup contact frequency on the evaluation of Muslims, by having a facilitative effect (H3). This hypothesis was confirmed. When native Dutch adolescents' willingness to cooperate was low, increased contact frequency did not seem to be related to additional positive effects on Muslim evaluations. However, as the willingness to cooperate increased, rises in contact frequency were related to increasingly positive Muslim evaluations. That is, the effect of contact frequency on Muslim evaluations became stronger the higher their willingness to cooperate.

Table 1

Regression weights for contact frequency categories 'not often' and 'never'.

	Contact Frequency	
	Not often (SE)	Never (SE)
Intercept	60.07 (10.30)	29.1 (11.00)
Cooperation	109.92 (42.39)	3.79 (44.72)

Note: The intercept depicts the evaluation score at the average amount of cooperation as cooperation was centered before it was submitted to the ANOVAs (cooperation = 0 is the average cooperation score for the subject sample).

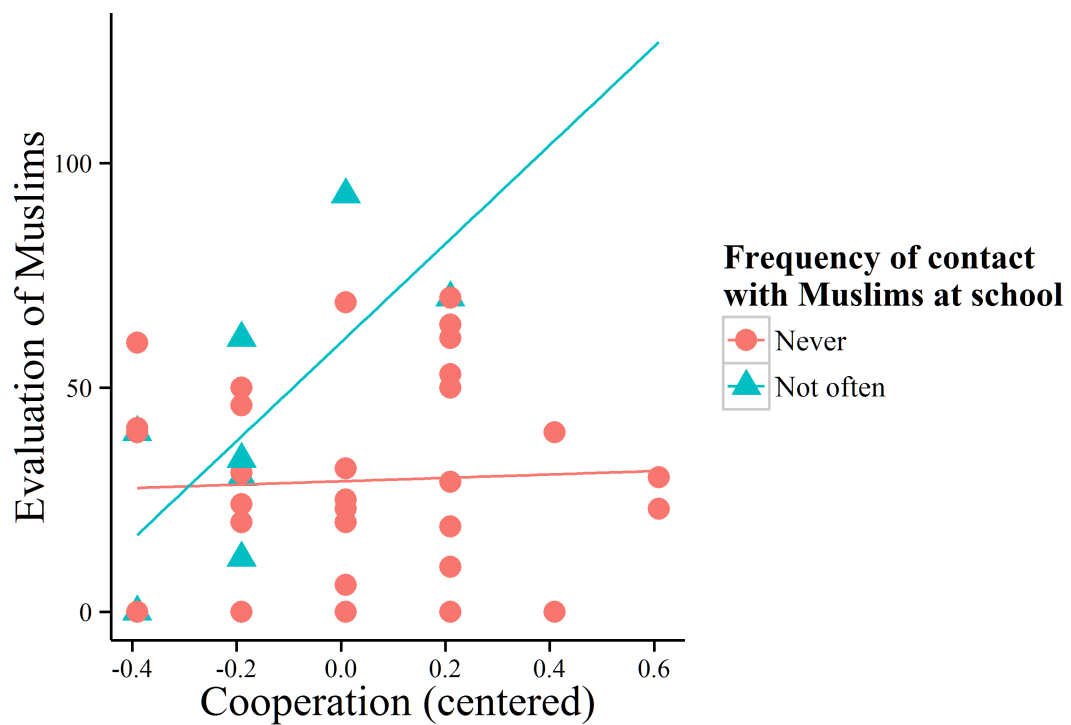


Figure 1. Scatterplot with fitted regression lines for the ‘never’ and ‘not often’ contact frequency subgroups.

Discussion

This study addressed the question whether native Dutch adolescents’ contact frequency with Muslims at school was positively associated with more positive evaluations of Muslims, and if the willingness to cooperate acted as a moderator of the effect of intergroup contact frequency on the evaluation of Muslims. Findings in this study generally supported expectations that increases in intergroup contact frequency, cooperation, and additionally, the facilitating effect of cooperation by contact frequency were positively related to increases in positive evaluations.

First, the expectation that native Dutch adolescents’ increased contact frequency with Muslims at school was related to increases in positive evaluations of Muslims, was indeed confirmed in this study. This finding posits that native Dutch adolescents’ exposure to Muslims at school increased their liking for Muslims in general. This is in line with previous

research that indicated that increased contact frequency by the ingroup with the outgroup indeed promotes positive evaluations of the outgroup (Bornstein, 1989).

Secondly, the expectation that native Dutch adolescents' willingness to cooperate with Muslim peers indeed resulted to an increase in positive evaluations of Muslims was confirmed. This finding posits cooperation is an effective strategy to increase native Dutch adolescents' liking for Muslims, when striving for success on collective goals. This was in accordance with previous studies that suggested ingroup members' willingness to cooperate with outgroup members increased outgroup liking (Gaertner & Dovidio, 2000; Aronson et al., 1978; Allport, 1954).

Lastly, as expected, the positive effect of contact frequency on Muslim evaluations became stronger the higher native Dutch adolescents' willingness to cooperate. No research to date had examined whether the willingness to cooperate facilitates intergroup contact frequency as a moderator in attaining increases in positive outgroup evaluations. An interaction effect was found between native Dutch adolescents' contact frequency with Muslims and their willingness to cooperate, on the evaluation of Muslims. However, the sample was comprised only of participants whom had little to no previous contact with Muslims. Nevertheless, this may suggest stronger effects for native Dutch adolescents in classrooms with a higher count of Muslim peers. Several studies had suggested that cooperative contact, that is, group members' willingness to cooperate with outgroup members, could facilitate the effect of increased intergroup contact frequency on outgroup evaluations, when intergroup contact was viewed as pleasant (Islam & Hewstone, 2003; Kuchenbrandt et al., 2013; Wolsko et al., 2003). While the degree to which native Dutch adolescents' viewed their direct contact experiences with Muslims as pleasant was not investigated in the present study, Bornstein (1989) implied that the ingroup's contact quantity with the outgroup was directly related to better evaluations of the outgroup. Additionally, Tausch et al. (2007) found a non-mediated effect of intergroup contact frequency on the reduction of outgroup prejudice. It was thereby assumed in the present study that mere increases in contact exposure to Muslim peers would directly lead to better evaluations of Muslims, thus indicating mere contact exposure would generally produce pleasant intergroup interactions. This was also confirmed by the first hypothesis of this study.

Limitations

Findings in the current study have provided support for the positive effect of contact frequency, and the facilitating factor of native Dutch adolescents' willingness to cooperate with Muslim peers, on the evaluation of Muslims. However, this study is not without limitations.

First, the sample of this study was comprised of only 43 native Dutch pupils from considerably homogeneous Dutch classrooms. This undermines the external validity of the found interaction effect of contact frequency by cooperation. The few pupils, who had experienced contact with Muslim peers, did report better evaluations of Muslims relative to pupils who had not. However they also reported the degree of contact exposure was low in frequency. Although the findings in the present study may suggest increased intergroup contact frequency is related to more positive regards towards Muslims, this effect was only relevant to groups who have reported low levels of intergroup contact frequency.

Second, native Dutch pupils who had reported no previous contact exposure with Muslims may have been susceptible to stereotypical information about Muslims in the media (Allen & Nielsen, 2002), or prejudiced people in their social circles (Paluck & Green, 2009). Stereotyping entails preconceived negatively coloured ideas about outgroup attitudes and traits (Paluck & Green, 2009). Thus, being presented with a Muslim name could have triggered preconceived negative stereotypical information about Muslims, consequently leading Dutch pupils to initially expect their Muslim co-player would not be willing to cooperate. This is evidenced by the notion that group members' established outgroup stereotypes are predominantly stable and rarely change (Wolsko et al., 2003).

Furthermore, mediating factors like intergroup anxiety or negative contact exposure were not examined in this study. Intergroup anxiety is defined as anticipated threat and insecurity regarding outgroup members in intergroup interactions (Pettigrew & Tropp, 2006). Though participants' level of contact was relatively low, intergroup anxiety may have contributed to native Dutch respondents' prior avoidance of contact with Muslims, due to anticipated threats during interactions.

Future research

Despite its limitations, this study should contribute to how intergroup relationships

between native Dutch adolescents and Muslim peers can be promoted. It offers a useful framework for optimizing the effect of increased intergroup contact frequency to increase outgroup liking. Also, it suggests Allport's (1954) conditions of intergroup cooperation and mutual goals may be established by taking into consideration ingroup members' willingness to cooperate, to assess the effectiveness of cooperation interventions. Future research could examine how to increase the incentive to cooperate with the outgroup, when ingroup members show initial inclinations towards competitiveness. The jigsaw learning technique, for example, offers the incentive to learn from different group members with each possessing unique portions of information that contribute to success on collective goals (Aronson et al., 1978).

Furthermore, studies could replicate the effects of the current study in schools with more Muslim diversity. This would contribute to determining further whether they indeed prove viable in promoting the degree of native Dutch adolescents' positive evaluations of Muslims, when the opportunity for frequent contact exposure is present. Also, replicating the effects of this study among a larger sample of native Dutch adolescents should lead to more generalizable results (external validity). When controlling for the mediating factor of intergroup anxiety, the effects of cooperation and increased contact frequency may improve. This could result to a better understanding of how intergroup relations between native Dutch adolescents and Muslims may be promoted.

In relatively homogeneous Dutch classrooms where the opportunity for contact with Muslims might not be possible or favoured, imagined contact and cooperation may prove to be viable strategies. Kuchenbrandt et al. (2013) have concluded simply imagining positive contact or cooperative contact enhances positive evaluations of outgroup members. These effects might not be as strong as direct and frequent cooperative contact exposure, but they might facilitate future positive contact potential with Muslims and possibly incite native Dutch adolescents to cooperate with Muslims in real life situations.

Conclusion

In the present study, the positive effect of increased contact frequency, and the facilitating factor of native Dutch adolescents' willingness to cooperate with Muslim peers were indeed positively related to positive evaluations of Muslims. These findings indicate intergroup cooperation, increased intergroup contact frequency and the facilitating effect of intergroup cooperation during contact exposure to Muslims at school may indeed promote

intergroup relations, by improving the degree to which native Dutch adolescents' view Muslims as likeable. Additionally, this study offers support for the notion that, if present, Allport's (1954) conditions of direct contact, equal status between groups, intergroup cooperation, mutual goals and the support of authorities or governing institutions would promote positive effects in Dutch classrooms. Furthermore, it may offer a usable framework for school policies to improve positive contact between native Dutch- and Muslim adolescents, ultimately reducing negative dispositions towards Muslims in The Netherlands by future generations of Dutch pupils.

References

- Allen, C., & Nielsen, J. S. (2002). *Summary report on Islamophobia in the EU after 11 September 2001*, Vienna: European Monitoring Centre on Racism and Xenophobia.
- Allport, G. (1954). *The nature of prejudice*. Garden City, NJ: Doubleday Anchor Books.
- Aronson, E., Bridgeman, D. L., & Geffner, R. (1978). Interdependent interactions and prosocial behavior. *Journal of Research and Development in Education*, 12, 16-27.
- Bornstein, R. F. (1989). Exposure and affect: Overview and meta-analysis of research, 1968–1987. *Psychological Bulletin*, 106, 265–289.
- Dovidio, J. F., Gaertner, S. L., & Kawakami, K. (2003). Intergroup Contact: The Past, Present, and the Future. *Group Processes & Intergroup Relations*, 6(1), 5-21.
- Ford, R. (2008). Is racial prejudice declining in Britain? *British Journal of Sociology*, 59(4), 609-636.
- Forsyth, D. R. (2010). *Group Dynamics* (5th ed.). Belmont, CA: Wadsworth, Cengage Learning.
- Gaertner, S. L., & Dovidio, J. F. (2000). *Reducing intergroup bias: The Common Ingroup Identity Model*. Philadelphia, PA: Psychology Press.
- Gieling, M., Thijs, J., & Verkuyten, M. (2014). Dutch adolescents' tolerance of Muslim immigrants: the role of assimilation ideology, intergroup contact, and national identification. *Journal of Applied Social Psychology* 2014, 44, 155-165.
- Islam, M. R., & Hewstone, M. (1993). Dimension of Contact as Predictors of Intergroup Anxiety, Perceived Outgroup Variability and Outgroup Attitude: An Integrative Model. *Personality and Social Psychology Bulletin*, 19, 700-710.

- Kuchenbrandt, D., Eyssele, F., Seidel, S. K. (2013). Cooperation makes it happen: Imagined intergroup cooperation enhances the positive effects of imagined contact. *Group Processes & Intergroup Relations*, 16(5), 635-647.
- Orbell, J., Dawes, R., & Schwartz-Shea, P. (1994). Trust, social categories, and individuals: The case of gender. *Motivation and Emotion*, 18(2), 109-128.
- Paluck, E. L., & Green, D. P. (2009). Prejudice reduction: What works? A review and assessment of research and practice. *Annual review of psychology*, 60, 339-367.
- Pettigrew, T. F. (1998). Intergroup Contact Theory. *Annual review of Psychology*, 49, 65-85.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of personality and social psychology*, 90(5), 751-783.
- SCP, Sociaal en Cultureel Planbureau (2004). *Moslim in Nederland* [Muslim in The Netherlands]. Den Haag: Sociaal Cultureel Planbureau.
- SCR, Sociaal- Cultureel Rapport 1998. *25 jaar sociale verandering* [25 years of social change]. Den Haag: Sociaal en Cultureel Planbureau.
- Sherif, M., Harvey, O. J., White, B. J., Hood, W. R., & Sherif, C. W. (1961). *Intergroup conflict and cooperation. The Robbers Cave experiment*. Norman, OK: University of Oklahoma Book Exchange.
- Tajfel, H., Billig, M. G., Bundy, R. P., & Flament, C. (1971). Social categorization and intergroup behaviour. *European Journal of Social Psychology*, 1(2), 1-39.
- Tausch, N., Tam, T., Hewstone, M., Kenworthy, J., & Cairns, E. (2007). Individual-level and group-level mediators of contact effects in Northern Ireland: The moderating role of social identification. *British Journal of Social Psychology*, 46, 541-556.
- Van Geel, M., & Vedder, P. (2010). Multicultural attitudes among adolescents: The role of ethnic diversity in the classroom. *Group Processes & Intergroup Relations*, 14(4), 549-558.
- Velasco González, K., Verkuyten, M., Weesie, J., & Poppe, E. (2008). Prejudice towards Muslims in the Netherlands: Testing integrated threat theory. *British Journal of Social Psychology*, 47, 667-685.
- Verkuyten, M., & Thijs, J. (2002). Multiculturalism among minority and majority adolescents in the Netherlands. *Elsevier*, 26(1), 91-108.
- White, F. A., Wootton, B., Man, J., Diaz, H., Rasiah, J., Swift, E., & Wilkinson, A. (2009). Adolescent racial prejudice development: The role of friendship quality and interracial contact. *International Journal of Intercultural Relations*, 33, 524-534.

Wolsko, C., Park, B., Judd, C. M., & Bachelor, J. (2003). Intergroup Contact: Effects on Group Evaluations and Perceived Variability. *Group Processes & Intergroup Relations*, 6(1), 93-110.