# The Direct, Indirect, and Conditional Effects of Intergroup Contact on Outgroup Evaluation among University Students in Myanmar

ミャンマーの大学生における集団間接触が外集団評価に及ぼす効果

A Dissertation Presented to the Graduate School of Arts and Sciences International Christian University for the Degree of Doctor of Philosophy

国際基督教大学 大学院 アーツ・サイエンス研究科提出博士論文

April 8, 2019

Aung Ko Ko Lynn アウンココリン

# The Direct, Indirect, and Conditional Effects of Intergroup Contact on Outgroup Evaluation among University Students in Myanmar

ミャンマーの大学生における集団間接触が外集団評価に及ぼす効果

A Dissertation Presented to the Graduate School of Arts and Sciences, International Christian University, for the Degree of Doctor of Philosophy

国際基督教大学 大学院 アーツ・サイエンス研究科提出博士論文

April 8, 2019 2 0 1 9年4月8日

Aung Ko Ko Lynn アウンココリン

#### 審査委員会メンバー

#### Members of Evaluation Committee

主査 森島 泰則

Chief Examiner

教授

承認署名

Signature

副査 磯崎 三喜年

Examiner

名誉教授

承認署名

Signature

副査 西村 馨

Examiner

上級准教授

承認署名

Signature

副査 佐藤 豊

Examiner

教授

承認署名

Signature

Y SA TO

#### Acknowledgements

Authoring this dissertation might be the most challenging task I have ever done. Without the support of the benefactors, I could not accomplish such a difficult task.

During the six-year-long period of my study in ICU, thanks to Professor ISOZAKI, I became to love social psychology and psychological research and gradually acquired essential research skills. It is nothing but Professor ISOZAKI's patient guidance and insightful instruction that inspires genuine enthusiasm in me for social psychological research. I want to express my deepest gratitude to Professor ISOZAKI, the godfather of my academic life.

Many heartfelt thanks are also towards Professor MORISHIMA, my thesis advisor, for his persistent encouragement, guidance, and support throughout my study. Particularly, due to Professor MORISHIMA's insightful guidance, I was able to view my social psychological research plan from the cognitive psychological perspective.

Besides, I appreciate the valuable contribution of Professor NISHIMURA, who kindly guided me on how to criticize my research plan from the perspectives of Erikson's ego-identity theory, and Professor SATO for his insightful comments and suggestions in the defense interview.

My sincere thanks also go to my friends in Myanmar, who enthusiastically helped me in data collection and data entry.

Lastly, I would like to thank my family –my parents, my wife, and my siblings– for supporting me throughout my life.

## **Dedication**

This dissertation is dedicated to my children –

Pyi Nyein Chan Lynn and Pyi Chit Khin Lynn

# **List of Figures**

Figure		Page
1 iguic		No.
Figure 3.1.	Structural equation model (Causal Model 1) for testing	26
	Hypothesis 1 with standardized regression coefficients of	
	significant paths.	
Figure 3.2.	An alternative model (Causal Model 2) for testing	29
	Hypothesis 1 with standardized regression coefficients of	
	significant paths.	
Figure 4.1.	Structural equation model (Mediation Model 1) for testing	37
	Hypothesis 2a with standardized regression coefficients of	
	significant paths.	
Figure 4.2.	Structural equation model (Mediation Model 2) for testing	40
	Hypothesis 2b with standardized regression coefficients of	
	significant paths.	
Figure 4.3.	Structural equation model (Mediation Model 3) for testing	43
	Hypothesis 2c with standardized regression coefficients of	
	significant paths.	
Figure 4.4.	Structural equation model (Mediation Model 4) depicting	46
	mediation of intergroup anxiety, realistic intergroup threat,	
	and symbolic intergroup threat on the relationship between	
	intergroup contact quality and negative outgroup evaluation.	
Figure 4.5.	Structural equation model (Mediation Model 5) for testing	52
	Hypothesis 3a with standardized regression coefficients of	
	significant paths.	
Figure 4.6.	Structural equation model (Mediation Model 6) for testing	55
	Hypothesis 3b with standardized regression coefficients of	
	significant paths.	
Figure 4.7.	Structural equation model (Mediation Model 7) for testing	58
	Hypothesis 3c with standardized regression coefficients of	
	significant paths.	

61 Figure 4.8. Structural equation model (Mediation Model 8) depicting mediation of intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat on the relationships between intergroup contact quantity and negative outgroup evaluation. Figure 4.9. Structural equation model (Mediation Model 9) for testing 67 Hypothesis 4a with standardized regression coefficients of significant paths. 70 *Figure 4.10.* Structural equation model (Mediation Model 10) for testing Hypothesis 4b with standardized regression coefficients of significant paths. Structural equation model (Mediation Model 11) for testing 73 *Figure 4.11.* Hypothesis 4c with standardized regression coefficients of significant paths. *Figure 4.12.* Structural equation model depicting parallel mediation of 76 intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat on the relationship between negative intergroup contact and negative outgroup evaluation. Figure 5.1. Conceptual model depicting moderation of national group 87 status, local group status, and participants' target outgroup on the relationship between intergroup contact quality and negative outgroup evaluation. 89 Figure 5.2. Johnson-Neyman plot showing moderation effect of national group status on the relationship between intergroup contact quality and negative outgroup evaluation. 91 Figure 5.3. Johnson-Neyman plot showing moderation effect of local group status on the relationship between intergroup contact quality and negative outgroup evaluation. Johnson-Neyman plot showing moderation effect of Figure 5.4. 92 participants' target outgroup on the relationship between intergroup contact quality and negative outgroup evaluation.

95 Figure 5.5. Conceptual model depicting moderation of national group status, local group status, and participants' target outgroup on the relationship between intergroup contact quantity and negative outgroup evaluation. Figure 5.6. Johnson-Neyman plot showing moderation effect of 97 national group status on the relationship between intergroup contact quantity and negative outgroup evaluation. Figure 5.7. 99 Johnson-Neyman plot showing moderation effect of local group status on the relationship between intergroup contact quantity and negative outgroup evaluation. Figure 5.8. Johnson-Neyman plot showing moderation effect of 101 participants' target outgroup on the relationship between intergroup contact quantity and negative outgroup evaluation. Figure 5.9. Conceptual model depicting moderation of national group 103 status, local group status, and participants' target outgroup on the relationship between negative intergroup contact and negative outgroup evaluation. Johnson-Neyman plot showing moderation effect of 105 *Figure 5.10.* national group status on the relationship between negative intergroup contact and negative outgroup evaluation. 106 *Figure 5.11.* Johnson-Neyman plot showing moderation effect of local group status on the relationship between negative intergroup contact and negative outgroup evaluation. Johnson-Neyman plot showing moderation effect of *Figure 5.12.* 108 participants' target outgroup on the relationship between negative intergroup contact and negative outgroup evaluation. Figure 6.1. Conceptual model (Moderated Mediation Model 1) 114 depicting moderation of national group status on the mediation model in which intergroup anxiety mediates the relationship between intergroup contact quality and negative outgroup evaluation.

Johnson-Neyman plot showing moderation effect of 116 Figure 6.2. national group status on the relationship between intergroup anxiety and negative outgroup evaluation. Figure 6.3. Conceptual model (Moderated Mediation Model 2) 117 depicting moderation of local group status on the mediation model in which intergroup anxiety mediates the relationship between intergroup contact quality and negative outgroup evaluation. Figure 6.4. Conceptual model (Moderated Mediation Model 3) 118 depicting moderation of participants' target outgroup on the mediation model in which intergroup anxiety mediates the relationship between intergroup contact quality and negative outgroup evaluation. Figure 6.5. Conceptual model (Moderated Mediation Model 4) 120 depicting moderation of national group status on the mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation. Johnson-Neyman plot showing moderation effect of Figure 6.6. 121 national group status on the relationship between realistic intergroup threat and negative outgroup evaluation. Figure 6.7. Conceptual model (Moderated Mediation Model 5) 122 depicting moderation of local group status on the mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation. 123 Figure 6.8. Johnson-Neyman plot showing moderation effect of local group status on the relationship between realistic intergroup threat and negative outgroup evaluation.

Figure 6.9. Conceptual model (Moderated Mediation Model 6) 125 depicting moderation of participants' target outgroup on the mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation. Johnson-Neyman plot showing moderation effect of *Figure 6.10.* 126 participants' target outgroup on the mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation. Figure 6.11. Conceptual model (Moderated Mediation Model 7) 127 depicting moderation of national group status on the mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation. *Figure 6.12.* Johnson-Neyman plot showing moderation effect of 128 national group status on the mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation. Figure 6.13. Conceptual model (Moderated Mediation Model 8) 130 depicting moderation of local group status on the mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation. Figure 6.14. Conceptual model (Moderated Mediation Model 9) 131 depicting moderation of participants' target outgroup on the mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation.

Figure 6.15. Johnson-Neyman plot showing moderation effect of 132 participants' target outgroup on the mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation. *Figure* 6.16. Conceptual model (Moderated Mediation Model 10) 133 depicting moderation of national group status on the mediation model in which intergroup anxiety mediates the relationship between intergroup contact quantity and negative outgroup evaluation. *Figure 6.17.* Johnson-Neyman plot showing moderation effect of 134 national group status on the relationship between intergroup contact quantity and intergroup anxiety. *Figure* 6.18. Conceptual model (Moderated Mediation Model 11) 135 depicting moderation of local group status on the mediation model in which intergroup anxiety mediates the relationship between intergroup contact quantity and negative outgroup evaluation. *Figure 6.19.* Johnson-Neyman plot showing moderation effect of local 136 group status on the relationship between intergroup contact quantity and intergroup anxiety. Figure 6.20. Conceptual model (Moderated Mediation Model 12) 138 depicting moderation of participants' target outgroup on the mediation model in which intergroup anxiety mediates the relationship between intergroup contact quantity and negative outgroup evaluation. Figure 6.21. Conceptual model (Moderated Mediation Model 13) 139 depicting moderation of national group status on the mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation.

- Figure 6.22. Conceptual model (Moderated Mediation Model 14) 140 depicting moderation of local group status on the mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation. Figure 6.23. Conceptual model (Moderated Mediation Model 15) 141 depicting moderation of participants' target outgroup on the mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation. Figure 6.24. Conceptual model (Moderated Mediation Model 16) 142 depicting moderation of national group status on the mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact
- Figure 6.25. Conceptual model (Moderated Mediation Model 17) 143 depicting moderation of local group status on the mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation.

quantity and negative outgroup evaluation.

- Figure 6.26. Conceptual model (Moderated Mediation Model 18)

  depicting moderation of participants' target outgroup on the mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation.
- Figure 6.27. Conceptual model (Moderated Mediation Model 19)

  depicting moderation of national group status on the mediation model in which intergroup anxiety mediates the relationship between negative intergroup contact and negative outgroup evaluation.

Figure 6.28. Conceptual model (Moderated Mediation Model 20) 146 depicting moderation of local group status on the mediation model in which intergroup anxiety mediates the relationship between negative intergroup contact and negative outgroup evaluation. *Figure 6.29.* Conceptual model (Moderated Mediation Model 21) 147 depicting moderation of participants' target outgroup on the mediation model in which intergroup anxiety mediates the relationship between negative intergroup contact and negative outgroup evaluation. *Figure 6.30.* Conceptual model (Moderated Mediation Model 22) 148 depicting moderation of national group status on the mediation model in which realistic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation. 150 Figure 6.31. Conceptual model (Moderated Mediation Model 23) depicting moderation of local group status on the mediation model in which realistic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation. *Figure 6.32.* Conceptual model (Moderated Mediation Model 24) 151 depicting moderation of participants' target outgroup on the mediation model in which realistic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation. Figure 6.33. Conceptual model (Moderated Mediation Model 25) 152 depicting moderation of national group status on the mediation model in which symbolic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation. *Figure* 6.34. Johnson-Neyman plot showing moderation effect of 153 national group status on the relationship between negative intergroup contact and symbolic intergroup threat.

Figure 6.35. Conceptual model (Moderated Mediation Model 26) 154 depicting moderation of local group status on the mediation model in which symbolic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation. *Figure* 6.36. Conceptual model (Moderated Mediation Model 27) 155 depicting moderation of participants' target outgroup on the mediation model in which symbolic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation. Figure 7.1. Structural equation model (Causal Model) for testing 166 regional difference in contact-evaluation relationship. Figure 7.2. Conceptual path model (Parallel Mediation Model) for 172 investigating regional difference in indirect effect of intergroup contact quality on negative outgroup evaluation through three mediators. Figure 7.3. Conceptual path model (Parallel Mediation Model) for 178 testing regional difference in indirect effect of intergroup contact quantity on negative outgroup evaluation through three mediators. Figure 7.4. Conceptual path model (Parallel Mediation Model) for 184 testing regional difference in indirect effect of negative outgroup contact on negative outgroup evaluation through three mediators.

# **List of Tables**

Table		Page No.
Table 3.1.	Zero-Order Correlations among Variables and Descriptive	25
	of Variables in Hypothesis 1	
Table 4.1.	Zero-Order Correlations among Variables and Descriptive	36
	of Variables in Hypothesis 2a	
Table 4.2.	Zero-Order Correlations among Variables and Descriptive	39
	of Variables in Hypothesis 2b	
Table 4.3.	Zero-Order Correlations among Variables and Descriptive	42
	of Variables in Hypothesis 2c	
Table 4.4.	Zero-Order Correlations among Variables and Descriptive	45
	of Variables in Parallel Mediation Model	
Table 4.4.1.	Comparison of Direct, Indirect, and Total Effect of Four	50
	Mediation Models Predicting Negative Outgroup	
	Evaluation by Intergroup Contact Quality	
Table 4.5.	Zero-Order Correlations among Variables and Descriptive	51
	of Variables in Hypothesis 3a	
Table 4.6.	Zero-Order Correlations among Variables and Descriptive	54
	of Variables in Hypothesis 3b	
Table 4.7.	Zero-Order Correlations among Variables and Descriptive	57
	of Variables in Hypothesis 3c	
Table 4.8.	Zero-Order Correlations among Variables and Descriptive	60
	of Variables in Parallel Mediation Model	
Table 4.8.1.	Comparison of Direct, Indirect, and Total Effect of Four	65
	Mediational Models Predicting Negative Outgroup	
	Evaluation by Intergroup Contact Quantity	
Table 4.9.	Zero-Order Correlations among Variables and Descriptive	66
	of Variables in Hypothesis 4a	
Table 4.10.	Zero-Order Correlations among Variables and Descriptive	69
	of Variables in Hypothesis 4b	
Table 4.11.	Zero-Order Correlations among Variables and Descriptive	72
	of Variables in Hypothesis 4c	
Table 4.12.	Zero-Order Correlations among Variables and Descriptive	75
	of Variables in Parallel Mediation Model	

4.12.1.	Comparison of Direct, Indirect, and Total Effect of Four	80
	Mediational Models Predicting Negative Outgroup	
	Evaluation by Negative Intergroup Contact	
4.12.2.	Comparison of Direct, Indirect, and Total Effect of Twelve	81
	Mediation Models Predicting Negative Outgroup	
	Evaluation by Three Predictors	
Table 5.1.	Descriptive of Variables in Hypothesis 5	86
Table 5.2.	Descriptive of Variables in Hypothesis 6	94
Table 5.3.	Descriptive of Variables in Hypothesis 7	102
Table 7.1.	Zero-Order Correlations among Variables and Descriptive	165
	of Variables in Three Regions	
Table 7.2.	Standardized Beta Coefficients of Paths between Predictors	168
	and Output Variable in Causal Model and Squared Multiple	
	Correlations of Three Regions	
Table 7.3.	Outputs of Pairwise Parameter Comparison for Direct	170
	Effect of Three Dimension Intergroup Contact on Negative	
	Outgroup Evaluation	
Table 7.4.	Standardized Beta Coefficients of Paths between Predictors	173
	and Output Variable in Path Model and Squared Multiple	
	Correlations of Three Regions	
Table 7.5.	Outputs of Pairwise Parameter Comparison for Indirect	176
	Effect of Intergroup Contact Quality on Negative Outgroup	
	Evaluation through Three Mediators	
Table 7.6.	Standardized Beta Coefficients of Paths between Predictors	179
	and Output Variable in Path Model and Squared Multiple	
	Correlations of Individual Region	
Table 7.7.	Outputs of Pairwise Parameter Comparison for Indirect	183
	Effect of Intergroup Contact Quantity on Negative Outgroup	
	Evaluation through Three Mediators	
Table 7.8.	Standardized Beta Coefficients of Paths between Predictors	186
	and Output Variable in Path Model and Squared Multiple	
	Correlations of Individual Region	
Table 7.9.	Outputs of Pairwise Parameter Comparison for Indirect	189
	Effect of Negative Intergroup Contact on Negative	
	Outgroup Evaluation through Three Mediators	

#### **Summary**

Intergroup relation is an unavoidable experience in our daily life. Since 1950s, the topics 'intergroup relations' and 'intergroup conflict' were widely studied in various fields of study. Gordon Allport (1954) conceptualized intergroup contact under four conditions as an effective way to improve intergroup relations. The four positive features of intergroup contact are (1) status equality, (2) common goals, (3) cooperation, and (4) support by authority. The Integrated Threat Theory (ITT) (Stephan and Stephan, 2000) states that intergroup anxiety and intergroup threat predicts intergroup prejudice. Intergroup contact is considered to reduce intergroup anxiety and intergroup threat, and then, it reduces prejudice indirectly. According to the Integrated Threat Theory, intergroup contact indirectly reduces prejudice. Studies have shown that the effects of intergroup contact on prejudice reduction are dependent on individual's group status. In the present study, three dimensions of intergroup contact (qualitative, quantitative, and negative one) are included as independent variables. Intergroup anxiety and two dimensions of intergroup threat (realistic and symbolic dimensions) are measured as mediators. Participants' group status in two-level (national and local contexts), target outgroup, and residential region are included as moderators. Negative outgroup evaluation is measured as the dependent variable. Based on the concepts of two theories, the direct and indirect effects of intergroup contact on outgroup evaluation are investigated. Conditional effects (or moderation effects) of moderators on the direct and indirect effects of intergroup contact are also investigated. Results of data analysis showed that the direct, indirect, and conditional effects of intergroup contact on negative outgroup evaluation are significant. In consistent with predictions of the contact hypothesis, the qualitative intergroup contact is found to predict a significant decrease in negative outgroup evaluation. In line with the findings of previous studies, intergroup anxiety is found to mediate the effects of intergroup contact on negative outgroup evaluation. The conditional

effects of group status and residential region are significantly found in the direct relationship between intergroup contact and negative outgroup evaluation. Both in national and local contexts, minority status group members reported a significantly higher negative outgroup evaluation than those of majority status group members. National minority group members are found to evaluate another national minority group co-existing in the same region more negatively than the national majority group. Where intergroup conflict is absent, the negative interpersonal experience is found to predict a relatively higher negative outgroup evaluation. Where intergroup conflict is present, negative interpersonal experience does not have any effect on negative outgroup evaluation.

#### 要約

人間は、集団間の関係を避けて日常生活を送ることは難しい。1950 年代以降、「集団間関係」と「集団間競合」というトピックは、さまざまな分野で広く研究されてきた。

中でも、ゴードン・オールポートは、集団間の関係を改善するための効果的な方法を概念化した社会心理学者として知られている。ゴードン・オールポート(1954)は、集団間の偏見を低減し、集団間の関係を改善するための強力なツールとして集団間の接触を概念化した。オールポートは、集団間の接触が偏見を低減する上で効果的な4つの条件を挙げている。その4つの条件とは、(1)地位の平等、(2)共通目標、(3)協力、(4)権威による支援である。オールポートの接触仮説によると、集団間の接触は直接に偏見を低減する。統合脅威論(ITT)(ステファンとステファン、1996)によると、集団間の不安や集団間の脅威は、集団間の偏見の原因となる。集団間の接触は、集団間の不安や脅威を軽減すると考えられる。統合脅威論によれば、集団間の接触は、間接的に偏見を低減する。先行研究では、偏見の低減における集団間接触の効果は、集団内の状況に応じて変化することを示している。つまり、集団間接触の効果は、文脈に依存している。

そこで、本研究では、集団間接触の3つの次元「質的次元、量的次元、負の次元」を独立変数として設定した。また、集団間不安や集団間脅威の2つの次元「現実的次元、象徴的次元」をメディエーター変数とした。参加者の集団内地位、「国家的文脈、地域的文脈」、対象の外集団や居住地をモデレータ変数とした。そして、負の外集団評価を従属変数として測定した。ここでは、先に述べた2つの社会心理学の理論に基づき、負の外集団評価に関する集団間接触の直接的および間接的影響を調査的研究によって検討した。参加者は、ミャンマーの大学生4,126人であった。

データの分析は、SPSSおよびAMOSを用いてなされた。その結果、

接触の質が負の外集団評価を抑制し、負の接触が負の外集団評価をもたらすことが明らかになった。その一方で、少数者集団の成員は、多数者集団の成員よりも、国全体の文脈そして地域的文脈においても、接触の質、量いずれのレベルにもかかわらず、より高い負の外集団評価を示した

0

接触の質がもたらす効果は、地域によっても異なることが明らかとなり、多民族国家の歴史と地域的特性が、集団間関係に及ぼす複雑な影響を示している。s

本研究の調査結果は、オールポートの接触仮説と統合脅威論の理論的な概念化と一致している。一般に、集団間接触の質は、直接的に負の外集団評価の低減を予測している。また、集団間不安は、負の外集団評価に関する集団間接触の効果を媒介する最強のメディエーターであることが示された。さらに、少数者集団の参加者は、多数者集団よりも同じ地域に住む他の少数者集団に対して、強い負の外集団評価を示した。この他、集団間競合がない場合、否定的な対人経験が高い負の外集団評価をもたらし、集団間競合がある場合、否定的な対人経験は負の外集団評価に影響しないことが明らかとなった。

これらの結果について、本研究が依拠した2つの社会心理学的理論および先行研究との関連から 精緻な考察がなされた。 Acknowledgements

Dedication

List of Figures

List of Tables

Summary

要約

## **Table of Contents**

CHAPTER 1: INTRODUCTION	1
1.1. Introduction	1
1.2. Background of the study	2
1.3. Purpose of the study	3
1.4. Research questions	5
1.5. Hypotheses	6
1.6. Operational definitions of key terms	6
CHAPTER 2: LITERATURE REVIEW	10
2.1. Roots of Intergroup Conflict	10
2.1.1. Realistic Conflict Theory (Sherif, 1966)	10
2.1.2. Relative Deprivation Theory (Gurr, 1970)	11
2.1.3. Minimal Group Paradigm (Tajfel and Billig, 1971)	11
2.1.4. Social Identity Theory (Tajfel and Turner, 1979)	12
2.1.5. Self-Categorization Theory (Turner et al., 1987)	12
2.2. Tool for Intergroup Conflict Reduction	12
2.2.1. Contact Hypothesis (Allport, 1954)	14
2.2.2. Different Kinds of Intergroup Contact.	14
2.2.3. Direct Effects of Contact	15
2.2.4. Indirect Effects of Contact.	17
2.2.5. Mediation of Intergroup Anxiety on Direct Effect of Contact	18

2.2.6. Mediation of Intergroup Threat on Direct Effect of Contact	19
2.2.7. Conditional Direct Effects of Contact	20
CHAPTER 3: direct effects of intergroup contact	22
3.1. Research Question	22
3.2. Hypothesis	22
3.3. Method	22
3.3.1. Participants	22
3.3.2. Materials	23
3.3.3. Procedure	24
3.4. Data Analysis	24
3.5. Results and Discussion	31
CHAPTER 4: INDIRECT EFFECTS OF INTERGROUP CONTACT	34
4.1. Research Question	34
4.2. Hypothesis	34
4.3. Method	34
4.3.1. Participants	34
4.3.2. Materials	34
4.3.3. Procedure	35
4.4. Data Analysis	35
4.4.1. Mediational Model 1	35
4.4.2. Mediational Model 2	38
4.4.3. Mediational Model 3	42
4.4.4. Mediational Model 4	45
4.4.5. Mediational Model 5	51
4.4.6. Mediational Model 6	53
4.4.7. Mediational Model 7	57

4.4.8. Mediational Model 8	59
4.4.9. Mediational Model 9	66
4.4.10. Mediational Model 10	69
4.4.11. Mediational Model 11	72
4.4.12. Mediational Model 12	75
4.5. Results and Discussion	82
CHAPTER 5: CONDITIONAL DIRECT EFFECTS OF INTER	GROUP CONTACT 84
5.1. Research Question	84
5.2. Hypothesis	84
5.3. Method	84
5.3.1. Participants	84
5.3.2. Materials	84
5.3.3. Procedure	85
5.4. Data Analysis	85
5.4.1. Moderation Model 1	88
5.4.2. Moderation Model 2	90
5.4.3. Moderation Model 3	91
5.4.4. Moderation Model 4	96
5.4.5. Moderation Model 5	98
5.4.6. Moderation Model 6	100
5.4.7. Moderation Model 7	104
5.4.8. Moderation Model 8	105
5.4.9. Moderation Model 9	107
5.5. Results and Discussion	108

CHAPTER 6:	CONDITIONAL	INDIRECT	EFFECTS	OF INTER	GROUP	CONTACT

	111
6.1. Research Question	111
6.2. Hypothesis	111
6.3. Method	112
6.3.1. Participants	112
6.3.2. Materials	112
6.3.3. Procedure	112
6.4. Data Analysis	112
6.4.1. Moderated Mediation Model 1	114
6.4.2. Moderated Mediation Model 2	117
6.4.3. Moderated Mediation Model 3	118
6.4.4. Moderated Mediation Model 4	119
6.4.5. Moderated Mediation Model 5	122
6.4.6. Moderated Mediation Model 6	124
6.4.7. Moderated Mediation Model 7	127
6.4.8. Moderated Mediation Model 8	129
6.4.9. Moderated Mediation Model 9	130
6.4.10. Moderated Mediation Model 10	133
6.4.11. Moderated Mediation Model 11	135
6.4.12. Moderated Mediation Model 12	137
6.4.13. Moderated Mediation Model 13	138
6.4.14. Moderated Mediation Model 14	139
6.4.15. Moderated Mediation Model 15	141
6.4.16. Moderated Mediation Model 16	142
6.4.17. Moderated Mediation Model 17	143
6.4.18. Moderated Mediation Model 18	144

6.4.19. Moderated Mediation Model 19	145
6.4.20. Moderated Mediation Model 20	146
6.4.21. Moderated Mediation Model 21	147
6.4.22. Moderated Mediation Model 22	148
6.4.23. Moderated Mediation Model 23	149
6.4.24. Moderated Mediation Model 24	150
6.4.25. Moderated Mediation Model 25	151
6.4.26. Moderated Mediation Model 26	154
6.4.27. Moderated Mediation Model 27	155
6.5. Results and Discussion	156
CHAPTER 7: REGIONAL DIFFERENCES IN EFFECTS OF INTERGROUP CO	NTACT
7.1. Regional Differences	162
7.2. Research question	163
7.3. Hypothesis	163
7.4. Method	163
7.4.1. Participants	163
7.4.2. Materials	163
7.4.3. Procedure	164
7.5. Data Analysis	164
7.5.1. Moderation Effect of Region on Direct Effect of Intergroup Contact	164
7.5.2. Moderation Effect of Region on Indirect Effect of Intergroup Contact	171
7.6. Results and Discussion	189
CHAPTER 8: DISCUSSION AND CONCLUSION	192
8.1. General Discussion	192
8.1.1. Direct Effect of Intergroup Contact	193
8.1.2. Indirect Effect of Intergroup Contact.	193

	8.1.3. Conditional Direct Effect of Intergroup Contact (Moderator: Perce	ived Group
	Status)	194
	8.1.4. Conditional Indirect Effect of Intergroup Contact (Moderator: Pero	eived Group
	Status)	195
	8.1.5. Conditional Indirect Effect of Intergroup Contact (Moderator: Part	cicipants'
	Target Outgroup)	196
	8.1.6 Conditional Direct Effects of Intergroup Contact (Moderator: Region	on)197
	8.1.7 Conditional Indirect Effects of Intergroup Contact (Moderator: Reg	gion)198
8	3.2. Conclusion	200
8	3.3. Limitations	202
8	3.4. Implications	202
8	3.5. Future Research	202
REI	FERENCES	204
API	PENDIX A	216

#### **CHAPTER 1**

#### Introduction

#### 1.1. Introduction

Human beings hardly stand alone disconnected from the social group(s). Individuals rely on a social group for two fundamental needs –need for assimilation and inclusion (Brewer, 1991; Baumeister and Leary, 1995) and need for reducing self-conceptual uncertainty (Berger and Calabrese, 1974; Hogg, Sherman, Dierselhuis, Maitner and Moffitt, 2007). Individuals belong to some social group in which its members share certain similarities and interact with each other. A social group is characterized by possession of a collective identity among its group members. Moreover, members of a social group share a specific set of obligations, and their behavior is expected, by ingroup members and people outside the social group, to meet the norms of the social group (Turner, Hogg, Oakes, Reicher and Wetherell, 1987). Individuals not only identify themselves as members of a certain group but also categorize other people as members some social group to reduce cognitive and behavioral uncertainty in engaging with people, particularly strangers at the first encounter (Berger and Bradac, 1982). Social categorization provides information about people as characteristics of a particular social group they belong to (McCauley, Jussim and Lee, 1995). Following the social categorization, intergroup processes such as ingroup-outgroup differentiating, stereotyping and intergroup bias develops consequently. Prosocial behavior is mostly directed toward members of ingroup rather than non-members, and individuals engage intragroup helping in the form of reciprocal altruism. To improve one's collective selfesteem, ingroup favoritism and outgroup derogation arise without a history of conflict

between groups (Taylor, and Doria, 1981). When two groups have aggressive goals for acquiring limited resources, intergroup hostility arises from competition (Jackson, 1993). Allport (1954) proposed 'contact hypothesis' stating that intergroup contact potentially reduces intergroup prejudice and improve intergroup relations.

#### 1.2. Background of the study

An individual's ethnic identity, a subjective identification with one's ethnic group, is a powerful self-identity that plays a vital role in one's everyday life. An individual's strength of ethnic identity was found to associate with positive self-esteem if one's ethnic group is positively evaluated (Levine and Hogg, 2010). An individual's religious identity is equally important as his ethnic identity in a feature of minority people's self-concept and associates with one's well-being. Both racial and religious identity often occur as the background of violent intergroup conflicts (Abu-Rayya and Abu-Rayya, 2009).

The present study aims at investigating the effects of intergroup contact on negative outgroup evaluation (instead of prejudice or outgroup attitudes) among university students in Myanmar, a culturally and ethnically diverse country. Intergroup relations among social groups in Myanmar are not always harmonious and friendly. National population of Myanmar mainly comprises eight ethnic groups, and some ethnic groups used to be citizens of four independent kingdoms. Those independent kingdoms were sometimes annexed into Burmese empire. The last Burmese Empire collapsed in 1885 and became a British colony. In 1948, after gaining independence from British, Union of the Republic of Burma (the name 'Burma' was given by the British and used until 1989, then it was changed as 'Myanmar') was founded by voluntary associations of indigenous people living in five territories—Burma Proper (former Burmese Empire), Federated Shan States, Karenni State, Kachin State, and Chin Special District.

Among the eight ethnic groups, four groups practice Buddhism while another four groups Christianity. Written and spoken language of each ethnic group is different from that of other groups. In Myanmar, an individual's ethnicity and religious affiliation are more accentuated than one's citizenship. A citizen's ethnicity and religious affiliation are mandatory information in the citizenship ID card and are an essential part of one's biodata used everywhere.

During the early days of independence, Karen separatist's movement arose, and it is the starting point of seven-decade-long intrastate conflict in Myanmar. As time passed, the number of ethnic-based insurgent groups steadily increased in response to the failure of successive national governments to fulfill their commitment to assuring ethnic equality and self-determination of minority ethnic people who co-founded the Union. Internal conflict in Myanmar characterizes as armed conflict between the national army and ethnic armed organizations (EAOs). Compared to contemporary intergroup conflicts around the world such as the conflict in Rwanda, Sudan, and Syria, the intergroup conflict in Myanmar seems to be relatively mild and less violent. However, intergroup conflict in Myanmar has gradually become a protracted one.

#### 1.3. Purpose of the study

Various dimensions of intergroup contact were significantly found to negatively associate with intergroup prejudice or negative outgroup attitudes (Pettigrew and Tropp, 2006). However, the direct effect of intergroup contact on prejudice reduction varied across different studies due to some confounding factors. The direct effect of intergroup contact on prejudice reduction is mediated and moderated by some factors. Some studies focused on mediated effect and moderated the effect of intergroup contact on prejudice reduction, and the important role of mediators and moderator in contact-prejudice relationship has been well-documented (Stephan and Renfro, 2002; Voci and Hewstone, 2003; Tausch, Hewstone,

Kenworthy and Cairns, 2007; Pettigrew and Tropp, 2008). An intergroup contact study should investigate the direct effect of intergroup contact on outgroup attitudes as well as the indirect or mediation effect (due to mediators) and conditional or moderation effect (due to moderators) of intergroup contact on outgroup evaluation. In the present study, the direct effect of three different dimensions of intergroup contact, the indirect effect of intergroup contact via intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat, and moderation effect of group status and participants' target outgroup on the effect of intergroup contact on negative outgroup evaluation will be studied. General and specific purposes of the present study are stated below.

#### 1.3.1. General purposes of the study

- 1. To test of Allport (1954)'s contact hypothesis –intergroup contact in optimal conditions can reduce negative outgroup evaluation– in Myanmar context.
- 2. To test conceptualizations of Integrated Threat Theory (Stephan and Stephan, 2000) –prejudice is anticipated by intergroup anxiety, realistic and symbolic intergroup threat (mediators); intergroup contact directly reduces these mediators, and in turn, indirectly reduces negative outgroup evaluation– in Myanmar context.
- To investigate the moderation effect of perceived group status and participants' target outgroup (moderators) on the direct relationship between intergroup contact and negative outgroup evaluation.
- 4. To investigate the moderation effect of perceived group status and participants' target outgroup (moderators) on indirect relationship between intergroup contact and negative outgroup evaluation via three mediators.

#### 1.3.2. Specific purposes of the study

1. To examine the moderation effect of participants' residential region on the direct relationship between intergroup contact and negative outgroup evaluation.

2. To examine the moderation effect of participants' residential region on the indirect relationship between intergroup contact and negative outgroup evaluation via mediators.

#### 1.4. Research question

While different dimensions of intergroup contact were found to associate with intergroup prejudice negatively, the degree in which intergroup contact reduces prejudice significantly varies across studies. In the present study, three dimensions (quantitative, qualitative, and negative dimension) of intergroup contact, three mediator variables (intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat), three moderator variables (national group status, local group status, and participants' target outgroup), and negative outgroup evaluation are measured. Three dimensions of intergroup contact are independent variables or predictors; negative outgroup evaluation is the dependent variable or output variable in this respect. The present study aims at answering the following research questions.

- 1. Do three dimensions of intergroup contact significantly associate with negative outgroup evaluation in the Myanmar context?
- 2. Do three mediators significantly mediate the effect of intergroup contact on negative outgroup evaluation in the Myanmar context?
- 3. Do three moderators significantly moderate the direct effect of intergroup contact on negative outgroup evaluation?
- 4. Do three moderators significantly moderate the indirect effect of intergroup contact on negative outgroup evaluation via three mediators?
- 5. Does the participants' residential region significantly moderate the direct effect of intergroup contact on negative outgroup evaluation?
- 6. Does the participants' residential region significantly moderate the indirect effect of intergroup contact on negative outgroup evaluation?

#### 1.5. Hypotheses

To address the research questions described above, the following hypotheses will be tested.

#### **Hypothesis 1**

Intergroup contact would significantly associate with negative outgroup evaluation;

- (a) the qualitative intergroup contact would negatively associate with negative outgroup evaluation.
- (b) the quantitative intergroup contact would negatively associate with negative outgroup evaluation.
- (c) the negative intergroup contact would positively associate with negative outgroup evaluation.

#### **Hypothesis 2**

The relationship between the qualitative intergroup contact and negative outgroup evaluation would be mediated by (a) intergroup anxiety, (b) realistic intergroup threat, and (c) symbolic intergroup threat.

#### **Hypothesis 3**

The relationship between the quantitative intergroup contact and negative outgroup evaluation would be mediated by (a) intergroup anxiety, (b) realistic intergroup threat, and (c) symbolic intergroup threat.

#### **Hypothesis 4**

The relationship between the negative intergroup contact and negative outgroup evaluation would be mediated by (a) intergroup anxiety, (b) realistic intergroup threat, and (c) symbolic intergroup threat.

**Hypothesis 5** The relationship between the qualitative intergroup contact and negative outgroup evaluation would be moderated by (a) national group status, (b) local group status, and (c) participants' target outgroup.

#### Hypothesis 6

The relationship between the quantitative intergroup contact and negative outgroup evaluation would be moderated by (a) national group status, (b) local group status, and (c) participants' target outgroup.

#### **Hypothesis 7**

The relationship between the negative intergroup contact and negative outgroup evaluation would be moderated by (a) national group status, (b) local group status, and (c) participants' target outgroup.

#### **Hypothesis 8**

The indirect effect of qualitative intergroup contact on negative outgroup evaluation via (a) intergroup anxiety, (b) realistic intergroup threat, and (c) symbolic intergroup threat would be moderated by (i) national group status, (ii) local group status, and (iii) participants' target outgroup.

#### Hypothesis 9

The indirect effect of quantitative intergroup contact on negative outgroup evaluation via (a) intergroup anxiety, (b) realistic intergroup threat, and (c) symbolic intergroup threat would be moderated by (i) national group status, (ii) local group status, and (iii) participants' target outgroup.

#### Hypothesis 10

The indirect effect of negative intergroup contact on negative outgroup evaluation via (a) intergroup anxiety, (b) realistic intergroup threat, and (c) symbolic intergroup threat would be moderated by (i) national group status, (ii) local group status, and (iii) participants' target outgroup.

#### **Hypothesis 11**

The relationship between three dimensions of intergroup contact and negative outgroup evaluation would be moderated by participants' residential region.

#### Hypothesis 12

The indirect effects of three dimensions of intergroup contact on negative outgroup evaluation via (a) intergroup anxiety, (b) realistic intergroup threat, and (c) symbolic intergroup threat would be moderated by participants' residential region.

#### 1.6. Operational definitions of key terms

Intergroup contact refers to a cross-group friendship between members of groups with different social entities. Intergroup contact is, in a broader sense, classified into (1) face-to-face direct contact and (2) extended or indirect contact. Extended contact is defined as "knowledge that an in-group member has a close relationship with an outgroup member" (Wright et al., 1997). Both types of intergroup contact have evidenced to improve attitudes toward outgroup members and eventually improve intergroup relations. In the present study, direct face-to-face contact between members of ingroup and outgroup is mainly focused.

Intergroup contact quality refers to optimal conditions that facilitate the effect of intergroup contact on prejudice reduction. Allport (1954) proposed four necessary conditions—status equality, the existence of a common goal, cooperative effort, and institutional support—that enable intergroup contact to reduce prejudice effectively. Quality of intergroup contact is measured based on Allport's recommended conditions and extension of his original recommendations.

*Intergroup contact quantity* refers to the number of one's outgroup friends and the frequency in which one encounters the outgroup members in his daily life. Frequent

exposure to outgroup members who were initially disliked did increase positive attitude toward those people (e.g., Lee et al., 2004).

**Negative intergroup contact** refers to an individual's negative experience such as being verbally insulted by outgroup member. Studies have shown that negative contact is closely related to more negative feeling and attitude toward outgroup (e.g., Stephan et al., 2002).

**Negative outgroup evaluation** refers to an individual's general evaluation of an outgroup (Wright et al., 1997). Outgroup evaluation is often measured as a dependent variable in research that aims at studying intergroup relations. In the present study, outgroup evaluation in a negative direction is measured as the dependent variable.

*Intergroup anxiety* refers to one's uncomfortable feelings in interacting with members of an outgroup. Intergroup anxiety often anticipates a variety of negative outcomes (Stephan and Stephan, 1985).

**Realistic intergroup threat** refers to one's perceived threat to the actual –political, economic or physical– well-being (land, security, health, wealth, employment) of his group (Stephan et al., 2009).

*Symbolic intergroup threat* refers to ones concerned with a group's values, traditions, ideology, morals, and is expected to be more prominent when an in-group believes that their cultural values and traits are different from those of an outgroup (Zárate et al., 2004).

*Perceived group status* refers to one's perception of ingroup status – majority or minority. In the present study, perceived group status is classified into two levels – (1) national level in which group status depends on ethnicity, and (2) local level in which group status depends on numerical superiority of one's group in his residential area. A meta-analysis of contact studies revealed that perceived minority status is less associated with outgroup attitude improvement via contact compared to perceived majority status (Tropp and Pettigrew, 2005).

#### **CHAPTER 2**

#### Literature Review

#### 2.1. Roots of Intergroup Conflict

Scholars from various fields of study theorized possible roots of the intergroup conflict. However, no universally accepted theory can give fully satisfiable answers for how and why intergroup conflict begins and what makes it continue. That is because an intergroup conflict arises from multiple causal factors and particular theory emphasizes a single of a few causal factors as the root of the conflict. At times, various scholars proposed different causal factors of arising an intergroup conflict. In social psychology, some popular theories have tried to explain why, how, and when an intergroup conflict arises and continue. In this chapter, some classical theories related to the intergroup conflict will be briefly discussed.

#### 2.1.1. Realistic Conflict Theory (Sherif, 1966)

Sherif conducted a series of experiments between 1961 and 1964 and eventually proposed 'realistic conflict theory' that pointed out the factor that causes intergroup conflict and that improves intergroup relations. According to realistic conflict theory (Sherif, 1966), aggressive goals of groups lead to intergroup hostility between groups while common goals of groups lead to intergroup harmony between groups. Intergroup conflict is a byproduct of competition for scarce resources between groups. Moreover, mere knowledge about the presence of another group having a similar goal for its achievement is enough to induce intergroup discrimination against that outgroups. Realistic conflict theory claimed that stereotyping occurred before actual competition between groups, that prejudice and

discrimination arose because of real intergroup conflict that personality factors did not play an essential role in the intergroup hostility, and that simple contact between members of groups in the conflict was not enough to improve intergroup relations (Binder at al., 2009).

### 2.1.2. Relative Deprivation Theory (Gurr, 1970)

Relative deprivation refers to the sense of being deprived of something to which one believes one is entitled (Walker, 2010). Feeling deprived is determined not by objective conditions of deprivation but rather by subjective comparison with others who are better off; theory of relative deprivation concerned with the experience of individuals situated in a social context. Runciman (1966) introduced the distinction between egoistic or personal, and fraternalistic or group relative deprivation. Egoistic relative deprivation refers to feelings of unfairness arising from comparisons between self and other individuals while fraternalistic relative deprivation stems from comparisons between one's in-group and another outgroup. These social comparisons between groups provide fuel for intergroup conflict. The findings of previous studies consistently show that experience of individual relative deprivation predicts stress and depression whereas the experience of group relative deprivation predicts engaging in social protest and attempting to change the status quo (Leach, Snider and Iyer, 2002; Smith and Kessler, 2004).

# 2.1.3. Minimal Group Paradigm (Tajfel and Billig, 1971)

Tajfel and Billig (1971) developed minimal group paradigm (MGP), and they revealed minimal group effect that refers to the fact that individuals explicit ingroup favoritism even when there is no interaction among ingroup members, and there is no conflict of interest nor previous hostility between groups. The mere perception of belonging to two distinct groups; in other words, social categorization, is enough to trigger intergroup discrimination between groups.

# 2.1.4. Social Identity Theory (Tajfel and Turner, 1979)

Social identity theory (Tajfel and Turner, 1979) explains the origins of conflictual relations between different social groups in the absence of conflict over scarce resources or realistic reasons for conflict. According to social identity theory, group memberships help people to define who they are and how they relate to others, and motivation to establish a positive social identity is considered as a root of the intergroup conflict. For instance, members of disadvantaged groups are motivated to improve their group's position whereas members of advantaged groups are motivated to maintain their privileged position. Social identity theory emphasizes cognitive (thought) processes and (behavioral) motivation (Turner, 1982).

## 2.1.5. Self-Categorization Theory (Turner et al., 1987)

Self-categorization theory (Turner et al., 1987) describes how the cognitive process of categorization creates a sense of identification with the social category and produces behavioral patterns associated with group membership. In the process of categorizing people, they are seen, rather than as distinctive individuals, prototypically. The prototype-based perception of outgroup members is called stereotyping. In the same way, ingroup members are categorized regarding the defining attributes of ingroup or self-stereotyping. Self-categorization transforms the way we view ourselves as well as transforms our behavior to comply with ingroup norms. Intergroup behavior becomes a struggle for positive ingroup distinctiveness and social identity. While higher status groups fight to protect their evaluative superiority, lower status groups struggle to ignore their social stigma and promote their positivity.

Since an intergroup conflict may have more than one underlying reason, several theoretical concepts are needed to explain how an intergroup conflict develops. The intergroup conflict in Myanmar developed on several underlying factors. In line with the conceptualization of realistic conflict theory, aggressive goals are found among different ethnic groups. Diversity

in ethnicity, language, culture, and religious affiliation cause a strong sense of group memberships among members of different social groups. According to findings of minimal group paradigm experimental study, in the absence of intergroup conflict history, mere categorization is enough to induce intergroup bias. Hence, relatively strong identification oneself with ethnicity, language and religious affiliation among members of different groups can easily produce intergroup bias. As an integrated result of mismanagement and failed economic policies of successive governments between 1962 and 2010, Myanmar has become a least developed country (LDC) and economic growth gradually declined compared to neighbor countries.

Consequently, individual household income declines steadily for several decades and poverty spreads all over the country. As for ethnic minority people, such a widespread deprivation is perceived and interpreted as the result of being discriminated by majority ethnic people, Bamar. That point is coinciding with the concept of relative deprivation theory that explains the root of social unrest and participation in collective action. One possible reason for a significant number of young ethnic people joining their respective ethnic armed organization voluntarily may be due to perceived relative deprivation. In the present study, not all the theories regarding the development of intergroup conflict can be focused due to some limitations. However, two well-known theories related to an intergroup conflict will be intensively discussed in the present study. One theory is Allport's contact hypothesis, and the other is the integrated threat theory (ITT) proposed by Stephan and Stephan (2000).

# 2.2. Tool for Intergroup Conflict Reduction

After presenting theories related to development of intergroup conflict, some theories concerning how intergroup conflict can be reduced and intergroup relations can be promoted will be presented.

#### 2.2.1. Contact Hypothesis (Allport, 1954)

Contact hypothesis states that cross-group friendship potentially reduces outgroup prejudice if the four situations –status equality, intergroup cooperation, a common goal, and institutional support— are available during intergroup contact. A negative association between intergroup contact and outgroup prejudice has been confirmed by findings of various research in a longitudinal design (e.g., Levin, van Laar, and Sidanius, 2003), experimental design (e.g., Wright et al., 2004), and meta-analysis (e.g., Pettigrew and Tropp, 2006). However, Pettigrew (1998) pointed out some weaknesses of cross-sectional studies on the contact hypothesis. Pettigrew criticized that cross-sectional studies potentially include a selection bias, i.e., prejudiced people rarely involved in the sample, overemphasis on contact facilitating conditions –i.e., Allport's optimal contact conditions—which are not essential conditions, fail to address the process in which contact reduces prejudice, and fail to specify the way in which contact effect generalizes from individual to group level. Pettigrew (1996) recommended longitudinal designs to be the best for conducting a contact research.

#### 2.2.2. Different Kinds of Intergroup Contact

Face-to-face direct contact is conceptualized as a powerful tool for reducing intergroup prejudice in the original contact hypothesis (Allport, 1954). Different kinds of indirect contact were focused on some intergroup contact studies. Like face-to-face direct intergroup contact, indirect contact is found to have potential to reduce intergroup prejudice and improve intergroup relations (Aboud, Friedmann and Smith, 2015; Wölfer, Christ, Schmid, Tausch, Buchallik, Vertovec and Hewstone, 2018). Among different kinds of indirect intergroup contact, the extended contact (Turner, Hewstone and Voci, 2007; Turner, Hewstone, Voci and Vonofakou, 2008; Vezzali, Stathi, Giovannini, Capozza and Visintin, 2015) and the imagined contact (Crisp and Turner, 2009; Husnu and Crisp, 2010; Husnu and

Crisp, 2010; Crisp and Turner, 2013; Vezzali, Stathi, Crisp, Giovannini, Capozza and Gaertner, 2015; Dunaev, Brochu and Markey, 2018) are frequently found as independent variables in contact studies. According to extended contact hypothesis, an individual's knowledge that one's ingroup member has a close relationship with an outgroup member can induce more positive attitudes towards the outgroup (Wright, Aron, McLaughlin-Volpe and Ropp, 1997). In the conception of imagined intergroup contact, simply conceiving of positive contact with outgroup member(s) can promote intergroup attitudes positively (Crisp and Turner, 2009). The literature of contact hypothesis well documented that intergroup contact of any kind –direct or indirect– can reduce intergroup prejudice and improve intergroup attitudes, intergroup relations. In the present study, intergroup contact is studied as direct face-to-face contact in its three different dimensions –quantitative, qualitative, and negative dimensions.

#### 2.2.3. Direct Effects of Contact

Intergroup contact has long been one of the most effective strategies for improving intergroup relations (Dovidio, Gaertner and Kawakami, 2003). The finding of a meta-analysis that covers 515 contact studies revealed a negative relationship between contact and prejudice (Pettigrew and Tropp, 2006). Generally, intergroup contact can improve intergroup relations in most situations. However, in the context of intergroup conflict settings, the effect of intergroup contact on improving intergroup relations can expect to be weaker than in the context of peace. Amidst an intergroup conflict, even opportunity of intergroup encounter is considerably limited due to segregation of the opposition groups' members.

Similarly, in a post-conflict community, willingness to contact members of the former enemy group may be low. Despite many challenges for researchers, it seems meaningful and fruitful to conduct a contact study in a site either where an ongoing intergroup conflict is currently present or where characterizes as a post-conflict society. When direct face-to-face

contact is not available among members of the antagonistic groups, indirect contact extended contact, or imagined contact are employed as an independent variable to predict prejudice reduction or other positive outcomes of intergroup contact.

Northern Ireland is one of the typical post-conflict societies where many contact studies were conducted. In general, intergroup conflict in Myanmar has recognized an on-going conflict by people in a local and international community. However, that notion is superficial and inaccurate because different stories of intergroup conflict exist in different places in Myanmar. For instance, data in this study collected from three geographical regions with an entirely different story and situations of intergroup conflict. Intergroup conflict in some regions is currently active whereas that in another region is over and the local community has already become a post-conflict community. Some contact studies done in Northern Ireland are selected for comparison of contact effect on intergroup attitudes in different situations, i.e., during the time of intergroup conflict and when intergroup conflict is resolved. Each of the three research sites in the present study is resembled as the situation in Northern Ireland during 1980s, during 2000s, and during 2010s. Therefore, three previous studies on contact research done in Northern Ireland are selected for review. In the study published in 1985, research design is a longitudinal one. Children attending desegregated schools were recruited and finding revealed that the effects of intergroup contact is long-lasting and improves positive intergroup relations (Slavin, 1985). Correlation coefficient value is not described, and intergroup contact is not separately measured as quality and quantity of contact in that paper. In another Northern Ireland-based research paper published in 2006, two studies were conducted –one aimed at investigating the predictors of intergroup contact, and the other aimed at examining contact effects on forgiveness and some output variables. The finding showed that intergroup contact significantly predicted intergroup forgiveness (Catholics, r = .31, p < .001; Protestants, r = .34, p < .001) and was found to positively

associate with attitudes toward denominational mixing in both groups (Hewstone, Voci, Hamberger, and Niens, 2006). That study used archival data sets accumulated between 1989 and 1991 for data analysis. In another research paper based on Northern Ireland published in 2017, the finding reported that higher quality contact predicted more positive intergroup attitudes, trust, more positive perceptions of outgroup intentions in working toward peace, and greater engagement in reconciliation efforts (Tropp, Hawi, O'Brien, Gheorghiu, Zetes, and Butz, 2017).

#### 2.2.4. Indirect Effects of Contact

A critic towards the contact hypothesis by the skeptics is that the contact hypothesis just described intergroup contact as a powerful tool for prejudice reduction, and it did not explain how contact reduces prejudice. In other words, the contact hypothesis did not reveal any psychological mechanism that works between intergroup contact and prejudice reduction. Some researchers investigated mechanism working in the process of contact-prejudice reduction relations, and the role of mediators is found in the process in which contact reduces prejudice. Intergroup contact is found to have both a direct and indirect effect on prejudice and attitudes towards outgroup members. It was found that intergroup contact predicts specific mediators such as intergroup anxiety (Greenland and Brown, 2000; Swart, Turner, Hewstone and Voci, 2007; Hewstone, Christ and Voci, 2011; West, Pearson and Stern, 2014), self-disclosure (Tam, Hewstone, Harwood, Voci and Kenworthy, 2006), stereotype (Miller, Smith and Mackie, 2004; Pettigrew and Tropp, 2008), intergroup salience (Brown, Vivian and Hewstone, 1999; Ensari and Miller, 2002; Voci and Hewstone, 2003; Pettigrew and Tropp, 2006; Pettigrew and Tropp, 2008; Paolini, Harwood and Rubin, 2010), perspective taking (Galinsky and Moskowitz, 2000; Vescio, Sechrist and Paolucci, 2003; Vescio, Sechrist and Paolucci, 2003; Aberson and Haag, 2007; Todd and Burgmer, 2013; Shih, Stotzer and Gutiérrez, 2013; Vorauer and Sasaki, 2014; Wang, Tai, Ku and Galinsky, 2014;

Barth and Stürmer, 2016), intergroup trust (Tropp, 2008; Turner, West and Christie, 2013; Gundelach, 2014; McKeown and Psaltis, 2017; Rozich, Kenworthy, Voci and Hewstone, 2018), empathy (Vezzali, Hewstone, Capozza, Trifiletti and Di Bernardo, 2017), intergroup threat (Stephan and Renfro, 2002; Riek, Mania and Gaertner, 2006), and the like directly, and in turn, those mediators predicts intergroup prejudice, attitudes, evaluation, and any outcomes of intergroup contact. Though intergroup contact effectively reduces prejudice, negative attitudes, and negative outgroup evaluation of outgroup, the prejudice and negative attitudes are not directly reduced by intergroup contact. Moreover, intergroup contact can potentially increase negative outgroup attitudes and prejudice in some cases. Whether intergroup contact reduces or increases prejudice depends on the mediators that operate between intergroup contact and output variables. Accordingly, the role of mediators is as vital as in the process of reducing intergroup prejudice through intergroup contact. Before the role of mediators has not been investigated and recognized, the relationship between intergroup contact and prejudice is somewhat confusing due to conflicting findings of different studies. Once the mediation role of mediators is revealed by some contact studies, contradicting effects of intergroup contact can be explained well. In this study, some mediators of contact-evaluation relationship are included to be able to explain variations in degrees and directions of the effect of intergroup contact on negative outgroup evaluation in different contexts.

### 2.2.5. Mediation of Intergroup Anxiety on Direct Effect of Contact

Intergroup anxiety, social anxiety in intergroup contexts, stems mainly from the expectation of negative consequences during contact with outgroup members (Stephan and Stephan, 1985). Intergroup anxiety results in avoidance of intergroup contact and can poison the intergroup encounter (Wilder and Simon, 2001) and intergroup hostility (Plant and Devine, 2003). Intergroup anxiety negatively predicts future direct contact (Shook and Fazio, 2008).

Intergroup anxiety was found to negatively associate with both direct contact (Islam and Hewstone, 1993; Paolini et al., 2004; Voci and Hewstone, 2003) and imagined contact (Turner, Crisp et al., 2007; West et al., 2011). In the present study, the role of anxiety in intergroup contact is expected to prominent in the Myanmar context because of the asymmetric intergroup relationship between minority and majority groups. While minority group members are anxious about being the target of discrimination and prejudice from the majority group, members of the majority group are worried to be accused of discrimination by minority group members. A high level of intergroup anxiety is anticipated in both minority and majority groups in national and local contexts. Moreover, a significant mediation effect of intergroup anxiety on the relationship between intergroup contact and negative outgroup evaluation is also anticipated in the present study.

# 2.2.6. Mediation of Intergroup Threat on Direct Effect of Contact

The original version of integrated threat theory (ITT) that was labeled as integrated threat model of prejudice (Stephan and Stephan, 2000) proposes that four basic types of intergroup threats –realistic threat, symbolic threat, intergroup anxiety, and negative stereotype— can induce prejudice and eventually cause intergroup conflict. The revision of integrated threat theory was named as intergroup threat theory (Stephan and Renfro, 2002; Stephan, Ybarra, and Morrison, 2009) and the number of types of threat was reduced into two kinds –realistic threat and symbolic threat—in two dimensions—individual and group dimension. Realistic threat involves realistic (tangible) harm from the outgroup, and symbolic threat involves value (intangible) damage to the ingroup. The realistic threat is perceived when the welfare of one's ingroup such as territory, political power, economic power, and any other kinds of physical property is threatened by outgroup members. The symbolic threat is perceived when one's ingroup's identity, values, beliefs, norms, the way of life are threatened by those of outgroup members (Stephan, Ybarra and Rios Morrison, 2009). Integrated threat theory

predicts prejudice through intergroup threat. (Morrison et al., 2009; Stephan et al., 2005). Since ethnic groups in Myanmar have their languages that distinctly differ from each other and different cultures that have developed on the background of different religions, the symbolic threat is predicted to find significantly among ethnic groups in the intergroup context.

Moreover, indigenous people living in ethnic minority dominant areas concern about their livelihood and preservation of natural resources in their region due to internal migration of majority Bamar from central region into their territory and massive projects such as hydropower plant, timber production, and jade mining initiated by the national government in their native land. In the side of national majority group members living in minority ethnic dominant areas, their minority status in a local context may make them to perceive a high level of symbolic threat from outgroup members. In the present study, two major types of intergroup threat are measured to examine the indirect effect of intergroup contact through intergroup threat on negative outgroup evaluation.

### 2.2.7. Conditional Direct Effects of Contact

In addition to the mediated effect of contact on prejudice reduction, moderated effect of intergroup contact was studied by several studies (Tropp and Pettigrew, 2005; Dhont and Van Hiel, 2011; Islam and Hewstone, 1993; Brown, Vivian and Hewstone, 1999). Group status is commonly found as a moderator in contact studies, and its moderation effect is significantly found in most studies. In the present study, group status is included as a moderator variable. Since the distinction between majority and minority status in Myanmar depends on context, a simple categorization of minority-majority group status is not directly applicable. Accordingly, group status was asked in two contexts – national context and local context.

Moreover, target outgroup is anticipated to be a factor that causes significant differences in the strength of the relationship between intergroup contact and negative outgroup evaluation reduction. Participants' experience of intergroup conflict in their residential region during their lifetime is also considered to have a significant conditional effect on contact-evaluation relationships. Therefore, along with national group status and local group status, target outgroup includes a moderator in the present study.

#### **CHAPTER 3**

### **Direct Effects of Intergroup Contact**

# 3.1. Research Question

Do qualitative, quantitative, and negative dimensions of intergroup contact significantly reduce negative outgroup evaluation in the Myanmar context?

In this chapter, the direct effects of qualitative, quantitative, and negative dimensions of intergroup contact on negative outgroup evaluation will be investigated. Hypothesis 1 is to examine the direct effects of three dimensions of intergroup contact on negative outgroup evaluation.

### 3.2. Hypothesis

Hypothesis 1: Intergroup contact would significantly associate with outgroup evaluation.

- (a) the qualitative intergroup contact would negatively associate with negative outgroup evaluation.
- (b) the quantitative intergroup contact would negatively associate with negative outgroup evaluation.
- (c) the negative intergroup contact would positively associate with negative outgroup evaluation. 3.3. Method

### 3.3.1. Participants

To investigate direct effects of three dimensions of intergroup contact on negative outgroup evaluation, data set of the full sample was used in statistical analysis. The entire sample data set includes 4,127 participants whose mean age is 18.96 years (within a range of 17 to 35

years) with a standard deviation of 1.65 years. The sample contains 2,743 females (66.5% of the sample size) and 1,384 males (33.5% of the sample size). In terms of participant's reported ethnicity, 2,240 participants are ethnic majority Bamar (54.30%), 87 are ethnic minority Chin (2.10%), 720 are ethnic minority Kachin (17.40%), 212 are ethnic minority Karen (5.10%), 376 are ethnic minority Mon (9.1%), 37 are ethnic minority Rakhine (0.90%), and 215 are ethnic minority Shan (5.20%) respectively. In minority-majority dichotomous classification based on ethnicity, 1,887 participants belong to national minority groups (45.70% of the sample size) while 2,240 belong to national majority group (54.30% of the sample size). In minority-majority dichotomy based on perceived numerical superiority of participants' ingroup in their residential area, 1,023 participants belong to local minority group (24.80% of the sample size) whereas 3,104 belong to local majority group (75.20% of the sample size).

#### 3.3.2. Materials

Qualitative intergroup contact, quantitative intergroup contact, negative intergroup contact, and negative outgroup evaluation are measured by using psychometric measurements described below.

Intergroup Contact Quality is measured by using 5-point Likert type General Intergroup Contact Quality Scales (Islam and Hewstone, 1993). The inventory includes five question items. Internal consistency reliability of General Intergroup Contact Quality Scales is good (Cronbach's  $\alpha = .80$ ).

Intergroup Contact Quantity is measured by using 5-point Likert type General Intergroup Contact Quantity Scales (Islam and Hewstone, 1993). The inventory includes five question items. The internal consistency reliability of General Intergroup Contact Quantity Scales is good (Cronbach's  $\alpha = .80$ ).

*Negative Intergroup Contact* is measured by using 5-point Likert type *Negative Experiences Inventory (NEI)* (Stephan et al., 2000) that comprises thirteen items. Internal consistency reliability of *Negative Experiences Inventory (NEI)* is excellent (Cronbach's  $\alpha = .92$ ).

Negative Outgroup Evaluation is measured by using 5-point Likert type General Evaluation Scale (GES) developed by Wright et al. (1997). The scale includes six question items –three items measure positive outgroup evaluation and the other three items measure negative outgroup evaluation. Negative outgroup evaluation score is calculated by summing up the direct scores of three items measuring negative outgroup evaluation and reversed scores of three items measuring positive outgroup evaluation. Internal consistency reliability of General Evaluation Scale (GES) is acceptable (Cronbach's  $\alpha = .66$ ).

#### 3.3.3. Procedure

A cross-sectional, between-subject design is used for collecting quantitative data by using survey questionnaire. IBM SPSS 23 and IBM AMOS Graphic 23 are used for statistical analysis.

### 3.4. Data Analysis

### **3.4.1. Causal Model 1**

To investigate direct effects of three dimensions of intergroup contact on negative outgroup evaluation, a structural equation model (Causal Model 1) is constructed as shown in *Figure* 3.1.

Before running the structural model, a zero-order bivariate correlation analysis was carried out. Correlations coefficients and their significant levels are demonstrated along with basic descriptive of the variables involved in Hypothesis 1 (see Table 3.1). Correlation between the predictor variables and the output variable are significant at p < .01 level.

Table 3.1. Zero-order Correlations among Variables and Descriptive of Variables in Hypothesis 1

Variable	1	2	3	4
ICQL	1	.517**	057**	358**
ICQT		1	.158**	115**
NIC			1	.396**
NOE				1
Scale Range	5-25	5-25	13-65	6-30
M	14.78	14.24	19.78	14.66
SD	3.73	3.97	7.97	3.62
n	4127	4127	4127	4127

*Note.* \*\* p < .01. ICQL = Intergroup contact quality, ICQT = Intergroup contact quantity, NIC = Negative intergroup contact, NOE = Negative outgroup evaluation.

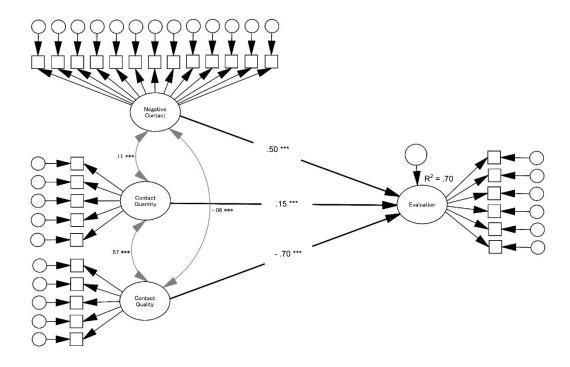


Figure 3.1. Structural equation model (Causal Model 1) for testing Hypothesis 1 with standardized regression coefficients of significant paths.

*Note*. \*\*\* p < .001. Model fit indices:  $\chi^2$  (263, N = 4127) = 1531.31,  $\chi^2/df = 5.82$ , p < .001, NFI = .97, IFI = .97, TLI = .96, CFI = .97, RMSEA = .034, 95% CI [.033 – .036]; SRMR = .059. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual

The model fit indices show that Causal Model 1 is good. Model fit indices for the model shown in *Figure 3.1*. are:  $\chi^2$  (263, N = 4127) = 1531.31,  $\chi^2/df = 5.82$ , p < .001, NFI = .97, IFI = .97, TLI = .96, CFI = .97, RMSEA = .034, 95% CI [.033 – .036]; SRMR = .059. (incremental fit index (IFI) > .90 indicates good fit; Tucker-Lewis index (TLI) > .90 indicates good fit; non-normed fit index (NFI) > .90 indicates good fit; comparative fit index (CFI) > .90 indicates adequate fit, > .95 indicates good fit; root mean square error of approximation (RMSEA) between .05 and .08 indicates, reasonable fit, < .05 indicates good fit; standardized root means square residual (SRMR) < .10 indicates good fit.) In Causal Model 1, direct causal paths are drawn between the predictors –qualitative intergroup contact, quantitative intergroup contact, and negative intergroup contact—and the output variable – negative outgroup evaluation. Covariation paths are drawn between contact quality and quantity, between contact quality and negative outgroup evaluation, and between contact quantity and negative outgroup evaluation.

In Causal Model 1, qualitative, quantitative, and negative dimensions of intergroup contact are found to be reliable predictors of negative outgroup evaluation. The standardized beta coefficient between intergroup contact quality and negative outgroup evaluation is strong and significant ( $\beta = -.70$ , p < .001), between intergroup contact quantity and negative outgroup evaluation is significant but weak ( $\beta = .15$ , p < .001), and between negative intergroup contact and negative outgroup evaluation is significant and strong ( $\beta = .50$ , p < .001). Quality of intergroup contact predicts negative intergroup evaluation negatively while the quantity of intergroup contact and the negative intergroup contact predict negative outgroup evaluation positively. Seventy percent of the variance in negative outgroup evaluation can be explained by Causal Model 1 ( $R^2 = .70$ ). The quantity of intergroup contact was found to significantly covary with the quality of intergroup contact (r = .57, p < .001) and negative intergroup contact (r = .11, p < .001). This result supports Hypothesis 1.

Intergroup contact would significantly associate with negative outgroup evaluation.

- (a) the qualitative intergroup contact would negatively associate with negative outgroup evaluation.
- (b) the quantitative intergroup contact would negatively associate with negative outgroup evaluation.
- (c) the negative intergroup contact would positively associate with negative outgroup evaluation.

Three dimensions of intergroup contact was found to significantly associate with negative outgroup evaluation. Qualitative dimesion of intergroup contact was significantly found to reduce negative outgroup evaluation. However, quantitative dimension of intergroup contact was found to increase negative outgroup evaluation. Positive correlation between intergroup contact quantity and negative outgroup evaluation showed the presence of conflictual relationships among participants from different social groups.

In Causal Model 1, the effects of three dimensions of intergroup contact on negative outgroup evaluation are investigated in parallel. A strong and significant covariation between qualitative and quantitative dimensions of intergroup contact means that these two dimensions are closely related. Consiquently, an increase in intergroup contact quality is anticipated when intergroup contact quantity goes up. Therefore, an alternative causal model was drawn to include a serial combination between quantitative and qualitative dimensions of intergroup contact.

#### 3.4.2. Causal Model 2

An alternative model (Causal Model 2) in which quantitative dimension of intergroup contact predicts both qualitative and negative dimension of intergroup contact, and, in turn, those two dimensions of intergroup contact predict negative outgroup evaluation is constructed as shown in *Figure 3.2*. Model fit indices show that Causal Model 2 has a good fit.

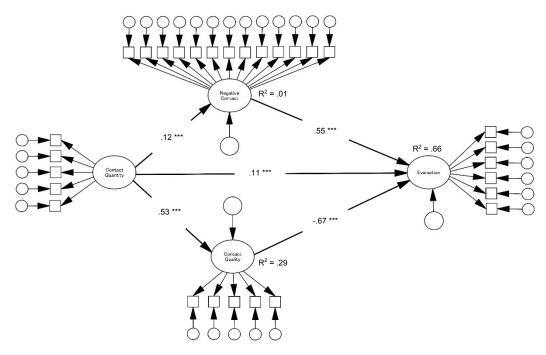


Figure 3.2. An alternative model (Causal Model 2) for testing Hypothesis 1 with standardized regression coefficients of significant paths.

Note. \*\*\* p < .001. Model fit indices:  $\chi^2$  (264, N = 4127) = 1596.45,  $\chi^2/df = 6.05$ , p < .001, NFI = .97, IFI = .97, TLI = .96, CFI = .97, RMSEA = .035, 95% CI [.033 – .037]; SRMR = .065. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual

Model fit indices for the Model 2 are:  $\chi^2$  (264, N = 4127) = 1596.45,  $\chi^2/df = 6.05$ , p < .001, NFI = .97, IFI = .97, TLI = .96, CFI = .97, RMSEA = .035, 95% CI [.033 - .037]; SRMR = .065. (incremental fit index (IFI) > .90 indicates good fit; Tucker-Lewis index (TLI) > .90 indicates good fit; non-normed fit index (NFI) > .90 indicates good fit; comparative fit index (CFI) > .90 indicates adequate fit, > .95 indicates good fit; root mean square error of approximation (RMSEA) between .05 and .08 indicates, reasonable fit, < .05 indicates good fit; standardized root means square residual (SRMR) < .10 indicates good fit). In Causal Model 2, a direct causal path is drawn between intergroup contact quantity and negative outgroup evaluation. Indirect paths between intergroup contact quantity and negative outgroup evaluation are drawn through intergroup contact quality and negative intergroup contact. In Causal Model 2, standardized direct effect of intergroup contact quantity on negative outgroup evaluation ( $\beta_{\text{direct}} = .11, p < .001$ ) is significant. Standardized indirect effect of intergroup contact quantity on negative outgroup evaluation through intergroup contact quality ( $\beta_{\text{indirect-1}} = \beta_{\text{quantity-quality}} \times \beta_{\text{quality-evaluation}}$ ) is significant,  $\beta = -.35$ , p < .001. Standardized indirect effect of intergroup contact quantity on negative outgroup evaluation through negative intergroup contact ( $\beta_{\text{indirect-2}} = \beta_{\text{quantity-negative}} \times \beta_{\text{negative-evaluation}}$ ) is significant,  $\beta = .05$ , p < .001. Standardized total effect of intergroup contact quantity on negative outgroup evaluation ( $\beta_{\text{total}} = \beta_{\text{direct}} + \beta_{\text{indirect-1}} + \beta_{\text{indirect-2}}$ ) is significant,  $\beta = -.19$ , p < .001.

Chapter 3 aims at investigating direct effects of three dimensions of intergroup contact on negative outgroup evaluation, a mediational model, Causal Model 2, is included to examine the interaction (between predictor and mediators) effect or mediation effect of intergroup contact quantity via intergroup contact quality and negative intergroup contact on negative outgroup evaluation. Interaction effect of qualitative and quantitative dimensions of

intergroup contact on negative outgroup evaluation is significant. Intergroup contact quantity is a reliable predictor of intergroup contact quality.

#### 3.5. Results and Discussion

A structural equation model includes measurement models measuring latent variables and a path model between predictor and output variable. In predicting the causal relationship between independent variable and the dependent variable, a unique benefit of using a structural equation model rather than a multiple linear regression model is that beta coefficient values generated by a structural equation model are more accurate and reliable than those produced by a regression model. In a structural equation model, the measurement errors of each factor, which are neglected in a regression model, are taken into consideration. Model fit of both Causal Model 1 and Causal Model 2 is good. While Causal Model 1 examined the direct effect of three dimensions of intergroup contact on negative outgroup evaluation, Causal Model 2 examined both direct and indirect effect of intergroup contact quantity (via qualitative and negative dimensions of intergroup contact) on negative outgroup evaluation.

Direct effects (total effects) of intergroup contact quantity on negative outgroup evaluation in Causal Model 1 and total effects of intergroup contact quantity in Causal Model 2 are nearly the same in magnitude with opposite directions. While intergroup contact quantity predicts negative outgroup evaluation positively in Causal Model 1, it predicts negative outgroup evaluation negatively in Causal Model 2. In Causal Model 2, the effect of intergroup contact quantity on negative outgroup evaluations is significantly mediated by qualitative and negative dimensions of intergroup contact.

Though the results revealed by two models are contradicted, both results are meaningful and can explain the effects of intergroup contact quantity on negative outgroup evaluation in different situations.

The result of Causal Model 1 shows that the intergroup contact quantity itself does not have any benefit in reducing negative intergroup evaluation. It also points out an important fact that intergroup contact quantity with low-quality can potentially increase mutual negative outgroup evaluation among members of different social groups. The result of Causal Model 2 shows that intergroup contact quantity interacts with intergroup contact quality to reduce negative outgroup evaluation significantly whereas it interacts with negative intergroup contact to increase negative outgroup evaluation significantly. Even in such situations where individuals experience both negative intergroup contact (with some outgroup members) and high-quality intergroup contact (with other outgroup members) simultaneously, the quantity of intergroup contact (with outgroup members in high-quality intergroup contact) significantly can reduce negative outgroup evaluation.

By integrating data analysis outputs of two causal models, intergroup contact quality (Hypothesis 1a), intergroup contact quantity (Hypothesis 1b), and negative intergroup contact (Hypothesis 1c) are found to significantly associate with negative outgroup evaluation, and thus, Hypothesis 1 is completely supported. Quality of intergroup contact is essentially an intergroup contact that meets Allport's recommended conditions. Therefore, this finding is consistent with the prediction of Allport's contact hypothesis and those findings of existing studies.

A positive association between the quantitative dimension of intergroup contact and negative outgroup evaluation may be due to the presence of intergroup conflict in the research sites. In other words, a positive association between the quantitative dimension of intergroup contact and negative outgroup evaluation indicates the existence of intergroup conflict in the population from which we sampled at the time of conducting the research. Despite a positive relationship between the quantity of intergroup contact and negative outgroup evaluation, the quantity of intergroup contact should not necessarily be regarded as a potential source of

intergroup conflict. In Causal Model 2, the quantitative dimension of intergroup contact was found to significantly and strongly predict a good quality intergroup contact, which in turn, predicts a decrease in negative outgroup evaluation. As shown in Causal Model 2, the quantity of intergroup contact simultaneously predicts both negative intergroup contact and quality of intergroup contact with different beta coefficient values. The strength of the relationship between the quantitative dimension and the qualitative dimension of intergroup contact is stronger than that of the relationship between quantitative and negative dimensions of intergroup contact. Intergroup contact quality cannot occur without any quantitative contact between members of different groups.

Whether intergroup contact quantity predicts intergroup poor or good intergroup contact quality partly depends on an individual's perceived intergroup conflict between one's ingroup and the outgroup to which one's friends belong. Intergroup contact quantity predicts (1) negative outgroup evaluation, which is found to be significantly reduced by intergroup contact quality, and (2) intergroup contact quality. Accordingly, to improve intergroup relation, members of different social groups should be provided a greater chance to establish cross-group contact (quantitative dimension of intergroup contact), and at the same time, the contact situations should be designed to meet Allport's recommendations (qualitative dimension of intergroup contact) and other additional conditions proposed by other scholars.

#### **CHAPTER 4**

### **Indirect Effects of Intergroup Contact**

#### 4.1. Research Question

Do intergroup anxiety, realistic and symbolic intergroup threat significantly mediate the effect of intergroup contact on negative outgroup evaluation in Myanmar context?

### 4.2. Hypothesis

Hypothesis 2: Relationship between the qualitative dimension of intergroup contact and negative outgroup evaluation would be mediated by (a) intergroup anxiety, (b) realistic intergroup threat, and (c) symbolic intergroup threat.

Hypothesis 3: Relationship between the quantitative dimension of intergroup contact and negative outgroup evaluation would be mediated by (a) intergroup anxiety, (b) realistic intergroup threat, and (c) symbolic intergroup threat.

Hypothesis 4: Relationship between the negative dimension of intergroup contact and negative outgroup evaluation would be mediated by (a) intergroup anxiety, (b) realistic intergroup threat, and (c) symbolic intergroup threat.

#### 4.3. Method

### 4.3.1. Participants

Participants' information are the same across all chapters in the present study.

#### 4.3.2. Materials

To measure qualitative intergroup contact, quantitative intergroup contact, negative intergroup contact, negative outgroup evaluation, intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat, *General Intergroup Contact Quality Scales*, *General* 

Intergroup Contact Quantity Scales, Negative Experiences Inventory, General Evaluation Scale, Intergroup Anxiety Scale, Realistic Intergroup Threat Scales, and Symbolic Intergroup Threat Scales are used. Psychometric properties of measurement tools are described below.

Intergroup Anxiety is measured by using 5-point Likert type Intergroup Anxiety Scale (IAS) developed by Stephan and Stephan (1985) and modified by Paolini et al. (2004). That scale includes six items –three items measure the construct in a straightforward direction, and the other three items measure in reverse direction. Intergroup anxiety score is obtained by summing up the direct scores of three items measuring the intergroup anxiety and reversed scores of three items measuring the construct in a reversed direction. Internal consistency reliability of the Intergroup Anxiety Scale is acceptable (Cronbach's  $\alpha = .65$ ).

*Realistic Intergroup Threat* is measured by using 5-point Likert type Realistic Intergroup Threat Scales (Stephan and Stephan, 1996; 2000). That scale comprises eight items. Internal consistency reliability of Realistic Intergroup Threat Scales is good (Cronbach's  $\alpha = .86$ ). *Symbolic Intergroup Threat* is measured by using 5-point Likert type Symbolic Intergroup

Threat Scales (Stephan and Stephan, 1996, 2000) that includes nine question items. Internal consistency reliability of Symbolic Intergroup Threat Scales is acceptable (Cronbach's  $\alpha = .76$ ).

#### 4.3.3. Procedure

Research procedure is the same across all chapters in the present study.

### 4.4. Data Analysis

### 4.4.1. Mediation Model 1

To investigate mediated effects of intergroup contact quality on negative outgroup evaluation via intergroup anxiety, a structural equation model is constructed as shown in *Figure 4.1*. Before running the structural model, a zero-order bivariate correlational analysis

is operated, and correlation coefficient values and their significant levels are described along with basic descriptive of variables involved in Hypothesis 2a (see Table 4.1). Correlation between predictor variables and output variable are significant at p < .01 level.

Table 4.1. Zero-order Correlations among Variables and
Descriptive of Variables in Hypothesis 2a

Variable	1	2	3
ICQL	1	421**	358**
IA		1	.618**
NOE			1
Scale Range	5-25	6-30	6-30
M	14.78	15.59	14.66
SD	3.73	3.80	3.62
N	4127	4127	4127

*Note.* \*\* p < .01. ICQL = Intergroup contact quality, IA = Intergroup anxiety, NOE = Negative outgroup evaluation.

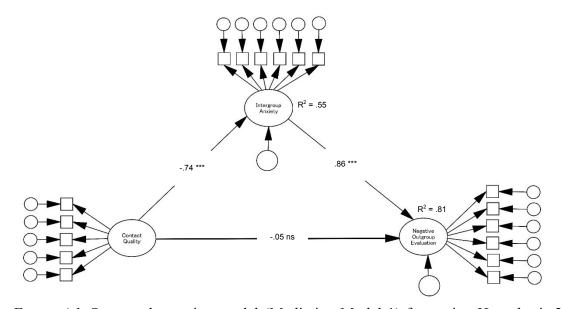


Figure 4.1. Structural equation model (Mediation Model 1) for testing Hypothesis 2a with standardized regression coefficients of significant paths. Note. \*\*\* p < .001. Model fit indices:  $\chi^2$  (79, N = 4127) = 1826.03,  $\chi^2$  /df = 23.11, p < .001, NFI = .91, IFI = .92, TLI = .87, CFI = .92, RMSEA = .073, 95% CI [.070 – .076]; SRMR = .079. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = nonnormed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual.

Model fit indices for Mediation Model 1 are:  $\chi^2$  (79, N = 4127) = 1826.03,  $\chi^2/df = 23.11$ , p < .001, NFI = .91, IFI = .92, TLI = .87, CFI = .92, RMSEA = .073, 95% CI [.070 – .076]; SRMR = .079. (incremental fit index (IFI) > .90 indicates good fit; Tucker-Lewis index (TLI) > .90 indicates good fit; non-normed fit index (NFI) > .90 indicates good fit; comparative fit index (CFI) > .90 indicates adequate fit, > .95 indicates good fit; root mean square error of approximation (RMSEA) between .05 and .08 indicates, reasonable fit, < .05 indicates good fit; standardized root means square residual (SRMR) < .10 indicates good fit). In Mediation Model 1, a direct causal path is drawn between intergroup contact quality (predictor) and negative outgroup evaluation (output). An indirect causal path between intergroup contact quality (predictor) and negative outgroup evaluation (output) is drawn through intergroup anxiety (mediator).

In Mediation Model 1, standardized direct effect of intergroup contact quality on negative outgroup evaluation is not significant,  $\beta_{\text{direct}} = -.05$ , p > .05. Standardized indirect effect of intergroup contact quality on negative outgroup evaluation through intergroup anxiety  $(\beta_{\text{indirect}} = \beta_{\text{quality-anxiety}} \times \beta_{\text{anxiety-evaluation}})$  is significant,  $\beta_{\text{indirect}} = -.64$ , p < .001. Since direct effect is not significant and indirect effect is significant, effects of intergroup contact quality on negative outgroup evaluation is fully mediated by intergroup anxiety. Standardized total effect of intergroup contact quality is same as indirect effect of intergroup contact quality on negative outgroup evaluation ( $\beta_{\text{total}} = \beta_{\text{direct}} + \beta_{\text{indirect}}$ ;  $\beta_{\text{direct}} = 0$ ). Thus, result of Mediation Model 1 supported Hypothesis 2a.

#### 4.4.2. Mediation Model 2

To investigate mediated effect of intergroup contact quality on negative outgroup evaluation via realistic intergroup threat, a structural equation model is constructed as shown in *Figure 4.2*. Before running the structural model, a zero-order bivariate correlation analysis is operated, and correlation coefficient values and their significant levels are demonstrated

along with basic descriptive of variables involved in Hypothesis 2b (see Table 4.2). The correlation between predictor variables and output variable is significant at p < .01 level.

Table 4.2. Zero-order Correlations among Variables and Descriptive of Variables in Hypothesis 2b

Variable	1	2	3
ICQL	1	127**	358**
RIT		1	.379**
NOE			1
Scale Range	5-25	8-40	6-30
M	14.78	22.09	14.66
SD	3.73	3.84	3.62
N	4127	4127	4127

*Note.* \*\* p < .01. ICQL = Intergroup contact quality, RIT = Realistic intergroup threat, NOE = Negative outgroup evaluation.

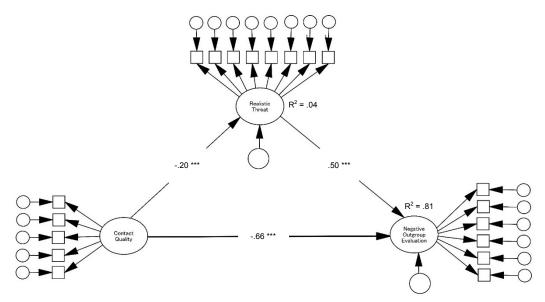


Figure 4.2. Structural equation model (Mediation Model 2) for testing Hypothesis 2b with standardized regression coefficients of significant paths. Note. \*\*\* p < .001. Model fit indices:  $\chi^2$  (102, N = 4127) = 853.18,  $\chi^2/df = 8.37$ , p < .001, NFI = .97, IFI = .97, TLI = .95, CFI = .97, RMSEA = .042, 95% CI [.040 – .045]; SRMR = .060. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual

Model fit indices of Mediation Model 2 are:  $\chi^2$  (102, N=4127) = 853.18,  $\chi^2/df$  = 8.37, p < .001, NFI = .97, IFI = .97, TLI = .95, CFI = .97, RMSEA = .042, 95% CI [.040 – .045]; SRMR = .060. (incremental fit index (IFI) > .90 indicates good fit; Tucker-Lewis index (TLI) > .90 indicates good fit; non-normed fit index (NFI) > .90 indicates good fit; comparative fit index (CFI) > .90 indicates adequate fit, > .95 indicates good fit; root mean square error of approximation (RMSEA) between .05 and .08 indicates, reasonable fit, < .05 indicates good fit; standardized root means square residual (SRMR) < .10 indicates good fit). In Mediation Model 2, a direct causal path is drawn between intergroup contact quality (predictor) and negative outgroup evaluation (output). An indirect causal path between intergroup contact quality (predictor) and negative outgroup evaluation (output) is drawn through realistic intergroup threat (mediator).

In Mediation Model 2, standardized direct effect of intergroup contact quality on negative outgroup evaluation is significant,  $\beta_{\text{direct}} = -.66$ , p < .001. Intergroup contact quality predicts negative a decrease in outgroup evaluation significantly. Standardized indirect effect of intergroup contact quality on negative outgroup evaluation through realistic intergroup threat  $(\beta_{\text{indirect}} = \beta_{\text{quality-realistic}} \times \beta_{\text{realistic-evaluation}})$  is significant,  $\beta_{\text{indirect}} = -.10$ , p < .001. Interaction effect of intergroup contact quality and realistic intergroup threat predict a decrease in negative outgroup evaluation significantly. Since both direct and indirect effect of intergroup contact quality are significant, the effects of intergroup contact quality on negative outgroup evaluation is partially mediated by realistic intergroup threat. Standardized total effect of intergroup contact quality on negative outgroup evaluation ( $\beta_{\text{total}} = -.76$ , p < .001) is summation of direct and indirect effect ( $\beta_{\text{total}} = \beta_{\text{direct}} + \beta_{\text{indirect}}$ ). The result of Mediation Model 2 supported Hypothesis 2b.

#### 4.4.3. Mediational Model 3

To investigate mediated effect of intergroup contact quality on negative outgroup evaluation via symbolic intergroup threat, a structural equation model is constructed as shown in *Figure 4.3*. Before running the structural model, a zero-order bivariate correlation analysis is operated, and correlation coefficient values and their significant levels are described along with basic descriptive of variables involved in Hypothesis 2c (see Table 4.3). The correlation between predictor variables and the output variable are significant at p < .01 level.

Table 4.3. Zero-order Correlations among Variables and Descriptive of Variables in Hypothesis 2c

Variable	1	2	3
ICQL	1	127**	358**
SIT		1	.414**
NOE			1
Scale Range	5-25	9-45	6-30
M	14.78	25.99	14.66
SD	3.73	5.36	3.62
N	4127	4127	4127

*Note.* \*\* p < .01. ICQL = Intergroup contact quality, SIT = Symbolic intergroup threat, NOE = Negative outgroup evaluation.

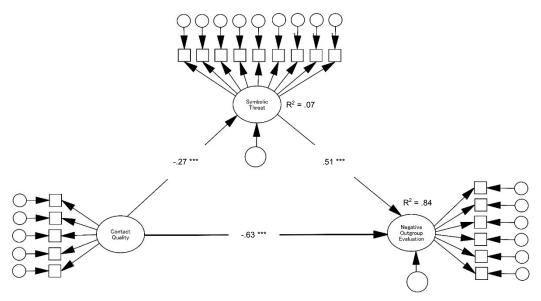


Figure 4.3. Structural equation model (Mediation Model 3) for testing Hypothesis 2c with standardized regression coefficients of significant paths.

Note. \*\*\* p < .001. Model fit indices:  $\chi^2$  (109, N = 4127) = 802.47,  $\chi^2/df = 7.36$ , p < .001, NFI = .96, IFI = .97, TLI = .94, CFI = .97, RMSEA = .039, 95% CI [.037 – .042]; SRMR = .048. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual.

Model fit indices of Mediation Model 3 are:  $\chi^2$  (102, N = 4127) = 853.18,  $\chi^2/df = 8.37$ , p < .001, NFI = .97, IFI = .97, TLI = .95, CFI = .97, RMSEA = .042, 95% CI [.040 – .045]; SRMR = .060. (incremental fit index (IFI) > .90 indicates good fit; Tucker-Lewis index (TLI) > .90 indicates good fit; non-normed fit index (NFI) > .90 indicates good fit; comparative fit index (CFI) > .90 indicates adequate fit, > .95 indicates good fit; root mean square error of approximation (RMSEA) between .05 and .08 indicates, reasonable fit, < .05 indicates good fit; standardized root means square residual (SRMR) < .10 indicates good fit). In Mediation Model 3, a direct causal path is drawn between intergroup contact quality (predictor) and negative outgroup evaluation (output). An indirect causal path between intergroup contact quality (predictor) and negative outgroup evaluation (output) is drawn through symbolic intergroup threat (mediator).

In Mediation Model 3, standardized direct effect of intergroup contact quality on negative outgroup evaluation is significant,  $\beta_{\text{direct}} = -.63$ , p < .001. Intergroup contact quality predicts a decrease in negative outgroup evaluation significantly. Standardized indirect effect of intergroup contact quality on negative outgroup evaluation through symbolic intergroup threat ( $\beta_{\text{indirect}} = \beta_{\text{quality-symbolic}} \times \beta_{\text{symbolic-evaluation}}$ ) is significant,  $\beta_{\text{indirect}} = -.14$ , p < .001. Interaction effect of intergroup contact quality and symbolic intergroup threat predicts a decrease in negative outgroup evaluation significantly. Since both direct and indirect effect of intergroup contact quality is significant, effect of intergroup contact quality on negative outgroup evaluation is partially mediated by symbolic intergroup threat. Standardized total effect of intergroup contact quality on negative outgroup evaluation ( $\beta_{\text{total}} = -.77$ , p < .001) is summation of direct and indirect effect ( $\beta_{\text{total}} = \beta_{\text{direct}} + \beta_{\text{indirect}}$ ). The result of Mediation Model 3 supported Hypothesis 2c.

#### 4.4.4. Mediation Model 4

To investigate mediated effect of intergroup contact quality on negative outgroup evaluation via intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat simultaneously a structural equation model (Mediation Model 4) is constructed as shown in *Figure 4.4*. Before running the structural model, a zero-order bivariate correlation analysis is operated, and correlation coefficient values and their significant levels are described along with basic descriptive of the variables involved in this model (see Table 4.4). The correlation between predictor variables and output variable are significant at p < .01 level.

Table 4.4. Zero-order Correlations among Variables and Descriptive of Variables in Parallel Mediation Model

Variable	1	2	3	4
ICQL	1	421**	127**	178**
IA		1	.390**	.453**
RIT			1	.556**
SIT				1
Scale Range	5-25	6-30	8-40	9-45
M	14.78	15.59	22.09	25.99
SD	3.73	3.80	3.84	5.36
n	4127	4127	4127	4127

*Note.* \*\* p < .01. ICQL = Intergroup contact quality, IA = Intergroup anxiety, RIT = Realistic intergroup threat, SIT = Symbolic intergroup threat.

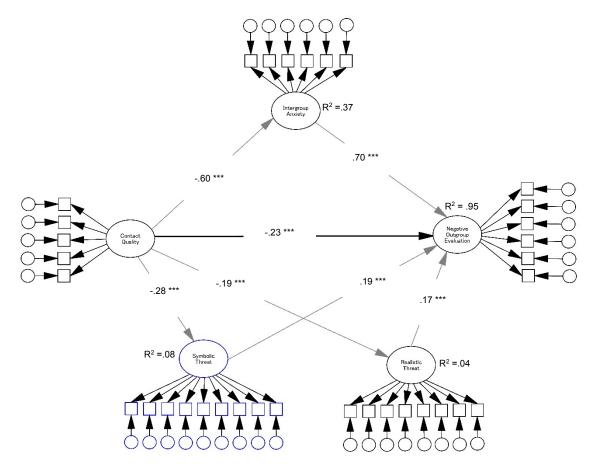


Figure 4.4. Structural equation model (Mediation Model 4) depicting mediation of intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat on the relationship between intergroup contact quality and negative outgroup evaluation. Squared multiple correlations of endogenous factors (mediators and output variables) and standardized regression coefficients of significant paths are described. Note. \*\*\* p < .001. Model fit indices:  $\chi^2$  (421, N = 4127) = 3377.50,  $\chi^2/df = 8.02$ , p < .001, NFI = .93, IFI = .94, TLI = .91, CFI = .94, RMSEA = .041, 95% CI [.040 – .043], SRMR = .063. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual

Model fit indices of Mediation Model 4 are:  $\chi^2$  (421, N = 4127) = 3377.50,  $\chi^2/df = 8.02$ , p < .001, NFI = .93, IFI = .94, TLI = .91, CFI = .94, RMSEA = .041, 95% CI [.040 – .043], SRMR = .063. (incremental fit index (IFI) > .90 indicates good fit; Tucker-Lewis index (TLI) > .90 indicates good fit; non-normed fit index (NFI) > .90 indicates good fit; comparative fit index (CFI) > .90 indicates adequate fit, > .95 indicates good fit; root mean square error of approximation (RMSEA) between .05 and .08 indicates, reasonable fit, < .05 indicates good fit; standardized root means square residual (SRMR) < .10 indicates good fit). In Mediation Model 4, a direct causal path is drawn between intergroup contact quality (predictor) and negative outgroup evaluation (output). Indirect causal paths between intergroup contact quality (predictor) and negative outgroup evaluation (output) are drawn through intergroup anxiety (mediator 1), realistic intergroup threat (mediator 2), and symbolic intergroup threat (mediator 3) in parallel combination. This model is a parallel mediational model.

In Mediation Model 4, standardized direct effect of intergroup contact quality on negative outgroup evaluation is significant,  $\beta_{\text{direct}} = -.23$ , p < .001. Intergroup contact quality predicts a decrease in negative outgroup evaluation. Standardized indirect effect of intergroup contact quality on negative outgroup evaluation through intergroup anxiety ( $\beta_{\text{indirect-1}} = \beta_{\text{quality-anxiety}} \times \beta_{\text{anxiety-evaluation}}$ ) is significant,  $\beta = -.42$ , p < .001. Standardized indirect effect of intergroup contact quality on negative outgroup evaluation through realistic intergroup threat ( $\beta_{\text{indirect-2}} = \beta_{\text{quality-realistic}} \times \beta_{\text{realistic-evaluation}}$ ) is significant,  $\beta = -.03$ , p < .001. Standardized indirect effect of intergroup contact quality on negative outgroup evaluation through symbolic intergroup threat ( $\beta_{\text{indirect-3}} = \beta_{\text{quality-symbolic}} \times \beta_{\text{symbolic-evaluation}}$ ) is significant,  $\beta = -.05$ , p < .001. Since both direct and indirect effects of contact quality are significant, the effect of intergroup contact quality on negative outgroup evaluation is partially mediated by three mediators. Standardized total effect of intergroup contact quality on negative outgroup evaluation ( $\beta_{\text{total}}$ )

= -.73, p < .001) is summation of direct and indirect effect ( $\beta_{\text{total}} = \beta_{\text{direct}} + \beta_{\text{indirect-1}} + \beta_{\text{indirect-2}} + \beta_{\text{indirect-3}}$ ). The result of Mediation Model 4 supported Hypothesis 2.

### 4.4.4.1. Model Comparison

Model fit indices of Mediation Model 1, 2, 3, and 4 show that these models have a good fit. Model 1, 2, and 3 separately examined mediated effect of intergroup contact quality on negative outgroup evaluation through intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat, respectively. Model 4 examined mediated effect of intergroup contact quality on negative outgroup evaluation through three mediators (used in Mediation Model 1, 2, and 3) combining in parallel.

In Mediation Model 1, intergroup contact quality predicts negative outgroup evaluation through intergroup anxiety. No direct effect of intergroup contact quality on negative outgroup evaluation is found and total effect of intergroup contact quality is same as indirect effect (mediated by intergroup anxiety) of intergroup contact quality on negative outgroup evaluation.

In Mediation Model 2, intergroup contact quality predicts negative outgroup evaluation through realistic intergroup threat. Effect of intergroup contact quality on negative outgroup evaluation is mediated by realistic intergroup threat, total effect of intergroup contact quality is equal to summation of direct and indirect effect of intergroup contact quality on negative outgroup evaluation.

In Mediation Model 3, intergroup contact quality predicts negative outgroup evaluation through symbolic intergroup threat. Effect of intergroup contact quality is partially mediated by symbolic intergroup threat, and total effect of intergroup contact quality is summation of direct and indirect effect of intergroup contact quality on negative outgroup evaluation.

In Mediation Model 4, intergroup contact quality predicts negative outgroup evaluation through three parallel mediators simultaneously. Effect of intergroup contact quality is partially mediated by three mediators, and total effect of intergroup contact quality is equal to summation of direct and three indirect effects of intergroup contact quality on negative outgroup evaluation.

Results of all models show that each mediator was found to independently mediate effect of intergroup contact quality on negative outgroup evaluation significantly. Moreover, these three mediators simultaneously mediate effect of intergroup contact quality on negative outgroup evaluation in parallel combination pattern. Thus, intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat are found to mediate effect of intergroup contact quality on negative outgroup evaluation. By interacting with predictor (intergroup contact quality), each of the three mediators predicts a significant reduction in negative outgroup evaluation. Relative percent of each mediational model in explaining of variance in negative outgroup evaluation model was found to be able to explain variance in negative outgroup evaluation much more than three other single-mediator models.

Table 4.4.1. Comparison of Direct, Indirect, and Total Effect of Four Mediation Models Predicting Negative Outgroup Evaluation by Intergroup Contact Quality

Mediation Model	Predictor	Mediator	Direct Effect $(\beta)$	Indirect Effect $(\beta)$	Total Effect $(\beta)$	$R^2$	Mediation Style
1	Contact Quality	Intergroup Anxiety	.00 ns	64 ***	64 ***	.81	Full
2	Contact Quality	Realistic Threat	66 ***	10 ***	76 ***	.81	Partial
3	Contact Quality	Symbolic Threat	63 ***	14 ***	77 ***	.84	Partial
4	Contact Quality	Three Mediators	23 ***	50 ***	73 ***	.95	Partial

Note: ns = not significant, \*\*\* p < .001.

### 4.4.5. Mediation Model 5

To investigate mediated effect of intergroup contact quantity on negative outgroup evaluation via intergroup anxiety, a structural equation model is constructed as shown in *Figure 4.5*. Before running the structural model, a zero-order bivariate correlation analysis was operated, and correlation coefficient values and their significant levels are demonstrated along with basic descriptive of variables involved in Hypothesis 3a (see Table 4.5). Correlation between the predictor variables and the output variable is significant at p < .01 level.

Table 4.5. Zero-order Correlations among Variables and Descriptive of Variables in Hypothesis 3a

Variable	1	2	3
ICQT	1	149**	115**
IA		1	.618**
NOE			1
Scale Range	5-25	6-30	6-30
M	14.24	15.59	14.66
SD	3.97	3.80	3.62
N	4127	4127	4127

*Note.* \*\* p < .01. ICQT = Intergroup contact quantity, IA = Intergroup anxiety, NOE = Negative outgroup evaluation.

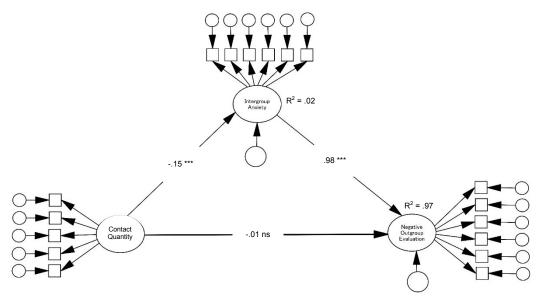


Figure 4.5. Structural equation model (Mediation Model 5) for testing Hypothesis 3a with standardized regression coefficients of significant paths.

*Note*. \*\*\* p < .001. Model fit indices:  $\chi^2$  (79, N = 4127) = 1898.60,  $\chi^2 / df = 24.03$ , p < .001, NFI = .91, IFI = .92, TLI = .86, CFI = .92, RMSEA = .075, 95% CI [.072 – .078]; SRMR = .087. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = nonnormed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual

Model fit indices of Mediation Model 5 are:  $\chi^2$  (79, N = 4127) = 1898.60,  $\chi^2/df = 24.03$ , p < .001, NFI = .91, IFI = .92, TLI = .86, CFI = .92, RMSEA = .075, 95% CI [.072 – .078]; SRMR = .087. (incremental fit index (IFI) > .90 indicates good fit; Tucker-Lewis index (TLI) > .90 indicates good fit; non-normed fit index (NFI) > .90 indicates good fit; comparative fit index (CFI) > .90 indicates adequate fit, > .95 indicates good fit; root mean square error of approximation (RMSEA) between .05 and .08 indicates, reasonable fit, < .05 indicates good fit; standardized root means square residual (SRMR) < .10 indicates good fit).

In Mediation Model 5, a direct causal path is drawn between intergroup contact quantity (predictor) and negative outgroup evaluation (output). An indirect causal path between intergroup contact quantity (predictor) and negative outgroup evaluation (output) is drawn through intergroup anxiety (mediator).

In Mediation Model 5, standardized direct effect of intergroup contact quantity on negative outgroup evaluation is not significant,  $\beta_{\text{direct}} = -.01$ , p > .05. Intergroup contact quantity did not predict negative outgroup evaluation significantly. Standardized indirect effect of contact quantity on negative outgroup evaluation through intergroup anxiety ( $\beta_{\text{indirect}} = \beta_{\text{quantity-anxiety}} \times \beta_{\text{anxiety-evaluation}}$ ) is significant,  $\beta_{\text{indirect}} = -.15$ , p < .001. Interaction effect of intergroup contact quantity and intergroup anxiety negatively predicts negative outgroup evaluation significantly. Direct effect is not significant and indirect effect of contact quantity on negative outgroup evaluation is significant. Effect of intergroup contact quantity on negative outgroup evaluation is fully mediated by intergroup anxiety. Standardized total effect of intergroup contact quantity,  $\beta_{\text{total}} = -.15$ , p < .05, is same as indirect effect ( $\beta_{\text{total}} = \beta_{\text{direct}} + \beta_{\text{indirect}}$ ;  $\beta_{\text{direct}} = 0$ ). Thus, result of Mediation Model 5 supported Hypothesis 3a.

### 4.4.6. Mediation Model 6

To investigate mediated effect of intergroup contact quantity on negative outgroup evaluation via realistic intergroup threat, a structural equation model is constructed as shown

in *Figure 4.6*. Before running the structural model, a zero-order bivariate correlation analysis was operated, and correlation coefficient values and their significant levels are demonstrated along with basic descriptive of variables involved in Hypothesis 3b (see Table 4.6). Correlation between predictor variables and output variable are significant at p < .01 level.

Table 4.6. Zero-order Correlations among Variables and Descriptive of Variables in Hypothesis 3b

Variable	1	2	3
ICQT	1	.089**	115**
RIT		1	.379**
NOE			1
Scale Range	5-25	8-40	6-30
M	14.24	22.09	14.66
SD	3.97	3.84	3.62
N	4127	4127	4127

*Note.* \*\* p < .01. ICQT = Intergroup contact quantity, RIT = Realistic intergroup threat, NOE = Negative outgroup evaluation.

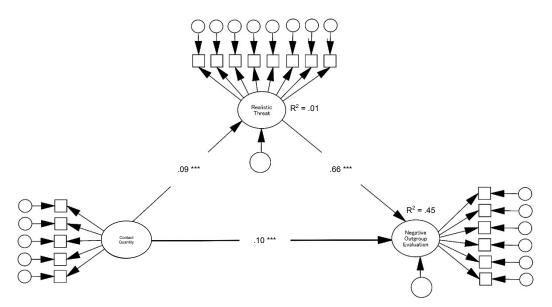


Figure 4.6. Structural equation model (Mediation Model 6) for testing Hypothesis 3b with

standardized regression coefficients of significant paths. *Note.* \*\*\* p < .001. Model fit indices:  $\chi^2$  (102, N = 4127) = 682.80,  $\chi^2/df = 6.70$ , p < .001, NFI = .97, IFI = .98, TLI = .96, CFI = .98, RMSEA = .037, 95% CI [.035 – .040]; SRMR = .049. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual.

Model fit indices of Mediation Model 6 are:  $\chi^2$  (102, N = 4127) = 682.80,  $\chi^2/df = 6.70$ , p < .001, NFI = .97, IFI = .98, TLI = .96, CFI = .98, RMSEA = .037, 95% CI [.035 – .040]; SRMR = .049. (incremental fit index (IFI) > .90 indicates good fit; Tucker-Lewis index (TLI) > .90 indicates good fit; non-normed fit index (NFI) > .90 indicates good fit; comparative fit index (CFI) > .90 indicates adequate fit, > .95 indicates good fit; root mean square error of approximation (RMSEA) between .05 and .08 indicates, reasonable fit, < .05 indicates good fit; standardized root means square residual (SRMR) < .10 indicates good fit).

In Mediation Model 6, a direct causal path is drawn between intergroup contact quantity (predictor) and negative outgroup evaluation (output). An indirect causal path between intergroup contact quantity (predictor) and negative outgroup evaluation (output) is drawn through realistic intergroup threat (mediator).

In Mediation Model 6, standardized direct effect of intergroup contact quantity on negative outgroup evaluation is significant,  $\beta_{\text{direct}} = .10$ , p < .001. Intergroup contact quantity predicts an increase in negative outgroup evaluation significantly. Standardized indirect effect of contact quantity on negative outgroup evaluation through realistic intergroup threat ( $\beta_{\text{indirect}} = \beta_{\text{quantity-realistic}} \times \beta_{\text{realistic-evaluation}}$ ) is significant,  $\beta_{\text{indirect}} = .06$ , p < .001. Interaction effect of intergroup contact quantity and realistic intergroup threat predicts an increase in negative outgroup evaluation significantly. Direct and indirect effects of intergroup contact quantity on negative outgroup evaluation are significant. Effect of intergroup contact quantity on negative outgroup evaluation is partially mediated by realistic intergroup threat. Standardized total effect of intergroup contact quantity,  $\beta_{\text{total}} = .16$ , p < .001, is equal to summation of direct and indirect effect ( $\beta_{\text{total}} = \beta_{\text{direct}} + \beta_{\text{indirect}}$ ). Thus, result of Mediation Model 6 supported Hypothesis 3b.

### 4.4.7. Mediation Model 7

To investigate mediated effect of intergroup contact quantity on negative outgroup evaluation via symbolic intergroup threat, a structural equation model is constructed as shown in *Figure 4.7*. Before running the structural model, a zero-order bivariate correlation analysis was operated, and correlation coefficient values and their significant levels are demonstrated along with basic descriptive of variables involved in Hypothesis 3c (see Table 4.7). Correlation between predictor variables and output variable are significant at p < .01 level.

Table 4.7. Zero-order Correlations among Variables and Descriptive of Variables in Hypothesis 3c

Variable	1	2	3
ICQT	1	.008	115**
SIT		1	.414**
NOE			1
Scale Range	5-25	9-45	6-30
M	14.24	25.99	14.66
SD	3.97	5.36	3.62
N	4127	4127	4127

*Note.* \*\* p < .01. ICQT = Intergroup contact quantity, SIT

<sup>=</sup> Symbolic intergroup threat, NOE = Negative outgroup evaluation.

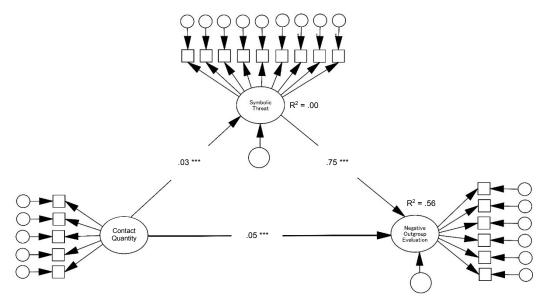


Figure 4.7. Structural equation model (Mediation Model 7) for testing Hypothesis 3c with standardized regression coefficients of significant paths.

*Note*. \*\*\* p < .001. Model fit indices:  $\chi^2$  (101, N = 4127) = 661.13,  $\chi^2/df = 6.07$ , p < .001, NFI = .97, IFI = .97, TLI = .95, CFI = .97, RMSEA = .035, 95% CI [.032 – .038]; SRMR = .043. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual.

Model fit indices of Mediation Model 7 are:  $\chi^2$  (101, N = 4127) = 661.13,  $\chi^2/df = 6.07$ , p < .001, NFI = .97, IFI = .97, TLI = .95, CFI = .97, RMSEA = .035, 95% CI [.032 – .038]; SRMR = .043. (incremental fit index (IFI) > .90 indicates good fit; Tucker-Lewis index (TLI) > .90 indicates good fit; non-normed fit index (NFI) > .90 indicates good fit; comparative fit index (CFI) > .90 indicates adequate fit, > .95 indicates good fit; root mean square error of approximation (RMSEA) between .05 and .08 indicates, reasonable fit, < .05 indicates good fit; standardized root means square residual (SRMR) < .10 indicates good fit).

In Mediation Model 7, a direct causal path is drawn between intergroup contact quantity (predictor) and negative outgroup evaluation (output). An indirect causal path between intergroup contact quantity (predictor) and negative outgroup evaluation (output) is drawn through symbolic intergroup threat (mediator).

In Mediation Model 7, standardized direct effect of intergroup contact quantity on negative outgroup evaluation is significant,  $\beta_{\text{direct}} = .05$ , p < .001. Intergroup contact quantity predicts an increase in negative outgroup evaluation significantly. Standardized indirect effect of intergroup contact quantity on negative outgroup evaluation through symbolic intergroup threat ( $\beta_{\text{indirect}} = \beta_{\text{quantity-symbolic}} \times \beta_{\text{symbolic-evaluation}}$ ) is significant,  $\beta_{\text{indirect}} = .02$ , p < .001. Interaction effect of intergroup contact quantity and symbolic intergroup threat predicts an increase in negative outgroup evaluation significantly. Direct and indirect effects of intergroup contact quantity on negative outgroup evaluation are significant. Effect of intergroup contact quantity on negative outgroup evaluation is partially mediated by symbolic intergroup threat. Standardized total effect of intergroup contact quantity,  $\beta_{\text{total}} = .07$ , p < .001, is equal to summation of direct and indirect effect ( $\beta_{\text{total}} = \beta_{\text{direct}} + \beta_{\text{indirect}}$ ). Thus, result of Mediation Model 7 supported Hypothesis 3c.

#### 4.4.8. Mediation Model 8

To investigate mediated effect of intergroup contact quantity on negative outgroup evaluation via intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat simultaneously, a structural equation model (Mediation Model 8) is constructed as shown in *Figure 4.8*. Before running the structural model, a zero-order bivariate correlation analysis was operated, and correlation coefficient values and their significant levels are demonstrated along with basic descriptive of variables involved in this model (see Table 4.8). Correlation between predictor variables and output variable are significant at p < .01 level.

Table 4.8. Zero-order Correlations among Variables and Descriptive of Variables in Parallel Mediation Model

Variable	1	2	3	4
ICQT	1	149**	.089**	.008
IA		1	.390**	.453**
RIT			1	.556**
SIT				1
Scale Range	5-25	6-30	8-40	9-45
M	14.24	15.59	22.09	25.99
SD	3.97	3.80	3.84	5.36
n	4127	4127	4127	4127

*Note.* \*\* p < .01. ICQT = Intergroup contact quantity, IA = Intergroup anxiety, RIT = Realistic intergroup threat, SIT = Symbolic intergroup threat.

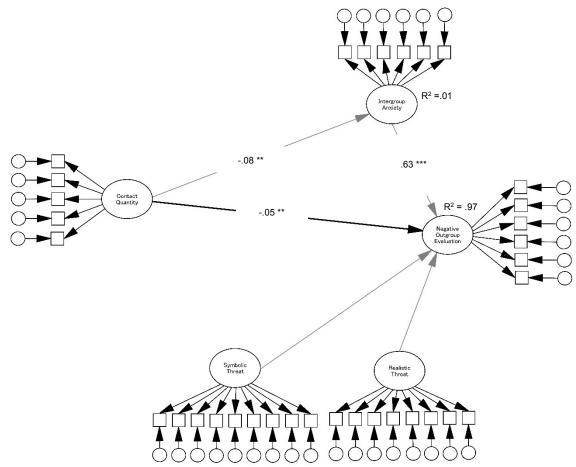


Figure 4.8. Structural equation model (Mediation Model 8) depicting mediation of intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat in the relationships between intergroup contact quantity and negative outgroup evaluation. Squared multiple correlation of endogenous factors (mediators and output variables) and standardized regression coefficients of the significant paths are described.

Note. \*\*\* p < .001. Model fit indices:  $\chi^2$  (421, N = 4127) = 3377.50,  $\chi^2/df = 8.02$ , p < .001, NFI = .93, IFI = .94, TLI = .91, CFI = .94, RMSEA = .041, 95% CI [.040 – .043], SRMR = .063. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual.

Model fit indices of Mediation Model 8 are:  $\chi^2$  (421, N = 4127) = 3377.50,  $\chi^2/df$  = 8.02, p < .001, NFI = .93, IFI = .94, TLI = .91, CFI = .94, RMSEA = .041, 95% CI [.040 – .043], SRMR = .063. (incremental fit index (IFI) > .90 indicates good fit; Tucker-Lewis index (TLI) > .90 indicates good fit; non-normed fit index (NFI) > .90 indicates good fit; comparative fit index (CFI) > .90 indicates adequate fit, > .95 indicates good fit; root mean square error of approximation (RMSEA) between .05 and .08 indicates, reasonable fit, < .05 indicates good fit; standardized root means square residual (SRMR) < .10 indicates good fit).

In Mediation Model 8, a direct causal path is drawn between intergroup contact quantity (predictor) and negative outgroup evaluation (output). Indirect causal paths between intergroup contact quantity (predictor) and negative outgroup evaluation (output) are drawn through intergroup anxiety (mediator 1), realistic intergroup threat (mediator 2), and symbolic intergroup threat (mediator 3) in parallel combination. This model is a parallel mediation model.

In Mediation Model 8, standardized direct effect of intergroup contact quantity on negative outgroup evaluation is significant,  $\beta_{\text{direct}} = -.05$ , p < .01. Intergroup contact quantity predicts a decrease in negative outgroup evaluation. Standardized indirect effect of intergroup contact quantity on negative outgroup evaluation through intergroup anxiety ( $\beta_{\text{indirect-1}} = \beta_{\text{quantity-anxiety}} \times \beta_{\text{anxiety-evaluation}}$ ) is significant,  $\beta = -.05$ , p < .01. Standardized indirect effect of intergroup contact quantity on negative outgroup evaluation through realistic intergroup threat ( $\beta_{\text{indirect-2}} = \beta_{\text{quantity-realistic}} \times \beta_{\text{realistic-evaluation}}$ ) is not significant,  $\beta = .00$ , p > .05. Standardized indirect effect of intergroup contact quantity on negative outgroup evaluation through symbolic intergroup threat ( $\beta_{\text{indirect-3}} = \beta_{\text{quantity-symbolic}} \times \beta_{\text{symbolic-evaluation}}$ ) is not significant,  $\beta = .00$ , p > .05. Both direct and indirect effect of intergroup contact quantity on negative outgroup evaluation through intergroup anxiety are significant, effect of intergroup contact quantity on negative outgroup evaluation is partially mediated by intergroup anxiety. Standardized

total effect of intergroup contact quantity on negative outgroup evaluation ( $\beta_{\text{total}} = -.10$ , p < .01) is equal to summation of the direct and indirect effects ( $\beta_{\text{total}} = \beta_{\text{direct}} + \beta_{\text{indirect-1}} + \beta_{\text{indirect-2}} + \beta_{\text{indirect-3}}$ ). Result of Mediation Model 8 supported Hypothesis 3.

# 4.4.8.1. Model Comparison

Model fit indices of Mediation Model 5, 6, 7, and 8 show that these models have a good fit. Model 5, 6, and 7 separately examined mediated effect of intergroup contact quantity on negative outgroup evaluation through intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat, respectively. Model 8 examined mediated effect of intergroup contact quantity on negative outgroup evaluation through three mediators combining in parallel.

In Mediation Model 5, intergroup contact quantity predicts negative outgroup evaluation through intergroup anxiety. Effect of intergroup contact quality is fully mediated by intergroup anxiety, and total effect of intergroup contact quantity is same as the indirect effect of intergroup contact quantity on negative outgroup evaluation.

In Mediation Model 6, intergroup contact quantity predicts negative outgroup evaluation through realistic intergroup threat. Effect of intergroup contact quantity is partially mediated by realistic intergroup threat, and total effect of intergroup contact quantity is equal to summation of direct and indirect effect of intergroup contact quantity on negative outgroup evaluation.

In Mediation Model 7, intergroup contact quantity predicts negative outgroup evaluation through symbolic intergroup threat. Effect of intergroup contact quantity is partially mediated by symbolic intergroup threat, and total effect of intergroup contact quantity is equal to summation of direct and indirect effect of intergroup contact quantity on negative outgroup evaluation.

In Mediation Model 8, intergroup contact quantity predicts negative outgroup evaluation through three parallel mediators simultaneously. Effect of intergroup contact quantity is partially mediated by intergroup anxiety (realistic and symbolic intergroup threat did not interact with intergroup contact quantity in Model 8), and total effect of intergroup contact quantity is equal to summation of direct and indirect effect of intergroup contact quantity on negative outgroup evaluation.

Results of all models show that each mediator independently mediates effect of intergroup contact quantity on negative outgroup evaluation significantly. However, except intergroup anxiety, two other mediators did not mediate effect of intergroup contact quantity on negative outgroup evaluation in parallel combination pattern. With an exception of result of Mediation Model 8, intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat are reliable mediators that mediate effect of intergroup contact quantity on negative outgroup evaluation. By interacting with predictor (intergroup contact quantity) each mediator significantly predicts a decrease in negative outgroup evaluation. Relative percent of each mediational model in explaining of variance in negative outgroup evaluation is shown in Table 4.8.1.

Table 4.8.1. Comparison of Direct, Indirect, and Total Effect of Four Mediation Models Predicting Negative Outgroup Evaluation by Intergroup Contact Quantity

Mediation Model	Predictor	Mediator	Direct Effect $(\beta)$	Indirect Effect $(\beta)$	Total Effect $(\beta)$	$R^2$	Mediation Style
5	Contact Quantity	Intergroup Anxiety	.00 ns	15 ***	15 ***	.97	Full
6	Contact Quantity	Realistic Threat	.10 ***	.06 ***	.16 ***	.45	Partial
7	Contact Quantity	Symbolic Threat	.05 ***	.01 ***	.06 ***	.56	Partial
8	Contact Quantity	Three Mediators	05 **	05 **	10 **	.97	Partial

Note: ns = not significant, \*\*p < .01, \*\*\*p < .001.

### 4.4.9. Mediation Model 9

To investigate mediated effect of negative intergroup contact on negative outgroup evaluation via intergroup anxiety, a structural equation model is constructed as shown in *Figure 4.9*. Before running the structural model, a zero-order bivariate correlation analysis was operated, and correlation coefficient values and their significant levels are demonstrated along with basic descriptive of variables involved in Hypothesis 4a (see Table 4.9). Correlation between predictor variables and output variable are significant at p < .01 level.

Table 4.9. Zero-order Correlations among Variables and Descriptive of Variables in Hypothesis 4a

Variable	1	2	3
NIC	1	.415**	.396**
IA		1	.618**
NOE			1
Scale Range	5-65	6-30	6-30
M	19.78	15.59	14.66
SD	7.97	3.80	3.62
N	4127	4127	4127

*Note.* \*\* p < .01. NIC = Negative intergroup contact, IA = Intergroup anxiety, NOE = Negative outgroup evaluation.

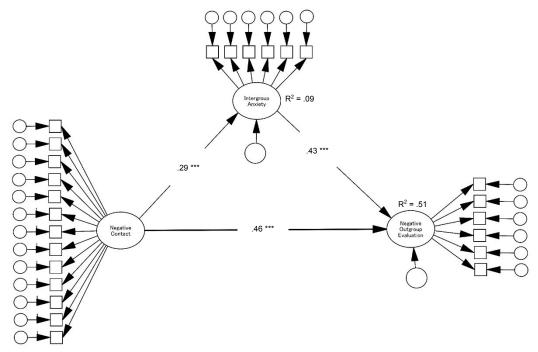


Figure 4.9. Structural equation model (Mediation Model 9) for testing Hypothesis 4a with standardized regression coefficients of significant paths.

Note. \*\*\* p < .001. Model fit indices:  $\chi^2$  (168, N = 4127) = 2111.13,  $\chi^2/df = 12.57$ , p < .001, NFI = .95, IFI = .96, TLI = .92, CFI = .96, RMSEA = .053, 95% CI [.051 – .055]; SRMR = .057. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual.

Model fit indices of Mediation Model 9 are:  $\chi^2$  (168, N = 4127) = 2111.13,  $\chi^2/df = 12.57$ , p < .001, NFI = .95, IFI = .96, TLI = .92, CFI = .96, RMSEA = .053, 95% CI [.051 – .055]; SRMR = .057. (incremental fit index (IFI) > .90 indicates good fit; Tucker-Lewis index (TLI) > .90 indicates good fit; non-normed fit index (NFI) > .90 indicates good fit; comparative fit index (CFI) > .90 indicates adequate fit, > .95 indicates good fit; root mean square error of approximation (RMSEA) between .05 and .08 indicates, reasonable fit, < .05 indicates good fit; standardized root means square residual (SRMR) < .10 indicates good fit).

In Mediation Model 9, a direct causal path is drawn between negative intergroup contact (predictor) and negative outgroup evaluation (output). An indirect causal path between negative intergroup contact (predictor) and negative outgroup evaluation (output) is drawn through intergroup anxiety (mediator).

In Mediation Model 9, standardized direct effect of negative intergroup contact on negative outgroup evaluation is significant,  $\beta_{\text{direct}} = .46$ , p < .001. Negative intergroup contact predicts an increase in negative outgroup evaluation significantly. Standardized indirect effect of negative intergroup contact on negative outgroup evaluation through intergroup anxiety  $(\beta_{\text{indirect}} = \beta_{\text{negative-anxiety}} \times \beta_{\text{anxiety-evaluation}})$  is significant,  $\beta_{\text{indirect}} = .12$ , p < .001. Interaction effect of negative intergroup contact and intergroup anxiety predicts an increase in negative outgroup evaluation significantly. Direct and indirect effects of negative intergroup contact on negative outgroup evaluation are significant. Effect of negative intergroup contact on negative outgroup evaluation is partially mediated by intergroup anxiety. Standardized total effect of negative intergroup contact,  $\beta_{\text{total}} = .58$ , p < .001, is equal to summation of direct and indirect effect ( $\beta_{\text{total}} = \beta_{\text{direct}} + \beta_{\text{indirect}}$ ). Thus, result of Mediation Model 9 supported Hypothesis 4a.

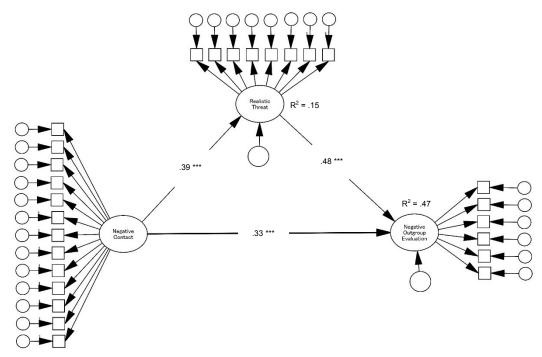
### 4.4.10. Mediation Model 10

To investigate mediated effect of negative intergroup contact on negative outgroup evaluation via realistic intergroup threat, a structural equation model is constructed as shown in *Figure 4.10*. Before running the structural model, a zero-order bivariate correlation analysis was operated, and correlation coefficient values and their significant levels are demonstrated along with basic descriptive of variables involved in Hypothesis 4b (see Table 4.10). Correlation between predictor variables and output variable are significant at p < .01 level.

Table 4.10. Zero-order Correlations among Variables and Descriptive of Variables in Hypothesis 4b

Variable	1	2	3
NIC	1	.362**	.396**
RIT		1	.379**
NOE			1
Scale Range	5-65	8-40	6-30
M	19.78	22.09	14.66
SD	7.97	3.84	3.62
n	4127	4127	4127

*Note.* \*\* p < .01. NIC = Negative intergroup contact, RIT = Realistic intergroup threat, NOE = Negative outgroup evaluation.



*Figure 4.10.* Structural equation model (Mediation Model 10) for testing Hypothesis 4b with standardized regression coefficients of significant paths.

*Note*. \*\*\* p < .001. Model fit indices:  $\chi^2$  (207, N = 4127) = 488.32,  $\chi^2/df = 2.36$ , p < .001, NFI = .99, IFI = .99, TLI = .99, CFI = .99, RMSEA = .018, 95% CI [.016 – .020]; SRMR = .016. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual.

Model fit indices of Mediation Model 10 are:  $\chi^2$  (207, N = 4127) = 488.32,  $\chi^2/df = 2.36$ , p < .001, NFI = .99, IFI = .99, TLI = .99, CFI = .99, RMSEA = .018, 95% CI [.016 – .020]; SRMR = .016. (incremental fit index (IFI) > .90 indicates good fit; Tucker-Lewis index (TLI) > .90 indicates good fit; non-normed fit index (NFI) > .90 indicates good fit; comparative fit index (CFI) > .90 indicates adequate fit, > .95 indicates good fit; root mean square error of approximation (RMSEA) between .05 and .08 indicates, reasonable fit, < .05 indicates good fit; standardized root means square residual (SRMR) < .10 indicates good fit).

In Mediation Model 10, a direct causal path is drawn between negative intergroup contact (predictor) and negative outgroup evaluation (output). An indirect causal path between negative intergroup contact (predictor) and negative outgroup evaluation (output) is drawn through realistic intergroup threat (mediator).

In Mediation Model 10, standardized direct effect of negative intergroup contact on negative outgroup evaluation is significant,  $\beta_{\text{direct}} = .33$ , p < .001. Negative intergroup contact predicts an increase in negative outgroup evaluation significantly. Standardized indirect effect of negative contact on negative outgroup evaluation through realistic intergroup threat ( $\beta_{\text{indirect}} = \beta_{\text{negative-realistic}} \times \beta_{\text{realistic-evaluation}}$ ) is significant,  $\beta_{\text{indirect}} = .19$ , p < .001. Interaction effect of negative intergroup contact and realistic intergroup threat predicts an increase in negative outgroup evaluation significantly. Direct and indirect effects of negative contact on negative outgroup evaluation are significant. Effect of negative intergroup contact on negative outgroup evaluation is partially mediated by realistic intergroup threat. Standardized total effect of negative intergroup contact,  $\beta_{\text{total}} = .52$ , p < .001, is equal to summation of direct and indirect effect ( $\beta_{\text{total}} = \beta_{\text{direct}} + \beta_{\text{indirect}}$ ). Thus, result of Mediation Model 10 supported Hypothesis 4b.

### 4.4.11. Mediation Model 11

To investigate mediated effect of negative intergroup contact on negative outgroup evaluation via symbolic intergroup threat, a structural equation model is constructed as shown in *Figure 4.11*. Before running the structural model, a zero-order bivariate correlation analysis was operated, and correlation coefficient values and their significant levels are demonstrated along with basic descriptive of variables involved in Hypothesis 4c (see Table 4.11). Correlation between predictor variables and output variable are significant at p < .01 level.

Table 4.11. Zero-order Correlations among Variables and descriptive of Variables in Hypothesis 4c

Variable	1	2	3
NIC	1	.362**	.396**
SIT		1	.414**
NOE			1
Scale Range	5-65	9-45	6-30
M	19.78	25.99	14.66
SD	7.97	5.36	3.62
n	4127	4127	4127

*Note.* \*\* p < .01. NIC = Negative intergroup contact, SIT = Symbolic intergroup threat, NOE = Negative outgroup evaluation.

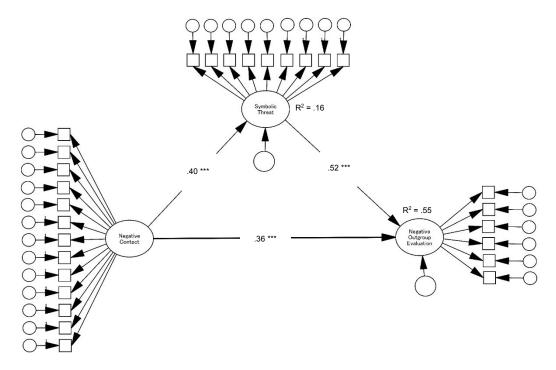


Figure 4.11. Structural equation model (Mediation Model 11) for testing Hypothesis 4c with standardized regression coefficients of significant paths. Note. \*\*\* p < .001. Model fit indices:  $\chi^2$  (222, N = 4127) = 550.85,  $\chi^2$  /df = 2.48, p < .001, NFI = .99, IFI = .99, TLI = .99, CFI = .99, RMSEA = .019, 95% CI [.017 – .021]; SRMR = .019. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual

Model fit indices of Mediation Model 11 are:  $\chi^2$  (222, N = 4127) = 550.85,  $\chi^2/df = 2.48$ , p < .001, NFI = .99, IFI = .99, TLI = .99, CFI = .99, RMSEA = .019, 95% CI [.017 – .021]; SRMR = .019. (incremental fit index (IFI) > .90 indicates good fit; Tucker-Lewis index (TLI) > .90 indicates good fit; non-normed fit index (NFI) > .90 indicates good fit; comparative fit index (CFI) > .90 indicates adequate fit, > .95 indicates good fit; root mean square error of approximation (RMSEA) between .05 and .08 indicates, reasonable fit, < .05 indicates good fit; standardized root means square residual (SRMR) < .10 indicates good fit).

In Mediation Model 11, a direct causal path is drawn between negative intergroup contact (predictor) and negative outgroup evaluation (output). An indirect causal path between negative intergroup contact (predictor) and negative outgroup evaluation (output) is drawn through symbolic intergroup threat (mediator).

In Mediation Model 11, standardized direct effect of negative intergroup contact on negative outgroup evaluation is significant,  $\beta_{\text{direct}} = .36$ , p > .001. Negative intergroup contact predicts an increase in negative outgroup evaluation significantly. Standardized indirect effect of negative intergroup contact on negative outgroup evaluation through symbolic intergroup threat ( $\beta_{\text{indirect}} = \beta_{\text{negative-symbolic}} \times \beta_{\text{symbolic-evaluation}}$ ) is significant,  $\beta_{\text{indirect}} = .21$ , p < .001. Interaction effect of negative intergroup contact and symbolic intergroup threat predicts an increase in negative outgroup evaluation significantly. Direct and indirect effects of negative contact on negative outgroup evaluation are significant. Effect of negative intergroup contact on negative outgroup evaluation is partially mediated by symbolic intergroup threat. Standardized total effect of negative intergroup contact,  $\beta_{\text{total}} = .57$ , p < .001, is equal to summation of direct and indirect effect ( $\beta_{\text{total}} = \beta_{\text{direct}} + \beta_{\text{indirect}}$ ). Thus, result of Mediation Model 11 supported Hypothesis 4c.

### 4.4.12. Mediation Model 12

To investigate mediated effect of negative intergroup contact on negative outgroup evaluation via intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat simultaneously, a structural equation model (Mediation Model 12) is constructed as shown in *Figure 4.12*. Before running the structural model, a zero-order bivariate correlation analysis was operated, and correlation coefficient values and their significant levels are demonstrated along with basic descriptive of variables involved in this model (see Table 4.12). Correlation between predictor variables and output variable are significant at p < .01 level.

Table 4.12. Zero-order Correlations among Variables and descriptive of Variables in Parallel Mediation Model

Variable	1	2	3	4
NIC	1	.415**	.362**	.362**
IA		1	.390**	.453**
RIT			1	.556**
SIT				1
Scale Range	13-65	6-30	8-40	9-45
M	19.78	15.59	22.09	25.99
SD	7.97	3.80	3.84	5.36
n	4127	4127	4127	4127

*Note.* \*\* p < .01. NIC = Negative intergroup contact, IA = Intergroup anxiety, RIT = Realistic intergroup threat, SIT = Symbolic intergroup threat.

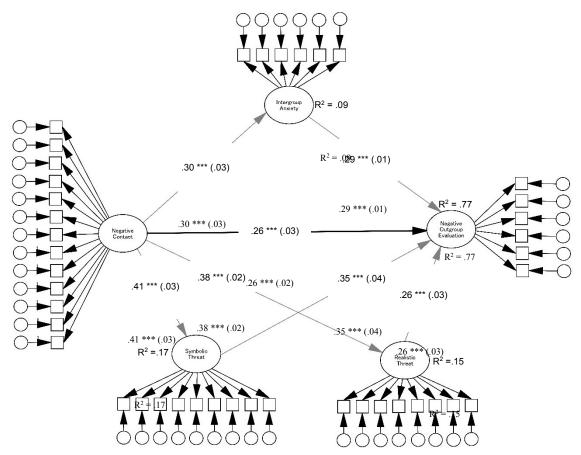


Figure 4.12. Structural equation model depicting parallel mediation of intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat on the relationship between negative intergroup contact and negative outgroup evaluation. Squared multiple correlation of endogenous factors (mediators and output variables), standardized regression coefficients and standard error (in the parentheses) of the significant paths are described. Note. \*\*\* p < .001. Model fit indices:  $\chi^2$  (646, N = 4127) = 3288.54,  $\chi^2/df = 5.09$ , p < .001, NFI = .95, IFI = .96, TLI = .95, CFI = .96, RMSEA = .031, 95% CI [.030 – .033], SRMR = .039. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual

Model fit indices of Mediation Model 12 are:  $\chi^2$  (646, N = 4127) = 3288.54,  $\chi^2$ /df = 5.09, p < .001, NFI = .95, IFI = .96, TLI = .95, CFI = .96, RMSEA = .031, 95% CI [.030 – .033], SRMR = .039. (incremental fit index (IFI) > .90 indicates good fit; Tucker-Lewis index (TLI) > .90 indicates good fit; non-normed fit index (NFI) > .90 indicates good fit; comparative fit index (CFI) > .90 indicates adequate fit, > .95 indicates good fit; root mean square error of approximation (RMSEA) between .05 and .08 indicates, reasonable fit, < .05 indicates good fit; standardized root means square residual (SRMR) < .10 indicates good fit).

In Mediation Model 12, a direct causal path is drawn between negative intergroup contact (predictor) and negative outgroup evaluation (output). Indirect causal paths between negative intergroup contact (predictor) and negative outgroup evaluation (output) are drawn through intergroup anxiety (mediator 1), realistic intergroup threat (mediator 2), and symbolic intergroup threat (mediator 3) in parallel combination. This model is a parallel mediational model.

In Mediation Model 12, standardized direct effect of negative intergroup contact on negative outgroup evaluation is significant,  $\beta_{\text{direct}} = .26$ , p < .001. Negative intergroup contact predicts an increase in negative outgroup evaluation. Standardized indirect effect of negative intergroup contact on negative outgroup evaluation through intergroup anxiety ( $\beta_{\text{indirect-1}} = \beta_{\text{negative-anxiety}} \times \beta_{\text{anxiety-evaluation}}$ ) is significant,  $\beta = .09$ , p < .001. Standardized indirect effect of negative intergroup contact on negative outgroup evaluation through realistic intergroup threat ( $\beta_{\text{indirect-2}} = \beta_{\text{negative-realistic}} \times \beta_{\text{realistic-evaluation}}$ ) is significant,  $\beta = .10$ , p < .001. Standardized indirect effect of negative intergroup contact on negative outgroup evaluation through symbolic intergroup threat ( $\beta_{\text{indirect-3}} = \beta_{\text{negative-symbolic}} \times \beta_{\text{symbolic-evaluation}}$ ) is significant,  $\beta = .14$ , p < .001. Direct and indirect effects of negative intergroup contact via three mediators are significant. Effect of negative intergroup contact on negative outgroup evaluation is partially mediated by three mediators. Standardized total effect of negative

intergroup contact on negative outgroup evaluation ( $\beta_{\text{total}} = .59$ , p < .001) is equal to summation of direct and indirect effect ( $\beta_{\text{total}} = \beta_{\text{direct}} + \beta_{\text{indirect-1}} + \beta_{\text{indirect-2}} + \beta_{\text{indirect-3}}$ ). Result of Mediation Model 12 supported Hypothesis 4.

## 4.4.12.1. Model Comparison

Model fit indices of Mediation Model 9, 10, 11, and 12 show that these models have a good fit. Model 9, 10, and 11 separately examined mediated effect of negative intergroup contact on negative outgroup evaluation through intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat, respectively. Model 12 examined mediated effect of negative intergroup contact on negative outgroup evaluation through three mediators combining in parallel.

In Mediation Model 9, negative intergroup contact predicts negative outgroup evaluation through intergroup anxiety. Effect of negative intergroup contact is partially mediated by intergroup anxiety, and total effect of negative intergroup contact is equal to summation of direct and indirect effects of negative intergroup contact on negative outgroup evaluation. In Mediation Model 10, negative intergroup contact predicts negative outgroup evaluation through realistic intergroup threat. Effect of negative intergroup contact is partially mediated by realistic intergroup threat, and total effect of negative intergroup contact is equal to summation of direct and indirect effects of negative intergroup contact on negative outgroup evaluation.

In Mediation Model 11, negative intergroup contact predicts negative outgroup evaluation through symbolic intergroup threat. Effect of negative intergroup contact is partially mediated by symbolic intergroup threat, and total effect of negative intergroup contact is equal to summation of direct and indirect effects of negative intergroup contact on negative outgroup evaluation.

In Mediation Model 12, negative intergroup contact predicts negative outgroup evaluation through three parallel mediators simultaneously. Effect of negative intergroup contact is partially mediated by three mediators, and total effect of negative intergroup contact is equal to summation of direct and indirect effects of negative intergroup contact on negative outgroup evaluation.

Results of all models show that each mediator was found to independently mediate effect of negative intergroup contact on negative outgroup evaluation significantly. Moreover, all mediators mediate effect of negative intergroup contact on negative outgroup evaluation in parallel combination. Intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat are found to mediate the effect of negative intergroup contact on negative outgroup evaluation. By interacting with predictor (negative intergroup contact) each of the three mediators predicts an increase in negative outgroup evaluation significantly. Relative percent of each mediational model in explaining of variance in negative outgroup evaluation is shown in Table 4.12.1.

Table 4.12.1. Comparison of Direct, Indirect, and Total Effect of Four Mediation Models Predicting Negative Outgroup Evaluation by Negative Intergroup Contact

Mediation Model	Predictor	Mediator	Direct Effect (β)	Indirect Effect $(\beta)$	Total Effect $(\beta)$	$R^2$	Mediation Style
9	Negative Contact	Intergroup Anxiety	.46 ***	.12 ***	.58 ***	.51	Partial
10	Negative Contact	Realistic Threat	.33 ***	.19 ***	.52 ***	.47	Partial
11	Negative Contact	Symbolic Threat	.36 ***	.21 ***	.57 ***	.55	Partial
12	Negative Contact	Three Mediators	.26 **	.33 **	.59 **	.77	Partial

*Note*: \*\* *p* < .01, \*\*\* *p* < .001.

Table 4.12.2. Comparison of Direct, Indirect, and Total Effect of Twelve Mediation Models Predicting Negative Outgroup Evaluation by Three Predictors

Mediation Model	Predictor	Mediator	Direct Effect $(\beta)$	Indirect Effect (β)	Total Effect $(\beta)$	$R^2$	Mediation Style
1	Contact Quality	Intergroup Anxiety	.00 ns	64 ***	64 ***	.81	Full
2	Contact Quality	Realistic Threat	66 ***	10 ***	76 ***	.81	Partial
3	Contact Quality	Symbolic Threat	63 ***	14 ***	77 ***	.84	Partial
4	Contact Quality	Three Mediators	23 ***	50 ***	73 ***	.95	Partial
5	Contact Quantity	Intergroup Anxiety	.00 ns	15 ***	15 ***	.97	Full
6	Contact Quantity	Realistic Threat	.10 ***	.06 ***	.16 ***	.45	Partial
7	Contact Quantity	Symbolic Threat	.05 ***	.01 ***	.06 ***	.56	Partial
8	Contact Quantity	Three Mediators	05 **	05 **	10 **	.97	Partial
9	Negative Contact	Intergroup Anxiety	.46 ***	.12 ***	.58 ***	.51	Partial
10	Negative Contact	Realistic Threat	.33 ***	.19 ***	.52 ***	.47	Partial
11	Negative Contact	Symbolic Threat	.36 ***	.21 ***	.57 ***	.55	Partial
12	Negative Contact	Three Mediators	.26 **	.33 **	.59 **	.77	Partial

Note: ns = not significant, \*\*p < .01, \*\*\*p < .001.

### 4.5. Results and Discussion

In Chapter 4, mediated effects of intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat on three dimensions of intergroup contact are investigated by constructing twelve mediational models. Model fit indices of all models are good.

Mediated effects of intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat on the relationship between intergroup contact quality and negative outgroup evaluation are separately examined in Mediation Model 1, 2, and 3. Results of these three models revealed significant mediation effects of three mediators on the relationship between intergroup contact quality and negative outgroup evaluation. Intergroup anxiety was found to fully mediate the effect of intergroup contact quality on negative outgroup evaluation whereas realistic and symbolic intergroup threats were found to partially mediate the effect of intergroup contact quality on negative outgroup evaluation. When mediated effects of the three mediators on the relationship between quality of intergroup contact and negative outgroup evaluation were parallelly examined in Mediation Model 4, all three mediators were found to simultaneously mediate the effect of intergroup contact quality on negative outgroup evaluation.

Mediated effects of intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat on the relationship between intergroup contact quantity and negative outgroup evaluation are separately examined in Mediation Model 5, 6, and 7. Results of three models revealed significant mediation effects of three mediators on the relationship between intergroup contact quantity and negative outgroup evaluation. Intergroup anxiety was found to fully mediate the effect of intergroup contact quantity on negative outgroup evaluation whereas realistic and symbolic intergroup threats were found to partially mediate the effect of intergroup contact quantity on negative outgroup evaluation. When mediated effects of all three mediators are included in Mediation Model 8, all three mediators were found to

simultaneously mediate the effect of intergroup contact quantity on negative outgroup evaluation.

Mediated effects of intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat on the relationship between negative intergroup contact and negative outgroup evaluation are separately examined in Mediation Model 9, 10, and 11. Results of three models revealed a significant mediation effect of three mediators on the relationship between negative intergroup contact and negative outgroup evaluation. Intergroup anxiety, realistic, and symbolic intergroup threats were found to partially mediate the effect of negative intergroup contact on negative outgroup evaluation. When three mediators are included in Mediation Model 12, three mediators were found to simultaneously mediate the effect of negative intergroup contact on negative outgroup evaluation.

The effect of intergroup contact quality is found to negatively associate with negative outgroup evaluation when it is mediated by either of three mediators. The effect of negative intergroup contact is found to positively associate with negative outgroup evaluation when it is mediated by either of three mediators. The effect of intergroup contact quantity is found to negatively associate with negative outgroup evaluation when it is mediated by intergroup anxiety. However, when it was mediated by either realistic or symbolic intergroup threat, it was found to associate with negative outgroup evaluation positively.

### **CHAPTER 5**

# **Conditional Direct Effects of Intergroup Contact**

# 5.1. Research Question

Do three moderators significantly moderate the direct effect of intergroup contact on negative outgroup evaluation?

# 5.2. Hypothesis

Hypothesis 5: Relationship between qualitative dimension of intergroup contact and negative outgroup evaluation would be moderated by (a) national group status, (b) local group status, and (c) participants' target outgroup.

Hypothesis 6: Relationship between quantitative dimension of intergroup contact and negative outgroup evaluation would be moderated by (a) national group status, (b) local group status, and (c) participants' target outgroup.

Hypothesis 7: Relationship between negative dimension of intergroup contact and negative outgroup evaluation would be moderated by (a) national group status, (b) local group status, and (c) participants' target outgroup.

# 5.3. Method

# **5.3.1.** Participants

Participants' information are the same across all chapters in the present study.

## 5.3.2. Materials

To measure qualitative intergroup contact, quantitative intergroup contact, negative intergroup contact, and negative outgroup evaluation, *General Intergroup Contact Quality* 

Scales, General Intergroup Contact Quantity Scales, Negative Experiences Inventory, and General Evaluation Scale are used.

# 5.3.3. Procedure

Research procedure is the same across all chapters in the present study.

# 5.4. Data Analysis

To examine moderated effect of national group status, local group status, and participants' target outgroup on relationship between intergroup contact quality and negative outgroup evaluation, PROCESS macro 3.1(Hayes, 2013), Model 1 was operated for each moderation analysis. A significant interaction effect between predictor variable and moderator variable on output variable indicates that relationship between predictor variable and output variable is significantly moderated by moderator variable. All the moderator variables in present study are categorical variables, descriptive of variables included in moderation model are described in Table 5.1.

Table 5.1. Descriptive of Variables in Hypothesis 5

Moderator		Intergroup Contact			Negative Outgroup			
		Quality			Evaluation			
		•	M	SD	SE	$\overline{M}$	SD	SE
National	Group Status	Minority $(n = 1887)$	14.81	3.51	.081	15.43	3.88	.089
		Majority $(n = 2240)$	14.76	3.91	.083	14.01	3.25	.069
Local Group	Status	Minority $(n = 1023)$	14.60	3.46	.108	15.24	3.77	.118
		Majority $(n = 3104)$	14.84	3.81	.068	14.47	3.55	.064
Participants 'Target	Outgroup	$Min \rightarrow Min$ $(n = 404)$	14.86	3.54	.176	15.12	3.81	.189
		Min→Maj $(n = 876)$	14.73	3.41	.115	15.60	3.77	.128
		Maj → Min $(n = 2111)$	14.80	3.94	.086	13.94	3.26	.071

 $\overline{Note}$ . Min→Min = (ingroup) minority → (target outgroup) another minority, Min → Maj = (ingroup) minority → (target outgroup) majority, Maj → Min = (ingroup) majority → (target outgroup) minority.

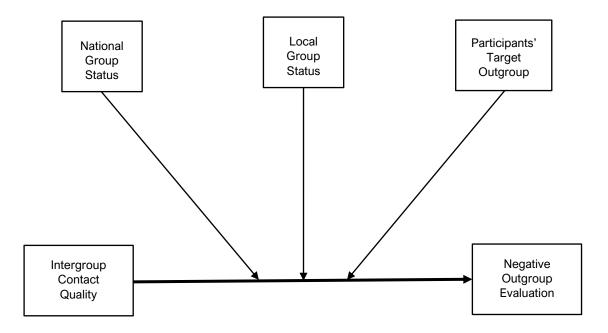


Figure 5.1. Conceptual model depicting moderation of national group status, local group status, and participants' target outgroup on the relationship between intergroup contact quality and negative outgroup evaluation.

# 5.4.1. Moderation Model 1

To investigate moderation effect of national group status on relationship between intergroup contact quality and negative outgroup evaluation, Model 1 of PROCESS Macro 3.1 was operated.

Results of analysis show that both intergroup contact quality ( $\beta$  = -.388, 95% CI [-.430 – -.345], SE = .021, t = -17.89, p < .001) and national group status ( $\beta$  = -2.411, 95% CI [-3.249 – -1.572], SE = .428, t = -5.63, p < .001) significantly associate with negative outgroup evaluation. National group status is a categorical variable with two levels; '0' represents minority status and '1' majority status. Negative outgroup evaluation significantly decreases with an increase in intergroup contact quality, and negative outgroup evaluation is significantly higher among members of national minority status group than members of national majority status group. Since interaction effect between intergroup contact quality and national group status on negative outgroup evaluation is significant ( $\beta$  = .066, 95% CI [.011 – .121], SE = .028, t = 2.34, p < .001), there is a significant moderation effect of national group status on relationship between intergroup contact quality and negative outgroup evaluation.

# Moderation Effect of National Group Status

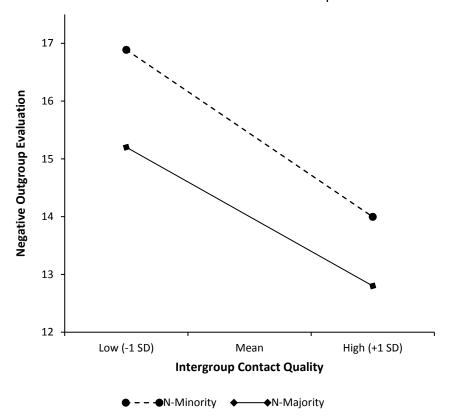


Figure 5.2. Johnson-Neyman plot showing moderation effect of national group status on the relationship between intergroup contact quality and negative outgroup evaluation.

Decomposing the moderation effect of national group status on relationship between intergroup contact quality and negative outgroup evaluation, intergroup contact quality was found to predict a significant decrease in negative outgroup evaluation among members of national minority status group (b = -.388, 95% CI [-.430 - -.345], SE = .022, t = -17.89, p < .001) as well as among those of national majority status group (b = -.329, 95% CI [-.357 - -.287], SE = .018, t = -18.03, p < .001).

Among members of national minority status groups, those whose intergroup contact quality is low reported a significantly higher negative outgroup evaluation than those whose intergroup contact quality is high. Similarly, among members of national majority status group, those whose intergroup contact quality is low reported a significantly higher negative outgroup evaluation than those whose intergroup contact quality is high. Moderation effect

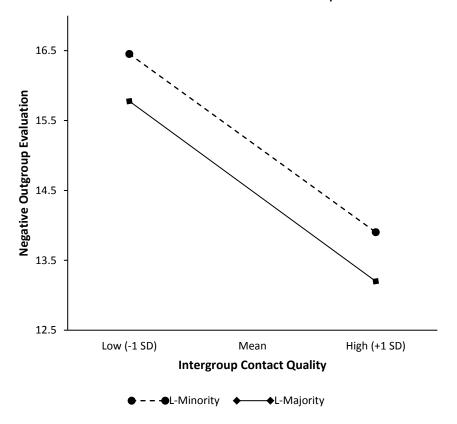
of national group status on the relationship between intergroup contact quality and negative outgroup evaluation is significant. Results of statistical analysis supported Hypothesis 5a.

# 5.4.2. Moderation Model 2

To investigate moderation effect of local group status on relationship between intergroup contact quality and negative outgroup evaluation, Model 1 of PROCESS Macro 3.1 was operated.

Results of analysis show that intergroup contact quality ( $\beta$  = -.342, 95% CI [-.402 – -.282], SE = .030, t = -11.25, p < .001) significantly associates with negative outgroup evaluation while local group status ( $\beta$  = -.635, 95% CI [-1.649 – .377], SE = .517, t = -1.23, p > .05) does not significantly associate with negative outgroup evaluation. Intergroup contact quality predicts a significant decrease in negative outgroup evaluation. Regardless of participants' local group status, those whose intergroup contact quality is low reported a significantly higher negative outgroup evaluation score than those whose intergroup contact quality is high. However, participant's local group status was found not to associate with negative outgroup evaluation significantly. Local group status is a categorical variable with two levels; '0' represents minority status and '1' represents majority status.

# Moderation Effect of Local Group Status



*Figure 5.3.* Johnson-Neyman plot showing moderation effect of local group status on the relationship between intergroup contact quality and negative outgroup evaluation.

Among members of the local minority status group, those who are low in intergroup contact quality reported a significantly higher negative outgroup evaluation score than those who are high in intergroup contact quality. Similarly, among members of the local majority status group, those whose intergroup contact quality is low reported a higher negative outgroup evaluation score than those whose intergroup contact quality is high (see Figure 5.3). However, no significant difference in negative outgroup evaluation was found depending on participants' local group status. Results of statistical analysis did not support Hypothesis 5b.

# 5.4.3. Moderation Model 3

To investigate moderation effect of participants' target outgroup on relationship between intergroup contact quality and negative outgroup evaluation, Model 1 of PROCESS Macro 3.1 was operated.

Results of analysis show that both intergroup contact quality ( $\beta = -.382$ , 95% CI [-.437 – -.327], SE = .028, t = -13.65, p < .001) and participants' target outgroup ( $\beta = -.242$ , 95% CI [-.343 – -.141], SE = .052, t = -4.70, p < .001) significantly associates with negative outgroup evaluation. Participants' target outgroup is a categorical variable with three levels; '1' represents (minority  $\rightarrow$  minority), '2' represents (minority  $\rightarrow$  majority), and '3' represents (majority  $\rightarrow$  minority).

# Moderation Effect of Target Outgroup 16.5 10.5 10.5 10.5 10.5 10.5 10.5 Low (-1 SD) Intergroup Contact Quality Mai-Min Mai-Min

Figure 5.4. Johnson-Neyman plot showing moderation effect of participants' target outgroup on the relationship between intergroup contact quality and negative outgroup evaluation.

Regardless of participants' target outgroup, intergroup contact quality predicts a significant decrease in negative outgroup evaluation score. Participants' target outgroup associates with a significant variation in negative outgroup evaluation. Members of national majority group whose target outgroup is a national minority group reported the lowest negative outgroup evaluation score than the other groups of participants. Members of national minority group

whose target outgroup is another national minority group reported the highest negative outgroup evaluation scores among the three groups of participants (see *Figure 5.4*).

However, interaction effect between intergroup contact quality and participants' target outgroup on negative outgroup evaluation is not significant ( $\beta$  = .006, 95% CI [-.001 – .012], SE = .003, t = 1.65, p > .05), and there is no moderation effect of participants' target outgroup on relationship between intergroup contact quality and negative outgroup evaluation. Results of statistical analysis did not support Hypothesis 5c.

To examine moderation effect of national group status, local group status, and participants' target outgroup on relationship between intergroup contact quantity and negative outgroup evaluation, PROCESS macro 3.1 Model 1 was operated for each moderation analysis. All moderators in present study are categorical variables. descriptive of variables included in moderation model are described in Table 5.2.

Table 5.2. Descriptive of Variables in Hypothesis 6

Moderator		Intergroup Contact			Negative Outgroup			
			Quantity			Evaluation		
			M	SD	SE	$\overline{M}$	SD	SE
National	Group Status	Minority $(n = 1887)$	15.30	3.77	.087	15.43	3.88	.089
		Majority $(n = 2240)$	13.35	3.92	.083	14.01	3.25	.069
Local Group	Status	Minority $(n = 1023)$	14.93	3.84	.120	15.24	3.77	.118
		Majority $(n = 3104)$	14.01	3.99	.072	14.47	3.55	.064
Participants' Target	Outgroup	$Min \rightarrow Min$ $(n = 404)$	14.71	3.79	.189	15.12	3.81	.189
		$Min \rightarrow Maj$ $(n = 876)$	15.63	3.64	.123	15.60	3.77	.128
		Maj → Min $(n = 2111)$	13.28	3.92	.085	13.94	3.26	.071

Note. Min $\rightarrow$ Min = (ingroup) minority  $\rightarrow$  (target outgroup) another minority, Min $\rightarrow$  Maj = (ingroup) minority  $\rightarrow$  (target outgroup) majority, Maj  $\rightarrow$  Min = (ingroup) majority  $\rightarrow$  (target outgroup) minority.

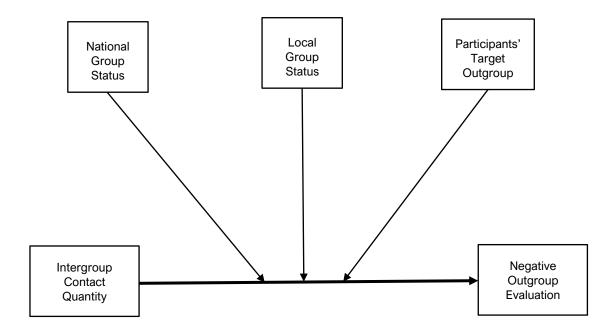
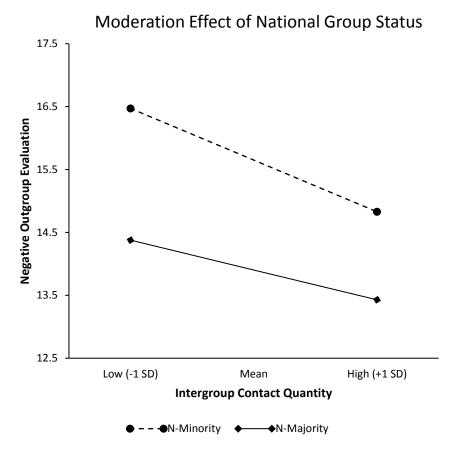


Figure 5.5. Conceptual model depicting moderation effect of national group status, local group status, and participants' target outgroup on the relationship between intergroup contact quantity and negative outgroup evaluation.

# **5.4.4. Moderation Model 4**

To investigate moderation effect of national group status on relationship between intergroup contact quantity and negative outgroup evaluation, PROCESS macro 3.1 Model 1 (Hayes, 2013) is operated.

Results of analysis show that both intergroup contact quantity ( $\beta$  = -.207, 95% CI [-.249 – -.165], SE = .426, t = -9.69, p < .001) and national group status ( $\beta$  = -2.99, 95% CI [-3.828 – -2.155], SE = .426, t = -7.02, p < .001) significantly associate with negative outgroup evaluation. National group status is a categorical variable with two levels; '0' represents national minority group status and '1' represents national majority group status. Intergroup contact quantity predicts a significant decrease in negative outgroup evaluation. Negative outgroup evaluation is significantly higher among members of national minority status groups than those of national majority status group. Since interaction effect between intergroup contact quantity and national group status on negative outgroup evaluation is significant ( $\beta$  = .087, 95% CI [.032 – .143], SE = .028, t = 3.07, p < .01), a significant moderation effect of national group status on relationship between intergroup contact quantity and negative outgroup evaluation is found. The degree in which intergroup contact quantity can reduce negative outgroup evaluation is significantly higher among national majority status group than national minority status group.



*Figure 5.6.* Johnson-Neyman plot showing moderation effect of national group status on the relationship between intergroup contact quantity and negative outgroup evaluation.

Decomposing the moderation effect of national group status on relationship between intergroup contact quantity and negative outgroup evaluation, intergroup contact quantity was found to predict a decrease in negative outgroup evaluation among national minority status group members (b = -.207, 95% CI [-.249 - -.165], SE = .021, t = -9.69, p < .001) as well as among national majority status group members (b = -.120, 95% CI [-.156 - -.082], SE = .019, t = -6.34, p < .001). Among national minority status group members, those who are low in intergroup contact quantity reported a significantly higher negative outgroup evaluation score than those who are high in intergroup contact quantity reported a significantly higher negative outgroup evaluation score than those who are high

in intergroup contact quality. Moderation effect of national group status is illustrated in *Figure 5.7*. Results of statistical analysis support Hypothesis 6a.

# 5.4.5. Moderation Model 5

To investigate moderation effect of local group status on relationship between intergroup contact quantity and negative outgroup evaluation, PROCESS macro 3.1 Model 1 (Hayes, 2013) is operated.

Results of analysis show that both intergroup contact quantity ( $\beta$  = -.193, 95% CI [-.249 – -.136], SE = .029, t = -6.62, p < .001) and local group status ( $\beta$  = -2.39, 95% CI [-3.378 – 1.394], SE = .506, t = -4.72, p < .001) significantly associate with negative outgroup evaluation. Local group status is a categorical variable with two levels; '0' represents local minority status and '1' represents local majority status. Intergroup contact quantity predicts a significant decrease in negative outgroup evaluation. Negative outgroup evaluation is significantly higher among members of local minority status group than members of local majority status group. Regardless of participants' local group status, those whose intergroup contact quantity is low reported a significantly higher negative outgroup evaluation than those whose intergroup contact quantity is high. Since interaction effect of intergroup contact quantity and local group status on negative outgroup evaluation is significant ( $\beta$  = .103, 95% CI [.037 – .168], SE = .033, t = 3.08, p < .01), moderation effect of local group status on relationship between contact quantity and negative outgroup evaluation is significantly found.

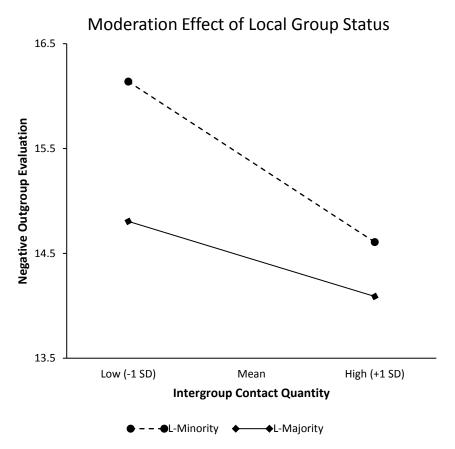


Figure 5.7. Johnson-Neyman plot showing moderation effect of local group status on the relationship between intergroup contact quantity and negative outgroup evaluation.

Decomposing the moderation effect of local group status, intergroup contact quantity was found to predict a decrease in negative outgroup evaluation among members of local minority status group (b = -.193, 95% CI [-.250 - -.136], SE = .029, t = -6.62, p < .001) as well as among members of local majority status group (b = -.090, 95% CI [-.122 - -.059], SE = .016, t = -5.61, p < .001). Among members of local minority status group, those who are low in intergroup contact quantity reported a significantly higher negative outgroup evaluation score than those who are high in intergroup contact quantity. Similarly, among members of local majority status group, those whose intergroup contact quantity is low reported a significantly higher negative outgroup evaluation score than those whose intergroup contact quality is high (see *Figure 5.8*). Results of statistical analysis supported Hypothesis 6b.

# **5.4.6. Moderation Model 6**

To investigate moderation effect of participants' target outgroup on relationship between intergroup contact quantity and negative outgroup evaluation, PROCESS macro 3.1 Model 1 (Hayes, 2013) is operated.

Results of analysis show that both intergroup contact quantity ( $\beta$  = -.163, 95% CI [-.236 – -.089], SE = .037, t = -4.36, p < .001) and participants' target outgroup ( $\beta$  = -1.28, 95% CI [-3.853 – -1.934], SE = .332, t = -3.86, p < .001) significantly associate with negative outgroup evaluation. Participants' target outgroup is a categorical variable with three levels; '1' represents (minority  $\rightarrow$  minority), '2' represents (minority  $\rightarrow$  majority), and '3' represents (majority  $r\rightarrow$  minority).

Intergroup contact quantity predicts a significant decrease in negative outgroup evaluation. Regardless of participants' target outgroup, those who are low in intergroup contact quantity reported a significantly higher negative outgroup evaluation score than those who are high in intergroup contact quantity.

Members of a national minority status group whose target outgroup is another national minority status group reported the highest negative outgroup evaluation score among three groups of participants whose target outgroup is different. Members of national majority status group whose target outgroup is a national minority status group reported the lowest negative outgroup evaluation among three groups of participants.

# Moderation Effect of Target Outgroup 16 15 Low (-1 SD) Mean High (+1 SD) Intergroup Contact Quantity A - - Min-Min Maj-Min

Figure 5.8. Johnson-Neyman plot showing moderation effect of participants' target outgroup on the relationship between intergroup contact quantity and negative outgroup evaluation. Since interaction effect between intergroup contact quantity and participants' target outgroup on negative outgroup evaluation is not significant ( $\beta$  = .017, 95% CI [.443 – -.027], SE = .022, t = .77, p > .05), moderation effect of participants' target outgroup on relationship between contact quantity and negative outgroup evaluation is not significant (*Figure 5.8*). Results of statistical analysis did not support Hypothesis 6c.

To examine moderation effect of national group status, local group status, and participants' target outgroup on relationship between negative intergroup contact and negative outgroup evaluation, PROCESS macro 3.1 Model 1 was operated. Moderators in present study are categorical variables. Descriptive of variables included in moderation model are described in Table 5.3.

Table 5.3. Descriptive of Variables in Hypothesis 7

		Negative Intergroup			Negative Outgroup			
Moderator		Contact			Evaluation			
		M	SD	SE	$\overline{M}$	SD	SE	
1.5	Minority	22.45	8.59	.198	15.43	3.88	.089	
onal Statı	(n = 1887)							
National Group Status	Majority	17.53	6.61	.140	14.01	3.25	.069	
G. G	(n = 2240)							
dr	Minority	21.85	8.43	.263	15.24	3.77	.118	
Grou	(n = 1023)							
Local Group Status	Majority	19.10	7.69	.138	14.47	3.55	.064	
Lc	(n = 3104)							
<u> </u>	Min→Min	22.19	8.47	.422	15.12	3.81	.189	
arge	(n = 404)							
Participants' Target Outgroup	Min <b>→</b> Maj	22.54	8.14	.275	15.60	3.77	.128	
ipan Jutg	(n = 876)							
artic (	Maj→Min	17.28	6.37	.139	13.94	3.26	.071	
Ь	(n = 2111)						.0 / 1	

Note. Min $\rightarrow$ Min = (ingroup) minority  $\rightarrow$  (target outgroup) another minority, Min $\rightarrow$  Maj = (ingroup) minority  $\rightarrow$  (target outgroup) majority, Maj  $\rightarrow$  Min = (ingroup) majority  $\rightarrow$  (target outgroup) minority.

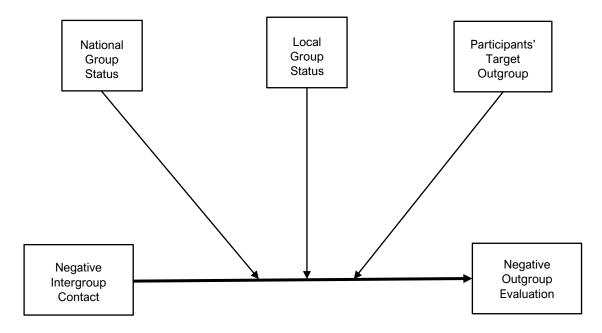


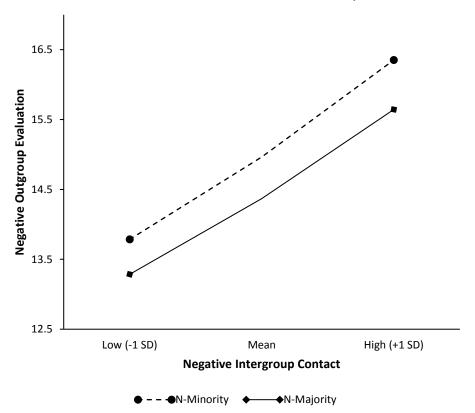
Figure 5.9. Conceptual model depicting moderation effect of national group status, local group status, and participants' target outgroup on the relationship between negative intergroup contact and negative outgroup evaluation.

### **5.4.7. Moderation Model 7**

To investigate moderation effect of national group status on relationship between negative intergroup contact and negative outgroup evaluation, PROCESS macro 3.1 Model 1 (Hayes, 2013) is operated.

Results of analysis show that negative intergroup contact ( $\beta$  = .174, 95% CI [.156 – .191], SE = .009, t = 19.61, p < .001) significantly associate with negative outgroup evaluation while national group status ( $\beta$  = -.316, 95% CI [-.888 – .255], SE = .291, t = -1.09, p >.001) does not significantly associate with negative outgroup evaluation. Negative intergroup contact predicts an increase in negative outgroup evaluation. Regardless of participants' national group status, those whose negative intergroup contact is high reported a significantly higher negative outgroup evaluation score than those whose negative intergroup contact is low. National group status was found not to associate with negative outgroup evaluation, i.e., no significant difference in negative outgroup evaluation was found between members of national minority and majority status groups. National group status is a categorical variable with two levels; '0' represents minority status and '1' represents majority status.

# **Moderation Effect of National Group Status**



5.10. Johnson-Neyman plot showing moderation effect of national group status on the relationship between negative intergroup contact and negative outgroup evaluation.

Since interaction effect between negative intergroup contact and national group status on negative outgroup evaluation is not significant ( $\beta$  = -.019, 95% CI [-.048 – .009], SE = .015, t = -1.32, p > .05), moderation effect of national group status on relationship between negative intergroup contact and negative outgroup evaluation was not found (see *Figure* 5.10). Results of statistical analysis did not support Hypothesis 7a.

# 5.4.8. Moderation Model 8

To investigate moderation effect of local group status on relationship between negative intergroup contact and negative outgroup evaluation, PROCESS macro 3.1 Model 1 (Hayes, 2013) is operated.

Results of analysis show that negative intergroup contact ( $\beta$  = .191, 95% CI [.167 –.215], SE = .012, t = 15.49, p < .001) significantly associates with negative outgroup evaluation while

local group status ( $\beta$  = .122, 95% CI [-.525 – .768], SE = .329, t = .36, p > .05) does not significantly associate with negative outgroup evaluation. Negative intergroup contact predicts an increase in negative outgroup evaluation significantly. Regardless of participants' local group status, those whose negative intergroup score is high reported a significantly higher negative outgroup evaluation score than those whose negative intergroup contact is low. However, participants' local group status was found not to associate with negative outgroup evaluation, i.e., no significant difference in negative outgroup evaluation score was found among members of local minority and majority status groups. Local group status is a categorical variable with two levels; '0' represents minority status and '1' represents majority status.

# Moderation Effect of Local Group Status 16.5 15.5 Low (-1 SD) Negative Intergroup Contact Mean Negative Intergroup Contact

*Figure 5.11.* Johnson-Neyman plot showing moderation effect of local group status on the relationship between negative intergroup contact and negative outgroup evaluation.

Since interaction effect of intergroup contact quality and local group status on negative outgroup evaluation is not significant ( $\beta$  = -.019, 95% CI [-.047 – .009], SE = .014, t = -1.32, p > .05), moderation effect of local group status on relationship between negative intergroup contact and negative outgroup evaluation was not significantly found (see *Figure 5.11*). Results of statistical analysis did not support Hypothesis 7b.

# 5.4.9. Moderation Model 9

To investigate moderation effect of participants' target outgroup on relationship between negative intergroup contact and negative outgroup evaluation, PROCESS macro 3.1 Model 1 (Hayes, 2013) is operated.

Results of analysis show that negative intergroup contact ( $\beta$  = .177, 95% CI [.146 – .209], SE = .016, t = 11.12, p < .001) significantly associate with negative outgroup evaluation while participants' target outgroup ( $\beta$  = -.311, 95% CI [-.755 – .132], SE = .226, t = -1.37 p > .001) does not significantly associate with negative outgroup evaluation. Negative intergroup contact predicts a significant increase in negative outgroup evaluation. Regardless of participants' target outgroup, those whose negative intergroup contact is high reported a significantly higher negative outgroup evaluation score than those whose negative intergroup contact is low. Participants' target outgroup was found not to associate with negative outgroup evaluation, i.e., no significant difference in negative outgroup evaluation was found among three different group of participants having different target outgroup. Target outgroup is a categorical variable with three levels; '0' represents minority  $\Rightarrow$  minority, '2' represents minority  $\Rightarrow$  minority, and '2' represents majority  $\Rightarrow$  minority.

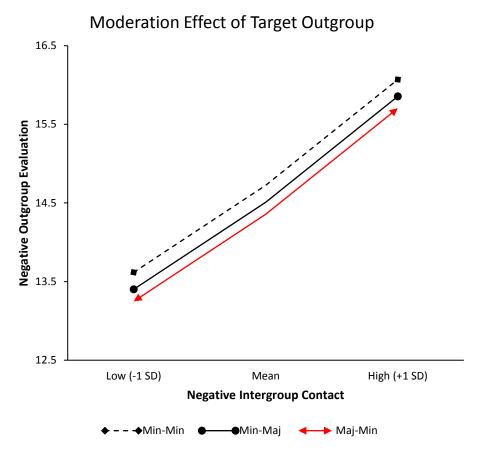


Figure 5.12. Johnson-Neyman plot showing moderation effect of participants' target outgroup on the relationship between negative intergroup contact and negative outgroup evaluation.

Since interaction effect of negative intergroup contact and participants' target outgroup on negative outgroup evaluation is not significant ( $\beta$  = .000, 95% CI [-.020 – .020], SE = .010, t = -.020, p > .05), moderation effect of participants' target outgroup on relationship between negative intergroup contact and negative outgroup evaluation was not significantly found (*Figure 5.12*). Results of statistical analysis did not support Hypothesis 7c.

# 5.5. Results and Discussion

In Chapter 5, moderation effects of national group status, local group status, and participants' target outgroup on the relationship between three dimensions of intergroup contact and negative outgroup evaluation were investigated. PROCESS macro 3.1 Model 1 (Hayes, 2013)

is mainly operated to examine moderation effects of moderators on the relationship between predictors and output variable.

A significant moderation effect of national group status was found on the relationship between intergroup contact quality and negative outgroup evaluation, and between intergroup contact quantity and negative outgroup evaluation. Both quantitative and qualitative dimensions of intergroup contact were found to predict a significant decrease in negative outgroup evaluation. Regardless of participants' national group status, those whose score in these two dimensions of intergroup contact is high reported a significantly lower negative outgroup evaluation score than those whose score in these two dimensions is low. Among participants whose scores in these two dimensions of intergroup contact are high, a significant difference in negative outgroup evaluation was found depending on their national group status. Similarly, among participants whose scores in these two dimensions of intergroup contact are low, a significant difference in negative outgroup evaluation was found depending on their national group status. Regardless of participants' level of quantity and quality of intergroup contact score, those who are members of a national minority status group reported a significantly higher negative outgroup evaluation score than those who are members of the national majority status group.

A significant moderation effect of local group status was found on the relationship between intergroup contact quantity and negative outgroup evaluation. Intergroup contact quantity was found to predict a significant decrease in negative outgroup evaluation. Regardless of participants' local group status, those whose score in intergroup contact quantity is high reported a significantly higher negative outgroup evaluation score than those whose intergroup contact quantity score is low. Among participants whose intergroup contact quantity score is high, a significant difference in negative outgroup evaluation was found depending on participants' local group status. Similarly, among participants whose

intergroup contact quantity score is low, a significant difference in negative outgroup evaluation was found depending on participants' local group status. Regardless of participants level of intergroup contact quantity score, those who are members of local minority status group reported a significantly higher negative outgroup evaluation score than those who are members of the local majority group.

A significant moderation effect of participants' target outgroup was not found the relationship between three dimensions of intergroup contact and negative outgroup evaluation.

Regardless of participants' level of intergroup contact quality score, members of national majority status group as well as local majority status group rated a significantly lower negative outgroup evaluation score than members of national minority status group and local minority status group.

### CHAPTER 6

# **Conditional Indirect Effects of Intergroup Contact**

# 6.1. Research Question

Do three moderators significantly moderate the indirect effects of intergroup contact on negative outgroup evaluation via intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat?

# 6.2. Hypothesis

Hypothesis 8: Indirect effect of qualitative dimension of intergroup contact on negative outgroup evaluation via (a) intergroup anxiety, (b) realistic intergroup threat, and (c) symbolic intergroup threat would be moderated by (i) national group status, (ii) local group status, and (iii) participants' target outgroup.

Hypothesis 9: Indirect effect of quantitative dimension of intergroup contact on negative outgroup evaluation via (a) intergroup anxiety, (b) realistic intergroup threat, and (c) symbolic intergroup threat would be moderated by (i) national group status, (ii) local group status, and (iii) participants' target outgroup.

Hypothesis 10: Indirect effect of negative dimension of intergroup contact on negative outgroup evaluation via (a) intergroup anxiety, (b) realistic intergroup threat, and (c) symbolic intergroup threat would be moderated by (i) national group status, (ii) local group status, and (iii) participants' target outgroup.

### 6.3. Method

# 6.3.1. Participants

Participants' information are the same across all chapters in the present study.

# 6.3.2. Materials

To measure qualitative intergroup contact, quantitative intergroup contact, negative intergroup contact, negative outgroup evaluation, intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat, General Intergroup Contact Quality Scales, General Intergroup Contact Quantity Scales, Negative Experiences Inventory, General Evaluation Scale, Intergroup Anxiety Scale, Realistic Intergroup Threat Scales, and Symbolic Intergroup Threat Scales are used.

### 6.3.3. Procedure

Research procedure is the same across all chapters in the present study.

# 6.4. Data Analysis

Direct effect of intergroup contact on negative outgroup evaluation is mediated by intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat (described in Chapter 4), and moderated by participants' national group status, local group status, and target outgroup (described in Chapter 5). Indirect effects of three dimensions of intergroup contact on negative outgroup evaluation via three mediators are investigated in Chapter 4, and intergroup contact quality and negative intergroup contact are found to interact with all mediators to predict negative outgroup evaluation. Conditional effects of three dimensions of intergroup contact are investigated in Chapter 5. While effect of intergroup contact quality on negative outgroup evaluation is found to be moderated by national group status, effect of intergroup contact quantity on negative outgroup evaluation is moderated by national and local group status. Moderation effect of participants' target outgroup on relationship between three dimensions of intergroup contact and negative outgroup evaluation is not significantly

found. In Chapter 6, conditional indirect effects of three dimensions of intergroup contact on negative outgroup evaluation are examined. In other words, whether mediation effects of mediators on relationship between three dimensions of intergroup contact and negative outgroup evaluation significantly vary depending on participants' national group status, local group status, and participants' target outgroup in Chapter 6.

To examine moderation effect of participants' national group status, local group status, and participants' target outgroup on mediated effects of three mediators (intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat) on the relationship between three dimensions of intergroup contact (qualitative, quantitative, and negative dimension) and negative outgroup evaluation, PROCESS macro 3.1 Model 58 is separately operated for each moderated mediation analysis.

Moderation effect of a moderator is said to be significant when interaction effect between predictor and moderator on output variable is significant. Mediation effect of a mediator is said to be significant either when interaction effect between predictor and mediator is present or when interaction effect between mediator and output variable is present, or both. Moderated mediation effect is said to be significant either when the effect of predictor on mediator depends on moderator or when the effect of mediator on output variable depends on moderator, or both. Moderated mediation implies that indirect effect between the predictor and output variable depends on moderator (Muller, Judd and Yzerbyt, 2005). Moderation effect of participants' national group status, local group status, and target outgroup on mediated effects of intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat on relationship between three dimensions of intergroup contact on negative outgroup evaluation are examined in this chapter.

### 6.4.1. Moderated Mediation Model 1

Hypothesis 8: Mediated effects (a) intergroup anxiety, (b) realistic intergroup threat, and (c) symbolic intergroup threat on relationship between intergroup contact quality and negative outgroup evaluation would vary depending on participants' (i) national group status, (ii) local group status, and (iii) target outgroup.

To investigate whether national group status moderates the mediated effect of intergroup anxiety on relationship between intergroup contact quality and negative outgroup evaluation, PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference in both paths of indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) are examined (see *Figure 6.1*).

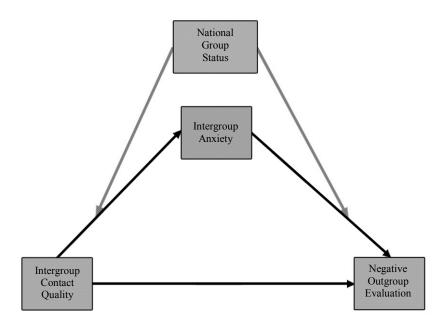


Figure 6.1. Conceptual model (Moderated Mediation Model 1) depicting moderation of national group status on the mediation model in which intergroup anxiety mediates the relationship between intergroup contact quality and negative outgroup evaluation.

Results of analysis output does not reveal any significant effect of national group status on relationship between intergroup contact quality and intergroup anxiety ( $\beta$  = .002, 95% CI [-.047 – .066], SE = .029, t = .33, p > .05). However, a significant effect of national group status on relationship between intergroup anxiety and negative outgroup evaluation is found

 $(\beta = -.049, 95\% \text{ CI } [-.094 - -.003], SE = .023, t = -2.07, p < .05)$ . The degree in which intergroup contact quality predicts intergroup anxiety is not significantly different between members of national minority and majority status groups. The degree in which intergroup anxiety predicts negative outgroup evaluation is significantly different between members of nation minority and majority status groups. Regardless of participants' national group status, those whose intergroup anxiety is low reported a significantly lower negative outgroup evaluation score than those whose intergroup anxiety is high. Among participants whose intergroup anxiety is low, members of national minority status group reported a significantly higher negative outgroup evaluation score than members of national majority status group. Similarly, among participants whose intergroup anxiety is high, members of national minority status group reported a significantly higher negative outgroup evaluation score than members of national majority status group. Regardless of participants' intergroup anxiety level, members of national minority status groups reported a significantly higher negative outgroup evaluation score than members of national majority status group. National group status is a categorical variable with two levels; '0' represents minority status and '1' majority status. The effect of intergroup contact quality on intergroup anxiety does not depend on participants' national group status. The effect of intergroup anxiety on negative outgroup evaluation depends on participants' national group status. Hence, moderation effect of participants' national group status is significantly found in the second stage of mediation model in which intergroup anxiety mediates the effect of intergroup contact quality on negative outgroup evaluation.

# **Moderation Effect of National Group Status**

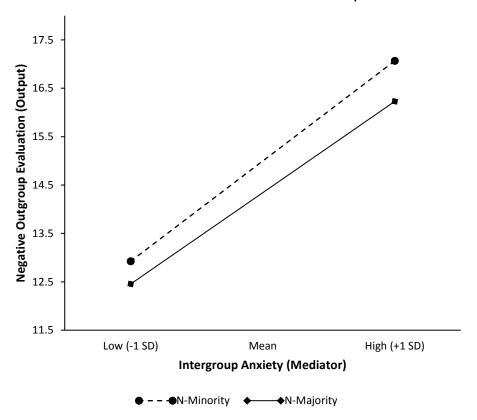


Figure 6.2. Johnson-Neyman plot showing moderation effect of national group status on the relationship between intergroup anxiety and negative outgroup evaluation.

Decomposing the moderation effect of national group status on relationship between intergroup anxiety and negative outgroup evaluation, intergroup anxiety is found to predict a significant increase in negative outgroup evaluation among members of national minority status group (b = .545, 95% CI [.511 - .579], SE = .017, t = 13.24, p < .001) as well as members of national majority status group (b = .496, 95% CI [.462 - .530], SE = .018, t = 28.40, p < .001). Among members of national minority status group, those who are high in intergroup anxiety reported a significantly higher negative outgroup evaluation score than those who are low in intergroup anxiety. Similarly, among members of national majority status group, those who are high in intergroup anxiety reported a relatively higher negative outgroup evaluation than those who are low in intergroup anxiety. Regardless of participants' level of intergroup anxiety, participants from national minority status groups reported a

significantly higher negative outgroup evaluation score than national majority group members (see *Figure 6.2*). A significant difference in mediated effect of intergroup anxiety on relationship between intergroup contact quality and negative outgroup evaluation depends on participants' national group status.

# 6.4.2. Moderated Mediation Model 2

To investigate whether participants' local group status moderates the mediated effect of intergroup anxiety on relationship between intergroup contact quality and negative outgroup evaluation, PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference in both paths of indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) are examined (see *Figure 6.3*).

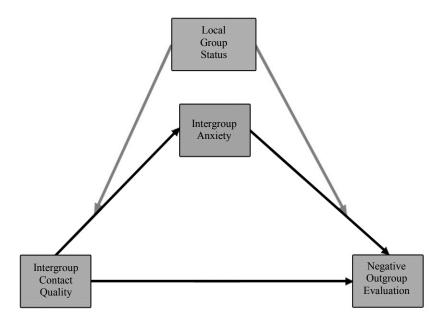


Figure 6.3. Conceptual model (Moderated Mediation Model 2) depicting moderation of local group status on the mediation model in which intergroup anxiety mediates the relationship between intergroup contact quality and negative outgroup evaluation.

Results of analysis output does not reveal any significant effect of participants' local group status on relationship between intergroup contact quality and intergroup anxiety ( $\beta = -.002$ , 95% CI [-.078 – .059], SE = .035, t = -.28, p > .05). Moreover, no significant effect of

participants' local group status is found on relationship between intergroup anxiety and negative outgroup evaluation ( $\beta$  = .009, 95% CI [-.044 – .062], SE = .027, t = .33, p > .05). Local group status is a categorical variable with two levels; '0' represents minority status and '1' majority status. Moderation effect of participants' local group status is not significantly found both in first and second stages of mediation model in which intergroup anxiety mediates relationship between intergroup contact quality and negative outgroup evaluation.

# 6.4.3. Moderated Mediation Model 3

To investigate whether participants' target outgroup moderates the mediated effect of intergroup anxiety on relationship between intergroup contact quality and negative outgroup evaluation, PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference in both paths of indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) are examined (see *Figure 6.4*).

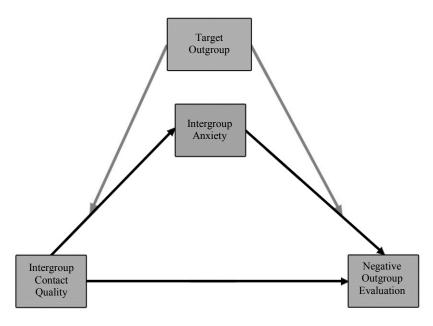


Figure 6.4. Conceptual model (Moderated Mediation Model 3) depicting moderation of participants' target outgroup on the mediation model in which intergroup anxiety mediates the relationship between intergroup contact quality and negative outgroup evaluation.

Results of analysis output does not reveal any significant effect of participants' target outgroup on relationship between intergroup contact quality and intergroup anxiety ( $\beta$  = -.002, 95% CI [-.043 – .047], SE = .023, t = -.08, p > .05). Moreover, no significant effect of participants' target outgroup is found relationship between intergroup anxiety negative outgroup evaluation ( $\beta$  = -.020, 95% CI [-.055 – .015], SE = .018, t = -1.31, p > .05). National group status is a categorical variable with two levels; '0' represents minority status and '1' majority status. Moderation effect of participants' target outgroup is not significantly found both in the first and second stages of mediation model in which intergroup anxiety mediates relationship between intergroup contact quality and negative outgroup evaluation.

By integrating results of analysis output of Mediation Model 1, 2, and 3, Hypothesis 8(a) is partially supported. Moderation effect of participants' national group status, local group status, and target outgroup on mediation model in which intergroup anxiety mediates relationship between intergroup contact quality and negative outgroup evaluation have been examined. While a significant moderation effect of participants' national group status is found in the second stage of the mediation model, moderation effect of participants' local group status and target outgroup is not found in either stage of that mediation model.

# 6.4.4. Moderated Mediation Model 4

To investigate whether participants' national group status moderates the mediated effect of realistic intergroup threat on relationship between intergroup contact quality and negative outgroup evaluation, PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference in both paths of indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) are examined (see *Figure 6.5*).

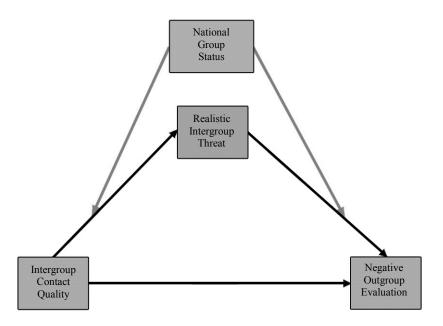


Figure 6.5. Conceptual model (Moderated Mediation Model 4) depicting moderation of national group status on the mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation.

Results of analysis output reveals no significant moderation effect of participants' national group status on relationship between intergroup contact quality and realistic intergroup threat  $(\beta = .049, 95\% \text{ CI } [-.041 - .139], SE = .046, t = 1.06, p > .05)$ . However, a significant moderation effect of participants' national group status on relationship between realistic intergroup threat and negative outgroup evaluation  $(\beta = -.051, 95\% \text{ CI } [-.087 - -.016], SE = .018, t = -2.86, p < .01)$  is found. National group status is a categorical variable with two levels; '0' represents minority status and '1' majority status. Moderation effect of national group status is found in neither the first nor second stage of mediation model in which realistic intergroup threat mediates relationship between intergroup contact quality and negative outgroup evaluation. Regardless of participants' national group status, those whose realistic intergroup threat is high reported a significantly high negative outgroup evaluation than those whose realistic intergroup threat is low. Among participants whose realistic intergroup threat is low, members of national minority status group reported a significantly higher negative outgroup evaluation score than national majority status group. Moreover,

among participants whose realistic threat score is high, members of national minority status group reported a significantly higher negative outgroup evaluation score than members of national majority status group.

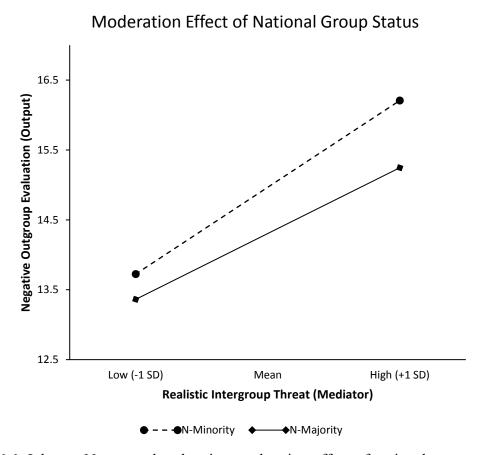


Figure 6.6. Johnson-Neyman plot showing moderation effect of national group status on relationship between realistic intergroup threat and negative outgroup evaluation.

Decomposing the moderation effect of national group status on the relationship between realistic intergroup threat and negative outgroup evaluation, realistic intergroup threat is found to predicts a significant increase in negative outgroup evaluation among members of national minority status group (b = .213, 95% CI [.189 –.236], SE = .012, t = 17.65, p < .001) as well as among members of national majority status group (b = .161, 95% CI [.135 –.188], SE = .013, t = 11.10, p < .001). Regardless of participants' national group status, those whose realistic intergroup threat score is high reported a significantly higher negative outgroup evaluation than those whose realistic intergroup threat is low. Among those whose realistic

intergroup threat is high, members of national minority status group reported a significantly higher negative outgroup evaluation than members of national majority status group. Similarly, among those whose realistic intergroup threat is low, members of national minority status group reported a significantly higher negative outgroup evaluation score than members of national majority status group (see *Figure 6.6*).

# 6.4.5. Moderated Mediation Model 5

To investigate whether participants' local group status moderates the mediated effect of realistic intergroup threat on relationship between intergroup contact quality and negative outgroup evaluation, PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference in both paths of indirect effect—the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) are examined (see *Figure 6.7*).

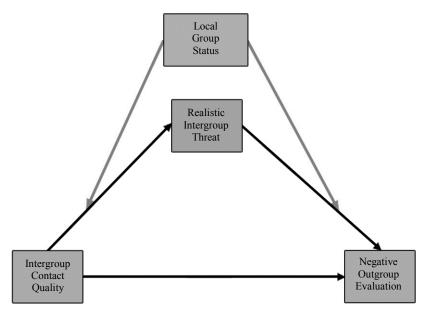


Figure 6.7. Conceptual model (Moderated Mediation Model 5) depicting moderation of local group status on the mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of local group status on relationship between intergroup contact quality and realistic intergroup threat ( $\beta$  = .049, 95% CI [-.041 – .139], SE = .046, t = .06, p > .05). However, a significant moderation effect of local group status on relationship between realistic intergroup threat and negative outgroup evaluation ( $\beta$  = -.051, 95% CI [-.087 – -.016], SE = .018, t = -2.86, p < .01) is revealed. Local group status is a categorical variable with two levels; '0' represents minority status and '1' majority status. The relationship between intergroup contact quality and realistic intergroup threat does not depend on participants' local group status. The relationship between realistic intergroup threat and negative outgroup evaluation depends on participants' local group status. Hence, moderation effect of participants' local group status is significantly found in the second stage of mediation model in which realistic intergroup threat mediates the effect of intergroup contact quality on negative outgroup evaluation.

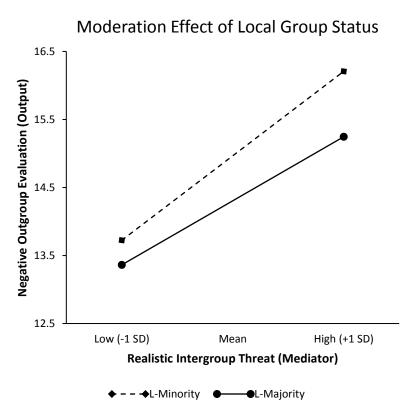


Figure 6.8. Johnson-Neyman plot showing moderation effect of local group status on mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation.

Decomposing the moderation effect of local group status on relationship between realistic intergroup threat and negative outgroup evaluation, realistic intergroup threat is found to predict a significant increase in negative outgroup evaluation among members of local minority status group (b = .213, 95% CI [.189 –.236], SE = .012, t = 17.65, p < .001) as well as among members of local majority status group (b = .161, 95% CI [.135 –.188], SE = .013, t = 11.99, p < .001). Regardless of participants' local group status, those whose realistic intergroup threat is high reported a significantly higher negative outgroup evaluation score than those whose realistic intergroup threat is low. Among those whose realistic intergroup threat is high, members of local minority status group reported a significantly higher negative outgroup evaluation score than members of local majority status group. Similarly, among those whose realistic intergroup threat is low, members of local minority status groups reported a significantly higher negative outgroup evaluation score than members of local majority status group (see *Figure 6.8*).

### 6.4.6. Moderated Mediation Model 6

To investigate whether participants' target outgroup moderates the mediated effect of realistic intergroup threat on relationship between intergroup contact quality and negative outgroup evaluation, PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference in both paths of indirect effect—the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) are examined (see *Figure 6.9*).

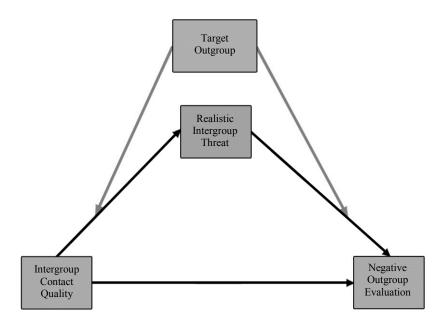


Figure 6.9. Conceptual model (Moderated Mediation Model 6) depicting the moderation of participants' target outgroup on the mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of participants' target outgroup on relationship between intergroup contact quality and realistic intergroup threat ( $\beta$  = -.017, 95% CI [-.089 – .056], SE = .037, t = -.44, p > .05). However, a significant moderation effect of participants' target outgroup on relationship between realistic intergroup threat and negative outgroup evaluation ( $\beta$  = -.048, 95% CI [-.075 – -.022], SE = .013, t = -3.53, p < .001) is revealed. The relationship between intergroup contact quality and realistic intergroup threat does not depend on participants' target outgroup. The relationship between realistic intergroup threat and negative outgroup evaluation depends on participants' target outgroup. Moderation effect of participants' target outgroup is found in the second stage of the mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation.

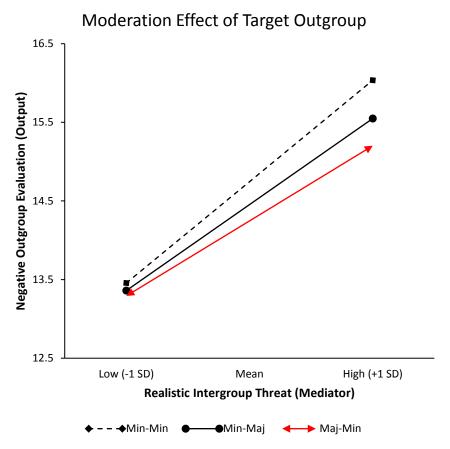


Figure 6.10. Johnson-Neyman plot showing moderation effect of participants' target outgroup on mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation.

Decomposing the moderation effect of target outgroup on relationship between realistic intergroup threat and negative outgroup evaluation, realistic intergroup threat is found to predict a significant increase in negative outgroup evaluation among national minority status group members whose target outgroup is another minority group (b = .223, 95% CI [.199 -.248], SE = .013, t = 17.89, p < .001), among national minority group members whose target outgroup is national majority group (b = .190, 95% CI [.170 -.209], SE = .010, t = 19.54, p < .001), and among national majority group members whose target outgroup is national minority group (b = .166, 95% CI [.141 -.190], SE = .013, t = 13.03, p < .001). Regardless of participants' target outgroup, those whose realistic intergroup threat is high reported a significantly higher negative outgroup evaluation score than those whose realistic intergroup threat is low. Among those whose realistic intergroup threat is high, members of national

minority status group whose target outgroup is another national minority group reported a significantly higher negative outgroup evaluation score than other two groups of participants. Members of national majority status group whose target outgroup is national minority group reported the lowest negative outgroup evaluations score among three groups of participants (see *Figure 6. 10*).

# 6.4.7. Moderated Mediation Model 7

To investigate whether participants' national group status moderates the mediated effect of symbolic intergroup threat on relationship between intergroup contact quality and negative outgroup evaluation, PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference in both paths of indirect effect—the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) are examined (see *Figure 6.11*).

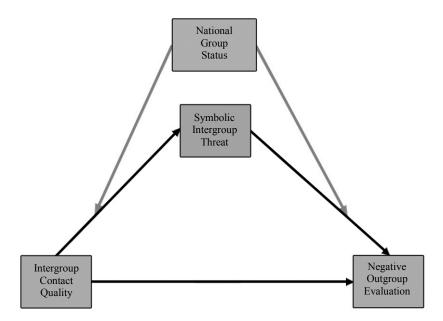


Figure 6.11. Conceptual model (Moderated Mediation Model 7) depicting moderation of national group status on the mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect national group status on relationship between intergroup contact quality and symbolic intergroup threat ( $\beta$  = .019, 95% CI [-.068 – .105], SE = .044, t = .42, p > .05). However, a significant moderation effect of national group status on relationship between symbolic intergroup threat and negative outgroup evaluation ( $\beta$  = -.070, 95% CI [-.106 – -.035], SE = .018, t = -3.85, p < .001) is found. The relationship between intergroup contact quality and symbolic intergroup threat does not depend on participants' national group status. The relationship between symbolic intergroup threat and negative outgroup evaluation depends on participants' national group status. Moderation effect of national group status is not significantly found in the first stage of mediation model in which symbolic intergroup threat mediates relationship between intergroup contact quality and negative outgroup evaluation while it is significantly found in the second stage of mediation model.

# Negative Outgroup 16.5 - 13.5 - 12.5

Moderation Effect of National Group Status

Figure 6.12. Johnson-Neyman plot showing moderation effect of national group status on mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation.

Mean

Symbolic Intergroup Threat (Mediator)

High (+1 SD)

Low (-1 SD)

Decomposing the moderation effect of national group status on relationship between symbolic intergroup threat and negative outgroup evaluation, symbolic intergroup threat is found to predict an increase in negative outgroup evaluation among members of national minority status groups (b = .261, 95% CI [.235 –.286], SE = .013, t = 20.51, p < .001) as well as among members of national majority status group (b = .190, 95% CI [.165 –.216], SE = .013, t = 14.51, p < .001). Regardless of participants' national group status, those whose symbolic intergroup threat is high reported a significantly higher negative outgroup evaluation score than those whose symbolic intergroup threat is low. National group status is a categorical variable with two levels; '0' represents minority status and '1' majority status. Among those whose symbolic intergroup threat is high, members of national minority status groups reported a significantly higher negative outgroup evaluation score than members of national majority status group. Similarly, among those whose symbolic intergroup threat is low, members of national minority status groups reported a significantly higher negative outgroup evaluation score than members of national majority status group.

# 6.4.8. Moderated Mediation Model 8

To investigate whether participants' local group status moderates the mediated effect of symbolic intergroup threat on relationship between intergroup contact quality and negative outgroup evaluation, PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference in both paths of indirect effect—the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) are examined (see *Figure 6.13*).

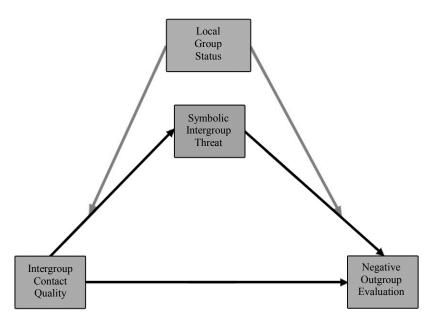


Figure 6.13. Conceptual model (Moderated Mediation Model 8) depicting moderation of local group status on the mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of local group status on relationship between intergroup contact quality and symbolic intergroup threat ( $\beta$  = -.011, 95% CI [-.116 - .094], SE = .054, t = -.21, p > .05). Similarly, no significant moderation effect of local group status on relationship between symbolic intergroup threat and negative outgroup evaluation ( $\beta$  = -.034, 95% CI [-.074 - .007], SE = .020, t = -1.63, p > .05) is found. Moderation effect of local group status is significantly found neither in the first stage nor second stage of mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation.

# 6.4.9. Moderated Mediation Model 9

To investigate whether participants' target outgroup moderates the mediated effect of symbolic intergroup threat on relationship between intergroup contact quality and negative outgroup evaluation, PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference in both paths of indirect effect—the path between predictor and mediator (the first

stage), and the path between mediator and output (the second stage) are examined (see *Figure 6.14*).

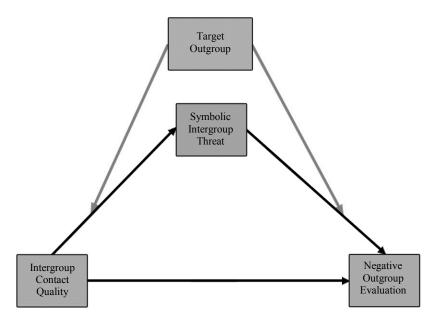


Figure 6.14. Conceptual model (Moderated Mediation Model 9) depicting the moderation of participants' target outgroup on the mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of participants' target outgroup on relationship between intergroup contact quality and symbolic intergroup threat ( $\beta$  = .005, 95% CI [-.063 – .073], SE = .035, t = .14, p > .05). However, a significant moderation effect of participants' target outgroup on relationship between symbolic intergroup threat and negative outgroup evaluation ( $\beta$  = -.052, 95% CI [-.079 – -.024], SE = .014, t = -3.64, p < .001) is revealed. Moderation effect of participants' target outgroup is not significantly found on the first stage of the mediation model in which symbolic intergroup threat mediates relationship between intergroup contact quality and negative outgroup evaluation while it is significantly found in the second stage of the mediation model.

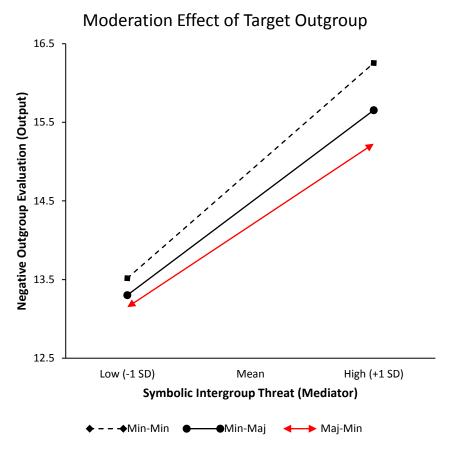


Figure 6.15. Johnson-Neyman plot showing moderation effect of participants' target outgroup on mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation.

Decomposing the moderation effect of participants' target outgroup on relationship between symbolic intergroup threat and negative outgroup evaluation, symbolic intergroup threat is found to predict a significant increase in negative outgroup evaluation among members of national minority status groups whose target outgroup is another national minority group (b = .258, 95% CI [.231 - .284], SE = .014, t = 18.84, p < .001), among members of national minority groups whose target outgroup is national majority group (b = .221, 95% CI [.202 - .241], SE = .013, t = 21.86, p < .001), and among members of national majority status group whose target outgroup is national minority group (b = .196, 95% CI [.171 - .221], SE = .013, t = 15.35, p < .001). Regardless of participants' target outgroup, those whose symbolic intergroup threat is high reported a significantly higher negative outgroup evaluation score than those whose symbolic intergroup threat is low.

### 6.4.10. Moderated Mediation Model 10

To investigate whether the moderation effect of national group status on mediation model in which intergroup anxiety mediates the relationship between intergroup contact quantity and negative outgroup evaluation, the PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference is investigated in both paths of the indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) (see *Figure 6.16*).

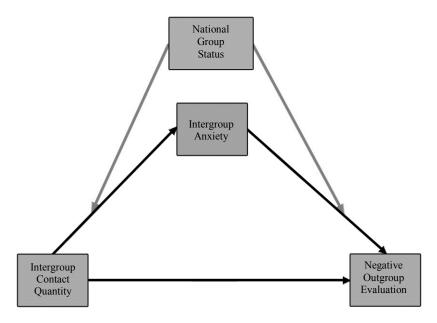


Figure 6.16. Conceptual model (Moderated Mediation Model 10) depicting the moderation of national group status on the mediation model in which intergroup anxiety mediates the relationship between intergroup contact quantity on negative outgroup evaluation.

Results of analysis output reveals a significant moderation effect of national group status on relationship between intergroup contact quantity and intergroup anxiety ( $\beta$  = .063, 95% CI [.004 – .121], SE = .030, t = 2.11, p < .05). However, no significant moderation effect of national group status on interaction between intergroup anxiety and negative outgroup evaluation ( $\beta$  = -.031, 95% CI [-.077 – .015], SE = .024, t = -1.32, p > .05) is found. The moderation effect of national group status is significantly found in the first stage of mediation model in which intergroup anxiety mediates relationship between intergroup

contact quantity and negative outgroup evaluation while it is not significantly found in the second stage of the mediation model.

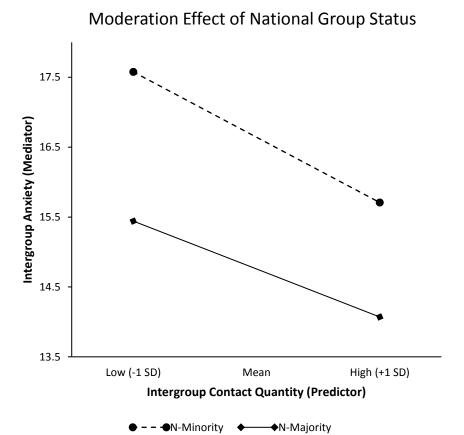


Figure 6.17. Johnson-Neyman plot showing moderation effect of national group status on the relationship between intergroup contact quantity and intergroup anxiety.

Decomposing the moderation effect of national group status in the first stage of the mediation model, intergroup contact quantity is found to predict a significant decrease in intergroup anxiety among members of national minority status groups (b = -.235, 95% CI [-.280 – -.192], SE = .022, t = -10.56, p < .001) as well as among national majority status group (b = -.173, 95% CI [-.211 – -.134], SE = .020, t = -8.78, p < .001). Regardless of participants' national group status, those whose intergroup contact quantity reported a significantly higher intergroup anxiety score than those whose intergroup contact quantity is high. Participants' national group status is a categorical variable with two levels – '1' represents majority status and '0' represents minority status. Among members of national

minority status groups, those whose intergroup contact quantity is low reported a significantly higher intergroup anxiety score than those whose intergroup contact quantity is high. Similarly, among members of national majority status group, those whose intergroup contact quantity is low reported a significantly higher intergroup anxiety score than those whose intergroup contact quantity is high. Among those whose intergroup contact quantity is high, members of national minority status groups reported a significantly higher intergroup anxiety score than members of national minority status group. Similarly, among those whose intergroup contact quantity is low, members of national minority status groups reported a significantly higher intergroup anxiety score than members of national majority status group.

### 6.4.11. Moderated Mediation Model 11

To investigate whether moderation effect of local group status on mediation model in which intergroup anxiety mediates the relationship between intergroup contact quantity and negative outgroup evaluation, the PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference is investigated in both paths of the indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) (see *Figure 6.18*).

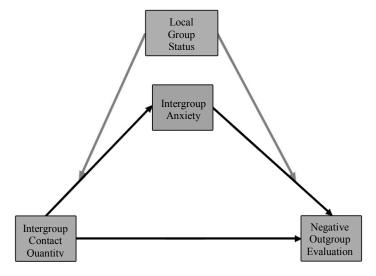


Figure 6.18. Conceptual model (Moderated Mediation Model 11) depicting moderation of local group status on mediation model in which intergroup anxiety mediates the relationship between intergroup contact quantity and negative outgroup evaluation.

Results of analysis output reveals a significant moderation effect of local group status on relationship between intergroup contact quantity and intergroup anxiety ( $\beta$  = .108, 95% CI [.040 – .176], SE = .035, t = 3.11, p < .01). However, no significant moderation effect of local group status on relationship between intergroup anxiety and negative outgroup evaluation ( $\beta$  = .021, 95% CI [-.032 – .074], SE = .027, t = .78, p > .05) is revealed. Moderation effect of local group status is significantly found in the first stage of mediation model in which intergroup anxiety mediates the relationship between intergroup contact quantity and negative outgroup evaluation while it is not significantly found in the second stage of the mediation model.

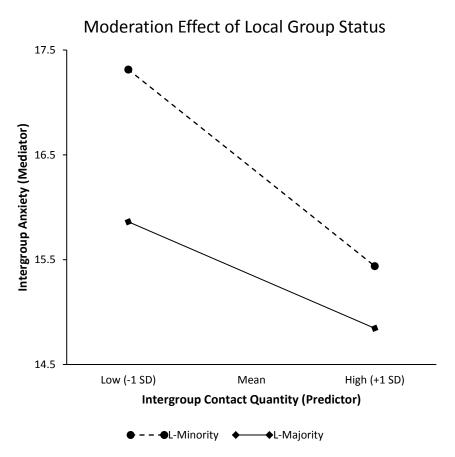


Figure 6.19. Johnson-Neyman plot showing moderation effect of local group status on the relationship between intergroup contact quantity and intergroup anxiety.

Decomposing the moderation effect of local group status in the first stage of the mediation model, intergroup contact quantity is found to predict a significant decrease in intergroup

anxiety both among members of local minority status group (b = -.236, 95% CI [-.296 – -.176], SE = .030, t = -7.76, p < .001) as well as among members of local majority status group (b = -.128, 95% CI [-.161 - -.095], SE = .017, t = -7.61, p < .001). Local group status is a categorical variable with two levels – '0' represents minority status and '1' majority status. Regardless of participants' local group status, those whose intergroup contact quantity is low reported a significantly higher intergroup anxiety score than those whose intergroup contact quantity is high. Among members of local minority status group, those whose intergroup contact quantity is low reported a significantly higher intergroup anxiety score than those whose intergroup contact quantity is high. Similarly, among members of local majority status group, those whose intergroup contact quantity is low reported a significantly higher intergroup anxiety score than those whose intergroup contact quantity is high. Among those whose intergroup contact quantity is high, members of local minority status group reported a significantly higher intergroup anxiety score than members of local majority status group. Similarly, among those whose intergroup contact quantity is low, members of local minority status group reported a significantly higher intergroup anxiety score than members of local majority status group.

# 6.4.12. Moderated Mediation Model 12

To investigate whether moderation effect of participants' target outgroup on mediation model in which intergroup anxiety mediates the relationship between intergroup contact quantity and negative outgroup evaluation, the PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference is investigated in both paths of the indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) (see *Figure 6.20*).

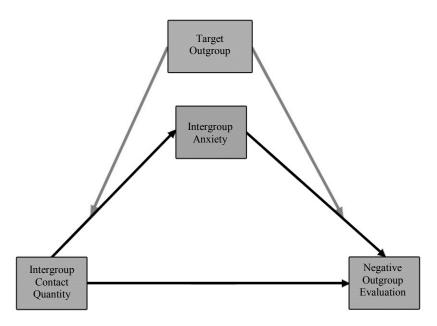


Figure 6.20. Conceptual model (Moderated Mediation Model 12) depicting moderation of participants' target outgroup on the mediation model in which intergroup anxiety mediates the relationship between intergroup contact quantity and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of participants' target outgroup on relationship between intergroup contact quantity and intergroup anxiety ( $\beta = .003$ , 95% CI [-.044 – .050], SE = .02, t = .13, p > .05). Moreover, no significant moderation effect of participants' target outgroup on the relationship between intergroup anxiety and negative outgroup evaluation ( $\beta = -.010$ , 95% CI [-.045 – .026], SE = .018, t = -.54, p > .05) is found. Moderation effect of participants' target outgroup is not significantly found both in the first stage and second stages of the mediation model in which intergroup anxiety mediates the relationship between intergroup contact quantity and negative outgroup evaluation.

# 6.4.13. Moderated Mediation Model 13

To investigate whether moderation effect of participants' national group status on mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation, the PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference is investigated in both paths of the indirect

effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) (see *Figure 6.21*).

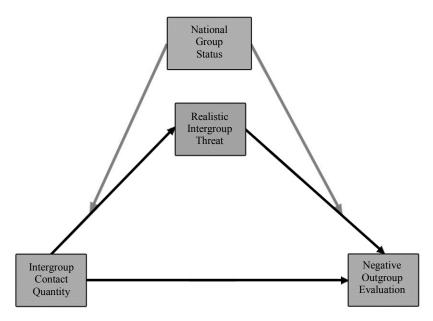


Figure 6.21. Conceptual model (Moderated Mediation Model 13) depicting moderation of national group status on mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation.

Results of analysis output reveals a significant moderation effect of national group status on relationship between intergroup contact quantity and realistic intergroup threat ( $\beta$  =.017, 95% CI [-.112 – .146], SE = .066, t = .26, p > .05). However, no significant moderation effect of national group status on relationship between realistic intergroup threat and negative outgroup evaluation ( $\beta$  = -.039, 95% CI [-.089 – .011], SE = .025, t = -1.51 p > .05) is revealed. Moderation effect of national group status is not significantly found both in the first and second stages of the mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation.

# 6.4.14. Moderated Mediation Model 14

To investigate whether moderation effect of participants' local group status on mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation, the PROCESS macro 3.1 Model 58

(Hayes, 2013) is run. Conditional difference is investigated in both paths of the indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) (see *Figure 6.22*).

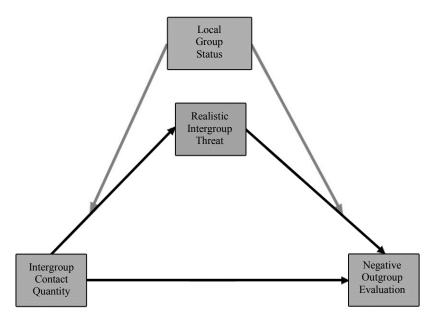


Figure 6.22. Conceptual model (Moderated Mediation Model 14) depicting moderation of local group status on the mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of local group status on relationship between intergroup contact quantity and realistic intergroup threat ( $\beta$  = .056, 95% CI [-.103 - .215], SE = .080, t = .69, p > .05). Similarly, no significant moderation effect of local group status on relationship between realistic intergroup threat and negative outgroup evaluation ( $\beta$  = .017, 95% CI [-.039 - .072], SE = .028, t = .58, p > .05) is revealed. Moderation effect of local group status is not significantly found both in the first and second stages of the mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation.

### 6.4.15. Moderated Mediation Model 15

To investigate whether moderation effect of participants' target outgroup on mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation, the PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference is investigated in both paths of the indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) (see *Figure 6.23*).

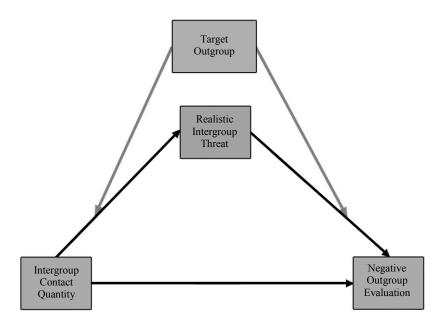


Figure 6.23. Conceptual model (Moderated Mediation Model 15) depicting moderation of participants' target outgroup on the mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of participants' target outgroup on the relationship between intergroup contact quantity and realistic intergroup threat ( $\beta = -.071$ , 95% CI [-.173 – .030], SE = .052, t = -1.38, p > .05). No significant moderation effect of participants' target outgroup on the relationship between realistic intergroup threat and negative outgroup evaluation ( $\beta = -.034$ , 95% CI [-.074 – .006], SE = .020, t = -1.66, p > .05) is revealed, too. Moderation effect of participants' target outgroup is not significantly found both in the first and second stages of the mediation model

in which realistic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation.

### 6.4.16. Moderated Mediation Model 16

To investigate whether moderation effect of participants' national group status on mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation, the PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference is investigated in both paths of the indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) (see *Figure 6.24*).

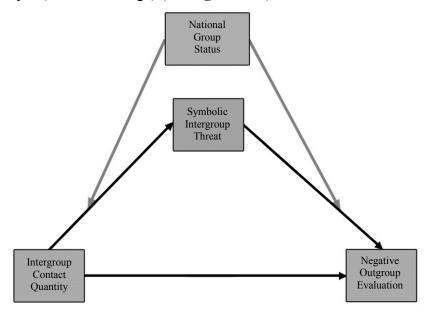


Figure 6.24. Conceptual model (Moderated Mediation Model 16) depicting moderation of national group status on the mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of national group status on the relationship between intergroup contact quantity and symbolic intergroup threat ( $\beta$  =.059, 95% CI [-.065 – .182], SE = .063, t = .93, p > .05). Similarly, no significant moderation effect of national group status on the relationship between symbolic intergroup threat and negative outgroup evaluation ( $\beta$  = -.039, 95% CI [-.090 – .014], SE = .026,

t = -1.44, p > .05) is revealed. Moderation effect of national group status is not significantly found both in the first and second stages of the mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation.

### 6.4.17. Moderated Mediation Model 17

To investigate whether moderation effect of participants' local group status on mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation, the PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference is investigated in both paths of the indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) (see *Figure 6.25*).

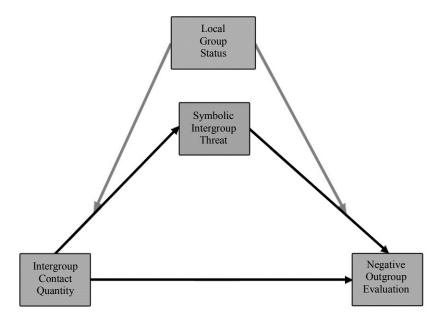


Figure 6.25. Conceptual model (Moderated Mediation Model 17) depicting moderation of local group status on the mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of local group status on the relationship between intergroup contact quantity and symbolic intergroup threat ( $\beta = .038, 95\%$  CI [-.110 - .185], SE = .075, t = .50, p > .05). Similarly, no significant

moderation effect of local group status on the relationship between symbolic intergroup threat and negative outgroup evaluation ( $\beta$  = -.004, 95% CI [-.064 – .055], SE = .030, t = -.15, p > .05) is revealed. Moderation effect of local group status is not significantly found both in the first and second stages of the mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation.

### 6.4.18. Moderated Mediation Model 18

To investigate whether moderation effect of participants' target outgroup on mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation, the PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference is investigated in both paths of the indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) (see *Figure 6.26*).

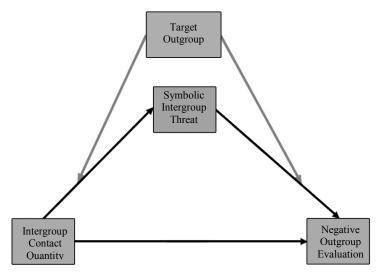


Figure 6.26. Conceptual model (Moderated Mediation Model 18) depicting moderation of participants' target outgroup on the mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of participants' target outgroup on the relationship between intergroup contact quantity and symbolic intergroup threat ( $\beta$  = -.035, 95% CI [-.130 – .061], SE = .048, t = -.71, p > .05). Similarly, no significant moderation effect of participants' target outgroup on the relationship between symbolic intergroup threat and negative outgroup evaluation ( $\beta$  = -.028, 95% CI [-.071 – .016], SE = .022, t = -1.25, p > .05) is revealed. Moderation effect of participants' target outgroup is not significantly found both in the first and second stages of the mediation model in which symbolic intergroup threat mediates the relationship between intergroup contact quantity and negative outgroup evaluation.

# 6.4.19. Moderated Mediation Model 19

To investigate whether moderation effect of participants' national group status on mediation model in which intergroup anxiety mediates the relationship between negative intergroup contact and negative outgroup evaluation, the PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference is investigated in both paths of the indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) (see *Figure 6.27*).

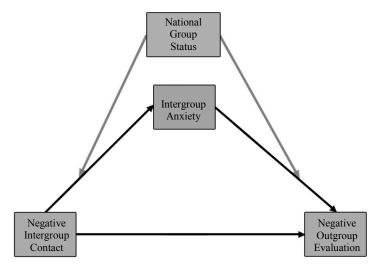


Figure 6.27. Conceptual model (Moderated Mediation Model 19) depicting moderation of national group status on the mediation model in which intergroup anxiety mediates the relationship between negative intergroup contact and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of national group status on the relationship between negative intergroup contact and intergroup anxiety ( $\beta$  =.014, 95% CI [-.015 - .042], SE = .014, t = .95, p > .05). Similarly, no significant moderation effect of national group status on the relationship between intergroup anxiety and negative outgroup evaluation ( $\beta$  = -.014, 95% CI [-.059 - .032], SE = .023, t = -.58, p > .05) is revealed. Moderation effect of national group status is not significantly found both in the first and second stages of mediation model in which intergroup anxiety mediates the relationship between negative intergroup contact and negative outgroup evaluation.

### 6.4.20. Moderated Mediation Model 20

To investigate whether moderation effect of participants' local group status on mediation model in which intergroup anxiety mediates the relationship between negative intergroup contact and negative outgroup evaluation, the PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference is investigated in both paths of the indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) (see *Figure 6.28*).

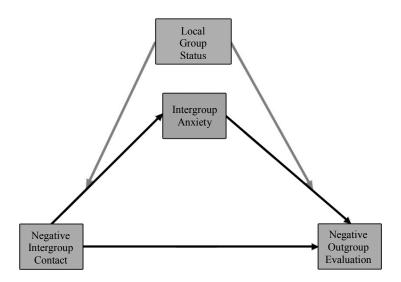


Figure 6.28. Conceptual model (Moderated Mediation Model 20) depicting moderation of local group status on mediation model in which intergroup anxiety mediates the relationship between negative intergroup contact and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of local group status on the relationship between negative intergroup contact and intergroup anxiety ( $\beta$  = -.006, 95% CI [-.036 - .023], SE = .015, t = -.42, p > .05). Similarly, no significant moderation effect of local group status on the relationship between intergroup anxiety and negative outgroup evaluation ( $\beta$  = .033, 95% CI [-.019 - .085], SE = .027, t = 1.24, p > .05) is revealed. Moderation effect of local group status is not significantly found both in the first stage and second stages of the mediation model in which intergroup anxiety mediates the relationship between negative intergroup contact and negative outgroup evaluation.

### 6.4.21. Moderated Mediation Model 21

To investigate whether moderation effect of participants' target outgroup on mediation model in which intergroup anxiety mediates the relationship between negative intergroup contact and negative outgroup evaluation, the PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference is investigated in both paths of the indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) (see *Figure 6.29*).

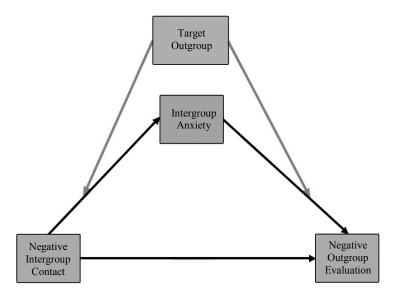


Figure 6.29. Conceptual model (Moderated Mediation Model 21) depicting moderation of participants' target outgroup on the mediation model in which intergroup anxiety mediates the relationship between negative intergroup contact and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of participants' target outgroup on the relationship between negative intergroup contact and intergroup anxiety ( $\beta$  = -.010, 95% CI [-.012 – .032], SE = .011, t = .87, p > .05). Similarly, no significant moderation effect of participants' target outgroup on the relationship between intergroup anxiety and negative outgroup evaluation ( $\beta$  = .005, 95% CI [-.030 – .039], SE = .018, t = .28, p > .05) is revealed. Moderation effect of participants' target outgroup is not significantly found both in the first and second stages of the mediation model in which intergroup anxiety mediates the relationship between negative intergroup contact and negative outgroup evaluation.

### 6.4.22. Moderated Mediation Model 22

To investigate whether moderation effect of participants' national group status on mediation model in which realistic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation, the PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference is investigated in both paths of the indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) (see *Figure 6.30*).

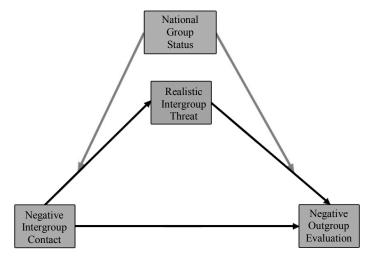


Figure 6.30. Conceptual model (Moderated Mediation Model 22) depicting moderation of national group status on the mediation model in which realistic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of participants' national group status on the relationship between negative intergroup contact and realistic intergroup threat ( $\beta = -.020$ , 95% CI [-.063 - .023], SE = .022, t = -.92, p > .05). No significant moderation effect of national group status on the relationship between realistic intergroup threat and negative outgroup evaluation ( $\beta = -.028$ , 95% CI [-.064 - .008], SE = .018, t = -1.54, p > .05) is revealed. Moderation effect of national group status is not significantly found both in the first and second stages of the mediation model in which realistic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation.

# 6.4.23. Moderated Mediation Model 23

To investigate whether moderation effect of participants' local group status on mediation model in which realistic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation, the PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference is investigated in both paths of the indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) (see *Figure 6.31*).

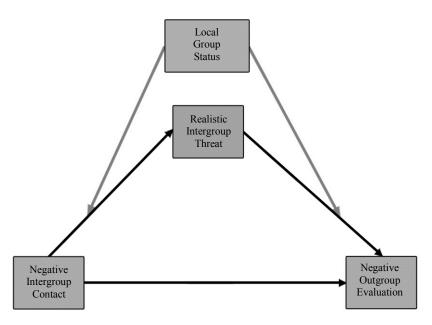


Figure 6.31. Conceptual model (Moderated Mediation Model 23) depicting moderation of local group status on the mediation model in which realistic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of local group status on the relationship between negative intergroup contact and realistic intergroup threat ( $\beta$  = -.002, 95% CI [-.049 - .044], SE = .024, t = -.09, p > .05). No significant interaction effect of local group status on the relationship between realistic intergroup threat and negative outgroup evaluation ( $\beta$  = -.011, 95% CI [-.050 - .028], SE = .020, t = -.57, p > .05) is revealed. Moderation effect of local group status is not significantly found both in the first stage and second stages of the mediation model in which realistic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation.

# 6.4.24. Moderated Mediation Model 24

To investigate whether moderation effect of participants' target outgroup on mediation model in which realistic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation, the PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference is investigated in both paths of the indirect

effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) (see *Figure 6.32*).

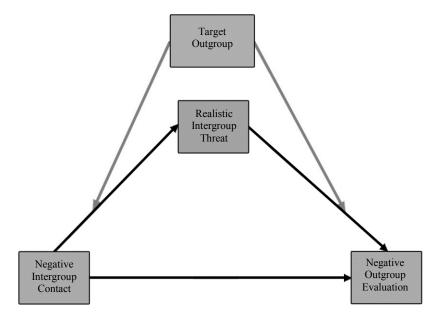


Figure 6.32. Conceptual model (Moderated Mediation Model 24) depicting moderation of participants' target outgroup on the mediation model in which realistic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of participants' target outgroup on the relationship between negative intergroup contact and realistic intergroup threat ( $\beta$  = -.006, 95% CI [-.039 – .027], SE = .017, t = -.35, p > .05). Similarly, no significant moderation effect of participants' target outgroup on the relationship between realistic intergroup threat and negative outgroup evaluation ( $\beta$  = -.017, 95% CI [-.045 – .010], SE = .014, t = -1.24, p > .05) is revealed. Moderation effect of participants' target outgroup is not significantly found both in the first and second stages of the mediation model in which realistic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation.

## 6.4.25. Moderated Mediation Model 25

To investigate whether moderation effect of participants' national group status on mediation model in which symbolic intergroup threat mediates the relationship between negative

intergroup contact and negative outgroup evaluation, the PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference is investigated in both paths of the indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) (see *Figure 6. 33*).

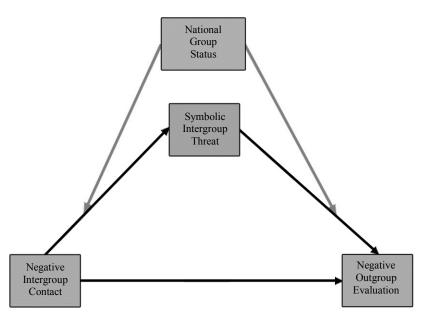


Figure 6.33. Conceptual model (Moderated Mediation Model 25) depicting moderation of national group status on the mediation model in which symbolic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of national group status on the relationship between negative intergroup contact and symbolic intergroup threat  $(\beta = -.008, 95\% \text{ CI } [-.049 - .032], SE = .020, t = -.40, p > .05)$ . However, a significant moderation effect of national group status on the relationship between symbolic intergroup threat and negative outgroup evaluation  $(\beta = -.037, 95\% \text{ CI } [-.074 - -.001], SE = .019, t = -1.98, p < .05)$  is revealed. Moderation effect of national group status is not significantly found in the first stage of the mediational model in which symbolic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation. However, it was significantly found in the second stage of the mediation model.

# Moderation Effect of National Group Status 17 16 10 10 10 11 Low (-1 SD) Mean High (+1 SD) Symbolic Intergroup Threat (Mediator)

Figure 6.34. Johnson-Neyman plot showing moderation effect of national group status on the relationship between negative intergroup contact and symbolic intergroup threat.

N-Minority

N-Majority

Decomposing the moderation effect of national group status on the second stage of the mediation model, symbolic intergroup threat is found to predict a significant increase in negative outgroup evaluation both among members of national minority status groups (b = .226, 95% CI [.199 –.252], SE = .014, t = 16.49, p < .001) and among members of national majority status group (b = .189, 95% CI [.162 –.215], SE = .014, t = 13.99, p < .001). Regardless of participants' national status group, those whose symbolic intergroup threat is high reported a significantly higher negative outgroup evaluation score than those whose symbolic intergroup threat is low. Among members of national minority status groups, those whose symbolic intergroup threat is high reported a significantly higher negative outgroup evaluation score than those whose symbolic intergroup threat is high reported a significantly higher negative outgroup evaluation score than those whose symbolic intergroup threat is low. Similarly, among members of national majority status group, those whose realistic intergroup threat reported

a significantly higher negative outgroup evaluation score than those whose symbolic intergroup threat is low. Among those whose symbolic intergroup threat is high, members of national minority status group reported a significantly higher negative outgroup evaluation score than members of national majority status group.

### 6.4.26. Moderated Mediation Model 26

To investigate whether moderation effect of participants' national group status on mediation model in which symbolic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation, the PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference is investigated in both paths of the indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) (see *Figure 6. 35*).

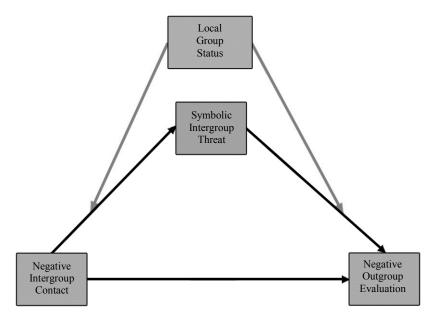


Figure 6.35. Conceptual model (Moderated Mediation Model 26) depicting moderation of local group status on mediation model in which symbolic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of local group status on the relationship between negative intergroup contact and symbolic intergroup threat  $(\beta = -.012, 95\% \text{ CI } [-.055 - .031], SE = .022, t = -.54, p > .05)$ . Similarly, no significant

moderation effect of local group status on the relationship between symbolic intergroup threat and negative outgroup evaluation ( $\beta$  = -.013, 95% CI [-.054 – .027], SE = .021, t = -.65, p > .05) is revealed. Moderation effect of local group status is not significantly found both in the first and second stages of the mediation model in which symbolic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation.

#### 6.4.27. Moderated Mediation Model 27

To investigate whether moderation effect of participants' target outgroup on mediation model in which symbolic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation, the PROCESS macro 3.1 Model 58 (Hayes, 2013) is run. Conditional difference is investigated in both paths of the indirect effect –the path between predictor and mediator (the first stage), and the path between mediator and output (the second stage) (see *Figure 6. 36*).

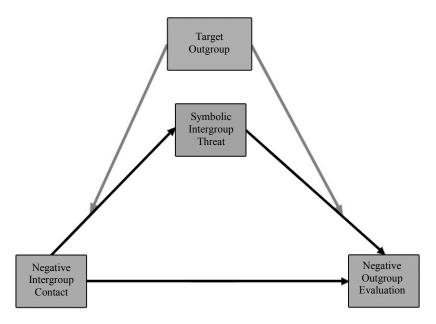


Figure 6.36. Conceptual model (Moderated Mediation Model 27) depicting moderation of participants' target outgroup on the mediation model in which symbolic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation.

Results of analysis output does not reveal any significant moderation effect of participants' target outgroup on the relationship between negative intergroup contact and symbolic intergroup threat ( $\beta$  = -.005, 95% CI [-.026 – .036], SE = .016, t = .34, p > .05). Similarly, no significant moderation effect of participants' target outgroup on the relationship between symbolic intergroup threat and negative outgroup evaluation ( $\beta$  = -.027, 95% CI [-.056 – .001], SE = .015, t = -1.88, p > .05) is revealed. Moderation effect of participants' target outgroup is not significantly found both in the first and second stages of the mediation model in which symbolic intergroup threat mediates the relationship between negative intergroup threat and negative outgroup evaluation.

### 6.5. Results and Discussion

In Chapter 6, indirect effects of three dimensions of intergroup contact (qualitative, quantitative, and negative dimension) on negative outgroup evaluation in three conditions (participants' national group status, local group status, and target outgroup) are investigated. Indirect effects of three dimensions of intergroup contact on negative outgroup evaluation through three mediators have been examined in Chapter 4, and the result showed that intergroup contact quality negatively predicts negative outgroup evaluation through all the three mediators while negative intergroup contact positively predicts negative outgroup evaluation through all the three mediators. Intergroup contact quantity negatively predicts negative outgroup evaluation through intergroup anxiety.

National group status is found to moderate the indirect effects of intergroup contact quality on negative outgroup evaluation via three mediators. Moderation effect of national group status is found in the second stage of the mediation models. All three mediators were found to predict a significant increase in negative outgroup evaluation. Regardless of participants' national group status, those whose scores in the three mediators are high reported a significantly higher negative outgroup evaluation score than those whose scores in three

mediator variables are low. Regardless of participants' high or low level of scores in three mediator variables, members of national minority status groups reported a significantly higher negative outgroup evaluation score than members of the national majority status group. The relationship between intergroup contact quality and three mediator variables – intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat— did not depend on participants' national group status.

The coefficient values in which either of three mediator variables predicts negative outgroup evaluation are found to be stronger among members of national minority status group than members of the national majority status group. This point means that the same level of intergroup anxiety can induce a significantly higher negative outgroup evaluation among members of national minority status groups than members of the national majority status group. This finding is consistent with what the previous studies have found –perceived minority status is associated with a higher intergroup prejudice. Even if the qualitative dimension of intergroup contact can significantly reduce intergroup anxiety, realistic and symbolic intergroup threat among members of both national minority and majority status groups, the relationship between those three mediator variables and negative outgroup evaluation is found to be stronger among members of national minority status groups.

The indirect effect of intergroup contact quantity on negative outgroup evaluation through intergroup anxiety is significantly moderated by national group status. The moderation effect of national group status is found in the first stage of the mediation model in which intergroup anxiety mediates the relationship between intergroup contact quantity and negative outgroup evaluation. Intergroup contact quantity is found to predict a significant decrease in intergroup anxiety. Regardless of participants' national group status, those whose intergroup contact quantity is high reported a significantly lower negative outgroup evaluation score than those whose intergroup contact quantity is low. Regardless of participants' (high or low)

level of intergroup contact quantity score, members of national minority status groups reported a significantly higher intergroup anxiety score than members of the national majority status group.

In Chapter 3, when the direct effect of intergroup contact quantity is examined by using the full sample, a significant, but weak, relationship between intergroup contact quantity and negative outgroup evaluation was found. However, in Chapter 6, when the effect of intergroup contact quantity on negative outgroup evaluation was mediated by intergroup anxiety, intergroup contact quantity was found to predict a significant decrease in intergroup anxiety, and the relationship between intergroup contact quantity and intergroup anxiety is found to be significantly stronger among members of national majority status group than members of national minority status group. This means that national majority group members can easily reduce their intergroup anxiety when they encounter outgroup members frequently regardless of their quality of contact with outgroup members. For national minority group members, intergroup contact quantity cannot effectively reduce their intergroup anxiety. As a result, the indirect effect of intergroup contact on negative outgroup evaluation reduction through intergroup anxiety is weaker among members national minority status groups than members of the national majority status group.

The indirect effect of negative intergroup contact on negative outgroup evaluation through symbolic intergroup threat is significantly moderated by participants' national group status. Moderation effect of national group status is found in the first stage of the mediation model in which symbolic intergroup threat mediates the relationship between negative intergroup contact and negative outgroup evaluation. Regardless of participants' national group status, those whose negative intergroup contact is high reported a significantly higher symbolic intergroup threat score than those whose negative intergroup contact is low. Regardless of participants' (high or low) level of negative intergroup contact score, members of national

minority status groups reported a significantly higher symbolic intergroup threat than members of the national majority status group.

Participants' target outgroup is found to moderate the indirect effects of intergroup contact quality on negative outgroup evaluation through realistic and symbolic intergroup threat. Moderation effect of participants' target outgroup is found in the second stage of mediation models in which either realistic or symbolic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation. Regardless of participants' target outgroup, those whose score in either realistic or symbolic intergroup threat is high reported a significantly higher score in negative outgroup evaluation than those whose score in either realistic and symbolic intergroup threat is low. Regardless of participants' high or low level of score in either realistic or symbolic intergroup threat, the highest score in negative outgroup evaluation is reported by members of national minority status group whose target outgroup is another national minority group (Minority–Minority) while members of the national majority status group whose target outgroup is a national minority group (Majority–Minority) reported the lowest negative outgroup evaluation score among three different groups of participants.

Participants' target outgroup is found to moderate the indirect effect of intergroup contact quantity on negative outgroup evaluation via intergroup anxiety. Moderation effect of participants' target outgroup is found both in the first and second stages of the mediation model in which intergroup anxiety mediates the relationship between intergroup contact quantity and negative outgroup evaluation. Regardless of participants' target outgroup, those whose intergroup contact quantity is low reported a significantly higher intergroup anxiety than those whose intergroup contact quantity is high. Moreover, regardless of participants' target outgroup, those whose intergroup anxiety score is high reported a significantly higher negative outgroup evaluation score than those whose intergroup anxiety is low. Regardless

of participants' high or low level of intergroup contact quantity, members of national minority status groups whose target outgroup is another national minority group (Minority–Minority) reported the highest intergroup anxiety score while members of the national majority status group whose target outgroup is a national minority status group (Majority–Minority) reported the lowest intergroup anxiety score. Similarly, regardless of participants' high or low level of intergroup anxiety score, members of national minority status groups whose target group is another national minority (Minority–Minority) reported the highest negative outgroup evaluation score while members of the national majority status group whose target outgroup is a national minority status group (Majority–Minority) reported the lowest negative outgroup evaluation score.

Local group status is found to moderate the indirect effect of intergroup contact quantity on negative outgroup evaluation via intergroup anxiety. Moderation effect of local group status is found in the first stage of the mediation model in which intergroup anxiety mediates the relationship between intergroup contact quantity and negative outgroup evaluation. Intergroup contact quantity predicts a significant decrease in intergroup anxiety. Regardless of participants' local group status, those whose intergroup contact quantity is high reported a significantly lower intergroup anxiety than those whose intergroup contact quantity is high. Regardless of participants' high or low level of intergroup contact quantity, members of local minority status group reported a significantly higher intergroup anxiety score than members of the local majority status group.

Local group status is found to moderate the indirect effect of intergroup contact quality on negative outgroup evaluation via realistic intergroup threat. Moderation effect of local group status is found in the first stage of the mediation model in which realistic intergroup threat mediates the relationship between intergroup contact quality and negative outgroup evaluation. Intergroup contact quality predicts a significant decrease in realistic intergroup

threat. Regardless of participants' local group status, those whose intergroup contact quality is high reported a significantly lower realistic intergroup threat score than those whose intergroup contact quality is low. Regardless of participants' high or low level of intergroup contact quality, members of local minority status group reported a significantly higher realistic intergroup threat than members of the local majority status group.

### Chapter 7

## **Regional Differences in the Effects of Intergroup Contact**

## 7.1. Regional Differences

In the present study, the sample includes participants living in three different regions of Myanmar. Numerical dominant ethnic groups in the three regions differ from each other. For instance, the northern region is populated with two minority ethnic groups –Kachin and Shan, whereas the southern region is home for two minority ethnic groups –Mon and Karen. The central region is the native land of the majority ethnic group –Bamar.

While members of national majority status group target national minority groups as an outgroup, members of national minority status group target either national majority group or another national minority group which co-exists with them in the same region as outgroup. History of intergroup conflict and current situation of intergroup conflict in those three regions are totally different. While the armed conflict in the northern region is taking place at the time of data collection, military tension between national majority and minority in southern region has stopped since two decades ago, and the central region never experiences intergroup conflict. Accordingly, the effect of intergroup contact on negative outgroup evaluation is anticipated to vary significantly across the three regions. The direct, indirect, conditional direct, and conditional indirect effects of intergroup contact on negative outgroup evaluation are investigated in Chapter 3, 4, 5, and 6 by using a full sample that includes participants from three regions. In other words, statistical data analysis in previous chapters is done in national context. In this chapter, direct and indirect effects of three

dimensions of intergroup contact on negative outgroup evaluation will be investigated in regional context.

## 7.2. Research question

Chapter 7 aims at examining regional differences in relationship between intergroup contact and negative outgroup evaluation. This chapter will address the following research questions:

Does participants' residential region significantly moderate the direct effect of intergroup contact on negative outgroup evaluation? and

Does participants' residential region significantly moderate the indirect effect of intergroup contact on negative outgroup evaluation?

## 7.3. Hypothesis

Hypothesis 11: Relationship between three dimensions of intergroup contact and negative outgroup evaluation would be moderated by participants' residential region.

Hypothesis 12: Indirect effects of three dimensions of intergroup contact on negative outgroup evaluation via (a) intergroup anxiety, (b) realistic intergroup threat, and (c) symbolic intergroup threat would be moderated by participants' residential region.

## 7.4. Method

#### 7.4.1. Participants

Participants' information are the same across all chapters in the present study.

#### 7.4.2. Materials

To measure qualitative intergroup contact, quantitative intergroup contact, negative intergroup contact, negative outgroup evaluation, intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat, General Intergroup Contact Quality Scales, General Intergroup Contact Quantity Scales, Negative Experiences Inventory, General Evaluation Scale, Intergroup Anxiety Scale, Realistic Intergroup Threat Scales, and Symbolic Intergroup Threat Scales are used.

#### 7.4.3. Procedure

Research procedure is the same across all chapters in the present study.

# 7.5. Data Analysis

## 7.5.1. Moderation Effect of Region on Direct Effect of Intergroup Contact

To investigate regional difference in direct effect of intergroup contact on outgroup evaluation, a structrual equation model that includes three parallel predictors –intergroup contact quality, intergroup contact quatity, and negative intergroup contact– predicting an output variable by using IBM AMOS Graphic 23 as in *Figure 7.1*. Before running structural model, a bivariate correlation analysis was operated by IBM SPSS 23. The standardized correlation coefficient values and descriptives are describe in Table 7.1.

Table 7.1. Zero-order Correlations among Variables and Descriptive of Variables in Three Regions

	Variable	1	2	3	4
	ICQL	1	.515**	088**	297**
	ICQT		1	.023	167**
	NIC			1	.356**
Northern	NOE				1
	Scale Range	5-25	5-25	13-65	6-30
	M	14.32	14.87	21.88	15.71
	SD	3.27	3.64	8.03	3.914
	n	1322	1322	1322	1322
	ICQL	1	.539**	.025	370**
	ICQT		1	.198**	115**
	NIC			1	.382**
	NOE				1
Central	Scale Range	5-25	5-25	13-65	6-30
	M	14.85	12.90	16.88	13.89
	SD	4.05	4.03	6.45	3.32
	n	1493	1493	1493	1493
	ICQL	1	.558**	095**	403**
	ICQT		1	.075**	212**
	NIC			1	.375**
Southern	NOE				1
	Scale Range	5-25	5-25	13-65	6-30
	M	15.17	15.12	20.96	14.47
	SD	3.72	3.83	8.48	3.37
	n	1312	1312	1312	1312

*Note.* \*\* p < .01. ICQL = Intergroup contact quality, ICQT = Intergroup contact quantity, NIC = Negative intergroup contact, NOE = Negative outgroup evaluation.

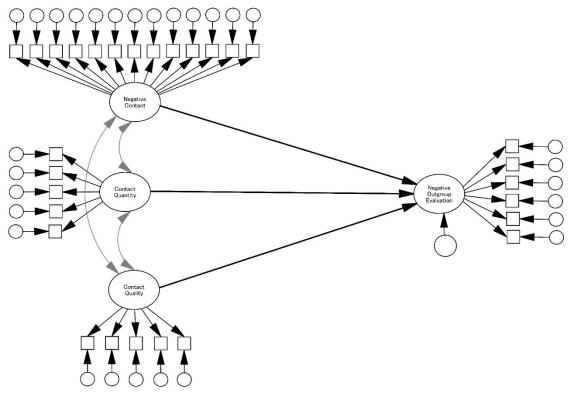


Figure 7.1. Structural equation model (Causal Model) for testing regional difference in contact-evaluation relationship.

Note. \*\*\* p < .001. Model fit indices:  $\chi^2$  (789, N = 4127) = 2133.47,  $\chi^2 / df = 2.70$ , p < .001, NFI = .96, IFI = .97, TLI = .96, CFI = .97, RMSEA = .020, 95% CI [.019 – .021]; SRMR = .043. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual.

Model fit indices of the Causal model are good.  $\chi^2$  (789, N = 4127) = 2133.47,  $\chi^2/df$  = 2.70, p < .001, NFI = .96, IFI = .97, TLI = .96, CFI = .97, RMSEA = .020, 95% CI [.019 – .021]; SRMR = .043. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual. Tucker-Lewis index (TLI) > .90 indicates good fit; non-normed fit index (NFI) > .90 indicates good fit; comparative fit index (CFI) > .90 indicates adequate fit, > .95 indicates good fit; root mean square error of approximation (RMSEA) between .05 and .08 indicates, reasonable fit, < .05 indicates good fit; standardized root means square residual (SRMR) < .10 indicates good fit).

Multigroup analysis is operated in structural equation model. Standardized beta coefficients between predictors and output variable are shown in Table 7.2. Squared multiple correlations of each group (Northern region, Central region, and Southern region) are shown in the table. In the northern region, intergroup contact quality ( $\beta = -.503$ , p < .001) and negative intergroup contact ( $\beta = .346$ , p < .001) are reliable predictors of negative outgroup evaluation while intergroup contact quantity ( $\beta = .062$ , ns) is not. While negative outgroup evaluation is negatively predicted by intergroup contact quality, it is positively predicted by negative intergroup contact. The 38.1 percent of variance in negative outgroup evaluation prediction can be explained by this model.

In the central regions, intergroup contact quantity ( $\beta$  = .186, p < .001), intergroup contact quality ( $\beta$  = -.620, p < .001), and negative intergroup contact ( $\beta$  = .816, p < .001) are found to be reliable predictors of negative outgroup evaluation. While negative outgroup evaluation is negatively predicted by intergroup contact quality, it is positively predicted by intergroup contact quantity and negative intergroup contact. The model can explain 96.3 percent of variance in predicting negative outgroup evaluation by the three dimensions of intergroup contact.

In the southern regions, intergroup contact quantity ( $\beta$  = .183, p < .001), intergroup contact quality ( $\beta$  = -.856, p < .001), and negative intergroup contact ( $\beta$  = .402, p < .001) are found to be reliable predictors of negative outgroup evaluation. While negative outgroup evaluation is negatively predicted by intergroup contact quality, it is positively predicted by intergroup contact quantity and negative intergroup contact. The model can explain 81.4 percent of variance in predicting negative outgroup evaluation by the three dimensions of intergroup contact.

Table 7.2. Standardized Beta Coefficients of Paths between Predictors and Output Variable in Causal Model and Squared Multiple Correlations of Three Regions

Parameter	Path _	Region					
	-	Northern	Central	Southern			
Standardized	Quality -> Evaluation	503 ***	620 ***	856 ***			
Beta Coefficient	Quantity→Evaluation	.062 ns	.186 ***	.183 **			
$(\beta)$	Negative→Evaluation	.346 ***	.816 ***	.402 ***			
Squared Multiple	Correlations (R <sup>2</sup> )	.381	.963	.814			

*Note*: ns = not significant, \*\* p < .01, \*\*\* p < .001.

To investigate the regional difference in the effect of intergroup contact on negative outgroup evaluation, pairwise parameter comparison is operated in a structural model. If the difference between standardized parameter values of two groups on the same path is greater than or equal to  $\pm 1.96$ , the two parameters are said to be significantly different.

The output of analysis showed that there is a significant regional difference in the direct effect of negative intergroup contact on negative outgroup evaluation between participants from the central and southern regions. The degree in which negative intergroup contact

predicts negative outgroup evaluation is significantly higher among participants living in the central region than those who live in the southern region. Except for the difference between central and southern regions in that parameter, there are no significant regional differences in the other paths of the structural model. Regional variation in the direct effect of intergroup contact on negative outgroup evaluation is found in the relationship between negative intergroup contact and negative outgroup evaluation between central and southern regions.

Table 7.3. Outputs of Pairwise Parameter Comparison for Direct Effect of Three Dimension Intergroup Contact on Negative Outgroup Evaluation.

	Ql_Ev_N	Qt_Ev_N	NC_Ev_N	Ql_Ev_C	Qt_Ev_C	NC_Ev_C	Ql_Ev_S	Qt_Ev_S	NC_Ev_S
Ql_Ev_C	1.641	-6.291	-7.833	.000					
Qt_Ev_C	6.146	.803	-3.301	7.308	.000				
NC_Ev_C	9.155	6.159	1.170	11.777	6.542	.000			
Ql_Ev_S	.618	-6.114	-7.799	-1.290	-7.703	-11.060	.000		
Qt_Ev_S	5.940	.569	-3.354	8.391	280	-6.653	5.837	.000	
NC_Ev_S	6.940	2.499	-1.893	9.689	2.414	-4.335 **	7.953	2.369	.000

*Note:* \*\*p < .01

Ql Ev N = path between intergroup contact quality and negative outgroup evaluation of northern region

Ql Ev C = path between intergroup contact quality and negative outgroup evaluation of central region

Ql Ev S = path between intergroup contact quality and negative outgroup evaluation of southern region

QT Ev N = path between intergroup contact quantity and negative outgroup evaluation of northern region

QT Ev C = path between intergroup contact quantity and negative outgroup evaluation of central region

OT E C - pain octween intergroup contact quantity and negative outgroup evaluation of central region

QT\_Ev\_S = path between intergroup contact quantity and negative outgroup evaluation of southern region

CN = P path between negative intergroup contact and negative outgroup evaluation of northern region

CN Ev C = path between negative intergroup contact and negative outgroup evaluation of central region

CN\_Ev\_S = path between negative intergroup contact and negative outgroup evaluation of southern region

# 7.5.2. Moderation Effect of Region on Indirect Effect of Intergroup Contact

To investigate regional difference or moderation effect of region on indirect effect of intergroup contact quality on negative outgroup evaluation through three mediator variables (intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat), a path model is constructed by using IBM AMOS Graphic 23 (see *Figure 7.2*).

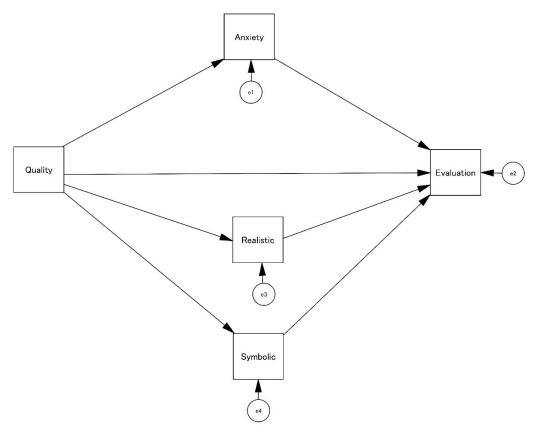


Figure 7.2. Conceptual path model (Parallel Mediation Model) for investigating regional difference in indirect effect of intergroup contact quality on negative outgroup evaluation through three mediators.

Model fit indices:  $\chi^2$  (6, N = 4127) = 12.57,  $\chi^2$  /df = 2.09, p < .05, NFI = .99, IFI = .99, TLI = .99, CFI = .99, RMSEA = .016, 95% CI [.000 – .029]; SRMR = .048. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual.

Modle fit indices show that the model has a good fit.  $\chi^2$  (6, N = 4127) = 12.57,  $\chi^2/df$  = 2.09, p < .05, NFI = .99, IFI = .99, TLI = .99, CFI = .99, RMSEA = .016, 95% CI [.000 – .029]; SRMR = .048. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual. Tucker-Lewis index (TLI) > .90 indicates good fit; non-normed fit index (NFI) > .90 indicates good fit; comparative fit index (CFI) > .90 indicates adequate fit, > .95 indicates good fit; root mean square error of approximation (RMSEA) between .05 and .08 indicates, reasonable fit, < .05 indicates good fit; standardized root means square residual (SRMR) < .10 indicates good fit).

Standardized beta coefficient values between predictor and mediators, between mediators and output variables are shown in *Table 7.4*. Squared multiple correlation ( $R^2$ ) values of each group is also described in the table below.

Table 7.4. Standardized Beta Coefficients of Paths between Predictors and Output Variable in Path Model and Squared Multiple Correlations of Three Regions

Parameter	Path -	Region						
T di di di di di	1 4111	Northern	Central	Southern				
Standardized	Quality→Anxiety	409 ***	435 ***	405 ***				
Beta Coefficient ( $\beta$ )	Anxiety→Evaluation	.395 ***	.550 ***	.437 ***				
	Quality → Realistic	147 ***	091***	088 ***				
	Realistic→Evaluation	.124 ***	.101 ***	.087 ***				
	Quality →Symbolic	237 ***	122 ***	148 ***				
	Symbolic→Evaluation	.158 ***	.073 **	.117 ***				
Squared Multiple	e Correlations (R <sup>2</sup> )	.349	.465	.408				

*Note*: \*\* *p* < .01, \*\*\* *p* < .001.

Results of analysis output showed that indirect effects of intergroup contact quality on negative outgroup evaluation via intergroup anxiety ( $\beta_{indirect-1} = \beta_{quality-anxiety} \times \beta_{anxiety-evaluation} = -.162, p < .001$ ), realistic intergroup threat ( $\beta_{indirect-2} = \beta_{quality-realistic} \times \beta_{realistic-evaluation} = -.018$ , p < .001), and symbolic intergroup threat ( $\beta_{indirect-3} = \beta_{quality-symbolic} \times \beta_{symbolic} \times \beta_{symbolic-evaluation} = -.037$ , p < .001) are significant in the northern region. The total indirect effect of intergroup contact quality on negative outgroup evaluation in northern region is significantly found ( $\beta_{indirect-total} = \beta_{indirect-1} + \beta_{indirect-2} + \beta_{indirect-3} = -.217, p < .001$ ). The model can explain 34.9 percent of variance in negative outgroup evaluation predicted by intergroup contact quality via three mediator variables.

In the central region, results of analysis output showed that indirect effect of intergroup contact quality on negative outgroup evaluation via intergroup anxiety ( $\beta_{indirect-1} = \beta_{quality-anxiety} \times \beta_{anxiety-evaluation} = -.176$ , p < .001), is significant, and the total indirect effect of intergroup contact quality on negative outgroup evaluation in central region ( $\beta_{indirect-total} = \beta_{indirect-1} = -.176$ , p < .001) is significant. The model can explain 46.5 percent of variance in negative outgroup evaluation predicted by intergroup contact quality via intergroup anxiety. In the southern region, results of analysis output showed that indirect effects of intergroup contact quality on negative outgroup evaluation via intergroup anxiety ( $\beta_{indirect-1} = \beta_{quality-anxiety} \times \beta_{anxiety-evaluation} = -.239$ , p < .001), and symbolic intergroup threat ( $\beta_{indirect-2} = \beta_{quality-symbolic} \times \beta_{symbolic-evaluation} = -.017$ , p < .001) are significant, and the total indirect effect of intergroup contact quality on negative outgroup evaluation in southern region ( $\beta_{indirect-total} = \beta_{indirect-1} + \beta_{indirect-2} = -.256$ , p < .001) is significant. The model can explain 40.8 percent of the variance in negative outgroup evaluation predicted by intergroup contact quality via intergroup anxiety and symbolic intergroup threat.

To investigate the regional difference in the indirect effect of intergroup contact quality on negative outgroup evaluation, pairwise parameter comparison is operated in a path model.

The output of analysis showed that there are some significant regional differences in the indirect effect of intergroup contact quality on negative outgroup evaluation among participants from three regions (see Table 7.5).

Regional difference is significantly found in the relationship between intergroup contact quality and symbolic intergroup threat among three regions. The degree in which intergroup contact quality predicts a decrease in symbolic intergroup threat is significantly higher among participants living in the northern region than those living in central and southern regions. Moderation effect of the region is also found in the relationship between intergroup contact quality and realistic intergroup threat among three regions. The degree in which intergroup contact quality predicts a decrease in realistic intergroup threat is significantly higher among participants living in the northern region than those who live in the central and southern regions. Regional difference in the relationship between intergroup anxiety and negative outgroup evaluation is significantly found among participants living in three regions. The degree in which intergroup anxiety predicts negative outgroup evaluation is significantly higher among participants living in the central region than those who live in the northern and southern regions. Moderation effect of region on the relationship between symbolic intergroup threat and negative outgroup evaluation is significantly found between the northern and central regions. The degree in which symbolic intergroup threat predicts an increase in negative outgroup evaluation is significantly higher among participants living in the northern region than those living in the central region.

Table 7.5. Outputs of Pairwise Parameter Comparison for Indirect Effect of Intergroup Contact Quality on Negative Outgroup Evaluation through Three Mediators

	Ql_Sy_N	Ql_Re_N	Re_Ev_N	Sy_Ev_N	Ax_Ev_N	Ql_Ax_N	Ql_Sy_C	Ql_Re_C	Re_Ev_C	Sy_Ev_C	Ax_Ev_C	Ql_Ax_C
Ql_Sy_C	4.098 **	1.735	-6.438	-7.066	-13.232	7.015	.000					
Ql_Re_C	4.689	2.320 **	-5.332	-5.988	-12.146	7.659	1.067	.000				
Re_Ev_C	9.829	6.456	996	-2.248	-11.251	16.605	6.117	4.961	.000			
Sy_Ev_C	9.411	6.100	-1.657	-2.828 **	-11.607	15.893	5.614	4.486	652	.000		
Ax_Ev_C	18.414	14.485	14.840	12.728	2.041 **	27.219	16.678	15.336	15.996	15.599	.000	
Ql_Ax_C	536	-2.793	-17.359	-17.394	-22.982	1.655	-7.765	-8.291	-18.082	-17.128	-29.921	.000
Ql_Sy_S	2.939 **	.789	-6.941	-7.512	-13.166	5.302	-1.031	-1.705	-6.646	-6.206	-16.103	4.404
Ql_Re_S	4.222	2.040 **	-4.880	-5.492	-11.158	6.737	.513	167	-4.516	-4.111	-13.762	5.969
Re_Ev_S	9.523	6.228	-1.266	-2.446	-11.184	15.913	5.775	4.657	363	.381	-16.755	17.063
Sy_Ev_S	9.918	6.620	330	-1.554	-10.315	16.293	6.290	5.174	.657	1.346	-15.463	17.418
Ax_Ev_S	16.109	12.506	10.781	9.109	388	23.512	13.862	12.661	12.478	12.842	-2.745 **	25.223
Ql_Ax_S	564	-2.752	-15.810	-16.012	-21.648	1.492	-5.977	-6.667	-16.195	-15.403	-27.488	069

*Note:* \*\* *p* <.01

Ql Ax N =path between intergroup contact quality and intergroup anxiety of northern region

Ql Re N = path between intergroup contact quality and realistic intergroup threat of northern region

Ql Sy N = path between intergroup contact quality and symbolic intergroup threat of northern region

Ql Ax C = path between intergroup contact quality and intergroup anxiety of central region

Ql Re C = path between intergroup contact quality and realistic intergroup threat of central region

Ql Sy C = path between intergroup contact quality and symbolic intergroup threat of central region

 $Ql_Ax_S = path$  between intergroup contact quality and intergroup anxiety of southern region

Ql\_Re\_S = path between intergroup contact quality and realistic intergroup threat of southern region

Ql Sy S = path between intergroup contact quality and symbolic intergroup threat of southern region

To investigate regional difference or moderation effect of region on indirect effect of intergroup contact quantity on negative outgroup evaluation through three mediators (intergroup anxiety, realistic intergroup threat and symbolic intergroup threat), a path model is constructed by using IBM AMOS Graphic 23 (see *Figure 7.3*).

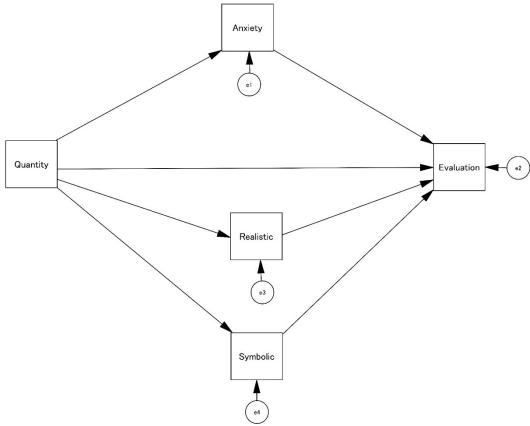


Figure 7.3. Conceptual path model (Parallel Mediation Model) for testing regional difference in indirect effect of intergroup contact quantity on negative outgroup evaluation through three mediators.

Model fit indices:  $\chi^2$  (6, N = 4127) = 15.02,  $\chi^2/df = 2.50$ , p < .05, NFI = .99, IFI = .99, TLI = .99, CFI = .99, RMSEA = .019, 95% CI [.007 – .031]; SRMR = .018. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual.

Modle fit indices show that the model has a good fit.  $\chi^2$  (6, N = 4127) = 15.02,  $\chi^2/df$  = 2.50, p < .05, NFI = .99, IFI = .99, TLI = .99, CFI = .99, RMSEA = .019, 95% CI [.007 – .031]; SRMR = .018. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual. Tucker-Lewis index (TLI) > .90 indicates good fit; non-normed fit index (NFI) > .90 indicates good fit; comparative fit index (CFI) > .90 indicates adequate fit, > .95 indicates good fit; root mean square error of approximation (RMSEA) between .05 and .08 indicates, reasonable fit, < .05 indicates good fit; standardized root means square residual (SRMR) < .10 indicates good fit).

Standardized beta coefficient values between predictor and mediators, between mediators and output variables are shown in *Table 7.6*. Squared multiple correlation ( $R^2$ ) values of each group is also described in the table below.

Table 7.6. Standardized Beta Coefficients of Paths between Predictors and Output Variable in Path Model and Squared Multiple Correlations of Individual Region

Parameter	Path -	Region						
	raui	Northern	Northern Central					
Standardized Beta Coefficient $(\beta)$	Quantity →Anxiety	223 ***	169 ***	214 ***				
	Anxiety→Evaluation	.412 ***	.595 ***	.496 ***				
	Quantity → Realistic	026 ns	.117 ***	.026 ns				
	Realistic > Evaluation	.126 ***	.100 ***	.090 ***				
	Quantity →Symbolic	102 ***	.034 ns	027 ns				
	Symbolic→Evaluation	.161 ***	.070 **	.121 ***				
Squared Multiple	Correlations (R <sup>2</sup> )	.342	.455	.392				

*Note*: ns = not significant, \*\* p < .01, \*\*\* p < .001.

Results of analysis output showed that indirect effects of intergroup contact quantity on negative outgroup evaluation via intergroup anxiety ( $\beta_{indirect-1} = \beta_{quantity-anxiety} \times \beta_{anxiety-evaluation} = -.091$ , p < .001) and symbolic intergroup threat ( $\beta_{indirect-2} = \beta_{quantity-symbolic} \times \beta_{symbolic-evaluation} = -.016$ , p < .001) are significant in the northern region. The total indirect effect of intergroup contact quantity on negative outgroup evaluation in northern region is significantly ( $\beta_{indirect-total} = \beta_{indirect-1} + \beta_{indirect-2} = -.107$ , p < .001). The model can explain 34.2 percent of variance in negative outgroup evaluation predicted by intergroup contact quantity via intergroup anxiety and symbolic intergroup threat.

In the central region, results of analysis output showed that indirect effect of intergroup contact quantity on negative outgroup evaluation via intergroup anxiety ( $\beta_{indirect-1} = \beta_{quantity-anxiety}$  x  $\beta_{anxiety-evaluation} = -.100$ , p < .001), is significant, and the total indirect effect of intergroup contact quantity on negative outgroup evaluation in central region ( $\beta_{indirect-total} = \beta_{indirect-1} = -.100$ , p < .001) is significant. The model can explain 45.5 percent of variance in negative outgroup evaluation predicted by intergroup contact quantity via intergroup anxiety. In the southern region, results of analysis output showed that indirect effect of intergroup contact quantity on negative outgroup evaluation via intergroup anxiety ( $\beta_{indirect-1} = \beta_{quantity-anxiety}$  x  $\beta_{anxiety-evaluation} = -.106$ , p < .001) is significant, and the total indirect effect of intergroup contact quantity on negative outgroup evaluation in southern region ( $\beta_{indirect-total} = \beta_{indirect-1} = -.106$ , p < .001) is significant. The model can explain 39.2 percent of the variance in negative outgroup evaluation predicted by intergroup contact quantity via intergroup anxiety.

To investigate the regional difference in the indirect effect of intergroup contact quantity on negative outgroup evaluation through three mediators, pairwise parameter comparison is operated in a path model (see Table 7.7). Regional difference is significantly found in the relationship between symbolic intergroup threat and negative outgroup evaluation between

the northern and central regions. The degree in which symbolic intergroup threat predicts an increase in negative outgroup evaluation is significantly higher among participants living in the northern region than those who live in the central region. Moderation effect of region on the relationship between intergroup anxiety and negative outgroup evaluation is significantly found among three regions. The degree in which intergroup anxiety predicts negative outgroup evaluation is significantly higher among participants living in the central region than those living in the northern and southern regions. Moderation effect of region on the relationship between intergroup contact quantity and the symbolic threat is significantly found among three regions. The degree in which intergroup contact quantity predicts a decrease in symbolic threat is significantly higher among participants living in the northern region than those who live in the central and southern regions. Moderation effect of region on the relationship between intergroup contact quantity and the realistic intergroup threat is significantly found among three regions. The degree in which intergroup contact quantity predicts a decrease in realistic intergroup threat is significantly higher among participants living in the central region than those living in the northern and southern regions.

Table 7.7. Outputs of Pairwise Parameter Comparison for Indirect Effect of Intergroup Contact Quantity on Negative Outgroup Evaluation. through Three Mediators

	Sy_Ev_N	Re_Ev_N	Ax_Ev_N	Qt_Sy_N	Qt_Re_N	Qt_Ax_N	Sy_Ev_C	Re_Ev_C	Ax_Ev_C	Qt_Sy_C	Qt_Re_C	Qt_Ax_C
Sy_Ev_C	-3.003 **	-1.768	-12.592	4.553	1.882	8.717	.000					
Re_Ev_C	-2.370	-1.055	-12.178	4.999	2.273	9.381	.693	.000				
Ax_Ev_C	14.477	16.874	2.803 **	15.647	12.204	22.796	17.637	18.067	.000			
Qt_Sy_C	-1.971	-1.110	-9.112	3.675 **	1.555	6.233	022	494	-12.630	.000		
Qt_Re_C	.861	1.804	-6.423	5.804	3.585 **	8.708	2.973	2.534	-9.549	3.382	.000	
Qt_Ax_C	-8.851	-8.176	-16.436	281	-2.377	1.877	-7.202	-7.926	-22.558	-6.262	-9.188	.000
Sy_Ev_S	-1.537	246	-11.036	5.285	2.610	9.481	1.536	.804	-17.387	.955	-1.978	8.071
Re_Ev_S	-2.470	-1.221	-11.985	4.786	2.124	8.926	.537	247	-18.849	.340	-2.622	7.448
Ax_Ev_S	10.936	12.820	.572	13.430	10.300	19.339	15.169	14.755	-2.462 **	10.239	7.343	18.740
Qt_Sy_S	-3.691	-2.952	-10.215	1.987 **	.064	4.046	-2.018	-2.459	-13.469	-1.606	-3.791	2.700
Qt_Re_S	-1.915	-1.147	-8.396	3.281	1.330	5.478	193	606	-11.340	142	-2.292 **	4.224
Qt_Ax_S	-9.870	-9.261	-17.039	-1.385	-3.350	.405	-8.385	-9.061	-22.715	-5.938	-8.440	-1.473

*Note:* \*\* *p* < .01

Qt Ax N = path between intergroup contact quantity and intergroup anxiety of northern region

Qt Re N = path between intergroup contact quantity and realistic intergroup threat of northern region

Ot Sy N = path between intergroup contact quantity and symbolic intergroup threat of northern region

Qt Ax C = path between intergroup contact quantity and intergroup anxiety of central region

Qt Re C = path between intergroup contact quantity and realistic intergroup threat of central region

Qt Sy C = path between intergroup contact quantity and symbolic intergroup threat of central region

Qt Ax S = path between intergroup contact quantity and intergroup anxiety of southern region

Qt Re S = path between intergroup contact quantity and realistic intergroup threat of southern region

Ot Sy S = path between intergroup contact quantity and symbolic intergroup threat of southern region

To investigate regional difference or moderation effect of region on indirect effect of negative intergroup contact on negative outgroup evaluation through three mediators (intergroup anxiety, realistic intergroup threat and symbolic intergroup threat), a path model is constructed by using IBM AMOS Graphic 23 (see *Figure 7.4*).

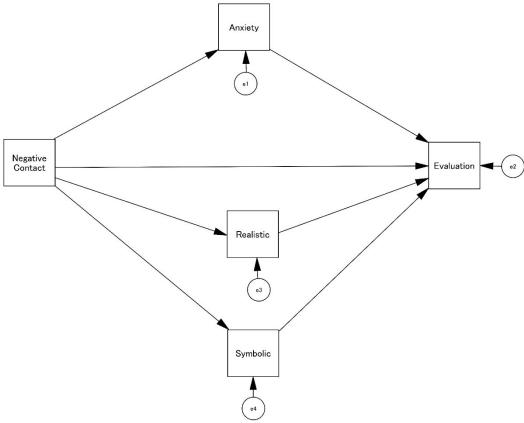


Figure 7.4. Conceptual path model (Parallel Mediation Model) for testing regional difference in indirect effect of negative intergroup contact on negative outgroup evaluation through three mediators.

Model fit indices:  $\chi^2$  (6, N = 4127) = 18.73,  $\chi^2/df = 3.12$ , p < .01, NFI = .99, IFI = .98, TLI = .99, CFI = .99, RMSEA = .023, 95% CI [.012 – .035]; SRMR = .019. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual.

Modle fit indices show that the model has a good fit.  $\chi^2$  (6, N = 4127) = 18.73,  $\chi^2/df$  = 3.12, p < .01, NFI = .99, IFI = .98, TLI = .99, CFI = .99, RMSEA = .023, 95% CI [.012 – .035]; SRMR = .019. IFI = incremental fit index, TLI = Tucker-Lewis index, NFI = non-normed fit index, CFI = comparative fit index, RMSEA = root mean square error of approximation, SRMR = standardized root means square residual. Tucker-Lewis index (TLI) > .90 indicates good fit; non-normed fit index (NFI) > .90 indicates good fit; comparative fit index (CFI) > .90 indicates adequate fit, > .95 indicates good fit; root mean square error of approximation (RMSEA) between .05 and .08 indicates, reasonable fit, < .05 indicates good fit; standardized root means square residual (SRMR) < .10 indicates good fit).

Standardized beta coefficient values between predictor and mediators, between mediators and output variables are shown in *Table 7.8*. Squared multiple correlation ( $R^2$ ) values of each group is also described in the table below.

Table 7.8. Standardized Beta Coefficients of Paths between Predictors and Output Variable in Path Model and Squared Multiple Correlations of Individual Region

Parameter	Path -	Region						
	ram	Northern	Central	Southern				
Standardized	NC →Anxiety	.413 ***	.361 ***	.394 ***				
Beta Coefficient $(\beta)$	Anxiety→Evaluation	.396 ***	.567 ***	.483***				
	NC →Realistic	.325 ns	.341 ***	.307 ns				
	Realistic→Evaluation	.107 ***	.067 ***	.062 ***				
	NC →Symbolic	.364 ***	.294 ns	.352 ns				
	Symbolic→Evaluation	.147 ***	.057 **	.096 ***				
Squared Multiple	Correlations (R <sup>2</sup> )	.352	.470	.390				

*Note: ns* = not significant, \*\* p < .01, \*\*\* p < .001. NC = Negative intergroup contact.

Results of analysis output showed that indirect effects of negative intergroup contact on negative outgroup evaluation via intergroup anxiety ( $\beta_{indirect-1} = \beta_{negative-anxiety} \times \beta_{anxiety-evaluation}$ 

=.163, p < .001) and symbolic intergroup threat ( $\beta_{indirect-2} = \beta_{negative-symbolic}$  x  $\beta_{symbolic-evaluation}$  =.053, p < .001) are significant in the northern region. The total indirect effect of negative intergroup contact on negative outgroup evaluation in the northern region is significantly found ( $\beta_{indirect-total} = \beta_{indirect-1} + \beta_{indirect-2} = .216, p < .001$ ). The model can explain 35.2 percent of variance in negative outgroup evaluation predicted by negative intergroup contact via intergroup anxiety and symbolic intergroup threat.

In the central region, results of analysis output showed that indirect effect of negative intergroup contact on negative outgroup evaluation via intergroup anxiety ( $\beta_{indirect-1} = \beta_{negative-anxiety} \times \beta_{anxiety-evaluation} = .204, p < .001$ ) and realistic intergroup threat ( $\beta_{indirect-2} = \beta_{negative-realistic} \times \beta_{realistic-evaluation} = .022, p < .001$ ) are significant, and the total indirect effect of negative intergroup contact on negative outgroup evaluation in the central region ( $\beta_{indirect-total} = \beta_{indirect-1} + \beta_{indirect-2} = .226, p < .001$ ) is significant. The model can explain 47 percent of variance in negative outgroup evaluation predicted by negative intergroup contact via intergroup anxiety and realistic intergroup threat.

In the southern region, results of analysis output showed that indirect effects of negative intergroup contact on negative outgroup evaluation via intergroup anxiety ( $\beta_{indirect-I} = \beta_{negative-anxiety} \times \beta_{anxiety-evaluation} = .190$ , p < .001) is significant, and the total indirect effect of negative intergroup contact on negative outgroup evaluation in the southern region ( $\beta_{indirect-total} = \beta_{indirect-I} = .190$ , p < .001) is significant. The model can explain 39 percent of the variance in negative outgroup evaluation predicted by negative intergroup contact via intergroup anxiety.

To investigate the regional difference in the indirect effect of negative intergroup contact on negative outgroup evaluation through three mediators, pairwise parameter comparison is operated in a path model (see *Table 7.9*). Regional difference is significantly found in the relationship between symbolic intergroup threat and negative outgroup evaluation between

the northern and central regions. The degree in which symbolic intergroup threat predicts an increase in negative outgroup evaluation is significantly higher among participants living in the northern region than those living in the central region. Moderation effect of region on the relationship between intergroup anxiety and negative outgroup evaluation is significantly found among three regions. The degree in which intergroup anxiety predicts an increase in negative outgroup evaluation in significantly higher among participants living in the central region than those who live in the northern and southern regions. Moderation effect of region on the relationship between negative intergroup contact and the realistic intergroup threat is significantly found between the central and southern regions. The degree in which negative intergroup contact predicts an increase in realistic intergroup threat is significantly higher among participants living in the central region than those living in the southern region. Moderation effect of region on the relationship between negative intergroup contact and intergroup anxiety is significantly found between the central and southern regions. The degree in which negative intergroup contact predicts an increase in intergroup anxiety is significantly higher among participants living in the southern region than those who live in the central region.

Table 7.9. Outputs of Pairwise Parameter Comparison for Indirect Effect of Negative Intergroup Contact on Negative Outgroup Evaluation through Three Mediators

	Sy_Ev_N	Re_Ev_N	Ax_Ev_N	NC_Sy_N	NC_Re_N	NC_Ax_N	Sy_Ev_C	Re_Ev_C	Ax_Ev_C	NC_Sy_C	NC_Re_C	NC_Ax_C
Sy_Ev_C	-2.905 **	-1.581	-12.238	-8.917	-8.173	-8.120	.000					
Re_Ev_C	-2.765	-1.408	-12.214	-8.889	-8.122	-8.105	.190	.000				
Ax_Ev_C	13.985	16.458	2.561 **	10.767	10.405	14.232	17.442	18.543	.000			
NC_Sy_C	4.308	6.019	-5.475	.009	.171	2.009	8.008	7.951	-9.880	.000		
NC_Re_C	5.935	7.737	-4.013	1.871	1.945	4.065	9.827	9.798	-8.018	2.340	.000	
NC_Ax_C	3.901	5.930	-6.849	-1.193	924	1.105	8.453	8.430	-12.571	-1.286	-3.454	.000
Sy_Ev_S	-1.760	421	-10.919	-7.115	-6.559	-5.998	1.144	.960	-17.059	-6.489	-8.218	-6.497
Re_Ev_S	-2.710	-1.411	-11.886	-8.421	-7.755	-7.511	.120	093	-18.578	-7.626	-9.392	-7.904
Ax_Ev_S	10.802	12.737	.730	7.486	7.340	10.009	14.935	14.964	-1.992 **	6.981	5.331	8.828
NC_Sy_S	4.051	5.967	-6.380	753	528	1.448	8.290	8.252	-11.613	689	-2.566	.401
NC_Re_S	3.180	4.971	-6.954	-1.638	-1.369	.354	7.117	7.051	-12.205	-1.494	-3.324 **	585
NC_Ax_S	2.602	4.665	-8.337	-3.124	-2.682	-1.029	7.325	7.289	-15.084	-2.748	-4.806	-2.040 **

*Note:* \*\* *p* < .01

NC Ax N = path between negative intergroup contact and intergroup anxiety of northern region

NC\_Re\_N = path between negative intergroup contact and realistic intergroup threat of northern region

NC Sy N = path between negative intergroup contact and symbolic intergroup threat of northern region

NC Ax C = path between negative intergroup contact and intergroup anxiety of central region

NC Re C = path between negative intergroup contact and realistic intergroup threat of central region

NC Sy C = path between negative intergroup contact and symbolic intergroup threat of central region

 $NC_Ax_S = path$  between negative intergroup contact and intergroup anxiety of southern region

NC\_Re\_S = path between negative intergroup contact and realistic intergroup threat of southern region

NC Sy S = path between negative intergroup contact and symbolic intergroup threat of southern region

### 7.6. Results and Discussion

In Chapter 3, 4, 5, and 6, direct, indirect, conditional direct, and conditional indirect effects of three dimensions of intergroup contact on negative outgroup evaluation are investigated in national context respectively. In Chapter 7, direct and indirect effects of three dimensions of intergroup contact on negative outgroup evaluation will be investigated in the regional context.

A structural equation model in which three dimensions of intergroup contact simultaneously predict negative outgroup evaluation was constructed to investigate the direct effects of intergroup contact on negative outgroup evaluation. Among participants from the northern region, intergroup contact quality is found to predict a significant decrease in negative outgroup evaluation while negative intergroup contact predicts a significant increase in negative outgroup evaluation. However, intergroup contact quantity is found not to associate with negative outgroup evaluation. Among participants from the central and southern regions, intergroup contact quantity, intergroup contact quality, and negative intergroup contact are found to significantly predict negative outgroup evaluation. While negative outgroup evaluation is negatively predicted by intergroup contact quality, it is positively predicted by intergroup contact quantity and negative intergroup contact. Between the central and southern regions, the direct effect of negative intergroup contact on negative outgroup evaluation is significantly different. The same level of negative intergroup contact causes participants from the central region to express a significantly higher negative outgroup evaluation than those from the southern region.

To investigate moderation effect of region on indirect effect of intergroup contact quality on negative outgroup evaluation via three mediator variables, a mediation model in which intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat mediate the relationship between intergroup contact and negative outgroup evaluation is separately constructed for each dimension of intergroup contact.

In the mediation model in which three mediators mediate the relationship between intergroup contact quality and negative outgroup evaluation, the regional difference is significantly found in the relationship between intergroup contact quality and symbolic intergroup threat. The same level of intergroup contact quality causes participants in the northern region to perceive a significantly lower symbolic intergroup threat than participants in the central and southern regions. Moreover, the same level of intergroup contact quality causes northern participants to perceive a significantly lower realistic intergroup threat than those who live in the central and southern regions. The same level of intergroup anxiety causes participants living central region to evaluate the outgroup more negatively than those who live in the northern and southern regions. The same level of symbolic intergroup threat causes participants living in the northern region to evaluate the outgroup more negatively than those living in the central region.

In the mediation model in which three mediators mediate the relationship between intergroup contact quantity and negative outgroup evaluation, the moderation effect of region was significantly found in the relationship between symbolic intergroup threat and negative outgroup evaluation. The same level of symbolic intergroup threat causes participants living in the northern region to evaluate the outgroup more negatively than those who live in the central region. The same level of intergroup anxiety causes participants living in the central region to evaluate the outgroup more negatively than those living in the northern and southern regions. The same level of intergroup contact quantity causes participants living in the northern region to perceive a significantly higher symbolic intergroup threat than those who live in the central and southern regions. The same level of intergroup contact quantity

causes participants living in the central region to perceive a significantly higher realistic intergroup threat than those living in the northern and southern regions.

In the mediation model in which three mediators mediate the relationship between negative intergroup contact and negative outgroup evaluation, the moderation effect of region was significantly found in the relationship between symbolic intergroup threat and negative outgroup evaluation. The same level of symbolic intergroup threat causes participants living in the northern region to evaluate the outgroup more negatively than those living in the central region. The same level of intergroup anxiety causes participants living in the central region to evaluate more negatively than those who live in the northern and southern regions. The same level of negative intergroup contact causes participants living in the central region to perceive a significantly higher realistic intergroup threat than those living in the southern region. The same level of negative intergroup contact causes participants living in the southern region to perceive a significantly higher intergroup anxiety than those who live in the central region to perceive a significantly higher intergroup anxiety than those who live in the central region.

# **Chapter 8**

#### **Discussion and Conclusion**

### 8.1. General Discussion

Nowadays, the intergroup encounter has become an everyday experience in our life due to advancements in information technology and the global phenomenon of migration. Once different social groups encounter in a context, intergroup relations, as well as intergroup conflict, arises naturally after a considerable length of time. In the area of social sciences, intergroup contact has been accredited to reduce intergroup conflict and to improve intergroup relations. Researchers who followed Allport's contact hypothesis, intergroup contact in the interpersonal level of human relations is measured as an independent variable. A good-quality contact or relationship between individuals of different social categories in interpersonal level instigates a foundation of harmonious and peaceful relationships in the intergroup level. A good-quality intergroup contact is an interpersonal relation under the influence of four optimal conditions proposed by Allport.

In the present study, the effects of three dimensions of intergroup contact on negative outgroup evaluation have been examined in different ways. Direct effects of three dimensions of intergroup contact on negative outgroup evaluation were examined by using two causal models. Indirect effects of three dimensions of intergroup contact on negative outgroup evaluation via three mediator variables were analyzed by using twelve mediation models. Conditional direct effects of three moderators on the relationship between three dimensions of intergroup contact and negative outgroup evaluation were examined by using nine moderation models. Conditional indirect effects of three moderators on the relationship

between three dimensions of intergroup contact and negative outgroup, evaluation was examined by using twenty-seven moderated mediation models.

## 8.1.1. Direct Effect of Intergroup Contact

The direct effect of three dimensions of intergroup contact on negative outgroup evaluation is examined, and the statistical data analysis outputs reveal that the qualitative dimension of intergroup contact significantly predicts a decrease in negative outgroup evaluation. This finding strongly confirms Allport's contact hypothesis in the Myanmar context. The quantitative dimension of intergroup contact is found to predict an increase in negative outgroup evaluation when its direct effect is studied. However, when indirect effect of quantitative dimension of intergroup contact on negative outgroup evaluation via qualitative dimension of intergroup contact is studied in the moderation model, the quantitative dimension is also found to predict a significant decrease in negative outgroup evaluation. It is not surprising to know that negative intergroup contact predicts a significant increase in negative outgroup evaluation.

# 8.1.2. Indirect Effect of Intergroup Contact

Integrated Threat Theory (Stephan and Stephan, 2000) stated that intergroup prejudice is significantly predicted by four dimensions of intergroup threat – realistic dimension, symbolic dimension, anxiety dimension, and negative stereotype dimension. Intergroup contact per se directly reduces those dimensions of intergroup threat rather than prejudice or negative outgroup evaluation in its initial stage. Based on theoretical concepts of integrated threat theory (ITT), intergroup contact is anticipated to reduce intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat directly, and then to reduce negative outgroup evaluation indirectly. Outputs of data analysis showed that, among the three mediator variables, intergroup anxiety is found to be the strongest mediator that fully mediates the effect of three dimensions of intergroup contact on negative outgroup

evaluation. Both realistic and symbolic are found to partially mediate the effect of three dimensions of intergroup contact on negative outgroup evaluation. These findings are consistent with the conceptualization of the integrated threat theory and findings of existing studies based on ITT. Therefore, the indirect effects of three dimensions of intergroup contact on negative outgroup evaluation through three mediator variables are significantly found in the Myanmar context.

# 8.1.3. Conditional Direct Effect of Intergroup Contact (Moderator: Perceived Group Status)

Based on the findings of some intergroup contact studies which have revealed that perceived minority status of one's ingroup associates with high-level negative attitudes towards majority status outgroup, participants' perceived group status is anticipated to moderate the strength of the relationship between intergroup contact and negative outgroup evaluation. National group status is essentially participant's ethnicity-based group status, i.e., among eight national ethnic groups, all the other ethnic groups other than Bamar are conventionally and officially regarded as ethnic minority groups or national minority groups. In the category of local group status, the term 'minority' and 'majority' do not associate with the participant's ethnicity. Participants are asked to determine their local group status based on their perception of the ratio of ingroup members living in their residential community. Moderation effect of perceived group status on the relationship between intergroup contact and negative outgroup evaluation is examined both in national and local contexts. The moderation effect of perceived group status in the national context is significantly found in the relationship between two dimensions of intergroup contact (qualitative and quantitative dimensions) and negative outgroup evaluation. However, the moderation effect of perceived group status in the local context is significantly found in the relationship between the quantitative dimension of intergroup contact and negative outgroup evaluation. In both contexts, perceived minority status is found to predict a significantly higher negative outgroup evaluation than perceived majority status. This finding is consistent with the findings of previous studies that investigated the moderation effect of perceived group status on outgroup attitudes. Moderation effect of perceived group status in the relationship between some dimensions of intergroup contact and negative outgroup evaluation is significantly found in the Myanmar context.

# 8.1.4. Conditional Indirect Effect of Intergroup Contact (Moderator: Perceived Group Status)

Perceived group status in the national context is found to moderate the indirect effects of intergroup contact quality on negative outgroup evaluation via three mediators. Moderation effect of national group status is found in the second stage of the mediation models. The same level intergroup anxiety, realistic intergroup threat, or symbolic intergroup threat causes members of national minority status group to evaluate the outgroup more natively than members of the national majority status group.

National group status is found to moderate the indirect effect of intergroup contact quantity on negative outgroup evaluation through intergroup anxiety. Moderation effect of national group status is found in the first stage of the mediation model. The same level of intergroup contact quantity causes members of national minority status groups to perceive a significantly higher intergroup anxiety than those of national majority status group.

National group status is found to moderate the indirect effect of negative intergroup contact on negative outgroup evaluation via symbolic intergroup threat. The moderation effect of national group status is found in the first stage of the mediation model. The same level of negative intergroup contact causes members of national minority status groups to perceive a significantly higher symbolic intergroup threat than those of national majority status group.

Local group status is found to moderate the indirect effect of intergroup contact quantity on negative outgroup evaluation via intergroup anxiety. Moderation effect of local group status is found in the first stage of the mediation model. Intergroup contact quantity predicts a significant decrease in intergroup anxiety. The same level of intergroup contact quantity causes members of local minority status group to perceive a significantly higher intergroup anxiety than members of the local majority status group.

Perceived group status in the local context is found to moderate the indirect effect of intergroup contact quality on negative outgroup evaluation via realistic intergroup threat. Moderation effect of local group status is found in the first stage of the mediation model. Intergroup contact quality predicts a significant decrease in realistic intergroup threat. The same level of intergroup contact quality causes members of local minority status group to perceive a significantly higher realistic intergroup threat than those of majority status group.

# 8.1.5. Conditional Indirect Effect of Intergroup Contact (Moderator: Participants' Target Outgroup)

Participants' target outgroup is found to moderate the indirect effects of intergroup contact quality on negative outgroup evaluation via realistic and symbolic intergroup threat. The same level of realistic or symbolic intergroup threat causes members of national minority status group to evaluate another minority status outgroup more negatively than the degree in which members national minority group negatively evaluate the national minority groups. Participants' target outgroup is found to moderate the indirect effect of intergroup contact quantity on negative outgroup evaluation via intergroup anxiety. The same level of intergroup contact quantity causes members of national minority status groups to perceive a significantly higher intergroup anxiety from another national minority group than the degree in which members of national majority status group perceive intergroup anxiety from the national minority group.

## 8.1.6 Conditional Direct Effects of Intergroup Contact (Moderator: Region)

Conditional effect of perceived group status on the direct relationship between intergroup contact and negative outgroup evaluation has been significantly found. In the present study, the residential region is the main moderator of which moderation effect on the direct relationship between intergroup contact and negative outgroup evaluation is anticipated. Before examining the moderation effect of residential region on the relationship between intergroup contact and negative outgroup evaluation, some interesting points regarding the perceived group status of the participants will be described.

Both in national and local contexts, members of minority status group have a significantly higher chance of intergroup contact than members of the majority status group. Consequently, members of minority status group in both contexts reported a significantly higher score in the quantitative dimension of intergroup contact. The fact that minority status group members have a higher quantity of intergroup contact than majority status group members reflects the reality. Most of the big cities have ethnically mixed communities, and ethnic segregation is uncommon in Myanmar. A high quantity of intergroup contact in the present study indicates that members of different social groups in Myanmar can coexist despite existing conflictual relations between groups in the form of armed conflict.

Both in national and local contexts, minority status group members reported a significantly higher negative intergroup contact than majority status group members. Consistent with the finding of a recent study revealed that negative intergroup contact significantly predicts negative outgroup attitudes (Mähönen and Jasinskaja-Lahti, 2016), a high-level negative intergroup contact of minority status group members is found to predict a significantly higher negative outgroup evaluation among members of minority status group than those of majority status group both contexts.

When the direct effect of three dimensions of intergroup contact on negative outgroup evaluation is separately examined for three geographical regions, the results of data analysis output showed that qualitative dimension of intergroup contact is found to predict a significant decrease in negative outgroup evaluation in all regions. The quantitative dimension of intergroup contact is found to predict a significant decrease in negative outgroup evaluation in the central and southern regions. The negative dimension of intergroup contact is found to predict a significant increase in negative outgroup evaluation in all regions. When pairwise parameter comparison is operated to investigate moderation effect of region on the relationship between intergroup contact and negative outgroup evaluation, the effect of the negative dimension of intergroup contact on negative outgroup evaluation is significantly different between the central and southern regions. The same level of negative intergroup contact causes participants living in the central region to evaluate the outgroup more negatively than those who are living in the southern region.

# 8.1.7 Conditional Indirect Effects of Intergroup Contact (Moderator: Region)

Mediation effect of intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat on the relationship between three dimensions of intergroup contact and negative outgroup evaluation is separately examined.

Intergroup anxiety was found to mediate the relationship between intergroup contact quality and negative outgroup evaluation in all regions. The symbolic intergroup threat is found to mediate the relationship between intergroup contact quality and negative outgroup evaluation in the southern region. The realistic and symbolic intergroup threat is found to mediate the relationship between intergroup contact quality and negative outgroup evaluation in the northern region.

Pairwise parameter comparison revealed that relationship between symbolic intergroup threat and negative outgroup evaluation is significantly different between the northern and

central regions, and the relationship between intergroup anxiety and negative outgroup evaluation is significantly different among three regions. Therefore, the moderation effect of the region is significantly found on the indirect relationship between intergroup contact quality and negative outgroup evaluation via intergroup anxiety and symbolic intergroup threat.

Intergroup anxiety was found to mediate the relationship between intergroup contact quantity and negative outgroup evaluation in all regions, and the symbolic intergroup threat is found to mediate the relationship between intergroup contact quantity and negative outgroup evaluation in the northern region. Pairwise parameter comparison analysis revealed that the relationship between intergroup contact quantity and realistic intergroup threat, and the relationship between intergroup anxiety and negative outgroup evaluation are significantly different among three regions. The relationship between symbolic intergroup threat and negative outgroup evaluation is significantly different between the northern and central regions. Therefore, the moderation effect of region on the indirect effect of intergroup contact quantity on negative outgroup evaluation via intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat.

Intergroup anxiety and symbolic intergroup threat are found to mediate the relationship between negative intergroup contact and negative outgroup evaluation in the northern region. Intergroup anxiety and realistic intergroup threat are found to mediate the relationship between negative intergroup contact and negative outgroup evaluation in the central region. Intergroup anxiety is found to mediate the relationship between negative intergroup contact and negative outgroup evaluation in the southern region. Pairwise parameter comparison is operated to investigate the moderation effect of regional on indirect effect of negative intergroup contact on negative outgroup evaluation through three mediators. The relationship between negative intergroup contact and intergroup anxiety is significantly

different between the central and southern regions. The relationship between negative intergroup contact and the realistic intergroup threat is significantly different between the central and southern regions. The relationship between symbolic intergroup threat and negative outgroup evaluation is significantly different between the northern and central regions. The relationship between intergroup anxiety and negative outgroup evaluation is significantly different among the three regions. Therefore, the moderation effect of region was found on the indirect effect of negative intergroup contact on negative outgroup evaluation via intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat. Moderation effect of participants' residential region is significantly found in the indirect effects of three dimensions of intergroup contact on negative outgroup evaluation via intergroup anxiety, realistic intergroup threat, and symbolic intergroup evaluation via intergroup anxiety, realistic intergroup threat, and symbolic intergroup threat. The use of 'participants' residential region' as a moderator in the intergroup contact study is one of the originalities of the present study.

### 8.2. Conclusion

In line with Allport's (1954) contact hypothesis, the qualitative dimension of intergroup contact was found to predict a significant decrease in negative outgroup evaluation. Quantitative dimension directly improves the qualitative dimension of intergroup contact, and in turn, it indirectly reduces negative outgroup evaluation. Both quantitative and qualitative dimensions of intergroup contact reduce negative outgroup evaluation in different ways. As Integrated Threat Theory (Stephan and Stephan, 2000) predicted, mediation effects of intergroup anxiety, realistic, and symbolic intergroup threat on the relationship between two dimensions (quantitative and qualitative dimensions) of intergroup contact and negative outgroup evaluation were significantly found. Qualitative dimension of intergroup contact negatively predicts intergroup anxiety rather than negative outgroup evaluation. However, qualitative intergroup contact does not predict a decrease in realistic and symbolic intergroup

threat. It may be since intergroup anxiety is perceived in the interpersonal level while the intergroup threat is perceived in the intergroup level. Until an individual can generalize his positive evaluation towards outgroup friends in interpersonal level to the entire outgroup in intergroup level, the realistic and symbolic intergroup threat is hard to reduce. Perceived group status in both contexts (national and local contexts) is found to moderate the relationship between two dimensions of intergroup contact (qualitative and quantitative dimensions) and negative outgroup evaluation. Consistent with findings of existing studies, perceived minority status in any context associated with a high-level negative outgroup evaluation. That included perceived group status as a moderator in contact study. Participants' target outgroup is found to moderate the indirect effect of intergroup contact on negative outgroup evaluation. National minority group members perceive a higher level of realistic and symbolic intergroup threat from their neighboring national minority group than from the national majority group. National minority group members evaluated their neighboring national minority group more negatively than the national majority group. Qualitative dimension of intergroup contact is found to reduce negative outgroup evaluation in all regions while the quantitative dimension reduces negative outgroup evaluation in a certain region where intergroup conflict is currently absent. In a region where an ongoing intergroup conflict is absent, the negative dimension of intergroup contact predicts a relatively high negative outgroup evaluation. In a region where an ongoing intergroup conflict is present, the qualitative dimension of intergroup contact negatively predicts intergroup anxiety and symbolic threat more powerfully than in a region where intergroup conflict is absent. To conclude, qualitative intergroup contact is the most effective means of reducing negative outgroup evaluation and improving intergroup relations. In addition to qualitative intergroup contact, knowledge acquisition about outgroup and perspective taking are also crucial to reduce symbolic threat which qualitative intergroup contact cannot reduce in some conditions such as perceiving one's group as minority status.

### 8.3. Limitations

It is recommended by some researchers that a longitudinal design is the best for intergroup contact study. The result of a contact study using the cross-sectional design may be affected by biased sampling, i.e., those who self-segregated cannot be recruited as participants in a cross-sectional study. Moreover, the effect of intergroup contact can be better understood by a longitudinal data set. In this study, cross-sectional data is analyzed. In examining the indirect effect of intergroup contact, only three mediator variables were used. Including a greater number of mediators, variables can provide a better understanding of the complex nature of the intergroup conflict in Myanmar. In the initial research design, intergroup contact is planned to study based on eight national, ethnic groups rather than minoritymajority status groups. Unfortunately, the predetermined number of participants from each ethnic group could not recruit, and consequently, the data analysis plan has dramatically changed. A significant portion of the sample size represents university students staying at a student dormitory. Since participants staying at dormitory already enjoy the Allport's recommended conditions for improving intergroup relations, they reported relatively high scores in intergroup contact. However, the strength of the relationship between intergroup contact and negative outgroup evaluation is reliable.

# 8.4. Implications

Findings of the present study confirm theoretical assumptions of two classical theories in intergroup contact study. Moreover, the findings of the present study are consistent with the findings of meta-analysis studies. The fact that intergroup contact reduces negative outgroup evaluation is a universal phenomenon across cultures and in various situations. Mere contact or a low-quality intergroup contact associates can potentially yield two opposite outcomes:

the negative intergroup experience that will lead to developing stronger negative outgroup attitudes, and good-quality intergroup contact that will improve intergroup attitudes. This point highlights the importance of authority's involvement in creating situations that guarantee good quality intergroup contact among members of different social groups. Especially, public spaces such as schools, universities and the like can be utilized places for improving intergroup contact quantity and quality simultaneously. We have seen the fact that members of minority status group perceive a relatively higher realistic and symbolic threat from majority status group as well as from the neighboring minority status group. The symbolic threat arises from perceived intergroup differences between self's group and the outgroup. Knowledge acquisition and perspective taking can reduce perceived intergroup differences and in turn will reduce symbolic threat indirectly.

## 8.5. Future Research

The future researcher who will conduct this kind of study should consider using a longitudinal design. The sample should include a variety of age groups, a wide range of educational background, socioeconomic status, occupation, location such as urban and rural areas, and participants' religious affiliations. Such mediators of intergroup contact effect on outgroup evaluation as information acquisition about outgroup, perspective taking, self-disclosure during intergroup contact, mutual trust, and the likes should be included. In terms of research procedure, experimental design or longitudinal design is recommended.

### References

- 1. Aberson, C. L., and Haag, S. C. (2007). Contact, perspective taking, and anxiety as predictors of stereotype endorsement, explicit attitudes, and implicit attitudes. *Group Processes and Intergroup Relations*, *10*(2), 179-201.
- 2. Aboud, F. E., Friedmann, J., and Smith, S. (2015). Direct and indirect friends in cross-ethnolinguistic peer relations. *Canadian Journal of Behavioural Science*, 47(1), 68-79.
- 3. Abu-Rayya, M., and Abu-Rayya, H. (2009). Ethnic identification, religious identity, and psychological well-being among muslim and christian palestinians in israel. *Mental Health, Religion and Culture, 12*(2), 147-155.
- 4. Al Ramiah, A., and Hewstone, M. (2013). Intergroup contact as a tool for reducing, resolving, and preventing intergroup conflict: Evidence, limitations, and potential. *American Psychologist*, 68(7), 527-542.
- 5. Allport, G. W. (1954). *The Nature of Prejudice*. New York: Addison.
- 6. 'And the best essay is...': Extended contact and cross-group friendships at school. *The British Journal of Social Psychology*, *54*(4), 601-615.
- 7. Bagci, S. C., Çelebi, E., and Karaköse, S. (2017). Discrimination towards ethnic minorities: How does it relate to majority group members' outgroup attitudes and support for multiculturalism. *Social Justice Research*, 30(1), 1-22.
- 8. Barlow, F. K., Paolini, S., Pedersen, A., Hornsey, M. J., M., H. R., Harwood, J., Sibley, C. G. (2012). The Contact Caveat: Negative Contact Predicts Increased Prejudice More Than Positive Contact Predicts Reduced Prejudice. *Personality and Social Psychology Bulletin*, 38(12), 1629-1643.
- 9. Barth, M., and Stürmer, S. (2016). Comparison of the effects of individual and group-level perspective taking on intergroup reconciliation. *Social Psychology*, 47(6), 311-326.
- 10. Baumeister, R. F., and Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497-529.

- 11. Berger, C. R., and Bradac, J. J. (1982). *Language and social knowledge: Uncertainty in interpersonal relationships*. London: Edward Arnold.
- 12. Berger, C. R., and Calabrese, R. J. (1974). Some explorations in initial interaction and beyond: Toward a developmental theory of interpersonal communication. *Human Communication Research*, *1*(2), 99-112.
- 13. Bikmen, N. (2011). Asymmetrical effects of contact between minority groups: Asian and black students in a small college. *Cultural Diversity and Ethnic Minority Psychology*, *17*(2), 186-194.
- 14. Billig, M., and Tajfel, H. (1973). Social categorization and similarity in intergroup behaviour. *European Journal of Social Psychology*, *3*(1), 27-52.
- 15. Binder, J., Zagefka, H., Brown, R., Funke, F., Kessler, T., Mummendey, A., and Leyens, J. P. (2009). Does contact reduce prejudice or does prejudice reduce contact? A longitudinal test of the contact hypothesis among majority and minority groups in three European countries. *Journal of Personality and Social Psychology*, 96(4), 843-856.
- 16. Bolin, J. H. (2014). Hayes, Andrew F. (2013). Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach. New York, NY: The Guilford Press. *Journal of Educational Measurement*, *51*(3), 335-337.
- 17. Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin*, *17*(5), 475-482.
- 18. Brown, R., and Hewstone, M. (2005). An integrative theory of intergroup contact. *Advances in Experimental Social Psychology*, *37*, 255-343.
- 19. Brown, R., Vivian, J., and Hewstone, M. (1999). Changing attitudes through intergroup contact: The effects of group membership salience. *European Journal of Social Psychology*, 29(5-6), 741-764.
- 20. Çakal, H., Hewstone, M., Güler, M., and Heath, A. (2016). Predicting support for collective action in the conflict between Turks and Kurds: Perceived threats as a mediator of intergroup contact and social identity. *Group Processes and Intergroup Relations*, 19(6), 732-752.
- 21. Corenblum, B., and Stephan, W. G. (2001). White fears and native apprehensions: An integrated threat theory approach to intergroup attitudes. *Canadian Journal of Behavioural Science* 33(4), 251-268.

- 22. Crisp, R. J., and Turner, R. N. (2009). Can imagined interactions produce positive perceptions? Reducing prejudice through simulated social contact. *American Psychologist*, 64(4), 231-240.
- 23. Crisp, R. J., and Turner, R. N. (2013). Imagined intergroup contact: Refinements, debates, and clarifications. In G. Hodson, and M. Hewstone (Eds.), *Advances in intergroup contact; advances in intergroup contact* (pp. 135-151, Chapter XIV, 316 Pages) Psychology Press, New York, NY.
- 24. Davies, K., and Aron, A. (2016). Friendship development and intergroup attitudes: The role of interpersonal and intergroup friendship processes. *The Journal of Social Issues*, 72(3), 489-510.
- 25. Dhont, K., and Van Hiel, A. (2011). Direct contact and authoritarianism as moderators between extended contact and reduced prejudice: Lower threat and greater trust as mediators. *Group Processes and Intergroup Relations*, 14(2), 223-237.
- 26. Dovidio, J. F., Gaertner, S. L., and Kawakami, K. (2003). Intergroup contact: The past, present, and the future. *Group Processes and Intergroup Relations*, 6(1), 5-21.
- 27. Dunaev, J. L., Brochu, P. M., and Markey, C. H. (2018). Imagine that! the effect of counterstereotypic imagined intergroup contact on weight bias. *Health Psychology*, *37*(1), 81-88.
- 28. Ensari, N., and Miller, N. (2002). The out-group must not be so bad after all: The effects of disclosure, typicality, and salience on intergroup bias. *Journal of Personality and Social Psychology*, 83(2), 313-329.
- 29. Galinsky, A. D., and Moskowitz, G. B. (2000). Perspective-taking: Decreasing stereotype expression, stereotype accessibility, and in-group favoritism. *Journal of Personality and Social Psychology*, 78(4), 708-724.
- 30. Graf, S., Paolini, S., and Rubin, M. (2014). Negative intergroup contact is more influential, but positive intergroup contact is more common: Assessing contact prominence and contact prevalence in five Central European countries. *European Journal of Social Psychology*, 44(6), 536-547.
- 31. Greenland, K., and Brown, R. (2000). Categorization and intergroup anxiety in intergroup contact. In D. Capozza, and R. Brown (Eds.), *Social identity processes: Trends in theory and research; social identity processes: Trends in theory and research* (pp. 167-183, Chapter XV, 227 Pages) Sage Publications Ltd, Thousand Oaks, CA.

- 32. Gundelach, B. (2014). In diversity we trust: The positive effect of ethnic diversity on outgroup trust. *Political Behavior*, *36*(1), 125-142.
- 33. Gurr, T. R. (1970). Why men rebel. Princeton, NJ: Princeton University Press.
- 34. Harwood, J., Hewstone, M., Paolini, S., and Voci, A. (2005). Grandparent-grandchild contact and attitudes toward older adults: Moderator and mediator effects. *Personality and Social Psychology Bulletin*, *31*(3), 393-406.
- 35. Hewstone M, Brown R, eds. (1986). *Contact and Conflict in Intergroup Encounters*. Oxford: Blackwell.
- 36. Hewstone, M. (1996). Contact and categorization: Social psychological interventions to change intergroup relation. *Stereotypes and stereotyping*, pp. 323-365.
- 37. Hewstone, M. Brown, R. (1986): "Contact is not enough: an intergroup perspective on the 'contact hypothesis", M. Hewstone R. Brown. *Contact and Conflict in Intergroup Encounters*. 1-44.
- 38. Hewstone, M., Cairns, E., Voci, A., Hamberger, J., and Niens, U. (2006). Intergroup contact, forgiveness, and experience of "the troubles" in northern ireland. *Journal of Social Issues*, 62(1), 99-120.
- 39. Hewstone, M., Lolliot, S., Swart, H., Myers, E., Voci, A., Al Ramiah, A., and Cairns, E. (2014). Intergroup contact and intergroup conflict. *Peace and Conflict: Journal of Peace Psychology*, 20(1), 39-53.
- 40. Hogg, M. A., Sherman, D. K., Dierselhuis, J., Maitner, A. T., and Moffitt, G. (2007). Uncertainty, entitativity, and group identification. *Journal of Experimental Social Psychology*, 43(1), 135-142.
- 41. Husnu, S., and Crisp, R. J. (2010). Imagined intergroup contact: A new technique for encouraging greater inter-ethnic contact in Cyprus. *Peace and Conflict: Journal of Peace Psychology*, *16*(1), 97-108.
- 42. Islam, M. R., and Hewstone, M. (1993). Dimensions of contact as predictors of intergroup anxiety, perceived out-group variability, and out-group attitude: An integrative model. *Personality and Social Psychology Bulletin*, 19(6), 700-710.
- 43. Jackson, J. W. (1993). Contact theory of intergroup hostility: A review and evaluation of the theoretical and empirical literature. *International Journal of Group Tensions*, 23(1), 43-65.
- 44. Kawakami, N., and Yoshida, F. (2010). Effects of subliminal mere exposure to group members on intergroup evaluation: Category evaluation measured in the implicit association test (IAT). *Japanese Journal of Psychology*, 81(4), 364-372.

- 45. Korol, L., Fietzer, A. W., and Ponterotto, J. G. (2018). The relationship between multicultural personality, intergroup contact, and positive outgroup attitudes toward Asian Americans. *Asian American Journal of Psychology*, *9*(3), 200-210.
- 46. Laurence, J., Schmid, K., and Hewstone, M. (2018). Ethnic diversity, inter-group attitudes and countervailing pathways of positive and negative inter-group contact:

  An analysis across workplaces and neighbourhoods. *Social Indicators Research*, *136*(2), 719-749.
- 47. Leach, C. W., Snider, N., and Iyer, A. (2002). 'Poisoning the consciences of the fortunate. *The experience of relative advantage and support for social equality.* In I. Walker, and H. Smith (Eds.), *Relative deprivation: Specification, development and integration*. Cambridge, England: Cambridge University Press. pp.136-163.
- 48. Lee, Y. T. E., Jussim, L. J., and McCauley, C. R. (1995). *Stereotype accuracy: Toward appreciating group differences*. American Psychological Association.
- 49. Levin, S., Van Laar, C., and Sidanius, J. (2003). The effects of ingroup and outgroup friendships on ethnic attitudes in college: A longitudinal study. *Group Processes and Intergroup Relations*, 6(1), 76-92.
- 50. Levine, J. M., and Hogg, M. A. (2010). *Encyclopedia of group processes and intergroup relations* (Vol. 1). Sage. pp.246.
- 51. Mähönen, T. A., and Jasinskaja-Lahti, I. (2016). Ramifications of positive and negative contact experiences among remigrants from Russia to Finland. *Cultural Diversity and Ethnic Minority Psychology*, 22(2), 247-255.
- 52. Mähönen, T. A., Ihalainen, K., and Jasinskaja-Lahti, I. (2013). Specifying the contact hypothesis in a minority-minority context: A social identity perspective. *Zeitschrift Für Psychologie/Journal of Psychology*, *221*(4), 223-231.
- 53. Makashvili, A., Vardanashvili, I., and Javakhishvili, N. (2018). Testing intergroup threat theory: Realistic and symbolic threats, religiosity and gender as predictors of prejudice. *Europe's Journal of Psychology*, *14*(2), 464-484.
- 54. Malloy, T. E., Ristikari, T., Berrios-Candelaria, R., Lewis, B., and Agatstein, F. (2011). Status-based asymmetry in intergroup responses: Implications for intergroup reconciliation. *Cultural Diversity and Ethnic Minority Psychology*, *17*(1), 31-42.
- 55. McCauley, C. R., Jussim, L. J., and Lee, Y. (1995). Stereotype accuracy: Toward appreciating group differences. In Y. Lee, L. J. Jussim and C. R. McCauley (Eds.), Stereotype accuracy: Toward appreciating group differences; stereotype accuracy:

- Toward appreciating group differences (pp. 293-312, Chapter XIV) American Psychological Association, Washington, DC.
- McKeown, S., and Psaltis, C. (2017). Intergroup contact and the mediating role of intergroup trust on outgroup evaluation and future contact intentions in Cyprus and Northern Ireland. *Peace and Conflict: Journal of Peace Psychology*, 23(4), 392-404.
- 57. Merrilees, C. E., Taylor, L. K., Baird, R., Goeke-Morey, M., Shirlow, P., and Cummings, E. M. (2018). Neighborhood effects of intergroup contact on change in youth intergroup bias. *Journal of Youth and Adolescence*, 47(1), 77-87.
- 58. Miller, D. A., Smith, E. R., and Mackie, D. M. (2004). Effects of intergroup contact and political predispositions on prejudice: Role of intergroup emotions. *Group Processes and Intergroup Relations*, 7(3), 221-237.
- 59. Morrison, K. R., Fast, N. J., and Ybarra, O. (2009). Group status, perceptions of threat, and support for social inequality. *Journal of Experimental Social Psychology*, 45(1), 204-210.
- 60. Muller, D., Judd, C. M., and Yzerbyt, V. Y. (2005). When moderation is mediated, and mediation is moderated. *Journal of Personality and Social Psychology*, 89(6), 852-863.
- 61. Paolini, S., Harwood, J., and Rubin, M. (2010). Negative intergroup contact makes group memberships salient: Explaining why intergroup conflict endures. *Personality and Social Psychology Bulletin*, *36*(12), 1723-1738.
- 62. Paolini, S., Hewstone, M., Cairns, E., and Voci, A. (2004). Effects of direct and indirect cross-group friendships on judgments of Catholics and Protestants in Northern Ireland: The mediating role of an anxiety-reduction mechanism. *Personality and Social Psychology Bulletin*, 30(6), 770-786.
- 63. Pettigrew T. F. (1996). *How to Think Like a Social Scientist*. New York: Harper-Collins. pp.198.
- Pettigrew, T. F. (1967). Social evaluation theory: Convergences and applications. In
   D. Levine (Ed.), *Nebraska Symposium on Motivation* (Vol. 15, pp. 241-311).
   Lincoln: University of Nebraska Press.
- 65. Pettigrew, T. F. (1997). Generalized intergroup contact effects on prejudice. *Personality and Social Psychology Bulletin*, 23(2), 173-185.
- 66. Pettigrew, T. F. (1998). Intergroup contact theory. *Annual review of psychology*, 49(1), 65-85.

- 67. Pettigrew, T. F., and Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, *90*(5), 751-783.
- 68. Pettigrew, T. F., and Tropp, L. R. (2008). How does intergroup contact reduce prejudice? Meta-analytic tests of three mediators. *European Journal of Social Psychology*, 38(6), 922-934.
- 69. Plant, E. A., and Devine, P. G. (1998). Internal and external motivation to respond without prejudice. *Journal of Personality and Social Psychology*, 75(3), 811-832.
- 70. Plant, E. A., and Devine, P. G. (2003). The antecedents and implications of interracial anxiety. *Personality and Social Psychology Bulletin*, *29*(6), 790-801.
- 71. Riek, B. M., Mania, E. W., and Gaertner, S. L. (2006). Intergroup threat and outgroup attitudes: A meta-analytic review. *Personality and Social Psychology Review*, *10*(4), 336-353.
- 72. Rozich, B. C., Kenworthy, J. B., Voci, A., and Hewstone, M. (2018). What's past is prologue: Intergroup emotions and trust as mediating the links between prior intergroup contact and future behavioral tendencies. *TPM-Testing, Psychometrics, Methodology in Applied Psychology*, 25(2), 179-191.
- 73. Runciman, W. G. (1966). *Relative deprivation and social justice*. Berkeley: University of California Press.
- 74. Saab, R., Harb, C., and Moughalian, C. (2017). Intergroup contact as a predictor of violent and nonviolent collective action: Evidence from Syrian refugees and Lebanese nationals. *Peace and Conflict: Journal of Peace Psychology*, 23(3), 297-306.
- 75. Schmid, K., Hewstone, M., Küpper, B., Zick, A., and Tausch, N. (2014). Reducing aggressive intergroup action tendencies: Effects of intergroup contact via perceived intergroup threat. *Aggressive Behavior*, 40(3), 250-262.
- 76. Sherif, M. (1966). *In common predicament: Social psychology of intergroup conflict and cooperation*. Boston: Houghton Mifflin.
- 77. Shih, M. J., Stotzer, R., and Gutiérrez, A. S. (2013). Perspective-taking and empathy: Generalizing the reduction of group bias towards Asian Americans to general outgroups. *Asian American Journal of Psychology*, *4*(2), 79-83.
- 78. Shook, N. J., and Fazio, R. H. (2008). Interracial roommate relationships: An experimental field test of the contact hypothesis. *Psychological Science*, *19*(7), 717-723.

- 79. Sidanius, J., and Pratto, F. (1999). Social dominance: An intergroup theory of social hierarchy and oppression. Cambridge: Cambridge University Press.
- 80. Slavin, R. E. (1985). Cooperative learning: Applying contact theory in desegregated schools. *Journal of Social Issues*, *41*(3), 45-62.
- 81. Smith, H. J., and Kessler, T. (2004). Group-based emotions and intergroup behavior: The case of relative deprivation. In L. Z. Tiedens and C. W Leach (Eds.), *The social life of emotions* (pp. 292-313). Cambridge, UK: Cambridge University Press.
- 82. Stathi, S., Husnu, S., and Pendleton, S. (2017). Intergroup contact and contact norms as predictors of postconflict forgiveness. *Group Dynamics: Theory, Research, and Practice*, 21(1), 20-39.
- 83. Stephan, W. G., & Stephan, C. W. (2000). An integrated threat theory of prejudice. In S. Oskamp (Ed.), "The Claremont Symposium on Applied Social Psychology" Reducing prejudice and discrimination (pp. 23-45). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- 84. Stephan, W. G., and Renfro, C. L. (2002). The role of threat in intergroup relations. *From prejudice to intergroup emotions: Differentiated reactions to social groups*, 191-207.
- 85. Stephan, W. G., and Stephan, C. W. (1985). Intergroup anxiety. *Journal of Social Issues*, 41(3), 157-175.
- 86. Stephan, W. G., and Stephan, C. W. (2017). Intergroup threat theory. *The International Encyclopedia of Intercultural Communication*, 1-12.
- 87. Stephan, W. G., Diaz-Loving, R., and Duran, A. (2000). Integrated threat theory and intercultural attitudes: Mexico and the united states. *Journal of Cross-Cultural Psychology*, *31*(2), 240-249.
- 88. Stephan, W. G., Renfro, C. L., Esses, V. M., Stephan, C. W., and Martin, T. (2005). The effects of feeling threatened on attitudes toward immigrants. *International Journal of Intercultural Relations*, 29 (1), 1-19.
- 89. Stephan, W. G., Ybarra, O., and Rios Morrison, K. (2009). Intergroup Threat Theory (pp. 43-59). *Handbook of prejudice. Mahwah, NJ: Lawrence Erlbaum Associates*.
- 90. Swart, H., Hewstone, M., Christ, O., and Voci, A. (2011). Affective mediators of intergroup contact: A three-wave longitudinal study in South Africa. *Journal of Personality and Social Psychology*, 101(6), 1221-1238.
- 91. Tajfel, H., and Turner, J. C. (1986). The social identity theory of inter group behavior. *Psychology of Intergroup Relations*. Chicago: Nelson.

- 92. Tajfel, H., Billig, M. G., Bundy, R. P., and Flament, C. (1971). Social categorization and intergroup behaviour. *European Journal of Social Psychology*, *1*, (pp. 149-178).
- 93. Tajfel, H., Turner, J. C. (1979). An integrative theory of intergroup conflict. *The Social Psychology of Intergroup Relation*. Monterey, California: Brooks Cole. 33-47.
- 94. Tam, T., Hewstone, M., Harwood, J., Voci, A., and Kenworthy, J. (2006). Intergroup contact and grandparent-grandchild communication: The effects of self-disclosure on implicit and explicit biases against older people. *Group Processes and Intergroup Relations*, *9*(3), 413-429.
- 95. Tausch, N., Hewstone, M., and Roy, R. (2009). The relationships between contact, status and prejudice: An integrated threat theory analysis of Hindu–Muslim relations in India. *Journal of Community and Applied Social Psychology*, 19(2), 83-94.
- 96. Tausch, N., Tam, T., Hewstone, M., Kenworthy, J., and 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(3), 541-556.
- 97. Taylor, D. M., and Doria, J. R. (1981). Self-serving and group-serving bias in attribution. *The Journal of Social Psychology*, *113*(2), 201-211.
- 98. Techakesari, P., Barlow, F. K., Hornsey, M. J., Sung, B., Thai, M., and Y., J. L. (2015). An Investigation of Positive and Negative Contact as Predictors of Intergroup Attitudes in the United States, Hong Kong, and Thailand. *Journal of Cross-Cultural Psychology*, 46(3), 454-468.
- 99. Todd, A. R., and Burgmer, P. (2013). Perspective taking and automatic intergroup evaluation change: Testing an associative self-anchoring account. *Journal of Personality and Social Psychology*, 104(5), 786-802.
- 100. Tropp, L. R. (2008). The role of trust in intergroup contact: Its significance and implications for improving relations between groups. In U. Wagner, L. R. Tropp, G. Finchilescu and C. Tredoux (Eds.), *Improving intergroup relations: Building on the legacy of Thomas F. Pettigrew* (pp. 91-106) Blackwell Publishing, Malden.
- 101. Tropp, L. R., and Pettigrew, T. F. (2005). Relationships between intergroup contact and prejudice among minority and majority status groups. *Psychological Science*, *16*(12), 951-957.
- 102. Tropp, L. R., Hawi, D. R., O'Brien, T. C., Gheorghiu, M., Zetes, A., and Butz, D. A. (2017). Intergroup contact and the potential for post-conflict reconciliation: Studies

- in Northern Ireland and south Africa. Peace and Conflict: Journal of Peace Psychology, 23(3), 239-249.
- 103. Turner, J. C. (1982). Towards a cognitive redefinition of the social group. *Social Identity and Intergroup Relations*. Cambridge, England: Cambridge University Press. 15-40.
- 104. Turner, J. C., Brown, R. J., and Tajfel, H. (1979). Social comparison and group interest in ingroup favouritism. *European Journal of Social Psychology*, 9(2), 187-204.
- 105. Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., and Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Basil Blackwell.
- Turner, R. N., Crisp, R. J., and Lambert, E. (2007). Imagining intergroup contact can improve intergroup attitudes. *Group Processes and Intergroup Relations*, 10(4), 427-441.
- 107. Turner, R. N., Hewstone, M., and Voci, A. (2007). Reducing explicit and implicit outgroup prejudice via direct and extended contact: The mediating role of self-disclosure and intergroup anxiety. *Journal of Personality and Social Psychology*, 93(3), 369-388.
- 108. Turner, R. N., Hewstone, M., Voci, A., and Vonofakou, C. (2008). A test of the extended intergroup contact hypothesis: The mediating role of intergroup anxiety, perceived ingroup and outgroup norms, and inclusion of the outgroup in the self. *Journal of Personality and Social Psychology*, 95(4), 843-860.
- 109. Turner, R. N., West, K., and Christie, Z. (2013). Out-group trust, intergroup anxiety, and out-group attitude as mediators of the effect of imagined intergroup contact on intergroup behavioral tendencies. *Journal of Applied Social Psychology*, 43, 196-205.
- 110. Vedder, P., Wenink, E., and van Geel, M. (2017). Intergroup contact and prejudice between Dutch majority and Muslim minority youth in the Netherlands. *Cultural Diversity and Ethnic Minority Psychology*, 23(4), 477-485.
- 111. Vescio, T. K., Sechrist, G. B., and Paolucci, M. P. (2003). Perspective taking and prejudice reduction: The mediational role of empathy arousal and situational attributions. *European Journal of Social Psychology*, 33(4), 455-472.
- 112. Vezzali, L., Giovannini, D., and Capozza, D. (2010). Longitudinal effects of contact on intergroup relations: The role of majority and minority group membership and

- intergroup emotions. *Journal of Community and Applied Social Psychology*, 20(6), 462-479.
- 113. Vezzali, L., Hewstone, M., Capozza, D., Trifiletti, E., and Di Bernardo, G. A. (2017). Improving intergroup relations with extended contact among young children: Mediation by intergroup empathy and moderation by direct intergroup contact. *Journal of Community and Applied Social Psychology, 27*(1), 35-49.
- 114. Vezzali, L., Stathi, S., Crisp, R. J., Giovannini, D., Capozza, D., and Gaertner, S. L. (2015). Imagined intergroup contact and common ingroup identity: An integrative approach. *Social Psychology*, 46(5), 265-276.
- 115. Vezzali, L., Stathi, S., Giovannini, D., Capozza, D., and Visintin, E. P. (2015). 'And the best essay is...': Extended contact and cross-group friendships at school. *The British Journal of Social Psychology, 54*(4), 601-615.
- 116. Visintin, E. P., Green, E. G., Pereira, A., and Miteva, P. (2017). How positive and negative contact relate to attitudes towards Roma: Comparing majority and high-status minority perspectives. *Journal of Community and Applied Social Psychology*, 27(3), 240-252.
- 117. Voci, A., and Hewstone, M. (2003). Intergroup contact and prejudice toward immigrants in Italy: The mediational role of anxiety and the moderational role of group salience. *Group Processes and Intergroup Relations*, 6(1), 37-54.
- 118. Vorauer, J. D., and Sasaki, S. J. (2014). Distinct effects of imagine-other versus imagine-self perspective-taking on prejudice reduction. *Social Cognition*, 32(2), 130-147.
- 119. Walker, I. (2010). Relative deprivation. In J. M. Levine and M. A. Hogg (Eds.), *Encyclopedia of Group Processes and Intergroup Relations* (pp. 695-698). Thousand Oaks, CA: SAGE Publications, Inc.
- 120. Wang, C. S., Tai, K., Ku, G., and Galinsky, A. D. (2014). Perspective-taking increases willingness to engage in intergroup contact. *PLoS One*, *9*(1), 1-9.
- 121. West, K., Holmes, E., and Hewstone, M. (2011). Enhancing imagined contact to reduce prejudice against people with schizophrenia. *Group Processes and Intergroup Relations*, *14*(3), 407-428.
- 122. West, T. V., Pearson, A. R., and Stern, C. (2014). Anxiety perseverance in intergroup interaction: When incidental explanations backfire. *Journal of Personality and Social Psychology*, 107(5), 825-843.

- 123. Wilder, D., and Simon, A. F. (2001). Affect as a cause of intergroup bias. In R. Brown and S.L. Gaertner (Eds.), *Blackwell handbook of social psychology: Intergroup processes* (pp. 153–172). Malden, MA: Blackwell.
- 124. Wölfer, R., Christ, O., Schmid, K., Tausch, N., Buchallik, F. M., Vertovec, S., and Hewstone, M. (2018). Indirect contact predicts direct contact: Longitudinal evidence and the mediating role of intergroup anxiety. *Journal of Personality and Social Psychology*.
- 125. Wright, S. C., Aron, A., McLaughlin-Volpe, T., and Ropp, S. A. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. *Journal of Personality and Social psychology*, 73(1), 73-90.
- 126. Wright, S. C., Van der Zande, C., Ropp, S. A., Tropp, L. R., Young, K., Zanna, M., and Aron, A. (2004). Cross-group friendships can reduce prejudice: Experimental evidence of a causal direction. *Unpublished manuscript, Simon Fraser University, Burnaby, British Columbia, Canada*.

# **Appendix A**Questionnaires



# အပိုင်း (က)

(c)	အသက်	နှစ် (ကိန်းဂဏန်းဖြင့် ရေးပေးပါ)	( <sub>J</sub> )	ග්	8	ြ ကျား	<b>ω</b>	
( <sub>J</sub> )	သင်သည် မည်သို့သော	အုပ်စု၌ ပါဝင်သနည်း။						
	[က] တနိုင်ငံလုံးအတိုင်း		များစု		ရင်းသား	]		
	[ခ] သင်နေထိုင်ရာရပ်ရွာ	ဒေသ၌ လူနည်းစုနေထိုင်သူ လူမှာ	:စုနေ	ထိုင်၁	ų			
	group) ဟုလည်းေ သင်သည် လူနည် လူများစုတိုင်းရင်း	င်ပါဝင်သည့်အုပ်စုကို <b>"အတွင်းအုပ်စု"</b> (In-group ကာင်း ရည်ညွှန်းခေါ်ဆိုပါမည်။ ပွဲးစုတိုင်းရင်းသားဖြစ်ပါက "ပြင်ပအုပ်စု" အဖြစ် သားဖြစ်ပါက "ပြင်ပအုပ်စု" အဖြစ် သင် ထိတွေ သီးသီး ဦးတည်စဉ်းစားလျှက် အပိုင်း (ခ) မှ မေးဒု	<b>လူ (</b>	<b>ျားစု</b> ဉ်ဆံဖူ	<b>တိုင်းရင်းသာ</b> ဦးသည့် <b>လူန</b> ု	အုပ်စုကို လ <b>ည်းစုတိုင်းရင်း</b>	ည်းကောင်း၊ <b>သား</b> အုပ်စု "d	- သင်သည်
		အပို	င်း (ခ	o)				
		ကျေးဇူးပြု၍မေးခွန်းဒ	စားဝ	ပုံးကို	ဖြေဆိုပေး	ວິ) ແ		
Q-1.	သင်၏ လူမျိုးအမည်ကို "	အမှန်ခြစ်" 🗹 ၍ ရွေးချယ်ပါ။						
or.	ာချင် ကြဟား	ြာကရင် ြူ ချင်း ြူ မွန် ြူ ဗမ	2		ရခိုင်	ရှမ်း	အခြား( အသေး	စိတ် ဖော်ပြပေးပါ
] m	၁ချင် ကယား	သည့်လူမျိုးကို သင် ဦးတည်စဉ်းစားမည်နည်း။ "အမှန် ကရင် ချင်း မွန် ဗဗ ဖြေမှန် / အဖြေမှားဟူ၍ မရှိဘဲ မေးခွန်းတစ်ခုချင်းစီအ	9		ရခိုင်	ရှမ်း	အခြား( အသေ	) ားစိတ်ဖော်ပြပေးပဴ င်းပေးပါ။
∖-3.	သင်၏နေ့စဉ်ဘဝ၌ –	_		ုံးဝ ရှိပါ	အနည်းငယ် ရှိပါသည်	အသင့် အတင့် ရှိပါသည်	အတော် များများ ရှိပါသည်	လုံးဝ ရှိပါသည်
က)	ပြင်ပအုပ်စုဝင်တို့နှင့် ထိဖေ	ာ္လဆက်ဆံနိုင်မည့် "အခွင့်အလမ်း" ရှိပါသလား။		0	J	6	9	2
)	ပြင်ပအုပ်စုဝင်များနှင့် ပြေး	ဆို ဆက်ဆံလိုသည့် "စိတ်ဆန္ဒ" ရှိပါသလား။		0	J	9	9	၅
Q-4.	သင်သည် —		ω 0	င်းဝ ရှိပါ	အနည်းငယ် ရှိပါသည်	အသင့် အတင့် ရှိပါသည်	အတော် များများ ရှိပါသည်	အများ အပြား ရှိပါသည်
(က)	ကျောင်း၌ ပြင်ပအုပ်စုနှင့်	ထိတွေ့ဆက်သွယ်မှု ဘယ်လောက်များများရှိသနည်း။		0	J	5	9	2
ခ)	သင်၏ အိမ်နီးနားချင်းအ များများ ရှိသနည်း။	ဖြစ် ပြင်ပအုပ်စုနှင့် ထိတွေ့ဆက်သွယ်မှု ဘယ်လောက်		၁	J	5	9	9
ი)	သင်၏ ခင်မင်ရင်းနှီးသော ဘယ်လောက်များများ ရှိ၁	သူငယ်ချင်းအဖြစ် ပြင်ပအုပ်စုနှင့် ထိတွေ့ဆက်သွယ်မှု ၁နည်း။		၁	J	5	9	2
(ဃ)	ပြင်ပအုပ်စုမှလူများနှင့် အ ရှိသနည်း။	ကြိမ်ဘယ်လောက်များများ စကားလက်ဆုံ ပြောဆိုဝေ	Ç	၁	J	9	9	2
(c)	ပြင်ပအုပ်စုဝင်များထံ အကြ	ကိုမ်ဘယ်လောက်များများ အိမ်လည်သွားလေ့ရှိသနည်	:1	0	J	9	9	2
* F	Ref: GENERAL INTERGROUP	CONTACT QUANTITY SCALES (Islam & Hewstone, 1993)			သု-၁/ခ	1	စာမျက်နှာ	

Q-5	. పర్టమమ్ —	လုံးဝ မကြုဖူးပါ	အနည်းငယ် ကြုဖူးသည်	အသင့်အတင့် ကြုဖူးသည်	အလွန် ကြုဖူးသည်	အပြည့်အဝ ကြုဖူးသည်
(က)	ပြင်ပအုပ်စုနှင့် ထိတွေ့ဆက်ဆံရာ၌ တန်းတူညီမျှမှုရှိခြင်းကို မည်မျှအတိုင်း အတာအထိ တွေ့ကြုခံစားဖူးသနည်း။	э	J	9	9	9
(၁)	ပြင်ပအုပ်စုနှင့် ထိတွေ့ဆက်ဆံရာ၌ မိမိဆန္ဒအတိုင်း လွတ်လပ်စွာ ပြုမူနိုင် ခြင်းကို မည်မျှအတိုင်းအတာအထိ တွေကြုံခံစားဖူးသနည်း။	0	J	9	9	၅
(n)	ပြင်ပအုပ်စုနှင့် ထိတွေ့ဆက်ဆံရာ၌ အပေါ်ယံဆန်ခြင်းကို မည်မျှအတိုင်း အတာအထိ တွေကြုခံစားဖူးသနည်း။	٥	J	9	9	၅
(ဃ)	ပြင်ပအုပ်စုနှင့် ထိတွေ့ဆက်ဆံရာ၌ ခင်မင်ရင်းနှီးမှုရှိခြင်းကို မည်မျှအတိုင်း အတာအထိ တွေကြုခံစားဖူးသနည်း။	٥	J	9	9	၅
(c)	ပြင်ပအုပ်စုနှင့် ထိတွေ့ဆက်ဆံရာ၌ စိတ်ကျေနပ်ဖွယ်ကောင်းခြင်းကို မည်မျှ အတိုင်းအတာအထိ တွေကြုံခံစားဖူးသနည်း။	o	J	9	9	9
(o)	ပြင်ပအုပ်စုနှင့် ထိတွေ့ဆက်ဆံရာ၌ ပူးပေါင်းဆောင်ရွက်မှုရှိခြင်းကို မည်မျှ အတိုင်းအတာအထိ တွေ့ကြုခံစားဖူးသနည်း။	0	J	9	9	၅
(∞)	ပြင်ပအုပ်စုနှင့် ထိတွေ့ဆက်ဆံရာ၌ ယှဉ်ပြိုင်မှုရှိခြင်းကို မည်မျှအတိုင်း အတာအထိ တွေကြုခံစားဖူးသနည်း။	0	J	9	9	၅

<sup>\*</sup> Ref: GENERAL INTERGROUP CONTACT QUALITY SCALES (Islam & Hewstone, 1993)

Q-6	I	လုံးဝ မဟုတ်ပါ	မဟုတ်ပါ	ဟုတ်-မဟုတ် မသေချာပါ	ဟုတ်သည်	လုံးဝ ဟုတ်သည်
(က)	"ပြင်ပအုဝ်စု" သည် တိုင်းပြည်တွင် အာဏာနှင့် လုပ်ပိုင်ခွင့်ရှိသည့် ရာထူးများကို အလွန်အကျွံ အများအပြား ရယူထား၏။	э	J	9	9	9
(a)	"ပြင်ပအုပ်စု" သည် နိုင်ငံရေးလောကကို သုတို့လွှမ်းမိုးသင့်သည့် အတိုင်းအတာ ထက် များစွာကျော်လွန်၍ လွှမ်းမိုးနေ၏။	0	J	9	9	၅
(റ)	အလွန်များပြားသော တိုင်းပြည့်ဘဏ္ဍာများကို "ပြင်ပအုပ်စု" အကျိုးရှိစေမည့် ပညာရေးအစီအစဉ်များ၌ သုံးစွဲနေ၏။	Э	J	9	9	၅
(ဃ)	"ပြင်ပအုပ်စု" သည် သူတို့၌ ရှိသင့်သည့် အတိုင်းအတာထက် များစွာပိုလွန် သော စီးပွားရေးအင်အားကို ပိုင်ဆိုင်ထား၏။	э	J	9	9	၅
(c)	ပညာရေးနှင့် ကျန်းမာရေးစောင့်ရှောက်မှုကဏ္ဍ၌ သုံးစွဲနေသည့် နိုင်ငံ့ဘဏ္ဍာ၏ အလွန်ကြီးမားသည့်ဝေစုကို "ပြင်ပအုပ်စု" က ရယူ ခံစားနေ၏။	0	J	9	9	၅
(ø)	မိမိတို့ "အတွင်းအုပ်စု" မှ အရည်အချင်း ပြည့်ဝသူများထက် "ပြင်ပအုပ်စု" မှ အရည်အချင်း နည်းပါးသူများကို အစိုးရဌာနများနှင့် ပုဂ္ဂလိကကုမ္ပဏီများ၌ အလုပ်ခန့်အပ်မှု ပို၍များပြား၏။	Э	J	9	9	၅
(∞)	ဆေးရုံ၊ ကျောင်းစသည့် ပြည်သူ့ဝန်ဆောင်မှုဌာနများက မိမိတို့ "အတွင်းအုပ်စု" ထက် "ပြင်ပအုပ်စု" ကို ပို၍ မျက်နှာသာပေးကြ၏။	0	J	9	9	၅
(e)	တရားစီရင်ရေးစနစ်သည် "ပြင်ပအုပ်စု" ကို မိမိတို့ "အတွင်းအုပ်စု" ထက် ပို၍ သက်ညှာထောက်ထား၏။	၁	J	6	9	<b>၅</b>

<sup>\*</sup> Ref: REALISTIC INTERGROUP THREAT SCALES (Stephan & Stephan, 1996, 2000)

# 🔾-7. ပြင်ပအုပ်စုအပေါ်၌ ယေဘုယျအားဖြင့် သင် မည်သို့ခံစားမိသနည်း။ သင့်ခံစားချက်၏ နံဘေးတွင် "အမှန်ခြစ်" 🗹 ပေးပါ။

ပြင်ပ	ာအုပ်စုအပေါ်၌	လုံးဝ မခံစားမိပါ	အနည်းငယ် ခံစားမိသည်	အသင့်အတင့် ခံစားမိသည်	အလွန် ခံစားမိသည်	အပြည့်အဝ ခံစားမိသည်
(က)	လှိုက်လှဲနွေးထွေးသည်	0	J	5	9	၅
(ခ)	အဆိုးမြင်သည်	0	J	9	9	၅
(n)	ခင်မင်ဖော်ရွေသည်	0	J	9	9	ງ
(బు)	မယုံသင်္ကာဖြစ်သည်	0	J	5	9	၅
(c)	အထင်ကြီးသည်	0	J	5	9	၅
(o)	စိတ်ပျက်သည်	э	J	5	9	၅

<sup>\*</sup> Ref: GENERAL EVALUATION SCALE (GES) (Wright et al., 1997)

သု-၁/၁ စာမျက်နှာ

)-8.		လုံးဝ မဟုတ်ပါ	မဟုတ်ပါ	ဟုတ်-မဟုတ် မသေချာပါ	ဟုတ်သည်	လုံးဝ ဟုတ်သည်
m)	"ပြင်ပအုပ်စု" နှင့် မိမိတို့ "အတွင်းအုပ်စု" အကြား၌ မိသားစုဆိုင်ရာ တန်ဖိုးထားမှု စံနှန်းများ (family values) အလွန်ခြားနား၏။	э	J	9	9	ე
s)	"ပြင်ပအုပ်စု" နှင့် မိမိတို့ "အတွင်းအုပ်စု" အကြား၌ အလုပ်ဆိုင်ရာ တန်ဖိုးထားမှုစ်နှန်း များ (work values) အလွန်ခြားနား၏။	э	J	9	9	ງ
0)	"ပြင်ပအုပ်စု" အနေဖြင့် သူတို့၌ မိမိတို့ "အတွင်းအုပ်စု" ထက်သာလွန်ကောင်းမြတ် သော တန်ဖိုးထားမှစ်နှန်းများ (values) ရှိသည်ဟု ထင်မြင်ယူဆရန် အခွင့်အရေး မရှိပါ။	э	J	9	9	ງ
(در	"ပြင်ပအုပ်စု" သည် ၎င်းတို့၏တန်ဖိုးထားမှုစံနှန်းများကို မိမိတို့ "အတွင်းအုပ်စု" ဆီသို့ အတင်းအကြပ် သွတ်သွင်းဖြန့်ဖြူးရန် မကြုံးစားသင့်ပါ။	э	J	9	9	9
e)	"ပြင်ပအုပ်စု" သည် မိမိတို့ "အတွင်းအုပ်စု" ၏ လောကအပေါ် ရှုမြင်ပုံ (world view) ကို ဘယ်သောအခါမှ နားလည်နိုင်မည် မဟုတ်ပါ။	э	J	9	9	၅
)	"ပြင်ပအုပ်စု" သည် ၎င်းတို့၏ အခွင့်အရေးကို မိမိတို့ "အတွင်းအုပ်စု" ၏ အခွင့်အရေး ထက် ပို၍ဦးစားပေး ရှေ့တန်းတင်လို၏။	э	J	9	9	၅
ထ)	"ပြင်ပအုပ်စု" က သူတို့ကိုယ်သူတို့ ဓိမိတို့ "အတွင်းအုပ်စု" ထက် ကိုယ်ကျင့်တရား ပို၍မြင်မြတ်သည်ဟု ထင်မြင်ယူဆနေ၏။	э	J	9	9	<b>ე</b>
a)	မိမိတို့ "အတွင်းအုပ်စု" က ကိုယ့်လေ့ထုံးစံများကို တန်ဖိုးထားသကဲ့သို့ "ပြင်ပအုပ်စု" က ၎င်းတို့၏ ဓလေ့ထုံးစံများကို တန်ဖိုးမထားကြပါ။	Э	J	9	9	9
ગુ)	ဖိမိတို့ "အတွင်းအုပ်စု" မှလူများသည် "ပြင်ပအုပ်စု" မှလူတို့၏ အရိုအသေပေးမှု၊ လေးစားမှုတို့ကို ရသင့်ရထိုက်သလောက် မရရှိကြပါ။	э	J	9	9	၅

<sup>\*</sup> Ref: SYMBOLIC INTERGROUP THREAT SCALES (Stephan & Stephan, 1996,

# 🔾 -9. ပြင်ပအုပ်စုမှလူများနှင့် အပြန်အလှန်ဆက်ဆံရစဉ်က သင် မည်သို့ ခံစားမိသနည်း။

		လုံးဝ မခံစားမိပါ	အနည်းငယ် ခံစားမိသည်	အသင့်အတင့် ခံစားမိသည်	အလွန် ခံစားမိသည်	အပြည့်အဝ ခံစားမိသည်
(က)	ပျော်ရွှင်ခြင်း	0	J	9	9	၅
(ခ)	စိတ်အနှောက်အယှက်ဖြစ်ခြင်း	٥	J	9	9	ງ
(n)	မိမိကိုယ်ကို သတိထားနေရခြင်း	٥	J	9	9	ງ
(ဃ)	ယုံကြည်စိတ်ချမှုရှိခြင်း	٥	J	9	9	9
(c)	စိတ်သက်တောင့်သက်သာရှိခြင်း	0	J	9	9	2
(o)	ခုခံကာကွယ်နေရခြင်း	0	J	9	9	ງ

<sup>\*</sup> Ref: INTERGROUP ANXIETY SCALE (IAS) (Stephan & Stephan, 1985) (Paolini et al., 2004)

Q-1	0. ပြင်ပအုပ်စုမှလူများနှင့် တွေ့ဆုံစဉ်က —	လုံးဝ မခံစားမိပါ	အနည်းငယ် ခံစားမိသည်	အသင့်အတင့် ခံစားမိသည်	အလွန် ခံစားမိသည်	အပြည့်အဝ ခံစားမိသည်
(က)	သင့်ကိုယ်သင် သူတို့အုပ်စုနှင့်မတူညီသော အခြားအသိုင်းအဝိုင်းတစ်ခု ၏ အဖွဲ့ဝင်ဖြစ်သည်ဟု ခံစားမိပါသလား။	э	J	9	9	9
(ခ)	သူတို့သည် သူတို့အုပ်စုထဲမှ အခြားလူများနှင့် ထူးမခြားနားသည့် "ဒီပုပ် ထဲက ဒီပဲ" တွေဖြစ်သည်ဟု သင် ထင်မြင်ခံစားမိပါသလား။	э	J	9	9	ว
(റ)	သူတို့နှင့် သင်သည် မတူညီသော အုပ်စုကိုယ်စီအား ကိုယ်စားပြုနေသူ များဖြစ်သည်ဟု ခံစားမိပါသလား။	0	J	9	9	ງ

<sup>\*</sup> Ref: GROUP MEMBERSHIP SALIENCE DURING CONTACT (Voci & Hewstone, 2003)

သု-၁/ခ စာမျက်နှာ

Q-1	1	လုံးဝ သဘော မတူပါ	သဘော မတူပါ	မည်သို့မျှ မပြောတတ်	သဘော တူသည်	လုံးဝ သဘော တူသည်
(က)	ကျွန်ုပ်၏ "လူမျိုး" သည် မိမိကိုယ်ကို "ငါ ဘယ်လို လူစား" ဖြစ်သည်ဟု သိမြင်ခြင်း ၌ အရေးမကြီးပါ။	0	J	9	9	၅
(9)	ကျွန်ုပ်၏ "လူမျိုး" သည် "ငါ ဘယ်သူလဲ" ဟူသော မေးခွန်းအတွက် အရေးကြီး သော အဖြေတစ်ခု ဖြစ်သည်။	э	J	9	9	၅
(n)	ယေဘုယျအားဖြင့် ကျွန်ုပ်၏ "လူမျိုး" သည် ကျွန်ုပ်၏ "မိမိကိုယ်ကို ရှုမြင်သည့် စိတ်တွင်း ပုံရိပိလွှာ" ၏ အရေးပါသော အစိတ်အပိုင်းတစ်ခု ဖြစ်သည်။	Э	J	9	9	9
(బు)	ယေဘုယျအားဖြင့် ကျွန်ုပ်၏ "လူမျိုး" သည် ကျွန်ုပ်၏ "မိမိကိုယ်ကို ခံစားသိမြင် ပုံ" တွင် အလွန်သေးငယ်သည့် အတိုင်းအတာမျှသာ အရေးပါ ပါသည်။	٥	J	5	9	၅

<sup>\*</sup> Ref: RACIAL IDENTIFICATION (Luhtanen & Crocker, 1992)

Q-12	2. ပြင်ပအုပ်စုမှလူများက —	တခါမျှ မကြုဖူးပါ	အနည်းငယ် ကြုဖူးသည်	တခါတရံ ကြုဖူးသည်	မကြာခဏ ကြုဖူးသည်	အမြဲလိုလို ကြုဖူးသည်
(က)	သင့်အား နှုတ်ဖြင့် စော်ကားပြောဆိုခြင်း	0	J	9	9	၅
ව)	သင့်အား မတူမတန်သလို ဆက်ဆံခြင်း	0	J	9	9	2
റ)	သင့်အား လွှမ်းမိုးချုပ်ကိုင်ခြင်း	٥	J	9	9	၅
(ဃ)	သင့်အား အဖက်မလုပ် ငြင်းပယ်ခြင်း	5	J	9	9	9
c)	သင့်အား ကာယိန္ဒြေ နှောက်ယှက်ခြင်း	٥	J	9	9	9
o)	သင့်အပေါ်၌ ရန်လိုခြင်း	0	J	9	9	2
ဆ)	သင့်ခန္ဓာကိုယ်အား အန္တရာယ်ပြုခြင်း	٥	J	9	9	2
<b>@</b> )	သင့်အား အသုံးချ၊ အမြတ်ထုတ်ခြင်း	0	J	5	9	ງ
<b>શ</b> )	သင်ဆန္ဒမရှိသည်ကို ဖိအားပေးခိုင်းစေခြင်း	0	J	9	9	၅
ည)	သင့်အား မမျှမတစွာဖြင့် ဝေဖန်ခြင်း	Э	J	9	9	9
දූ)	သင့်ကို အပေါင်းသင်းမဲ့အောင် ပြုလုပ်ခြင်း	э	J	9	9	9
ვ)	သင့်အား ခြိမ်းခြောက်ငွေညှစ်ခြင်း	0	J	9	9	၅
ဍ)	သင့်အား အရှက်ခွဲခြင်း	э	J	9	9	2

<sup>\*</sup> Ref: NEGATIVE EXPERIENCES INVENTORY (NEI) (Stephan et al., 2000)

# ပါဝင်ကူညီမှုအတွက် ကျေးဇူးတင်ပါသည်။

သု-၁/ခ စာမျက်နှာ



# Section A

1.	Ageyears 2	. Gende	r	Male	Female	
3.	I belong to the group which is –					
	(a) in national level ethinic minority eth	nic majority				
	foreign descents hyb	rid [		]		
	(b) in local level numerical minority numer	ical majority				
						_
	<ul> <li>The group you belong to is referred as 'in-group' and those grou</li> <li>If you are a member of national ethnic minority group, please registry are a member of national ethnic majority group, please registry are a member of national ethnic majority group, please registry.</li> <li>Please response all the question items in the Section B.</li> </ul>	gard the 'n	ational eth	nic majority g	roup as 'out	1710 St.
	Secti	on B				
<b>Q-1.</b> Ple	ease choose your ethnicity by ticking in the box $oxize{\!$					
Kad	chin Kayah Karen Chin Mon Bam	ah Ral	chine S	Shan Ot	ther ( Descri	be in detail
<b>Q-2.</b> P	Please choose an ethnic group as your targeted "out-group" by ticking in the b	ox ☑.				
Kad	chin Kayah Karen Chin Mon Bam	ah Ral	khine	Shan Ot	ther ( Descri	be in detail
Please	choose a number that is consistent with your experience.					
<b>Q-3.</b> In	your daily life —	None	A few	Somewhat	Many	A great deal
(a) [	Do you have any chance to contact with outgroup members?	1	2	3	4	5
(b) [	Oo you have willingness to contact with outgroup members?	1	2	3	4	5
Q-4	1	None	A few	Somewhat	Many	A great deal
(a)	How much contact do you have with outgroup at college?	1	2	3	4	5
(b)	How much contact do you have with outgroup as neighbors?	1	2	3	4	5
(c)	How much contact do you have with outgroup as close friends?	1	2	3	4	5
(d)	How often have you engaged in informal conversations with outgroup	1	2	3	4	5

(e) How often have you visited the homes of outgroup members?

<sup>\*</sup> Ref: GENERAL INTERGROUP CONTACT QUANTITY SCALES (Islam & Hewstone, 1993)

Q-	5. To what extent	Definitely not	A few	Somewhat	Many	Definitely yes
a)	did you experience the contact with outgroup as equal?	1	2	3	4	5
b)	did you experience the contact with outgroup as voluntary?	1	2	3	4	5
c)	did you experience the contact with outgroup as superficial?	1	2	3	4	5
d)	did you experience the contact with outgroup as intimate?	1	2	3	4	5
e)	did you experience the contact with outgroup as pleasant?	1	2	3	4	5
f)	did you experience the contact with outgroup as cooperative?	1	2	3	4	5
g)	did you experience the contact with outgroup as competitive?	1	2	3	4	5

<sup>\*</sup> Ref: GENERAL INTERGROUP CONTACT QUALITY SCALES (Islam & Hewstone, 1993)

Q-6	1	Definitely not	Not	Rather not say	Yes	Definitely yes
a)	Outgroup holds too many positions of power and responsibility in this country.	1	2	3	4	5
o)	Outgroup dominates American politics more than they should.	1	2	3	4	5
c)	Too much money is spent on educational programs that benefit outgroup.	1	2	3	4	5
d)	outgroup has more economic power than they deserve in this country.	1	2	3	4	5
9)	Outgroup receives too much of the money spent on healthcare and childcare.	1	2	3	4	5
)	Many companies hire less qualified outgroup members over more qualified ingroup members.	1	2	3	4	5
g)	Public service agencies favor outgroup members over ingroup members.	1	2	3	4	5
)	The legal system is more lenient on outgroup members than on ingroup members.	1	2	3	4	5

<sup>\*</sup> Ref: REALISTIC INTERGROUP THREAT SCALES (Stephan & Stephan, 1996, 2000)

# Q-7. Please describe how you feel about outgroup in general.

		Not at all	A few	Somewhat	Very	Absolutely
)	warm	1	2	3	4	5
)	negative	1	2	3	4	5
)	friendly	1	2	3	4	5
)	suspicious	1	2	3	4	5
)	respect	1	2	3	4	5
	disgust	1	2	3	4	5

<sup>\*</sup> Ref: GENERAL EVALUATION SCALE (GES) (Wright et al., 1997)

S-1 page

}-8	1	Definitely not	Not	Rather not say	Yes	Definitely yes
a)	Outgroup and Ingroup have different family values.	1	2	3	4	5
0)	Ingroup and outgroup have very different values.	1	2	3	4	5
c)	Outgroup members have no right to think they have better values than ingroup members.	1	2	3	4	5
d)	Outgroup members should not try to impose their values on ingroup.	1	2	3	4	5
e)	Outgroup members don't understand the way ingroup members view the world.	1	2	3	4	5
)	Outgroup members want their rights to be put ahead of the rights of ingroup members.	1	2	3	4	5
g)	Outgroup members regard themselves as morally superior to ingroup members.	1	2	3	4	5
1)	Outgroup members don't value the traditions of their group as much as ingroup members do.	1	2	3	4	5
)	Ingroup members do not get as much respect from outgroup members as they deserve.	1	2	3	4	5

<sup>\*</sup> Ref: SYMBOLIC INTERGROUP THREAT SCALES (Stephan & Stephan, 1996,

# Q-9. How would you feel when you are interacting with people from outgroup?

		Not at all	A few	Somewhat	Very	Extremely
)	happy	1	2	3	4	5
	awkward	1	2	3	4	5
	self-conscious	1	2	3	4	5
	confident	1	2	3	4	5
	relaxed	1	2	3	4	5
	defensive	1	2	3	4	5

<sup>\*</sup> Ref: INTERGROUP ANXIETY SCALE (IAS) (Stephan & Stephan, 1985) (Paolini et al., 2004)

Q-10	When you met people from [the outgroup	Not at all	A few	Somewhat	Much	Very much
(a)	How aware were you that you belonged to different communities?	1	2	3	4	5
(b)	Did you perceive the other person as a typical outgroup member?	1	2	3	4	5
(c)	Did you feel that you were two people representing their respective membership groups?	1	2	3	4	5

<sup>\*</sup> Ref: GROUP MEMBERSHIP SALIENCE DURING CONTACT (Voci & Hewstone, 2003)

S-1 page 3

Q-11	1	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
(a)	My race/ethnicity is unimportant to my sense of what kind of a person I am.	ī	2	3	4	5
(b)	The racial/ethnic group I belong to is an important reflection of who I am.	1	2	3	4	5
(c)	In general, belonging to my race/ethnicity is an important part of my self-image.	1	2	3	4	5
(d)	Overall, my race/ethnicity has very little to do with how I feel about myself.	1	2	3	4	5

<sup>\*</sup> Ref: RACIAL IDENTIFICATION (Luhtanen & Crocker, 1992)

<b>Q-12.</b> follow	Have outgroup members ever treated you as s?	Never	Seldom	Sometimes	Often	Always
(a)	verbally abused	1	2	3	4	5
(b)	treated as inferior	1	2	3	4	5
(c)	manipulated	1	2	3	4	5
(d)	rejected	1	2	3	4	5
(e)	sexually harassed	1	2	3	4	5
f)	threatened	1	2	3	4	5
g)	physically harmed	1	2	3	4	5
h)	exploited	1	2	3	4	5
i)	forced to do something I didn't want to	1	2	3	4	5
j)	unfairly criticized	1	2	3	4	5
k)	made to feel unwanted	1	2	3	4	5
1)	emotionally blackmailed	1	2	3	4	5
m)	put down	1	2	3	4	5

<sup>\*</sup> Ref: NEGATIVE EXPERIENCES INVENTORY (NEI) (Stephan et al., 2000)

# Thank you for your participation!

S-1 page 4



# အပိုင်း [က]

(5)	အသက်	နှစ် (ကိန်းဂ	ာာန်းဖြင့် ရေးပေးပါ)		()	ගීරි	ကျား		မ	
		 မည်သို့သောအုပ်စု၌ ပါဝ	င်သနည်း။							
141	[က] တနိုင်	ငံလုံးအတိုင်းအတာ၌	ြ လူနည်းစုတိုင်	်းရင်းသား	လူများ	စုတိုင်းရင်းသ	);			
			နိုင်ငံခြားသား	နွယ်ဖွား	ြ ကြား			]		
	[ခ] သင်နေ	ထိုင်ရာရပ်ရွာဒေသ၌	ြ လူနည်းစုနေထိုင်	သူ 🗌	လူများစုေ	နထိုင်သူ				
	5	5 2 2 2 2 2	0 0 0		-	-		0.70	•	
gr	oup) ဟုလဉ ဝင်သည်	ရှိ သင်ပါဝင်သည့်အုပ်၊ ည်းကောင်း ရည်ညွှန်းမ သူနည်းစုတိုင်းရင်းသား းရင်းသားဖြစ်ပါက "ပြ း အသီးသီး ဦးတည်စ	ခေါ်ဆိုပါမည်။ ဖြစ်ပါက "ပြင်ပအုပ် င်ပအုပ်စု" အဖြစ် ၁	ာ်စု" အဖြစ် လင် ထိတွေ့ခ	<b>လူများစုင</b> ဆက်ဆံဖူး	<b>ဂိုင်းရင်းသာ</b> သည့် <b>လူန</b> ု	းအုပ်စုကို လ <b>ည်းစုတိုင်းရင်</b>	ည်းကောင် း <b>သား</b> အုပ်စု	င်း၊ သင်သည်	
			ကျေးဇူးပြု၍	အပိုင်း မေးခွန်းအား	[၁] းလုံးကို ဖြေ	ဖြဆိုပေးပါ။				
Q-1	သင်၏ လူ	မျိုးစုအမည်ကို "အမှန်ခြစ်	S" 🗹 ၍ ရွေးချယ်ပါ။							
o	n බුරි	ါ ကယား ကရင်	ව	ြမွန်	೮೪೨	ြ ရခိုင်	ြ ရှမ်း		ကြား( အသေးစိတ် ဖေ	် ဂြပြပေးပါ
Q-2	"ပြင်ပအုပ်	<b>စု</b> " အဖြစ် မည်သည့်လူမျိ	ူးစုကို သင် သတ်မှတ်မ	မည်နည်း။ အေ	ဓာက်ပါစာရ	င်းထဲမှ <b>"လူမျိ</b>	ူး <b>စုတစ်ခု"</b> ကို	"အမှန်ခြစ်'	' ☑ ၍ ရွေးချယ်	Sol11
$\equiv$	_									
	3100	1 mum.	S 🗆 as. [	η <sub>ε</sub>			□ <sub>0</sub> δ.	П	n[m*(	)
	ကချင်	ါကယား တြကရပ်	ි 🗌 නුරි: 🗍	ြ မွန်	లళు	ြ ရခိုင်	ြရှမ်း		အခြား( အသေးစိတ်ဖေ	) ာ်ပြပေးပ်
	•				_				အသေးစိတ်ဖေ	
	•	ြကယား ကြရပ် များအတွက် အဖြေမှန် / :			_				အသေးစိတ်ဖေ	
ജോ	•				_				အသေးစိတ်ဖေ	းပေးပါ။ လုံးဇ
ങ്കോ -3.	ာ်ပါဖေးခွန်း(		အဖြေမှားဟူ၍ မရှိဘဲ (	မေးခွန်းတစ်ခုး	_	က် သင်နှင့်ကို လုံးဝ	က်ညီသည့် <b>"နံ</b> အနည်းငယ်	<b>ပါတ်"</b> ကို ေ သဘော	အသေးစိတ်ဖေ ကျးဇူးပြု၍ ဝိုင် အလွန်	်ပေးပါ။ လုံး
නොර -3.	က်ပါဖေးခွန်းဖ န်ုပ်နှင့် ပြင်ပ	် များအတွက် အဖြေမှန် / :	အဖြေမှားဟူ၍ မရှိဘဲ ဂ ဂုတ္ညညိမှု များစွာရှိသည်	မေးခွန်းတစ်ခုး ။	_	က် သင်နှင့်ကို လုံးဝ သဘောမတူ	က်ညီသည့် " <b>နံ</b> အနည်းငယ် သဘောတု	<b>ပါတ်"</b> ကို ေ သဘော တူ	အသေးစိတ်ဖေ ကျးဇူးပြု၍ ဝိုင် အလွန် သဘောတူ	ပေးပါ။ လုံးလ သဘေ
නොර -3. ා)	ာ်ပါမေးခွန်း( နိုပ်နှင့် ပြင်ပ နိုပ်၏အုပ်စုနှ နိုပ်၏အုပ်စုနှ	များအတွက် အဖြေမှန် / : အုပ်စုဝင်များအကြား၌ ဘုံ	အဖြေမှားဟူ၍ မရှိဘဲ ပ ုတူညီမှု များစွာရှိသည် ၌ ဘုံတူညီမှု များစွာရှိသ ဦအမည်တစ်ခုဏ်အောဂ	မေးခွန်းတစ်ခုး ။ သည်။	ချင်းစီအတွ	က် သင်နှင့်ကို လုံးဝ သဘောမတူ ၁	က်ညီသည့် <b>"နံ</b> အနည်းငယ် သဘောတူ	<b>ပါတ်</b> " ကို ေ သဘော တူ ၃	အသေးစိတ်ဖေ ကျ:ဇူးပြု၍ ဝိုင် အလွန် သဘောတူ	းပေးပါ။ လုံး( သဘေ
(33. mg)	က်ပါမေးခွန်း၊ နိုဝ်နှင့် ပြင်ပ: နိုဝ်၏အုပ်စုနှ နိုဝ်၏အုပ်စုနှ ဘန်းတူ အုပ်၊ နိုဝ်၏အုပ်စုနှ	များအတွက် အဖြေမှန် / မ အုပ်စုဝင်များအကြား၌ ဘုံ ငံ့ ပြင်ပအုပ်စုတို့အကြား ငံ့ ပြင်ပအုပ်စုတို့သည် ဘုံ	အဖြေမှားဟူ၍ မရှိဘဲ ဂ တူညီမှု များစွာရှိသည် ၌ ဘုံတူညီမှု များစွာရှိသ ဂုံအမည်တစ်ခု၏အောင ဒဲသည်။ ဂုံအမည်တစ်ခု၏အောင	မေးခွန်းတစ်ခုး ။ သည်။ က်တွင်ရှိသော က်၌ ပါဝင်သေ	ချင်းစီအတွ အဆင့်	က် သင်နှင့်ကို လုံးဝ သဘောမတူ ၁ ၁	က်ညီသည့် " <b>နံ</b> အနည်းငယ် သဘောတု ၂	<b>ပါတ်"</b> ကို ေ သဘော တူ ၃	အသေးစိတ်ဖေ ကျ:ဇူးပြု၍ ဝိုင် အလွန် သဘောတူ 9	ငေးပါ။ လုံး( သဘေ ၅
(33. c) (73. c) (73. c) (73. c) (73. c)	က်ပါမေးခွန်း၊ နိုင်နှင့် ပြင်ပ နိုင်၏အုပ်စုနှ နိုင်၏အုပ်စုန ဘန်းတူ အုပ်၊ နိုင်၏အုပ်စုနှ	များအတွက် အဖြေမှန် / အုပ်စုဝင်များအကြား၌ ဘုံ င့် ပြင်ပအုပ်စုတို့အကြား၌ င့် ပြင်ပအုပ်စုတို့သည် ဘုံ စုနှစ်ခုဖြစ်သည်ဟု ခံစားမိ င့် ပြင်ပအုပ်စုတို့သည် ဘုံ	အဖြေမှားဟူ၍ မရှိဘဲ ပ ကူညီမှု များစွာရှိသည် ၌ ဘုံတူညီမှု များစွာရှိသ ဦးအမည်တစ်ခု၏အောင ခဲ့သည်။ (အမည်တစ်ခု၏အောင ဆိုင်သည်ဟု မခံစားမိ	။ သည်။ ဘုတ်တွင်ရှိသော ဘို၌ ပါဝင်သော	ချင်းစီအတွ အဆင့်	က် သင်နှင့်ကို လုံးဝ သဘောမတူ ၁ ၁	က်ညီသည့် <b>"နံ</b> အနည်းငယ် သဘောတု ၂ ၂	ပါတ်" ကို ေ သဘော တူ ၃	အသေးစိတ်ဖေ ကျ:ဇူးပြု၍ ဝိုင် အလွန် သဘောတူ 9	:ပေးပါ။ လုံးလ သဘေ ၅ ၅
නොර -3. ා)	က်ပါပေးခွန်း၊ နိုဝ်နှင့် ပြင်ပ နိုဝ်၏အုပ်စုနှ နိုဝ်၏အုပ်စုန ဘန်းဟု အုပ် နိုဝ်၏အုပ်စုနှ သုံးအမည်ကို နိုဝ်၏အုပ်စုနှ	များအတွက် အဖြေမှန် / အုပ်စုဝင်များအကြား၌ ဘုံ င့် ပြင်ပအုပ်စုတို့အကြား င့် ပြင်ပအုပ်စုတို့သည် ဘုံ စုနှစ်ခုဖြစ်သည်ဟု ခံစားမ င့် ပြင်ပအုပ်စုတို့သည် ဘုံ ကျွန်ုပ်၏ဆုပ်စုအုင့် သက်	အဖြေမှားဟူ၍ မရှိဘဲ ပ ုတူညိမ္န များစွာရှိသည် ၌ ဘုံတူညိမှ များစွာရှိသ ဂုံအမည်တစ်ခု၏အောင သည်။ အမည်တစ်ခု၏အောင ဆိုင်သည်ဟု မခံစားမိ ၌ ခြားနားမှု များစွာရှိသ	။ သည်။ ဘိတ္စင်ရှိသော ဘိ၌ ပါဝင်သေ ပါ။ ည်။	ချင်းစီအတွ အဆင့်	က် သင်နှင့်ကို လုံးဝ သဘောမတူ ၁ ၁	က်ညီသည့် <b>"နံ</b> အနည်းငယ် သဘောတု ၂ ၂	ပါတ်" ကို ေ သဘော တူ ၃ ၃	အသေးစိတ်ဖေ ကျးဇူးပြု၍ ဝိုင် အလွန် သဘောတူ 9 9	လုံးလဲ။ လုံးလဲ သဘော ၅ ၅
(33.) (73.) (73.) (73.) (74.)	က်ပါမေးခွန်း၊ နိုဝ်နှင့် ပြင်ပ: နိုဝ်၏အုပ်စုနှ နိုဝ်၏အုပ်စုနှ ဘန်းတူ အုပ်၊ နိုဝ်၏အုပ်စုနှ နှုပ်၏အုပ်စုနှ နိုဝ်၏အုပ်စုနှ	များအတွက် အဖြေမှန် / အုပ်စုဝင်များအကြား၌ ဘုံ ငှံ ပြင်ပအုပ်စုတို့အကြားံ့ ငှံ ပြင်ပအုပ်စုတို့သည် ဘုံ စုနှစ်စုဖြစ်သည်ဟု ခံစားံ ငှံ ပြင်ပအုပ်စုတို့သည် ဘုံ ကျွန်ုပ်၏အုပ်စုနှင့် သက် ငံ့ ပြင်ပအုပ်စုတို့အကြားံ့ အုပ်စုဝင်များအကြား၌ ခြ ယံချင်းတို့ကို သီးခြားကိုပ	အဖြေမှားဟူ၍ မရှိဘဲ ပ တူညီမှ များစွာရှိသည် ၌ ဘုံတူညီမှ များစွာရှိသ သည်။ အမည်တစ်ခု၏အောင ဆိုင်သည်ဟု မခံစားမိ ၌ ခြားနားမှု များစွာရှိသည်။ ားနားမှု များစွာရှိသည်။	။ သည်။ တိတွင်ရှိသော ကိ၌ ပါဝင်သေ ပါ။ ည်။	ချင်းစီအတွ အဆင့် ာ်လည်း	က် သင်နှင့်ကို လုံးဝ သဘောမတူ ၁ ၁	က်ညီသည့် <b>"နံ</b> အနည်းငယ် သဘောတု ၂ ၂ ၂	ပါတ်" ကို ေ သဘော တူ ၃ ၃ ၃	အသေးစိတ်ဖေ ကျ:ဇူးပြု၍ ဝိုင် အလွန် သဘောတူ 9 9	:ပေးပါ။ လုံးလ သဘော ၅ ၅
(33.) (73.) (73.) (74.) (74.) (74.) (74.) (75.) (76.)	က်ပါမေးခွန်း၊ နိုပ်နှင့် ပြင်ပ: နိုပ်၏အုပ်စုနှ နိုပ်၏အုပ်စုနှ ဆိုင်၏အုပ်စုနှ (ဘုံအမည်ကို နိုပ်၏အုပ်စုနှ နိုပ်၏အုပ်စုနှ နိုပ်၏အုပ်စုနှ နိုပ်၏အုပ်စုနှ	များအတွက် အဖြေမှန် / အုပ်စုဝင်များအကြား၌ ဘုံ ငုံ ပြင်ပအုပ်စုတို့အကြားနဲ့ ငုံ ပြင်ပအုပ်စုတို့သည် ဘုံ စုနှစ်ခုဖြစ်သည်ဟု ခံစားဖဲ ငုံ ပြင်ပအုပ်စုတို့အကြားနဲ့ ကျွန်ုပ်၏အုပ်စုဆို့အကြားနဲ့ အုပ်စုဝင်များအကြား၌ ခြ ယံချင်းတို့ကို သီးခြားကိုပ သည်။	အဖြေမှားဟူ၍ မရှိဘဲ ပ တူညီမှ များစွာရှိသည် ၌ ဘုံတူညီမှ များစွာရှိသ သည်။ အမည်တစ်ခု၏အောင ဆိုင်သည်ဟု မခံစားမိ ၌ ခြားနားမှု များစွာရှိသည်။ ားနားမှု များစွာရှိသည်။	။ သည်။ တိတွင်ရှိသော ကိ၌ ပါဝင်သေ ပါ။ ည်။	ချင်းစီအတွ အဆင့် ာ်လည်း	က် သင်နှင့်ကို လုံးဝ သဘောမတူ ၁ ၁ ၁	က်ညီသည့် <b>"နံ</b> အနည်းငယ် သဘောတု ၂ ၂ ၂	ပါတ်" ကို ေ သဘော တူ ၃ ၃ ၃ ၃	အသေးစိတ်ဖေ ကျ:ဇူးပြု၍ ဝိုင် အလွန် သဘောတူ 9 9 9	(လုံးလုံးလုံးလုံးလုံးလုံးလုံးလုံးလုံးလုံး
නොර 3.   නු (කු (කු (කු (කු (කු (කු (කු (කු (කු (ක	က်ပါမေးခွန်း၊ နိုဝ်နှင့် ပြင်ပ: နိုဝ်၏အုပ်စုနှ နိုဝ်၏အုပ်စုနှ နိုဝ်၏အုပ်စုနှ ဘုံအမည်ကို နိုဝ်၏အုပ်စုနှ နိုဝ်၏အုပ်စုနှ နိုဝ်၏အုပ်စုနှ နိုဝ်အော်တို့ ရှုပြင် ငံ၏နေ့စဉ်	များအတွက် အဖြေမှန် / အုပ်စုဝင်များအကြား၌ ဘုံ ငုံ ပြင်ပအုပ်စုတို့အကြားနဲ့ ငုံ ပြင်ပအုပ်စုတို့သည် ဘုံ စုနှစ်ခုဖြစ်သည်ဟု ခံစားဖဲ ငုံ ပြင်ပအုပ်စုတို့အကြားနဲ့ ကျွန်ုပ်၏အုပ်စုဆို့အကြားနဲ့ အုပ်စုဝင်များအကြား၌ ခြ ယံချင်းတို့ကို သီးခြားကိုပ သည်။	အဖြေမှားဟူ၍ မရှိဘဲ ပ တူညီမှု များစွာရှိသည် ၌ ဘုံတူညီမှု များစွာရှိသ ၌အမည်တစ်ခု၏အောင ဆိုင်သည်ဟု မခံစားမိ ၌ ခြားနားမှု များစွာရှိသ ားနားမှု များစွာရှိသည်။ ဝိပိုင်စရိုက်လက္ခဏာမျ	။ သည်။ တ်တွင်ရှိသော တို့။ ကားရှိသည့် လူင	ချင်းစီအတွ အဆင့် ာ်လည်း	က် သင်နှင့်ကို လုံးဝ သဘောမတူ ၁ ၁ ၁	က်ညီသည့် <b>"နံ</b> အနည်းငယ် သဘောတု ၂ ၂ ၂	ပါတ်" ကို ေ သဘော တူ ၃ ၃ ၃ ၃	အသေးစိတ်ဖေ ကျ:ဇူးပြု၍ ဝိုင် အလွန် သဘောတူ 9 9 9	င်းပေးပါ။
(33.)  (3.)  (3.)  (3.)  (3.)  (4.)  (4.)  (5.)  (6.)  (7.)	က်ပါမေးခွန်း၊ နိုပ်နှင့် ပြင်ပ: နိုပ်၏အုပ်စုနှ နိုပ်၏အုပ်စုနှ နိုပ်၏အုပ်စုနှ နှပ်၏အုပ်စုနှ နိုပ်၏အုပ်စုနှ နိုပ်၏အုပ်စုနှ နိုပ်နှင့် ပြင်ပ: ပာအုပ်စုသူငင်းအဖြစ် ရှုမြင်	များအတွက် အဖြေမှန် / အုပ်စုဝင်များအကြား၌ ဘုံ ငံ့ ပြင်ပအုပ်စုတို့အကြားနဲ့ ငံ့ ပြင်ပအုပ်စုတို့သည် ဘုံ စုနှစ်စုဖြစ်သည်ဟု ခံစားနဲ ငံ့ ပြင်ပအုပ်စုတို့သည် ဘုံ ကျွန်ုပ်၏အုပ်စုနှင့် သက် ငံ့ ပြင်ပအုပ်စုတို့အကြားနဲ့ အုပ်စုဝင်များအကြား၌ ခြ သံချင်းတို့ကို သီးခြားကိုပ သည်။ ဘဝ၌ —	အဖြေမှားဟူ၍ မရှိဘဲ ပ တူညီမှု များစွာရှိသည် ၌ ဘုံတူညီမှ များစွာရှိသည် အမည်တစ်ခု၏အောင ဆိုင်သည်။ အမည်တစ်ခု၏အောင ဆိုင်သည်ဟု မခံစားမိ ၌ ခြားနားမှု များစွာရှိသည်။ ပီပိုင်စရိုက်လက္ခဏာမျ	။ သည်။ ဘည်း တို့သို့ ပါဝင်သော ပါ။ ညီ။ ၊ ကားရှိသည့် လူင	ချင်းစီအတွ အဆင့် င်္ဂလည်း	က် သင်နှင့်ကို လုံးဝ သဘောမတူ ၁ ၁ ၁ ၁ ၁	က်ညီသည့် <b>"နံ</b> အနည်းငယ် သဘောတု ၂ ၂ ၂ ၂	ပါတ်" ကို ေ သဘော တူ ၃ ၃ ၃ ၃ ၃	အသေးစိတ်ဖေ ကျ:ဇူးပြု၍ ဝိုင် အလွန် သဘောတူ 9 9 9 9	:ပေးပါ။

Q-5	သင်သည် —	လုံးဝ မရှိပါ	အနည်းငယ် ရှိပါသည်	အသင့် အတင့် ရှိပါသည်	အတော် များများ ရှိပါသည်	အများ အပြား ရှိပါသည်
(က)	ကျောင်း၌ ပြင်ပအုပ်စုနှင့် ထိတွေ့ဆက်သွယ်မှု ဘယ်လောက်များများရှိသနည်း။	0	J	9	9	อ
(၁)	သင်၏ အိမ်နီးနားချင်းအဖြစ် ပြင်ပအုပ်စုနှင့် ထိတွေ့ဆက်သွယ်မှု ဘယ်လောက် များများ ရှိသနည်း။	0	J	9	9	၅
(n)	သင်၏ ခင်မင်ရင်းနှီးသော သူငယ်ချင်းအဖြစ် ပြင်ပအုပ်စုနှင့် ထိတွေဆက်သွယ်မှု ဘယ်လောက်များများ ရှိသနည်း။	٥	J	9	9	2
(ဃ)	ပြင်ပအုပ်စုမှလူများနှင့် အကြိမ်ဘယ်လောက်များများ စကားလက်ဆုံ ပြောဆိုလေ့ ရှိသနည်း။	э	J	5	9	9
(c)	ပြင်ပအုပ်စုဝင်များထံ အကြိန်ဘယ်လောက်များများ အိမ်လည်သွားလေ့ရှိသနည်း	Э	J	9	9	9

<sup>\*</sup> Ref: GENERAL INTERGROUP CONTACT QUALITY SCALES (Islam & Hewstone, 1993)

0.6	22					
Q-6	. သင်သည် —	လုံးဝ မကြုဖူးပါ	အနည်းငယ် ကြုဖူးသည်	အသင့်အတင့် ကြုဖူးသည်	အလွန် ကြုံဖူးသည်	အပြည့်အဝ ကြုဖူးသည်
(က)	ပြင်ပအုပ်စုနှင့် ထိတွေ့ဆက်ဆံရာ၌ တန်းတူညီမျှမှုရှိခြင်းကို မည်မျှအတိုင်း အတာအထိ တွေ့ကြုခံစားဖူးသနည်း။	0	J	5	9	2
(၁)	ပြင်ပအုပ်စုနှင့် ထိတွေ့ဆက်ဆံရာ၌ မိမိဆန္ဒအတိုင်း လွတ်လပ်စွာ ပြုမူနိုင် ခြင်းကို မည်မျှအတိုင်းအတာအထိ တွေကြုံခံစားဖူးသနည်း။	5	J	9	9	อ
(n)	ပြင်ပအုဝ်စုနှင့် ထိတွေ့ဆက်ဆံရာ၌ အပေါ်ယံဆန်ခြင်းကို မည်မျှအတိုင်း အတာအထိ တွေကြုခံစားဖူးသနည်း။	5	J	5	9	2
(ဃ)	ပြင်ပအုဝ်စုနှင့် ထိတွေ့ဆက်ဆံရာ၌ ခင်မင်ရင်းနှီးမှုရှိခြင်းကို မည်မျှအတိုင်း အတာအထိ တွေ့ကြုခံစားဖူးသနည်း။	5	J	5	9	9
(c)	ပြင်ပအုပ်စုနှင့် ထိတွေ့ဆက်ဆံရာ၌ စိတ်ကျေနပ်ဖွယ်ကောင်းခြင်းကို မည်မျှ အတိုင်းအတာအထိ တွေ့ကြုံခံစားဖူးသနည်း။	5	J	5	9	9
(D)	ပြင်ပအုပ်စုနှင့် ထိတွေ့ဆက်ဆံရာ၌ ပူးပေါင်းဆောင်ရွက်မှုရှိခြင်းကို မည်မျှ အတိုင်းအတာအထိ တွေကြုခံစားဖူးသနည်း။	0	J	9	9	อ
(∞)	ပြင်ပအုပ်စုနှင့် ထိတွေ့ဆက်ဆံရာ၌ ယှဉ်ပြိုင်မှုရှိခြင်းကို မည်မျှအတိုင်း အတာအထိ တွေ့ကြုခံစားဖူးသနည်း။	0	J	9	9	9

<sup>\*</sup> Ref: GENERAL INTERGROUP CONTACT QUANTITY SCALES (Islam & Hewstone, 1993)

Q-7	1	လုံးဝ မဟုတ်ပါ	မဟုတ်ပါ	ဟုတ်-မဟုတ် မသေချာပါ	ဟုတ်သည်	လုံးဝ ဟုတ်သည်
(က)	"ပြင်ပအုပ်စု" သည် တိုင်းပြည်တွင် အာဏာနှင့် လုပ်ပိုင်ခွင့်ရှိသည့် ရာထူးများကို အလွန်အကျွံ အများအပြား ရယူထား၏။	э	J	9	9	9
ခ)	"ပြင်ပအုပ်စု" သည် နိုင်ငံရေးလောကကို သုတို့လွှမ်းမိုးသင့်သည့် အတိုင်းအတာ ထက် များစွာကျော်လွန်၍ လွှမ်းမိုးနေ၏။	၁	J	9	9	၅
ი)	အလွန်များပြားသော တိုင်းပြည့်ဘဏ္ဍာများကို "ပြင်ပအုပ်စု" အကျိုးရှိစေမည့် ပညာရေးအစိအစဉ်များ၌ သုံးစွဲနေ၏။	၁	J	9	9	၅
ဃ)	"ပြင်ပအုပ်စု" သည် သူတို့၌ ရှိသင့်သည့် အတိုင်းအတာထက် များစွာပိုလွန် သော စီးပွားရေးအင်အားကို ပိုင်ဆိုင်ထား၏။	э	J	9	9	ງ
c)	ပညာရေးနှင့် ကျန်းမာရေးစောင့်ရှောက်မှုကဏ္ဍ၌ သုံးစွဲနေသည့် နိုင်ငံ့ဘဏ္ဍာ၏ အလွန်ကြီးမားသည့်ဝေစုကို "ပြင်ပအုပ်စု" က ရယူ ခံစားနေ၏။	э	J	9	9	ງ
ນ)	မိမိတို့ "အတွင်းအုပ်စု" မှ အရည်အချင်း ပြည့်ဝသူများထက် "ပြင်ပအုပ်စု" မှ အရည်အချင်း နည်းပါးသူများကို အစိုးရဌာနများနှင့် ပုဂ္ဂလိကကုမ္ပဏီများ၌ အလုဝ်ခန့်အပ်မှ ပိုရိုများပြား၏။	၁	J	9	9	ງ
သ)	ဆေးရုံ၊ ကျောင်းစသည့် ပြည်သူ့ဝန်ဆောင်မှုဌာနများက မိမိတို့ "အတွင်းအုပ်စု" ထက် "ပြင်ပအုပ်စု" ကို ပို၍ မျက်နှာသာပေးကြ၏။	э	J	9	9	ງ
<u>a</u> )	တရားစီရင်ရေးစနစ်သည် "ပြင်ပအုပ်စု" ကို မိမိတို့ "အတွင်းအုပ်စု" ထက် ပို၍ သက်ညှာထောက်ထား၏။	э	J	9	9	ງ

<sup>\*</sup> Ref: REALISTIC INTERGROUP THREAT SCALES (Stephan & Stephan, 1996, 2000)

<sup>သု-၂</sup> စာမျက်နှာ **၂** 

🔾-8. ပြင်ပအုပ်စုအပေါ်၌ ယေဘုယျအားဖြင့် သင် မည်သို့ခံစားမိသနည်း။ သင့်ခံစားချက်၏ နံဘေးတွင် "အမှန်ခြစ်" 🗹 ပေးပါ။

ပြင်င	ာအုပ်စုအပေါ်၌	လုံးဝ မခံစားမိပါ	အနည်းငယ် ခံစားမိသည်	အသင့်အတင့် ခံစားမိသည်	အလွန် ခံစားမိသည်	အပြည့်အဝ ခံစားမိသည်
(က)	လှိုက်လှဲနွေးထွေးသည်	э	J	9	9	ງ
(ခ)	အဆိုးမြင်သည်	э	J	9	9	၅
(n)	ခင်မင်ဖော်ရွှေသည်	Э	J	9	9	ງ
(బు)	မယုံသင်္ကာဖြစ်သည်	э	J	9	9	2
(c)	အထင်ကြီးသည်	э	J	9	9	ງ
(0)	စိတ်ပျက်သည်	2	J	5	9	ງ

<sup>\*</sup> Ref: GENERAL EVALUATION SCALE (GES) (Wright et al., 1997)

	ren del del evices (Total Series (CES) (Vilgia et al., 1557)					
ე-9		လုံးဝ မဟုတ်ပါ	မဟုတ်ပါ	ဟုတ်-မဟုတ် မသေချာပါ	ဟုတ်သည်	လုံးဝ ဟုတ်သည်
က)	"ပြင်ပအုဝ်စု" နှင့် မိမိတို့ "အတွင်းအုပ်စု" အကြား၌ မိသားစုဆိုင်ရာ တန်ဖိုးထားမှု စံနှန်းများ (family values) အလွန်ခြားနား၏။	э	J	9	9	ງ
ခ)	"ပြင်ပအုပ်စု" နှင့် မိမိတို့ "အတွင်းအုပ်စု" အကြား၌ အလုပ်ဆိုင်ရာ တန်ဖိုးထားမှုစ်နှန်း များ (work values) အလွန်ခြားနား၏။	0	J	9	9	၅
ი)	"ပြင်ပအုပ်စု" အနေဖြင့် သူတို့၌ မိမိတို့ "အတွင်းအုပ်စု" ထက်သာလွန်ကောင်းမြတ် သော တန်ဖိုးထားမှုစံနှန်းများ (values) ရှိသည်ဟု ထင်မြင်ယူဆရန် အခွင့်အရေး မရှိပါ။	Э	J	9	9	ງ
ဃ)	"ပြင်ပအုပ်စု" သည် ၎င်းတို့၏တန်ဖိုးထားမှုစံနှန်းများကို မိမိတို့ "အတွင်းအုပ်စု" ဆီသို့ အတင်းအကြပ် သွတ်သွင်းဖြန့်ဖြူးရန် မကြိုးစားသင့်ပါ။	э	J	9	9	9
c)	"ပြင်ပအုပ်စု" သည် မိမိတို့ "အတွင်းအုပ်စု" ၏ လောကအပေါ် ရှုဖြင်ပုံ (world view) ကို ဘယ်သောအခါမှ နားလည်နိုင်မည် မဟုတ်ပါ။	э	J	9	9	2
o)	"ပြင်ပအုပ်စု" သည် ၎င်းတို့၏ အခွင့်အရေးကို မိမိတို့ "အတွင်းအုပ်စု" ၏ အခွင့်အရေး ထက် ပို၍ဦးစားပေး ရှေ့တန်းတင်လို၏။	э	J	9	9	9
ω)	"ပြင်ပအုပ်စု" က သူတို့ကိုယ်သူတို့ မိမိတို့ "အတွင်းအုပ်စု" ထက် ကိုယ်ကျင့်တရား ပို၍မြင့်မြတ်သည်ဟု ထင်မြင်ယူဆနေ၏။	э	J	9	9	၅
2)	မိမိတို့ "အတွင်းအုပ်စု" က ကိုယ့်လေ့ထုံးစံများကို တန်ဖိုးထားသကဲ့သို့ "ပြင်ပအုပ်စု" က ၎င်းတို့၏ ဓလေ့ထုံးစံများကို တန်ဖိုးမထားကြပါ။	Э	J	۶	9	9
ઇ)	မိမိတို့ "အတွင်းအုပ်စု" မှလူများသည် "ပြင်ပအုပ်စု" မှလူတို့၏ အရိုအသေပေးမှု၊ လေးစားမှုတို့ကို ရသင့်ရထိုက်သလောက် မရရှိကြပါ။	o	J	9	9	2

<sup>\*</sup> Ref: SYMBOLIC INTERGROUP THREAT SCALES (Stephan & Stephan, 1996,

# **Q-10.** ပြင်ပအုပ်စုမှလူများနှင့် အပြန်အလှန်ဆက်ဆံရစဉ်က သင် မည်သို့ ခံစားမိသနည်း။

		လုံးဝ မခံစားမိပါ	အနည်းငယ် ခံစားမိသည်	အသင့်အတင့် ခံစားမိသည်	အလွန် ခံစားမိသည်	အပြည့်အဝ ခံစားမိသည်
က)	ပျော်ရွှင်ခြင်း	0	J	9	9	ງ
ခ)	စိတ်အနှောက်အယှက်ဖြစ်ခြင်း	0	J	9	9	9
ი)	မိမိကိုယ်ကို သတိထားနေရခြင်း	0	J	9	9	9
ဃ)	ယုံကြည်စိတ်ချမှုရှိခြင်း	э	J	9	9	ງ
c)	စိတ်သက်တောင့်သက်သာရှိခြင်း	э	J	9	9	9
o)	ခုခံကာကွယ်နေရခြင်း	0	J	9	9	9

<sup>\*</sup> Ref: INTERGROUP ANXIETY SCALE (IAS) (Stephan & Stephan, 1985) (Paolini et al., 2004)

<sup>ဘု-၂ စာမျက်နှာ</sup> ၃

Q-11	ပြင်ပအုပ်စုမှလူများက —	တခါမျှ မကြုဖူးပါ	အနည်းငယ် ကြုဖူးသည်	တခါတရံ ကြုဖူးသည်	မကြာခဏ ကြုဖူးသည်	အမြဲလိုလို ကြုဖူးသည်
(က)	သင့်အား နှတ်ဖြင့် စော်ကားပြောဆိုခြင်း	٥	J	9	9	9
(ခ)	သင့်အား မတူမတန်သလို ဆက်ဆံခြင်း	э	J	9	9	9
(n)	သင့်အား လွှမ်းမိုးချုပ်ကိုင်ခြင်း	0	J	5	9	2
(ဃ)	သင့်အား အဖက်မလုပ် ငြင်းပယ်ခြင်း	0	J	9	9	9
(c)	သင့်အား ကာယိန္ဒြေ နှောက်ယှက်ခြင်း	0	J	9	9	9
(o)	သင့်အပေါ်၌ ရန်လိုခြင်း	٥	J	9	9	9
( <del></del>	သင့်ခန္ဓာကိုယ်အား အန္တရာယ်ပြုခြင်း	э	J	5	9	9
(œ)	သင့်အား အသုံးချ၊ အမြတ်ထုတ်ခြင်း	0	J	5	9	2
(ହା)	သင်ဆန္ဒမရှိသည်ကို ဖိအားပေးခိုင်းစေခြင်း	0	J	9	9	2
(ည)	သင့်အား မမျှမတစွာဖြင့် ဝေဖန်ခြင်း	0	J	9	9	ງ
(පූ)	သင့်ကို အပေါင်းသင်းမဲ့အောင် ပြုလုပ်ခြင်း	0	J	9	9	ງ
(ဌ)	သင့်အား ခြိမ်းခြောက်ငွေညှစ်ခြင်း	0	J	9	9	9
(ဍ)	သင့်အား အရှက်ခွဲခြင်း	٥	J	9	9	9

<sup>\*</sup> Ref: NEGATIVE EXPERIENCES INVENTORY (NEI) (Stephan et al., 2000)

Q-12	2	လုံးဝ သဘောမတူ	အနည်းငယ် သဘောတူ	သဘော တူ	အလွန် သဘောတူ	လုံးဝ သဘောတု
(က)	လူ့အဖွဲ့အစည်းတစ်ခုအတွင်း၌ မတူညီသောအုပ်စုများ ရှိနေခြင်းက ၎င်းလူ့အဖွဲ့အစည်း အတွင်း စည်းလုံးညီညွတ်မှုကို ထိခိုက်စေသည်။	э	J	9	9	၅
(၁)	အုပ်စုအချင်းချင်း ပူးပေါင်းဆောင်ရွက်ခြင်းအားဖြင့် အုပ်စုချင်း ပဋိပက္ခများ လျော့နည်း ချုပ်ငြိမ်းသွားနိုင်သည်ဟု ကျွန်ုပ် ထင်မြင်ယူဆသည်။	э	J	9	9	อ
(o)	အုပ်စုချင်း ပဋိပက္ခများလျော့နည်းသွားစေရန် လွူအဖွဲ့အစည်းတစ်ခုအတွင်းတွင် အင်အားကြီးမားသောအုပ်စုက အင်အားနည်းသော အုပ်စုများအပေါ်တွင် လွှမ်းမိုး ချုဝ်ကိုင်ခွင့်ရှိသည်ဟု ခံစားမိပါသည်။	э	J	9	9	၅
(ဃ)	လူ့အဖွဲ့အစည်းတစ်ခုအတွင်း၌ မတူညီသောအုပ်စုများ ရှိနေခြင်းက ၎င်းလူ့အဖွဲ့အစည်း ကို ပိုမိုအင်အားကြီးစေသည်။	э	J	9	9	၅
(c)	အုပ်စုအချင်းချင်း မပတ်သက်ဘဲ သီးခြားနေခြင်းအားဖြင့် အုပ်စုချင်း ပဋိပက္ခများ လျော့နည်းချုပ်ငြိမ်းသွားနိုင်သည်ဟု ကျွန်ုပ် ထင်မြင်ယူဆသည်။	э	J	9	9	၅
(o)	အုပ်စုချင်း ပဋိပက္ခများလျော့နည်းသွားစေရန် လူ့အဖွဲ့အစည်းတစ်ခုအတွင်းရှိ အင်အား ကြီး-ငယ်မရွေး အုပ်စုတိုင်းကို တန်းတူအခွင့်အရေးနှင့် လုပ်ပိုင်ခွင့်ပေးသင့်သည်ဟု ကျွန်ုပ်ထင်မြင်ယူဆသည်။	э	J	9	9	၅
(∞)	အုပ်စုချင်းပဋိပက္ခများသည် လူ့အဖွဲ့အစည်းအတွင်းရှိ အင်အားကြီးအုပ်စုကြောင့် ဖြစ်ပေါ်နေသည်ဟု ကျွန်ုပ် ထင်မြင်ယူဆသည်။	٥	J	9	9	၅
(@)	အုဝ်စုချင်းပဋိပက္ခများသည် လူ့အဖွဲ့အစည်းအတွင်းရှိ အင်အားနည်းသောအုဝ်စုငယ် များကြောင့် ဖြစ်ပေါ်နေသည်ဟု ကျွန်ုပ် ထင်မြင်ယူဆသည်။	0	J	9	9	၅

# ပါဝင်ကူညီမှုအတွက် ကျေးဇူးတင်ပါသည်။



# Section A

Ageyears 2. Ge	ender	Male	F	emale	
I belong to the group which is –					
(a) in national level ethinic minority ethinic major	rity				
foreign descents hybrid [			]		
(b) in local level numerical minority numerical major	ority				
<ul> <li>The group you belong to is referred as 'in-group' and those groups you</li> <li>If you are a member of national ethnic minority group, please regard the</li> <li>Please response all the question items in the Section B.</li> </ul>	e 'national e	thnic majo	rity group as		- II
Section B	ı				
<b>Q-1.</b> Please choose your ethnicity by ticking in the box $oxtimes$ .					
Kachin Kayah Karen Chin Mon Ban	nah Raki	hine S	han O	other ( Descr	ibe in detai
Q-2. Please choose an ethnic group as your targeted "out-group" by ticking in the	box ☑.				
Kachin Kayah Karen Chin Mon Ban	nah Rakl	hine S	han O	other ( Descr	ibe in deta
Please choose a number that is consistent with your experience.					
3.	Totally disagree	Slightly	Agree	Strongly	Totally agree
there are many similarities between the outgroup members and me.	1	2	3		3
there are many similarities between the outgroup and our group.				4	5
2010	1	2	3	4	
I feel that the outgroup and our group are two equal status groups under a superordinate category.	1	2			5
2 - 2 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	1		3	4	5
superordinate category.  though the outgroup and our group exist under a superordinate category, I do no	1	2	3	4	5 5 5
superordinate category.  though the outgroup and our group exist under a superordinate category, I do no feel that superordinate category is not relevant to our group.	1 t 1	2	3 3	4 4	5 5 5
superordinate category.  though the outgroup and our group exist under a superordinate category, I do no feel that superordinate category is not relevant to our group.  there are many dissimilarities between our group and the outgroup.	1 t 1	2 2	3 3 3	4 4 4	5 5 5 5
superordinate category.  though the outgroup and our group exist under a superordinate category, I do no feel that superordinate category is not relevant to our group.  there are many dissimilarities between our group and the outgroup.  there are many dissimilarities between the outgroup members and me.  I view my outgroup friends as the individuals who possess their unique	1 1 1 1 1	2 2 2 2	3 3 3 3	4 4 4 4	5 5 5 5 5
superordinate category.  though the outgroup and our group exist under a superordinate category, I do no feel that superordinate category is not relevant to our group.  there are many dissimilarities between our group and the outgroup.  there are many dissimilarities between the outgroup members and me.  I view my outgroup friends as the individuals who possess their unique	1 1 1 1 1	2 2 2 2	3 3 3 3	4 4 4 4	5 5 5 5 5
though the outgroup and our group exist under a superordinate category, I do no feel that superordinate category is not relevant to our group.  there are many dissimilarities between our group and the outgroup.  there are many dissimilarities between the outgroup members and me.  I view my outgroup friends as the individuals who possess their unique characters.	1 1 1 1 1 1	2 2 2 2 2	3 3 3 3 3	4 4 4 4	5 5 5 5 5 5 A great

Q-5	I	None	A few	Somewhat	Many	A great deal
(a)	How much contact do you have with outgroup at college?	1	2	3	4	5
(b)	How much contact do you have with outgroup as neighbors?	1	2	3	4	5
(c)	How much contact do you have with outgroup as close friends?	1	2	3	4	5
(d)	How often have you engaged in informal conversations with outgroup members?	1	2	3	4	5
(e)	How often have you visited the homes of outgroup members?	1	2	3	4	5

Q-6	To what extent	Definitel y not	A few	Somewhat	Many	Definitely yes
a)	did you experience the contact with outgroup as equal?	1	2	3	4	5
b)	did you experience the contact with outgroup as voluntary?	1	2	3	4	5
c)	did you experience the contact with outgroup as superficial?	1	2	3	4	5
i)	did you experience the contact with outgroup as intimate?	1	2	3	4	5
)	did you experience the contact with outgroup as pleasant?	1	2	3	4	5
)	did you experience the contact with outgroup as cooperative?	1	2	3	4	5
)	did you experience the contact with outgroup as competitive?	1	2	3	4	5

<sup>\*</sup> Ref: GENERAL INTERGROUP CONTACT QUANTITY SCALES (Islam & Hewstone, 1993)

Q-	7.	Definitely not	Not	Rather not say	Yes	Definitely yes
a)	Outgroup holds too many positions of power and responsibility in this country.	1	2	3	4	5
b)	Outgroup dominates American politics more than they should.	1	2	3	4	5
c)	Too much money is spent on educational programs that benefit outgroup.	1	2	3	4	5
d)	outgroup has more economic power than they deserve in this country.	1	2	3	4	5
e)	Outgroup receives too much of the money spent on healthcare and childcare.	1	2	3	4	5
f)	Many companies hire less qualified outgroup members over more qualified ingroup members.	1	2	3	4	5
g)	Public service agencies favor outgroup members over ingroup members.	1	2	3	4	5
n)	The legal system is more lenient on outgroup members than on ingroup members.	1	2	3	4	5

<sup>\*</sup> Ref: REALISTIC INTERGROUP THREAT SCALES (Stephan & Stephan, 1996, 2000)

S-2 Page 2

Q-8. Please describe how you feel about outgroup in general.

		Not at all	A few	Somewhat	Very	Absolutely
(a)	warm	1	2	3	4	5
(b)	negative	1	2	3	4	5
(c)	friendly	1	2	3	4	5
(d)	suspicious	1	2	3	4	5
(e)	respect	1	2	3	4	5
(f)	disgust	1	2	3	4	5

\* Ref: GENERAL EVALUATION SCALE (GES) (Wright et al., 1997)

Q-9	1	Definitely not	Not	Rather not say	Yes	Definitely yes
a)	Outgroup and Ingroup have different family values.	1	2	3	4	5
b)	Ingroup and outgroup have very different values.	1	2	3	4	5
c)	Outgroup members have no right to think they have better values than ingroup members.	1	2	3	4	5
d)	Outgroup members should not try to impose their values on ingroup.	1	2	3	4	5
)	Outgroup members don't understand the way ingroup members view the world.	1	2	3	4	5
)	Outgroup members want their rights to be put ahead of the rights of ingroup members.	1	2	3	4	5
)	Outgroup members regard themselves as morally superior to ingroup members.	1	2	3	4	5
n)	Outgroup members don't value the traditions of their group as much as ingroup members do.	1	2	3	4	5
	Ingroup members do not get as much respect from outgroup members as they deserve.	1	2	3	4	5

<sup>\*</sup> Ref: SYMBOLIC INTERGROUP THREAT SCALES (Stephan & Stephan, 1996,

Q-10. How would you feel when you are interacting with people from outgroup?

		Not at all	A few	Somewhat	Very	Extremely
1)	happy	1	2	3	4	5
)	awkward	1	2	3	4	5
)	self-conscious	1	2	3	4	5
)	confident	1	2	3	4	5
	relaxed	1	2	3	4	5
	defensive	1	2	3	4	5

<sup>\*</sup> Ref: INTERGROUP ANXIETY SCALE (IAS) (Stephan & Stephan, 1985) (Paolini et al., 2004)

S-2 Page

3

	Have outgroup members ever treated you ows?	Never	Seldom	Sometimes	Often	Always
1)	verbally abused	1	2	3	4	5
o)	treated as inferior	1	2	3	4	5
:)	manipulated	1	2	3	4	5
1)	rejected	1	2	3	4	5
e)	sexually harassed	1	2	3	4	5
)	threatened	1	2	3	4	5
;)	physically harmed	1	2	3	4	5
)	exploited	1	2	3	4	5
	forced to do something I didn't want to	1	2	3	4	5
	unfairly criticized	1	2	3	4	5
)	made to feel unwanted	1	2	3	4	5
	emotionally blackmailed	1	2	3	4	5
n)	put down	1	2	3	4	5

<sup>\*</sup> Ref: NEGATIVE EXPERIENCES INVENTORY (NEI) (Stephan et al., 2000)

Q-1	2.	Totally disagree	Slightly agree	Agree	Strongly agree	Totally agree
(a)	The existence of different groups within a society damages the internal solidarity of that society	1	2	3	4	5
(b)	I think the intergroup conflict can be reduced by cooperating among different groups within the society.	1	2	3	4	5
(c)	I feel that the strongest group within a society should dominate the weaker groups in order to reduce intergroup conflict among groups.	1	2	3	4	5
(d)	The existence of diverse groups within a society can make that society stronger	1	2	3	4	5
(e)	I think the intergroup conflict within a society can be reduced by letting groups to stand separately.	1	2	3	4	5
(f)	I think that all the groups within a society should have equal rights and opportunity regardless of their power status in order to reduce the intergroup conflicts among those groups	1	2	3	4	5
(g)	I feel that the stronger group is responsible for intergroup conflict within a society.	1	2	3	4	5
(h)	I feel that the weaker groups are responsible for intergroup conflict within a society.	1	2	3	4	5

# Thank you for your participation!

S-2 Page 4