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## Aggression and emotions: cultural and individual differences

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**Title:** Aggression and emotions: cultural and individual differences

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# DATA COLLECTION IN MALAYSIA AND THE NETHERLANDS

## Geographical Location of Research

In Malaysia, this study was conducted in selected secondary schools in four states in Peninsular Malaysia, namely Kedah, Selangor, Kelantan and Johor. These states were chosen based on the geographical difference.

In the Netherlands, this study was conducted in selected high schools in 6 cities in provinces such as South Holland (i.e., Leiden, The Hague), North Holland (i.e., Haarlem, Velsen-Zuid), Zeeland (i.e. Middelburg) and Friesland (i.e. Drachten).



Figure 1. The map of Peninsular Malaysia, where the states are categorized in four development regions (Map source: <https://www.mlit.go.jp>)



Figure 2. The map of Netherland that consists of 12 provinces (Map source: <http://ontheworldmap.com/netherlands/>)

## Sampling

First, a pilot study was conducted in 2014 and participated by 168 school adolescents (56% boys) aged between 13 and 15 from one school in an urban area of Selangor. In the pilot test, we examined the adaptability of our Western-based questionnaires.

Second, we gathered 1427 Malaysian adolescents (605 boys, 794 girls;  $M_{age} = 13.30$  years,  $SD = 0.69$  years) from eight national secondary schools as the participants for our real data collection in 2015. Also, in the same year, we started our data collection in the Netherlands where we recruited 627 adolescents from 8 high schools that were located in 6 different cities (302 boys, 318 girls;  $M_{age} = 13.83$  years,  $SD = 0.60$  years).

Third, another 300 Malaysian adolescents were recruited from four national secondary schools and participated in our data collection in 2017.

## **Sampling technique**

In selecting our Malaysian sample, we the researchers found that the multi-stage cluster sampling could be implemented through three-stage clustering. The first cluster is the region of Peninsular Malaysia. Peninsular Malaysia is divided into four development regions, namely North, Centre, South and East regions. The regions are consisted of several states (see Table 1).

In each region, a state was selected randomly. The purpose of this selection was to make sure that the results of this study could be generalized to Peninsular Malaysia. Therefore, in the first stage of the cluster sampling, four states were randomly selected, namely Kedah, Selangor, Johor and Kelantan, and each selected state represented their development region. The second stage of multi-stage cluster sampling was done by randomly choosing a few districts from the list of districts in each state. The third stage of this cluster sampling was achieved by randomly selecting schools in the selected districts.

To select our Dutch sample, we first chose four provinces out of twelve. Then, we picked one or two cities in each province. In each city, we identified potential schools and contacted the school management to obtain their consents. Only the schools that agreed to participate in the study were selected as research sites.

## **Measures**

Information regarding all variables (i.e., aggressive and aggressive-related behaviours, emotional regulation, cultural values, peer interaction) was collected through a set of self-administrated questionnaires. All variables were measured by using the existing scale/questionnaire that were developed by previous researchers. Table 2 presents brief information about the questionnaires that we used in this study.

Given that this cross-cultural study was conducted in Malaysia, all English versions of the questionnaires used in this study were translated into Malay language, the national language of Malaysia. In order to check for the validity of the Malay translated versions, back-translations were conducted. An independent translator with expertise in both

**Table 1. List of Regions and States in Peninsular Malaysia**

	Region	States		Region	States
1	North	Perlis	3	South	Negeri Sembilan
		Kedah			Melaka
		Penang			Johor
		Perak			
2	Centre	Selangor	4	East	Pahang
		Federal Territory Kuala Lumpur			Terengganu
		Lumpur			Kelantan
		Federal Territory Putrajaya			

languages (Malay and English) checked the accuracy of the translation in order to maintain the meaning of each item in the original instruments.

As mentioned before, a pilot study was conducted to check if the questions were clear and could be easily understood. We asked 168 students from one school in an urban area of Selangor to complete a set of questionnaires. We examined the psychometric properties of the students' responses such as internal consistencies (Cronbach's alpha) and factor analyses to confirm that the translation of the questionnaires was good and adequate.

**Table 2:** List of questionnaires in this study

Variable	Questionnaire
1. Aggressive-related behaviours	1. <i>Self-Report Instrument for Reactive and Proactive Aggression (IRPA)</i> (Rieffe et al., 2016) 2. <i>The Bully-Victim Questionnaire</i> (Rieffe, Camodeca, Pouw, Lange, & Stockmann, 2012)
2. Emotion Regulation	1. <i>Coping questionnaire</i> (Wright, Banerjee, Hoek, Rieffe, & Novin, 2010) 2. <i>Empathy Questionnaire for Children and Adolescents (EmQue-CA)</i> ; Overgaauw, Rieffe, Broekhof, Crone, & Güroğlu, 2017 3. <i>Mood Scale</i> (Rieffe, Meerum Terwogt, & Bosch, 2004)
3. Cultural values	1. <i>Individualistic-Collectivistic Value Questionnaire for Adolescent</i> (Novin, Azam, Broekhof, Li, Koch, & Rieffe, submitted) 2. <i>Inclusion of Others in the Self scale</i> (Aron, Aron, & Smollan, 1992)
5. Peer Interaction	<i>Best Friend Index</i> (Kouwenberg, Rieffe, & Banerjee, 2013)
6. Personal background	Information regarding respondents' background, such as gender, age, and family SES.

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## SUPPLEMENTARY MATERIALS

### Chapter 2

#### *Instrumen Tingkah Laku Agresif Reaktif & Proaktif Malaysia*

Berikut merupakan enam pernyataan yang menggambarkan enam tingkah laku agresif yang boleh dilakukan oleh seorang pelajar berserta sebab kepada tindakan tersebut. Anda boleh memilih jawapan sama ada tidak pernah melakukan perkara-perkara tersebut, kadang-kadang melakukannya, atau seringkali dalam tempoh empat minggu lepas.

Nota: Soalan-soalan berikut adalah berkenaan tingkah laku yang buruk dan teruk. Jika anda melakukan tingkah laku tersebut tetapi hanya bermaksud untuk bergurau (contoh: mengejek rakan kerana bergurau), sila tandakan Tidak Pernah.

1. Dalam tempoh 4 minggu lepas, saya menendang seseorang kerana...	Tidak pernah	Jarang	Kadang-kala	Kerap	Selalu
Saya berasa marah	<input type="checkbox"/>				
Saya telah dibuli	<input type="checkbox"/>				
Saya mahu kelihatan ganas	<input type="checkbox"/>				
Saya berasa seronok	<input type="checkbox"/>				
Saya mahu menjadi ketua	<input type="checkbox"/>				
Saya telah ditendang	<input type="checkbox"/>				
2. Dalam tempoh 4 minggu lepas, saya menolak seseorang kerana...	Tidak pernah	Jarang	Kadang-kala	Kerap	Selalu
Saya berasa marah	<input type="checkbox"/>				
Saya telah dibuli	<input type="checkbox"/>				
Saya mahu kelihatan ganas	<input type="checkbox"/>				
Saya berasa seronok	<input type="checkbox"/>				
Saya mahu menjadi ketua	<input type="checkbox"/>				
Saya telah ditolak	<input type="checkbox"/>				
3. Dalam tempoh 4 minggu lepas, saya memukul seseorang kerana...	Tidak pernah	Jarang	Kadang-kala	Kerap	Selalu
Saya berasa marah	<input type="checkbox"/>				
Saya telah dibuli	<input type="checkbox"/>				
Saya mahu kelihatan ganas	<input type="checkbox"/>				
Saya berasa seronok	<input type="checkbox"/>				
Saya mahu menjadi ketua	<input type="checkbox"/>				
Saya telah dipukul	<input type="checkbox"/>				

4. Dalam tempoh 4 minggu lepas, saya mengejek nama seseorang kerana...	Tidak pernah	Jarang	Kadang-kala	Kerap	Selalu
Saya berasa marah	<input type="checkbox"/>				
Saya telah dibuli	<input type="checkbox"/>				
Saya mahu kelihatan ganas	<input type="checkbox"/>				
Saya berasa seronok	<input type="checkbox"/>				
Saya mahu menjadi ketua	<input type="checkbox"/>				
Saya telah diejek	<input type="checkbox"/>				
5. Dalam tempoh 4 minggu lepas, saya bergaduh dengan seseorang kerana...	Tidak pernah	Jarang	Kadang-kala	Kerap	Selalu
Saya berasa marah	<input type="checkbox"/>				
Saya telah dibuli	<input type="checkbox"/>				
Saya mahu kelihatan ganas	<input type="checkbox"/>				
Saya berasa seronok	<input type="checkbox"/>				
Saya mahu menjadi ketua	<input type="checkbox"/>				
Mereka cari gaduh dengan saya	<input type="checkbox"/>				
6. Dalam tempoh 4 minggu lepas, saya berbohong dan bergosip tentang seseorang kerana...	Tidak pernah	Jarang	Kadang-kala	Kerap	Selalu
Saya berasa marah	<input type="checkbox"/>				
Saya telah dibuli	<input type="checkbox"/>				
Saya mahu kelihatan ganas	<input type="checkbox"/>				
Saya berasa seronok	<input type="checkbox"/>				
Saya mahu menjadi ketua	<input type="checkbox"/>				
Mereka bercakap bohong tentang saya	<input type="checkbox"/>				

Table S1. The reliability coefficient of the Victim, Shame and Guilt and Mood (anger) questionnaires

	Cronbach's alpha	
	Sample 1	Sample 2
1. Reactive Aggression	.92	.92
2. Proactive Aggression	.95	.94
3. Victimization	.70	.76
4. Shame	.67	.75
5. Guilt	.70	.77
6. Anger	.73	.69

SB  $\chi^2/df$  of 15.19  
GFI = .81  
CFI = .76  
RMSEA = .14 (90% CI = .12 - .16)  
SRMR = .10

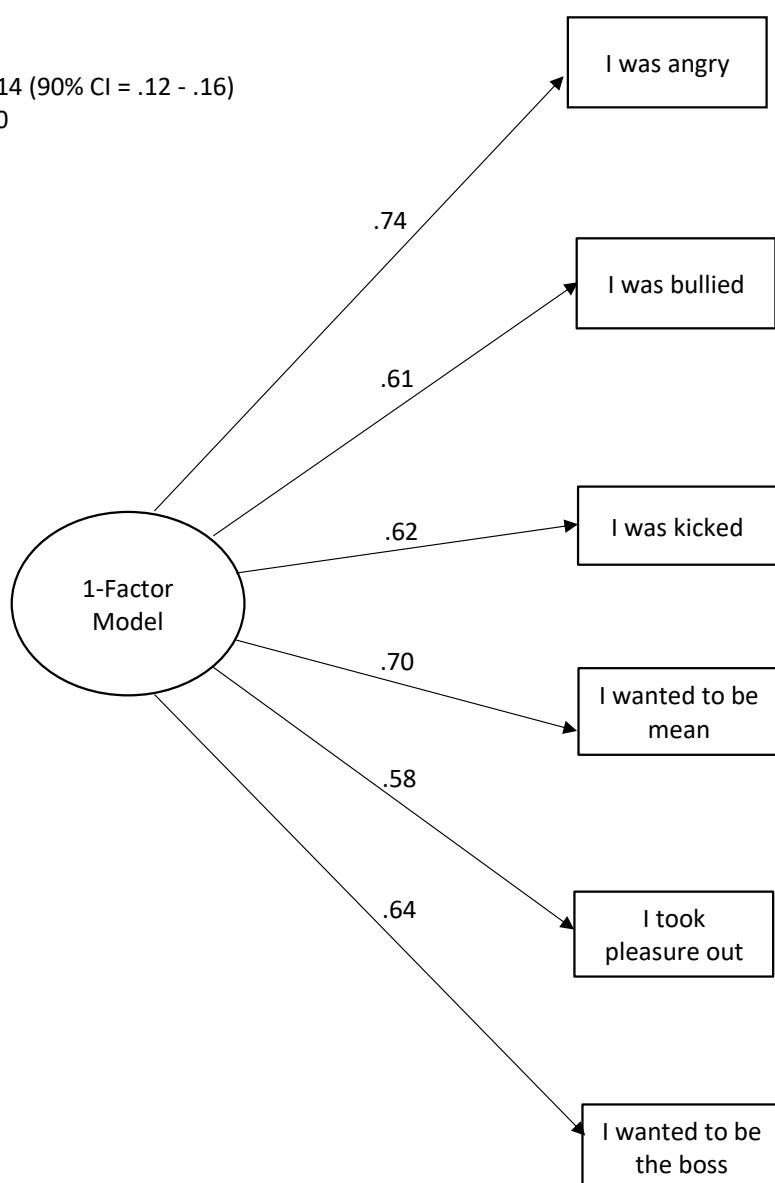


Figure S1. Alternative one-factor model of the Malay self-report IRPA (Sample 2; n = 789).

## Chapter 3

Table S1. The Individualistic-Collectivistic Value Questionnaire for Youth in English, Dutch, and Malay derived from Adult Questionnaires.

Original Adult Items	English	Dutch	Malay
		Individualism	
It is better for me to follow my own ideas than to take suggestions from my family (Oyserman, 1993)	1. I believe that it is better to follow my own ideas than to take suggestions from my friends	Ik denk dat het beter is mijn eigen ideeën te volgen dan te doen wat een vriend(in) zegt.	Saya percaya bahawa mengikut idea sendiri adalah lebih baik daripada menerima pandangan rakan saya.
Being able to take care of myself is a primary concern for me (Singelis, 1994)	3. If I really want something, I go for it, even when my friends wouldn't do that themselves	Als ik graag iets wil, dan ga ik ervoor, ook al zouden mijn vrienden dat niet doen.	Jika saya betul-betul mahukan sesuatu, saya akan berusaha mendapatkannya walaupun rakan-rakan saya tidak akan melakukannya.
I want to decide myself about things related to my life (Realo, et al., 2002)	5. I can make my own decisions. I do not need friends and family for that	Ik kan prima mijn eigen keuzes maken, daar heb ik vrienden en familie niet voor nodig.	Saya boleh buat keputusan sendiri. Saya tidak perlukan rakan-rakan dan keluarga untuk melakukannya.
If I make my own choices I will be more happy than if I listen to other (Oyserman, 1993)	7. I feel happier when I make my own choices rather than using my friends' and family's suggestions  9. My own opinion is more important than those of my friends and family	Ik vind het fijner om mijn eigen keuzes te maken dan te luisteren naar de mening van mijn vrienden en familie.  Mijn eigen mening vind ik belangrijker dan de mening van mijn vrienden en familie.	Saya berasa lebih gembira apabila membuat pilihan sendiri daripada mendengar cadangan rakan-rakan.  Pendapat saya adalah lebih penting berbanding pendapat rakan-rakan dan keluarga saya.
	11. I think it's better to have my own opinion than to use the opinion of my friends or family	Ik denk dat het beter is om mijn eigen mening te hebben dan om de mening van mijn vrienden of familie over te nemen.	Saya percaya bahawa mempunyai pendapat sendiri adalah lebih baik daripada mengambil pendapat rakan-rakan dan keluarga.

Table S1. (continued)

Original Adult Items	English	Dutch	Malay
<b>Collectivism</b>			
My happiness depends on the happiness of those around me (Singelis, 1994)	<p>2. I feel happy when my friends and family are happy</p> <p>4. I always do my best to make my family and friends happy</p> <p>6. If one of my friends does not perform well in school, I believe I should help him/her</p>	<p>Ik voel me gelukkig als mijn vrienden en familie gelukkig zijn.</p> <p>Ik voel me gelukkig als mijn vrienden en familie gelukkig zijn.</p> <p>Als een van mijn vrienden het niet goed doet op school, dan vind ik dat ik hem/haar moet helpen.</p>	<p>Saya rasa gembira apabila keluarga dan rakan-rakan saya gembira.</p> <p>Saya sentiasa melakukan yang terbaik untuk membuatkan keluarga dan rakan-rakan gembira.</p> <p>Jika seorang rakan saya tidak menunjukkan prestasi yang baik di sekolah, saya rasa saya perlu membantunya.</p>
When I think of myself, I often think of my close friends or family also (Cross, 2000)	8. When I think about myself, I also think about my friends and family	Als ik over mezelf nadenk dan denk ik vaak ook aan familie en vrienden.	Apabila saya memikirkan diri sendiri, biasanya saya turut memikirkan rakan-rakan dan keluarga saya juga.
My close relationships are an important reflection of who I am (Cross, 2000)	10. Friends and family are an important part of who I am	Mijn vrienden en familie zijn een belangrijk onderdeel van wie ik ben.	Rakan-rakan dan keluarga adalah individu yang penting dalam hidup saya.
Whenever my family needs something I try to help (Oyserman, 1994)	12. When my friends need something, I try to help	Als mijn vrienden iets nodig hebben dan probeer ik te helpen.	Apabila rakan-rakan saya memerlukan sesuatu, saya cuba untuk membantu.

Note. The italicized items in the original adult version were not considered suitable of our age group and were therefore excluded in the children's version

**Table S2.** Items of the Independent Goal Attainment scale of the Sociotropy-Autonomy Scale in English, Dutch, and Malay derived from the original adult version.

Original Adult Items	English	Dutch	Malay
If a goal is important to me I will pursue it even if it may make other people uncomfortable.	When I want to accomplish something, I will go for it, even though others may dislike it.	Als ik iets graag wil bereiken, dan ga ik daarvoor, ook al vinden anderen dat niet leuk.	Apabila saya inginkan sesuatu, saya akan berusaha mendapatkannya, walaupun orang lain tidak menyukainya.
The possibility of being rejected by others for standing up for my rights would not stop me.	I will always defend myself even if this would mean that others will not like me anymore	Ik kom altijd voor mezelf op, ook al zullen anderen mij dan misschien niet aardig meer vinden.	Saya akan sentiasa mempertahankan pendirian diri sendiri walaupun saya tidak akan disukai orang selepas itu.
I set my own standards and goals for myself rather than accepting those of other people.	I decide for myself what is important and what I would like to achieve, rather than listening to others	Ik bepaal zelf wat ik belangrijk vind en wat ik wil bereiken in plaats van naar anderen te luisteren.	Saya sendiri yang menentukan apa yang penting dan mahu dicapai, bukannya orang lain.
If I think I am right about something, I feel comfortable expressing myself even if others don't like it.	When I feel I am right, I will speak up, even though others may not like it	Als ik denk dat ik ergens gelijk in heb, zeg ik het gewoon ook al vinden anderen dit niet leuk.	Apabila saya merasakan saya betul mengenai sesuatu, saya akan mengucapkannya walaupun orang lain mungkin tidak suka mendengarnya.
It is more important to meet your own objectives on a task than to meet another person's objective.	It is more important to do what I find important than to meet other people's expectations.	Het is belangrijker om te gaan voor wat ik belangrijk vind dan te doen wat anderen van mij verwachten.	Penting bagi saya untuk melakukan apa yang saya rasakan perlu daripada melakukan apa yang orang lain harapkan daripada saya.
When I achieve a goal I get more satisfaction from reaching the goal than from any praise I might get.	I am happier when I accomplish a personal goal than when I'm praised by others.	Ik word blijer van het bereiken van mijn eigen doel, dan van het krijgen van complimenten.	Dapat mencapai matlamat diri membuatkan saya lebih gembira berbanding kepada menerima pujian.
It is more important that I know I've done a good job than having others know it.	It is more important to me to know that I've done something well than being acknowledged by others.	Het is voor mij belangrijker om zelf te weten dat ik iets goed gedaan heb, dan dat anderen vinden dat ik iets goed heb gedaan.	Ita penting untuk saya mengetahui bahawa saya telah melakukan sesuatu dengan baik daripada orang lain menganggapnya begitu.
I enjoy accomplishing things more than being given credit for them.	When I'm successful at something, I am happier with my accomplishment than with the compliments	Ik ben blijer met het bereiken van iets dan met de complimentjes die ik ervoor krijg.	Saya lebih gembira mencapai kejayaan berbanding menerima pujian di atas pencapaian itu.

**Table S3.** Items of the Conformity Scale in English, Dutch, and Malay derived from the original adult version.

Original Adult Items	English	Dutch	Malay
I often rely on, and act upon, the advice of others.	I rely and act on the advice of others.	Ik vertrouw op het advies van anderen en doe vaak wat ze adviseren.	Saya selalu bergantung, dan bertindak atas nasihat orang lain.
2. I would be the last one to change my opinion in a heated argument on a controversial topic.	When I disagree with someone, I usually do not change my opinion	In een discussie verander ik niet vaak van mening.	Ketika saya berselisih pendapat, selalunya saya tidak mengubah pendirian diri.
3. Generally, I'd rather give in and go along for the sake of peace than struggle to have my way.	To avoid an argument, I usually prefer to relent and don't push to get my way	Ik geef vaak de ander gelijk om zo ruzie te voorkomen dan strijd te voeren om mijn eigen zin te krijgen.	Untuk mengelakkan pertengkaran, biasanya saya memilih untuk mengalah dan akur daripada mempertahankan diri sendiri.
4. I tend to follow family tradition in making political decisions.	-	-	-
5. Basically, my friends are the ones who decide what we do together	My friends are usually the one's who decide what we will do	Mijn vrienden zijn vaak degene die bepalen wat we gaan doen.	Kebiasaanaya, rakan-rakan saya adalah orang yang menentukan apa yang kami lakukan bersama.
6. A charismatic and eloquent speaker can easily influence and change my ideas	A clear and convincing speaker can influence and change my thinking.	Iemand met een duidelijk en overtuigend verhaal kan gemakkelijk mijn ideeën beïnvloeden en veranderen.	Seorang penutur yang jelas dan meyakinkan boleh mempengaruhi dan mengubah pemikiran saya.
7. I am more independent than conforming in my ways.	I would rather decide for myself of what I will do rather than following others.	Ik bepaal vaker zelf wat ik ga doen dan dat ik mij aanpas aan anderen.	Saya lebih suka menentukan sendiri apa yang akan saya lakukan daripada mengikuti apa dilakukan oleh orang lain.
8. If someone is very persuasive, I tend to change my opinion and go along with them.	If someone is very convincing, I tend to change my opinion and go along with him/her.	Als iemand heel overtuigend is, verander ik meestal mijn mening en luister ik meestal naar diegene.	Jika seseorang itu sangat meyakinkan, saya cenderung untuk mengubah pendapat saya dan mengikutnya.
9. I don't give in to others easily.	I don't give in to others easily.	Ik geef niet makkelijk toe aan anderen	Saya tidak mudah mengalah kepada orang lain.

Table S3. (continued)

Original Adult Items	English	Dutch	Malay
10. I tend to rely on others when I have to make an important decision quickly.	I tend to rely on others when I have to make an important decision quickly.	Ik luister meestal naar anderen wanneer ik snel een belangrijke beslissing moet nemen.	Saya lebih mudah bergantung terhadap orang lain apabila saya perlu membuat satu keputusan penting dengan segera.

Note. The italicized item in the original adult version was not considered suitable of our age group and was therefore excluded in the children's version

Table S4. Selection of items of the Collective Self-Esteem Scale in English and Dutch, derived from the original adult version.

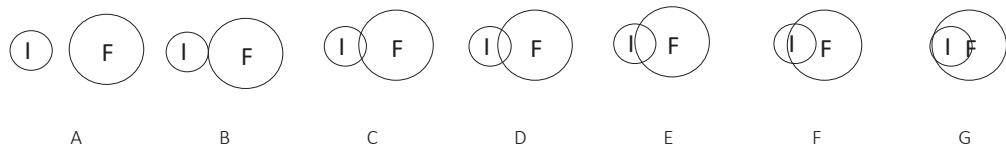
Original Adult Items	English	Dutch
1. I am a worthy member of the social groups I belong to.		
2. I often regret that I belong to some of the social groups I do	Overall, I like the group of friend that I belong to	In het algemeen vind ik mijn vriendengroep leuk.
3. Overall, my social groups are considered good by others.	In general, others like the group of friends that I belong to	Over het algemeen vinden anderen mijn vriendengroep leuk.
4. Overall, my group memberships have very little to do with how I feel about myself		
5. I feel I don't have much to offer to the social groups I belong to.	I feel I don't have much to offer to the group of friends I belong to.	Ik denk dat mijn vriendengroep niet veel aan mij heeft als vriend(in).
6. In general, I'm glad to be a member of the social groups I belong to.	Overall, I'm happy to belong to my group of friends	Over het algemeen ben ik blij om bij mijn vriendengroep te horen.
7. Most people consider my social groups, on the average, to be more ineffective than other social groups		
8. The social groups I belong to are an important reflection of who I am	I totally fit with the group of friends that I belong to	De vriendengroep waar ik bij hoor past helemaal bij me.
9. I am a cooperative participant in the social groups I belong to.	I cooperate well in my group of friends	Ik ben iemand die goed meedoet in mijn vriendengroep.
10. Overall, I often feel that the social groups of which I am a member are not worthwhile		

Table S4. (continued)

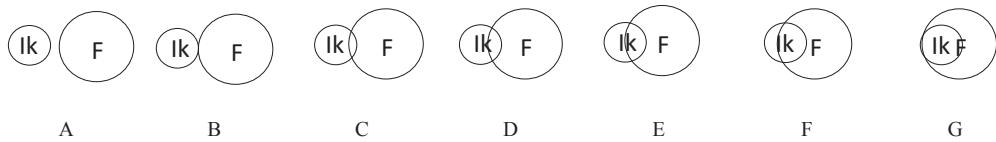
Original Adult Items	English	Dutch
11. In general, others respect the social groups that I am a member of.	Overall, others respect the group of friend that I belong to	Over het algemeen hebben anderen respect voor mijn vriendengroep.
12. The social groups I belong to are unimportant to my sense of what kind of a person I am.		
13. I often feel I'm a useless member of my social groups	I often feel like a useless member of my group of friends	Ik voel me vaak een nutteloos lid van mijn vriendengroep.
14. I feel good about the social groups I belong to.	I feel good about the group of friends I belong to.	Ik voel me goed over de vriendengroep waar ik bij hoor.
15. In general, others think that the social groups I am a member of are unworthy	In general, others think that my group of friends is nice	Over het algemeen denken anderen dat ik een fijne vriendengroep heb.
16 In general, belonging to social groups is an important part of my self-image		

&

**English:** Look at below pairs of circles. In each pair of circles, one circle represents you (I) and the other represents your family (F). Now think about you and your family. Which pair of circles fits best with how you see yourself and your family? Now think about you and your friends. Which pair of circles fits best with how you see yourself and your friends?



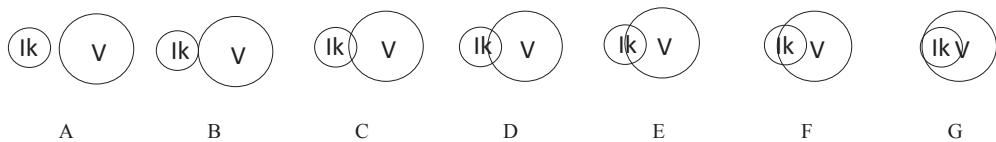
**Dutch:** Kijk naar de cirkels hieronder. Voor elke mogelijkheid (A, B, C, enzovoorts) is er één cirkel die jou voorstelt (ik) en één cirkel die jouw familie (F) voorstelt. Denk nu eens aan jezelf en je familie. Welk plaatje past het beste bij hoe jij jezelf en je familie ziet? Zet een cirkel om A, B, C, D, E of F of G.



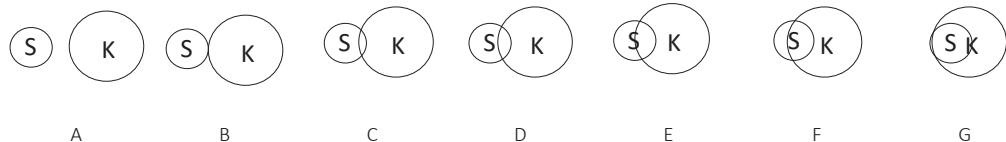
Hieronder zie je nog een aantal cirkels. Er is één cirkel die jou voorstelt (ik) en één cirkel die jouw vrienden en vriendinnen (V) voorstelt. Denk nu eens aan jezelf en je vrienden. Welk plaatje past het beste bij hoe jij jezelf en je vrienden en vriendinnen ziet? Zet een cirkel om A, B, C, D, E, F of G.

&

APPENDIX



**Malay:** Perhatikan setiap pasangan bulatan di bawah. Pada setiap pasangan tersebut, satu bulatan mewakili diri anda (S) dan satu bulatan lain mewakili keluarga anda (K). Sekarang, fikirkan tentang anda dan keluarga anda. Manakah antara pasangan bulatan tersebut sangat benar dalam menggambarkan hubungan anda dan keluarga anda?



Sekarang, fikirkan berkenaan anda dan rakan anda. Manakah antara pasangan bulatan tersebut sangat benar dalam menggambarkan hubungan anda (S) dan rakan anda (R)?

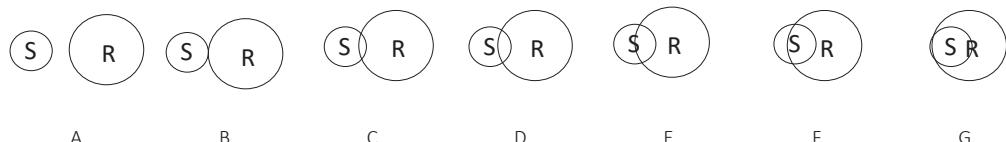


Figure S1. Inclusion of Other in the Self (IOS) scale in English, Dutch, and Malay

## Chapter 4

Supplementary Table 1. Pearson correlation coefficients of shame, guilt, approach coping, avoidant coping and individual cultural values (IC) on reactive and proactive aggression between Dutch and Malaysian samples

	r (95% CI)							
	Reactive Aggression	Proactive Aggression	Shame	Guilt	Approach	Avoidant	Individualism	Collectivism
Reactive Aggression	-	.47*** (.36 -. 57)	-.05 (-.17 -. 08)	-.07 (-.19 -. 05)	.17** (.05 -. 29)	.21*** (.09 -. 32)	.18** (.04 -. 29)	-.01 (-.13 -. 11)
Proactive Aggression	.53*** (.39 -. 63)	-	-.20** (-.30 -. 09)	-.18** (-.29 -. 07)	.10 (-.03 -. 23)	.19** (.07 -. 32)	.15* (.04 -. 27)	-.25*** (-.36 -. 14)
Shame	.07 (-.04 -. 19)	-.12 (-.22 -. 03)	-	.62*** (.55 -. 70)	.17** (.04 -. 29)	.10 (-.04 -. 21)	.08 (.04 -. 19)	.27*** (.15 -. 38)
Guilt	-.15* (-.29 -. 01)	-.32*** (-.43 -. 21)	.43*** (.31 -. 52)	-	.23*** (.11 -. 35)	.16** (.04 -. 28)	.03 (.09 -. 15)	.35*** (.23 -. 45)
Approach	-.25*** (-.37 -. 12)	-.29*** (-.42 -. 17)	.17** (.04 -. 29)	.46*** (.34 -. 56)	-	.59*** (.47 -. 69)	.21*** (.07 -. 34)	.41*** (.31 -. 50)
Avoidant	-.06 (-.22 -. 10)	.06 (-.08 -. 20)	-.14* (-.25 -. 00)	.04 (-.09 -. 16)	.05 (-.10 -. 18)	-	.23*** (.09 -. 36)	.30*** (.18 -. 39)
Individualism	.01 (-.11 -. 13)	.03 (-.08 -. 14)	-.24*** (-.36 -. 10)	-.17** (-.30 -. 04)	-.11 (-.23 -. 02)	.06 (-.07 -. 19)	-	.29*** (.16 -. 40)
Collectivism	-.14* (-.27 -. 00)	-.14* (-.31 -. 00)	.21*** (.08 -. 33)	.29*** (.16 -. 41)	.43*** (.23 -. 55)	.04 (-.10 -. 17)	-.02 (-.16 -. 12)	-

\* $p < 0.05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

Note: Correlations below diagonals are from the Dutch sample, and above diagonals are from the Malaysian sample.



## Chapter 5

**Supplementary Table 1.** Pearson correlation coefficients of shame, guilt, fear, anger and individual cultural values (IC) on bullying and victimization between Dutch and Malaysian samples

	Bullying	Victimization	Shame	Guilt	Fear	Anger	Individualism	Collectivism
<i>r</i> (95% CI)								
Bullying	—	.40*** (.26 – .53)	-.13* (-.24 – -.02)	-.09 (-.19 – .01)	.17** (.04 – .30)	.29*** (.17 – .41)	.20** (.09 – .31)	-.15* (-.27 – -.03)
Victimization	.45*** (.34 – .56)	— -.08 (-.20 – .04)	.04 -.20** (.02 – .37)	-.05 -.63*** (.55 – .71)	.21*** -.05 (.09 – .33)	.24*** .04 (.13 – .37)	.10 .08 (.01 – .22)	.11 .28*** (-.02 – .23)
Shame								
Guilt								
Fear								
Anger								
Individualism								
Collectivism								

\* $p < 0.05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

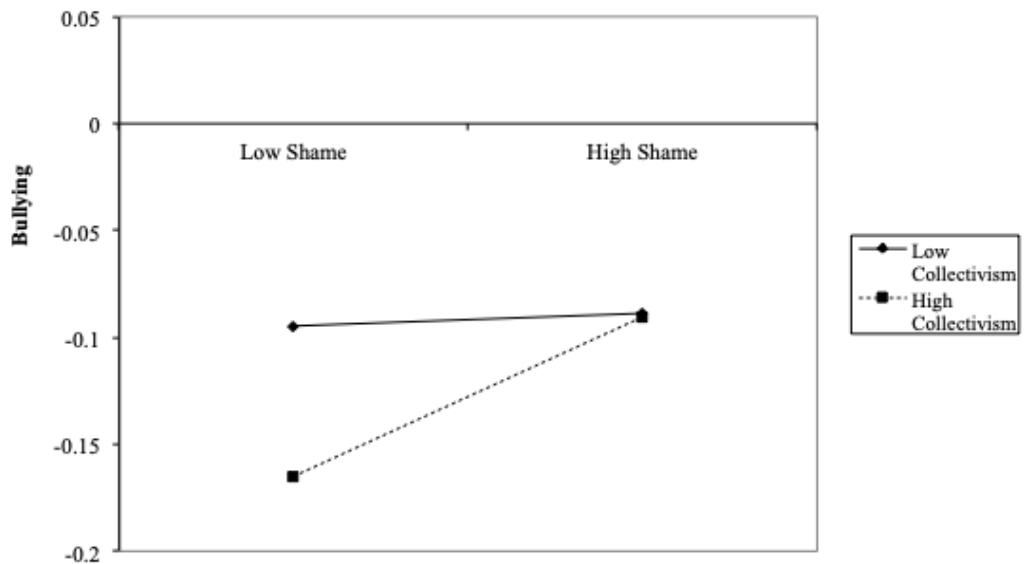
Note: Correlations below diagonals are from the Dutch sample, and above diagonals are from the Malaysian sample.

**Supplementary Table 2.** Regression analysis showing gender, shame-proneness, guilt-proneness, fear, anger and cultural values as predictors of bullying and victimization

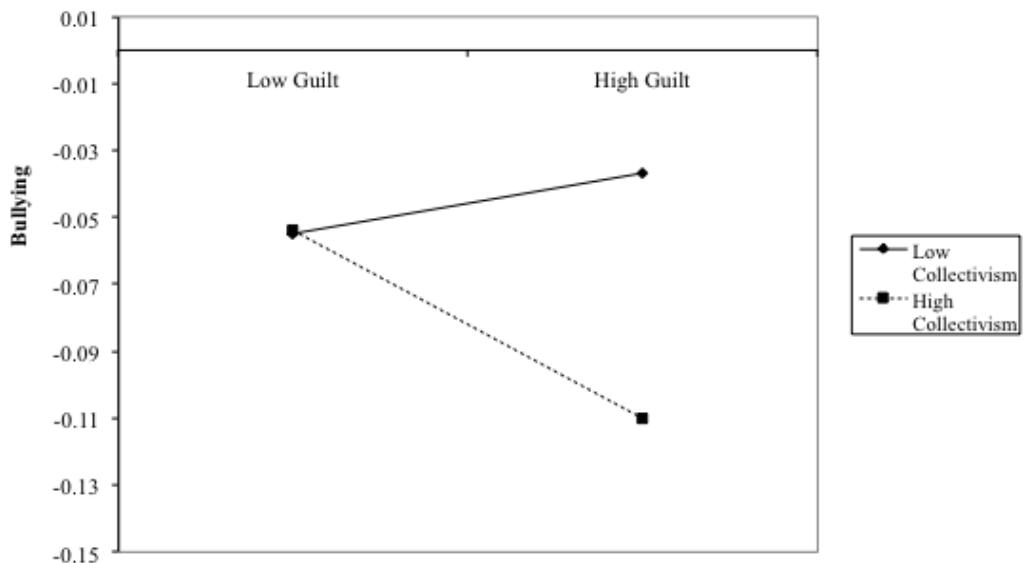
Predictor	Bullying				Victimization			
	B	SE B	p	R <sup>2</sup> /ΔR <sup>2</sup>	B	SE B	p	R <sup>2</sup> /ΔR <sup>2</sup>
Model 1				.13/ .13**				.12/ .12**
Age	-.00	.00	.827		.00	.00	.775	
Gender	-.06	.01	.000		-.03	.01	.047	
Shame	-.01	.02	.452		.05	.02	.010	
Guilt	-.04	.02	.019		-.04	.02	.021	
Fear	.07	.03	.060		.13	.04	.000	
Anger	.14	.03	.000		.13	.04	.000	
Model 2				.16/ .03**				
Age	-.00	.00	.999					
Gender	-.05	.01	.000					
Shame	-.01	.02	.566					
Guilt	-.03	.02	.107					
Fear	.07	.03	.043					
Anger	.13	.03	.000					
Individualism	.07	.02	.000					
Collectivism	-.05	.02	.006					
Model 3				.21/ .05*				
Age	-.00	.00	.802					
Gender	-.05	.01	.001					
Shame	-.01	.02	.927					
Guilt	-.03	.02	.057					
Fear	.07	.04	.090					
Anger	.11	.03	.000					
Individualism	.06	.02	.000					
Collectivism	-.65	.02	.000					
Shame x CTY	-.04	.02	.048					
Guilt x CTY	.05	.02	.007					
Fear x CNTY	-.01	.04	.813					
Anger x CNTY	.08	.03	.018					
Shame x IND	-.02	.02	.483					
Guilt x IND	-.02	.02	.264					
Fear x IND	.04	.04	.405					
Anger x IND	-.01	.05	.820					
Shame x COLL	.05	.02	.014					
Guilt x COLL	-.05	.02	.009					
Fear x COLL	-.13	.04	.003					
Anger x COLL	.04	.04	.332					

\*p < .05, \*\*p < .001

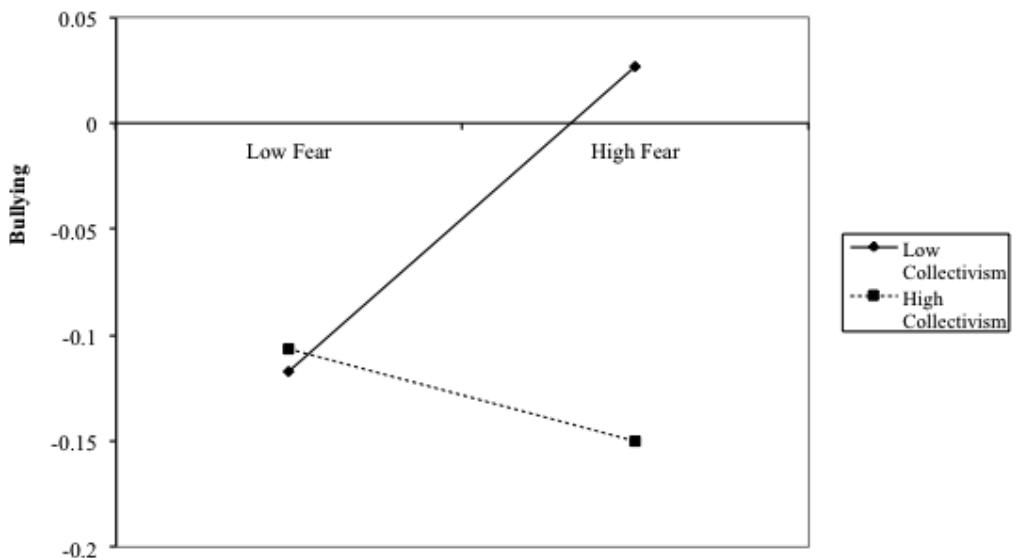
Note: B = unstandardized regression coefficients; SE = Standard Error; p = significant value; Δ R<sup>2</sup> = change in R<sup>2</sup> value; IND = individualism; COLL = collectivism; CTY = Country of Origin (-1=Netherlands, 1 = Malaysia)



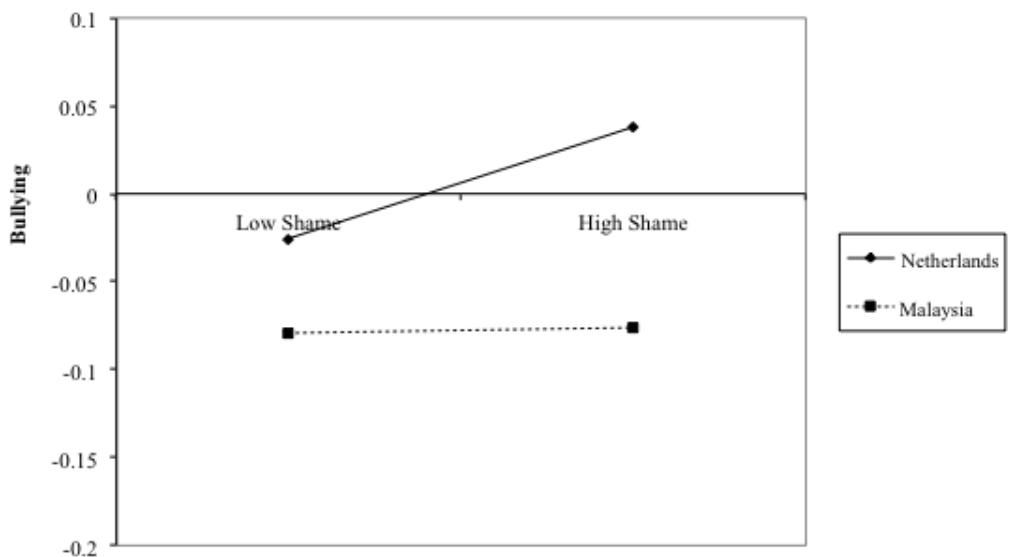
Supplementary Figure 1. The moderating effect of collectivism on the relationship between shame and bullying



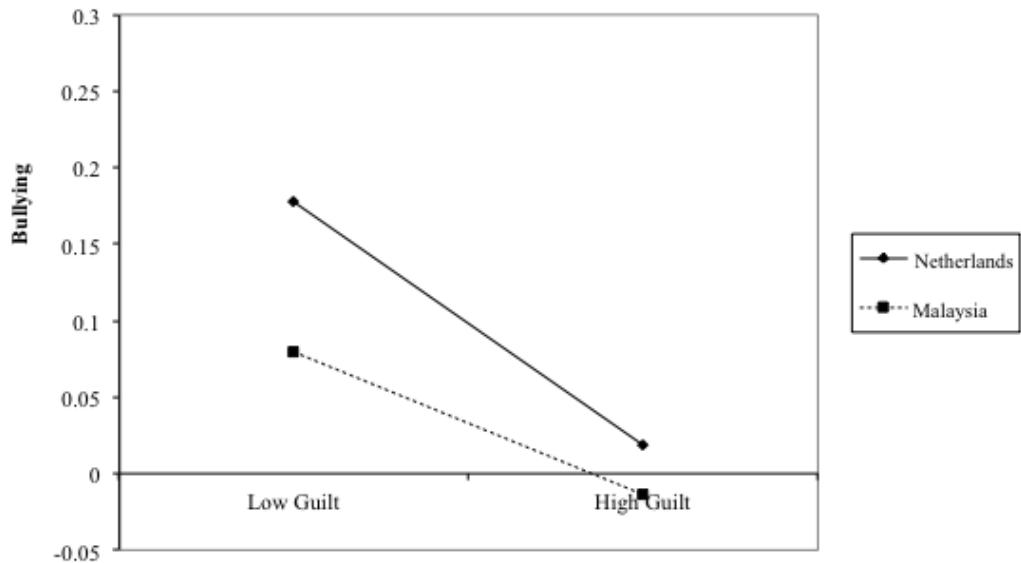
Supplementary Figure 2. The moderating effect of collectivism on the relationship between guilt and bullying



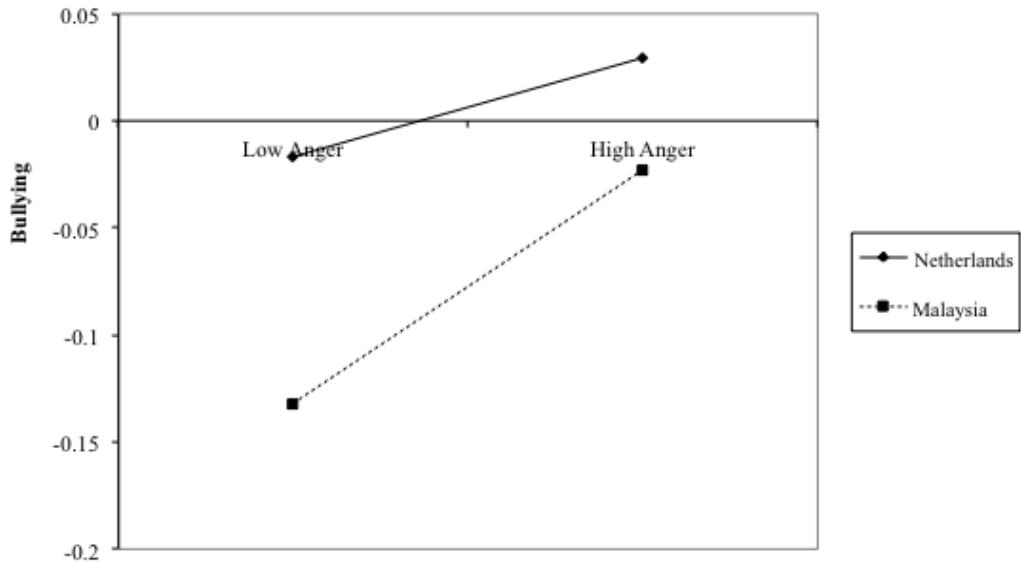
Supplementary Figure 3. The moderating effect of collectivism on the relationship between fear and bullying



Supplementary Figure 4. The moderating effect of country of origin on the relationship between shame and bullying



Supplementary Figure 5. The moderating effect of country of origin on the relationship between guilt and bullying



Supplementary Figure 6. The moderating effect of country of origin on the relationship between angry and bullying

## Chapter 6

**Supplementary Table 1.** Pearson correlation coefficients of approach coping, maladaptive coping, avoidant coping and interpersonal closeness on positive and negative friendship between Dutch and Malaysian samples.

		r (95% CI)				
	Positive Friendship	Negative Friendship	Approach	Maladaptive	Avoidant	Closeness
Positive Friendship	-	.10 (-.05 – .22)	.42*** (.31 – .52)	.21*** (.09 – .32)	.31*** (.17 – .43)	.12* (-.00 – .25)
Negative Friendship	-.28*** (-.42 – -.14)	- (.05 – .35)	.21*** -.47*** (.34 – .59)	.47*** (.23 – .50)	.37*** (.23 – .50)	.00 (-.12 – .10)
Approach	.37*** (.26 – .48)	.01 (-10 – .13)	- -.51*** (.40 – .60)	.51*** (.48 – .68)	.59*** (.48 – .68)	.11 (.00 – .22)
Maladaptive	.13* (-.03 – .27)	.37*** (.23 – .50)	.28*** (.17 – .39)	- -.03 .03	.52*** (.39 – .63)	-.01 (-.11 – .10)
Avoidant	-.04 (-.15 – .08)	-.03 (-.14 – .09)	.03 (-11 – .17)	-.15* (-.25 – -.04)	-.10 -	.10 (-.02 – .20)
Closeness	.41*** (.28 – .53)	-.17** (-.31 – -.03)	.08 (-.04 – .20)	.00 (-.15 – .14)	.06 (-.04 – .16)	-

\* $p < 0.05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

Note: Correlations below diagonals are from the Dutch sample, and above diagonals are from the Malaysian sample.

## LIST OF PUBLICATIONS

Dahamat Azam, N., Novin, S., Oosterveld, P., & Rieffe, C. (2019). Aggression in Malaysian adolescents: Validation of the IRPA self-report to measure reactive and proactive aggression. *European Journal of Developmental Psychology*, 16, 2, 225-235. doi: 10.1080/17405629.2017.1360177

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Dahamat Azam, N., Novin, S., Li, B., Oosterveld, P., Zainal, M., Schoerke, J., & Rieffe, C. (submitted). Reactive versus proactive aggression and moral emotions: The moderating role of cultural values.

Dahamat Azam, N., Novin, S., Li, B., Oosterveld., P., Mahoney. P., & Rieffe, C. (submitted). Coping strategies and Friendship Quality: The Moderating Role of Interpersonal Closeness and Country of Origin.

Novin, S., Dahamat Azam, N., Broekhof, E., Li, B., Koch, Y., & Rieffe, C. (submitted). Validation of the Individualistic-Collectivistic Value Questionnaire for Youth.