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Parental cultural values, parenting practices, and aggression in Malaysian and Dutch adolescents.

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Abstract

Research has long been investigating aggression in children and adolescents, and has identified parenting as one of the most influential factors (e.g., van Aken, Junger, Verhoeven, van Aken, & Decovic, 2008; Shuster, Li & Shi, 2012). The purpose of the present research was to understand the influence of parenting practices on proactive and reactive aggression, with the hypothesis that these practices were associated with lower aggression (Beyers, Bates, Pettit, & Dodge, 2003). Further, we knew that cultural backgrounds tend to determine parenting practices, and therefore we investigated how parental cultural values impact the relationship between parenting practices and proactive or reactive aggression in adolescents. Results regarding the hypotheses were only found in the Dutch sample, but not in the Malaysian. They indicated that induction (giving explanations for why behaviour is wrong) was associated with decreased proactive aggression, but increased reactive aggression in Dutch adolescents. Further, the relationships between induction and proactive aggression and between induction and reactive aggression were strengthened by parent´s individualistic as well as collectivistic cultural values. Additionally, reinforcement of good behaviour as a parenting practice was associated with higher proactive aggression, if parents held individualistic values. Possible explanations for the findings and implications were discussed.

Keywords: Responsiveness, Reinforcement of Good Behaviour, Induction, Proactive Aggression, Reactive Aggression, Collectivism, Individualism

Parental cultural values, parenting practices, and aggression in Malaysian and Dutch adolescents.

It has been widely assumed that aggression is mostly influenced by the environment, and is less genetically predetermined (Plomin, Foch, & Rowe, 1981). Research has long been exploring aggression in children and adolescents, and has identified maladaptive parenting as one of the most influential factors (e.g., van Aken, Junger, Verhoeven, van Aken, & Decovic, 2008; Shuster, Li & Shi, 2012). Luckily parenting does not only relate to increased aggression, but supportive and engaged parenting can be beneficial, and lead to a decrease of aggression in the offspring (Beyers, Bates, Pettit, & Dodge, 2003). Because aggression early in life is one important predictor of later conduct problems, reducing effects of parenting can have crucial implications (Fite, Raine, Stouthamer-Loeber, & Pardini, 2010). The present research aimed at examining the extent to which cultural values in parents influence the relationship between parenting and aggression. We had no reason to assume the different cultural orientation of the Malaysian and Dutch parents in our samples, but wanted to investigate how parents from both countries are influenced by their personal cultural values.

1.1. Reactive and Proactive Aggression

Aggression has commonly been distinguished in reactive and proactive aggression. This distinction has a long history of research (see Feshbach, 1964). Reactive and proactive aggression have different underlying cognitions and functions (Card, & Little, 2006; Dodge, & Coie, 1987). Reactive aggression is understood as a reaction to a provocation or frustration (Pouw, Rieffe, Oosterveld, Huskens, & Stockmann, 2013). Therefore it is described as the `defensive´ kind of aggression (Card, & Little, 2006). Reactive aggression has been linked to poor emotion regulation and low levels of empathy (Pouw et al., 2013; Dodge, 1991). In contrast to that, proactive aggression is a type of behaviour which implies a motive for being

aggressive towards others; it is aimed at self gain, and is being described as `instrumental´ (Dodge, & Coie, 1987; Card, & Little, 2006). Proactive aggressive individuals are characterized by heightened levels of anger, but not by a lack of empathy (Pouw et al., 2013). Both proactive and reactive aggression are more prevalent in boys compared to girls (Salmivalli, & Nieminen, 2002). Moreover, the two types of aggression have been found across different cultures (Fung, Raine, & Gao, 2009).

1.2. Parenting Practices

The concept of parenting has been attempted to capture in numerous ways (Baumrind, 1971; Frick, 1991; Gerris, van Boxtel, Vermulst, Janssens, van Zutphen, & Felling, 1993). Yet, a common problem is that these concepts might lack the multidimensionality in order to account for differences between cultures (Chao, 2001). A concept that is relevant in a Western context might not be relevant for Asian cultures (Chao, 2001). Accordingly parenting concepts need to be as specific as possible. Van Aken et al. (2008) described parenting amongst others in terms of parental support and positive discipline. These practices are defined in very clear terms. Parental support is being expressed as responsiveness towards the child and his/her needs. Positive discipline contains two aspects of parenting. Firstly, reinforcement of good behaviour, which praises a child´s desirable actions. Secondly, explaining the consequences of not appreciated behaviour, called induction. According to former research, parental support and positive discipline are known to have beneficial effects on children (van Aken et al., 2008). By expressing warmth and sensitivity a trustful relationship between parents and their children, with both Eastern and Western backgrounds, is established. This increases the likelihood of children following their parent´s advice (Chen, Rubin, Liu, Chen, Wang, Li, Gao, Cen, Gu, & Li, 2003).

1.3. Parenting and Aggression in Children

A vast amount of research has been done on the relationship between parenting and aggressive behaviour in children. It has repeatedly been established that parenting styles play a crucial role in the development of children and their social functioning, and specifically with regard to the development of aggression (van Aken et al., 2008). Parents regulate the interaction a child has with the environment and teach the child how to adapt to it (Senese, Bornstein, Haynes, Rossi, & Venuti, 2012; Bornstein, &Lansford, 2010). Responsiveness, induction and reinforcement of good behaviour consistently show good effects on the children, hence decreased level of aggression (van Aken, et al., 2008). This positive effect has also been found for an isolated use of induction (Shuster, Li, & Shi, 2012). When considering proactive and reactive aggression separately, an irregular use of induction leads to increased reactive aggression (Rathert, Pederson, File, Stoppelbein, & Greening, 2015).

1.4. Parental Cultural Values on Parenting and Aggression

Cultural values are widely being discussed in terms of collectivism and individualism. Collectivistic cultures tend to praise the group´s interest as the main goal (Chao, 2001). Collectivistic oriented individuals put the group´s interest above its individual interests, and stress mutual dependence (Chao, 2001). Individualistic oriented individuals on the other hand value their independence and autonomy, and define themselves in these terms (Lam, 1997).

As Darling and Steinberg (1993) stress, parenting styles need to be interpreted within the cultural context where they are practiced, in order to account for ethnic differences in socialization goals. Cultural values are known to have an impact on how parents educate their children (Bornstein, 1998).

Individualistic oriented parents reinforce autonomy, achievement, and self-control (Baumrind, 1971). Consequently, parenting in Western cultures is aiming at teaching children to explore confidently and to express their opinion freely (Gecas, & Burke, 1995). Baumrind

(1971) argues that amongst others responsiveness, induction and reinforcement of good behaviour as parenting practices are appropriate for this socialization goal, because it provides the children with appropriate support without undermining their individuality.

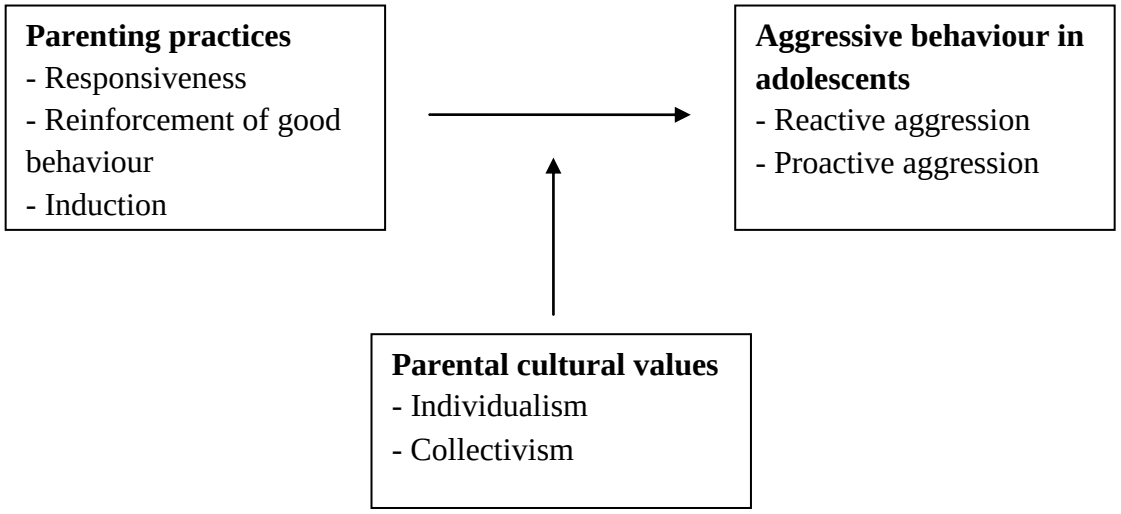
Collectivistic parents in contrast have socialization goals that target at being hard-working and obedient (Chao, 2001). Research by Xu, Farver, Zhang, Zeng, Yu, & Cai (2005) presents that collectivistic oriented cultures value conformity to norms and emotional self-control, without questioning the group´s priority. This implies that induction in parenting is decreased in collectivistic cultures as giving explanations for appropriate behaviour is not a priority (Xu et al., 2005; Vinden, 2001). Instead children are expected to act in line with their parents´ demand without asking for reasons.

The present study investigated the influence of parenting practices on adolescent aggressive behaviour in Malaysia and the Netherlands. It should be noted that, previously it was assumed that people from Eastern countries like Malaysia are more collectivistic oriented, and people from Western countries like the Netherlands are more individualistic oriented. However, recent research showed that people growing up in Eastern societies can hold individualistic values, and those growing up in Western societies can be high in collectivistic values (Korbin, & Coulton, 1997). Therefore we did not want to assume the common cultural values based on countries but instead investigated how the personally held cultural orientation of a parent can influence his/her parenting practices, and in turn influence his/her child´s aggressive behaviours. Consequently, the above described differences between parental cultural orientation (individualism versus collectivism) and relation with parenting styles and adolescent´s aggression could apply to parents coming from all countries and different ethnic, religious, or cultural backgrounds.

1.5. Aim of the Study

Although many studies have found that responsiveness, reinforcement of good behaviour and induction can prevent aggressive behaviours in adolescents, little research has been conducted under the influence of culture. Therefore the main aim of this study was to investigate the relationship between the parenting practices (responsiveness, reinforcement of good behaviour, induction) and reactive and proactive aggression in adolescents. Besides, we wanted to specifically observe how this relationship was influenced by the cultural values that parents reflected. These were measured in terms of collectivistic and individualistic orientation. Hereby we also investigated the immediate effect of the adolescent´s own cultural values. We aimed to ultimately answer the questions: How are proactive and reactive aggression in adolescents affected by the parenting practices (responsiveness, reinforcement of good behaviour, induction)? How is this relationship moderated by parental cultural values?

Model of the present study



1.6. Hypotheses

First, we expected that the use of responsiveness, reinforcement of good behaviour and induction as parenting practices were related to lower levels of proactive and reactive aggression in adolescents (van Aken et al., 2008).

Second, we expected that collectivistic cultural values in parents weakened the relationship between positive parenting practices and aggression in adolescents. We expected that the parenting practices in question were less commonly used by parents who held collectivistic cultural values (Xu et al., 2005; Vinden, 2001).

Third, we expected that individualistic cultural values in parents strengthened the relationship between positive parenting practices and aggression in adolescents. Former research informed us that parents with individualistic cultural values engaged in the parenting practices in question frequently (Baumrind, 1971; Zahn-Waxler, Friedman, Cole, Mizuta, & Hiruma, 1996).

2. Method

2.1. Participants

The sample consisted of participants from Malaysia and the Netherlands. The Malaysian sample consisted of a total of 690 Malaysian adolescents and their parents. The Dutch sample consisted of 157 participants (adolescents and parents).

Table 1

Demographic profile of participants: adolescents and parents.

	Adolescents		Parents	
	Malaysia	Netherlands	Malaysia	Netherlands
number of participants	690	157	690	157
Age, years, mean (SD)	13.58 (0.50)	13.61 (0.46)	44.9 (6.07)	45.45 (5.17)
Gender				
Male	275 (39.9%)	77 (49%)	285 (41.3%)	32 (20.4%)
Female	412 (59.7%)	78 (49.7%)	405 (58.7%)	125 (79.6%)

2.2. Procedure

In Malaysia the study was given permission by:

1) The Economic Planning Unit, an unit under the Prime Minister Department.
2) The Ministry of Education.
3) The Education Department of each participating state (Kedah, Kelantan, Johor & Selangor).
4) The principals of the participating schools.

In the Netherlands the study was given permission by:

1) The Ethical Commission of the University Leiden.
2) The principals of the participating schools.

Both the adolescents and their parents signed consent forms to participate in the research. A short introduction was given about the broad context of the study. Further, they were reminded of the confidentiality of the questionnaires. Adolescents filled in the questionnaires in class during school time, which took about fifty minutes. After that, their parents were asked to fill in questionnaires online, which took about fifteen minutes.

2.3. Materials

In order to assess *adolescent´s proactive and reactive aggression* a 36-item self-report instrument for Reactive and Proactive Aggression (IRPA) was used (Rieffe et al, in press). The questionnaire addressed six types of aggressive behaviour (kicking, pushing, hitting, name calling, picking fights, gossiping). The participant was asked to rate how often he/she performed the behaviour in the last four weeks on a 3- point scale (1 ((almost) never) to 3 (often)). For each behaviour one could indicate the motives behind the behaviour. There were three proactive aggression motives ("I wanted to be mean", " I took pleasure in it", " I wanted to be the boss") and three reactive aggression motives ("I was mad", "I was bullied", "I was name-called") to choose from. The internal consistency for both the reactive aggression and the proactive aggression scales in both groups were excellent (see table 2).

Adolescent´s cultural values were assessed by a 20-item questionnaire (Singelis, 1994; Cross, Bacon, & Morris, 2000; Oysermann, 1993). There were ten items expressing individualistic values (e.g. "I enjoy being a unique person who is different from other children"), and ten items expressing collectivistic values (e.g. "My friends and family are an important part of who I am"). Each item could be rated on a scale from 1(strongly disagree) to 5 (strongly agree). The reliability of the scales lied between acceptable and good (see table 2).

For the purpose of assessing the parenting practices we used the instruments that van Aken et al. (2008) used in their study. To measure *responsiveness* we used a subscale from a Dutch parenting questionnaire (Gerris et al., 1993). It assessed the degree of parental responsiveness to the child´s needs and requests. As van Aken et al. (2008) we integrated four of the originally eight questions in our questionnaire (e.g. "If my child is sad, I know what is going on"). Parents could indicate the frequency of responsiveness towards their children on a five-point scale (1 (never) to 5 (very often)). With regard to the scale in our study we found a good reliability for the Malaysian data and an acceptable Cronbach´s alpha in the Dutch data (see table 2).

To measure *reinforcement of good behaviour* we used six items of the Alabama Parenting Questionnaire (Frick, 1991; Shelton, Frick, & Wootton, 1996)(e.g. "I praise my child when he/she behaves well"). On a five-point (1 (never) to 5 (very often)) parents could indicate the frequency of their praising of the good behaviour of their children. The reliability of this scale was good in both sample groups (see table 2).

To measure *induction* we used another subscale of the Dutch parenting questionnaire (Gerris et al., 1993). The scale consisted of four items (e.g. "When my child does not listen to me, I explain to him/her that it annoys me"). Parents could rate the frequency of their

induction giving behaviour on a scale from 1 (never) to 5 (very often). The reliability of this scale was good (see table 2).

The *cultural values* of the parents was measured by a twenty-statement questionnaire (Cross, Bacon, & Morris, 2000; Oyserman, 1993; Singelis, 1994). These statements explored the parent´s opinion about their relationship to other people. They could agree/disagree with the statement on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree). Ten of the statement described individualistic values, the other ten described collectivistic values. The Cronbach´s alpha indicated a questionable internal consistency for both the individualistic and the collectivistic scales in the Malaysian as well as in the Dutch data (see table 2).

Both caregivers filled in the questionnaires on parenting practices and cultural values separately. Although the caregivers were asked to fill in the questionnaire separately, we did only use the data of the parent who responded first. This was done in order to avoid double data of one child.

Table 2

Psychometric properties and group means of the questionnaires for aggression, cultural values (adolescents), parenting practices, cultural values (parents).

	N items	Cronbach´s α		M and SD	
		Malaysia	Netherlands	Malaysia	Netherlands
Reactive aggression	18	0.92	0.92	1.74 (0.66)	1.66 (0.64)
Proactive aggression	18	0.94	0.94	1.29 (0.51)	1.21 (0.45)
Individualism (Adolescents)	10	0.74	0.70	3.38 (0.59)	3.49 (0.52)*
Collectivism (Adolescents)	10	0.84	0.74	3.78 (0.67)	3.71 (0.48)
Responsiveness	4	0.84	0.73	3.74 (0.81)	4.03 (0.48)**
Reinforcement of good behaviour	6	0.86	0.81	3.82 (0.79)	3.91 (0.55)
Induction	4	0.86	0.83	3.55 (1.02)	3.73 (0.82)*
Individualism	10	0.67	0.66	3.48 (0.49)	3.34 (0.45)**

(Parents)					
Collectivism (Parents)	10	0.66	0.61	4.00 (0.52)	3.48 (0.39)**

Note: * p < .05; ** p <.01 for significant differences in group mean.

2.4. Statistical Analysis

T-tests were performed to compare the mean differences of the variables in this study. Additionally, a correlation analysis was performed in order to find similarities between the factors within one group.

A multiple regression analysis was conducted to determine the relationship between parenting practices and proactive and reactive aggression. The dependent variables reactive aggression and proactive aggression were analyzed in two separate models. Furthermore, the data file was split by countries. Consequently four models were investigated. After filling in the dependent variable, the control variables were selected (gender and for reactive aggression: proactive aggression; and for proactive aggression: reactive aggression). This was done in order to partial out the impact of one kind of aggression on the relationship between the other kind of aggression and the predictors (Miller, & Lynam, 2006). Thereafter the independent variables were selected, which are: Responsiveness, reinforcement of good behaviour, induction, parental individualistic, parental collectivistic values, adolescent´s individualistic and adolescent´s collectivistic values. In order to investigate the moderator effect of parental cultural values, the interaction effects of the parenting practices and the parental cultural values were entered to the regression model. All independent variables were standardized prior to the analysis.

3. Results

3.1. Differences Between Groups in Proactive, Reactive Aggression, Parenting Practices, Collectivism and Individualism

The mean scores are presented per country in Table 2. Reactive aggression and proactive aggression did not differ significantly between the Malaysian and the Dutch group of adolescents.

Regarding parenting practices responsiveness and induction were used more often by Dutch parents than by Malaysian parents ($t(836)= -4.27$, $p\leq .01$; $t(836)= -1.96$, $p\leq .05$).

Malaysian parents scored significantly higher on both individualistic ($t(833)= 3.24$, $p\leq .001$), and collectivistic cultural values compared to Dutch parents ($t(833)= 11.785$, $p\leq .001$). In contrast to that Dutch adolescents self-reported higher individualistic values than Malaysian adolescents ($t(839= -2.107$, $p\leq .05$).

3.2. Association of Parenting Practices and Aggression, and Moderation Effect of Parental Cultural Values

The correlation analysis of the Malaysian data revealed negative correlations between adolescent´s individualistic values and proactive aggression; and adolescent´s collectivism with both reactive and proactive aggression (see table 3). No other correlations with proactive and reactive aggression were found in the Malaysian data.

Furthermore, positive correlations were found for responsiveness and adolescent´s individualistic and collectivistic orientation, as well as reinforcement of good behaviour and adolescent´s individualistic and collectivistic orientation. In contrast, induction was not correlated with adolescent´s cultural orientation.

Finally, parental individualism and collectivism were both positively correlated with all three parenting practices, as well as with adolescent´s individualism and collectivism.

With regard to the Dutch sample the following correlations appeared (see table 4). Firstly, adolescent's collectivism were negatively correlated with reactive aggression.

Secondly, parental individualistic cultural values were positively correlated with proactive aggression. Parental individualistic values were further positively correlated with responsiveness and reinforcement of good behaviour, whereas parental collectivistic values were positively correlated with reinforcement of good behaviour and induction.

Table 3

Pearson Correlations for the Malaysian sample.

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Reactive Aggression	1								
2. Proactive Aggression	0.47**	1							
3. Individualism (Adolescents)	-0.05	-0.10**	1						
4. Collectivism (Adolescents)	-0.12**	-0.14**	0.70**	1					
5. Responsiveness	0.04	-0.002	0.11**	0.14**	1				
6. Reinforcement of good behaviour	-0.02	0.01	0.12**	0.11**	0.64**	1			
7. Induction	0.07	0.04	0.07	0.02	0.48**	0.44**	1		
8. Individualism (Parents)	-0.07	-0.025	0.16**	0.10**	0.30**	0.31**	0.27**	1	
9. Collectivism (Parents)	-0.04	-0.07	0.15**	0.16**	0.45**	0.41**	0.36**	0.53**	1

significant correlation at level * $p < .05$; ** $p < .01$

Table 4

Pearson Correlations for the Dutch sample.

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Reactive Aggression	1								
2. Proactive Aggression	0.52**	1							
3. Individualism (Adolescents)	0.02	-0.08	1						
4. Collectivism (Adolescents)	-0.19**	-0.13	0.45**	1					
5. Responsiveness	0.11	0.01	0.13	0.48	1				

6. Reinforcement of good behaviour	0.04	-0.03	0.16	0.10**	0.43**	1			
7. Induction	0.06	-0.06	0.18*	0.07	0.25**	0.46**	1		
8. Individualism (Parents)	0.10	0.17*	0.09	0.03	0.18*	0.18*	0.13	1	
9. Collectivism (Parents)	0.09	-0.02	0.05	-0.1	0.07	0.21**	0.19*	-0.06	1

significant correlation at level * p < .05; ** p <.01

The multiple regression analysis found mixed results with regard to the effect of responsiveness, reinforcement of good behaviour and induction on the self-reported levels of proactive and reactive aggression in adolescents (see table 5). A significant impact of induction in parenting was present only in the Dutch data, for both proactive (*B*=-0.19, *p*= 0.015) and reactive aggression (*B*=2.47, *p*= 0.02). Against our expectations, induction was related to higher levels of reactive aggression. No effect of the parenting practices on aggressive behaviour in adolescents was present in the Malaysian sample. Interestingly, individualistic values in Dutch parents were related to proactive aggression in adolescents (*B*=0.106 , *p*=0.009). In turn individualistic values in Malaysian parents predicted lower levels of reactive aggression (*B*=-0.058, *p*=0.030). Further collectivistic values in Malaysian parents were associated with decreased levels of proactive aggression (*B*=-0.054, *p*=0.024). In addition to that being male (*B*=-0.19, *p*=0.00), more proactive aggression (*B*=0.59, *p*=0.00), and higher individualistic values (*B*=0.11, *p*=0.037) of adolescents were associated with more reactive aggression in Malaysian adolescents.

With regard to a moderation effects in the Dutch sample: collectivistic values (figure 1) and individualistic values (figure 2) in Dutch parents predicted a strengthened relationship between induction and proactive aggression (*B*=-0.135, *p*=0.032; *B*=-0.137, *p*=0.008) (see table 5); and between induction and reactive aggression (*B*=0.209 , *p*=0.017; *B*=0.178,

p=0.013) (figure 3 and 4 respectively). The relationship between reinforcement of good behaviour and proactive aggression was strengthened by parental individualistic values in the Dutch sample (*B*=0.157, *p*=0.004) (figure 5).

In line with the lack of relationships between parenting practices and aggression, no moderation effects were present in the Malaysian data.

Table 5

Multiple Regression Analysis for parenting practices, parental and adolescent´s cultural values, interactions on reactive and proactive aggression and model fit (Adjusted R^2).

	Malay				Dutch			
	Proactive aggression		Reactive aggression		Proactive aggression		Reactive aggression	
	B	Adj. R^2	B	Adj. R^2	B	Adj. R^2	B	Adj. R^2
Student Gender	0.003	0.21	-1.9 **	0.23	-0.07	0.26	-0.07	0.26
Reactive/Proactive Aggression	0.34**		0.59**		0.36**		0.71**	
Responsiveness (RE)	-0.01	0.22	0.05	0.24	0.03	0.26	0.08	0.27
Reinforcement of Good Behaviour (RGB)	0.04		-0.05		0.04		-0.04	
Induction (ID)	0.01		0.04		-0.19*		0.25*	
Individualism (Parents) (IP)	0.03		-0.06 *		0.11**		-0.09	
Collectivism (Parents) (CP)	-0.05*		0.01		-0.001		-0.001	
Individualism (Adolescents)	-0.03		0.07*		-0.04		0.08	
Collectivism (Adolescents)	-0.01		-0.06*		0.02		-0.12	
RE X IP	0.02	0.21	-0.05	0.24	-0.06	0.31	0.15	0.32
RE X CP	-0.003		0.05		0.04		-0.002	
RGB X IP	-0.01		0.06		0.16**		-0.14	
RGB X CP	-0.02		-0.05		0.02		0.01	
ID X IP	-0.01		0.001		-0.14**		0.18*	
ID X CP	0.04		-0.03		-0.14*		0.21*	

significant at level * p < .05; ** p <.001

NB: All other drivers of the model were set on mean value for the figures below.

Figure 1
Moderator parental collectivism (CP) on induction and proactive aggression.

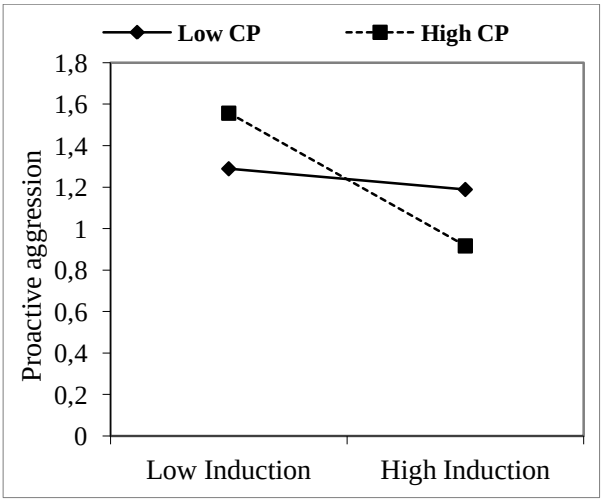


Figure 2
Moderator parental individualism (IP) on induction and proactive aggression.

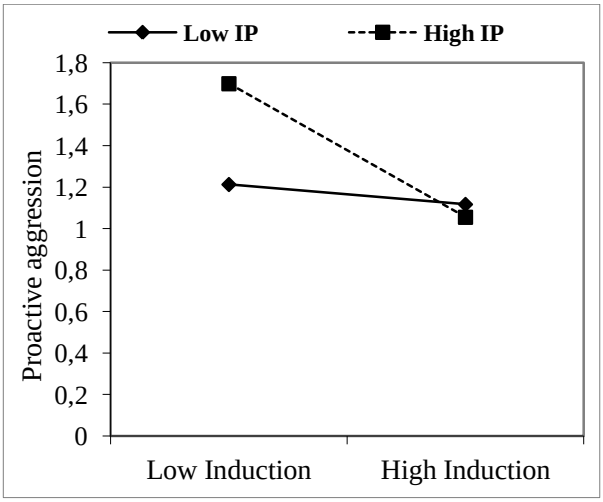


Figure 3
Moderator parental collectivism (CP) on induction and reactive aggression.

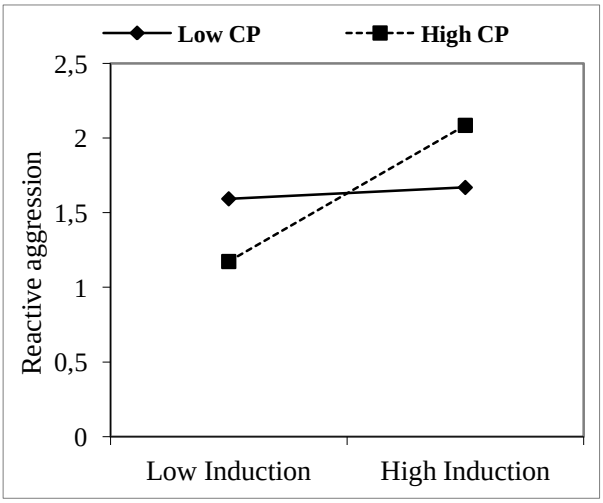


Figure 4
Moderator parental individualism (IP) on induction and reactive aggression.

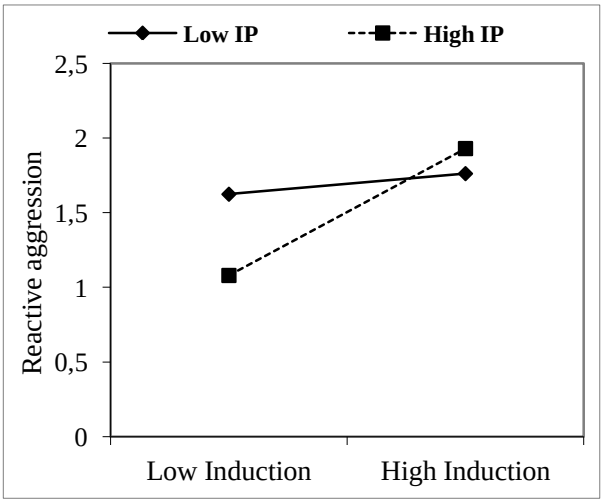
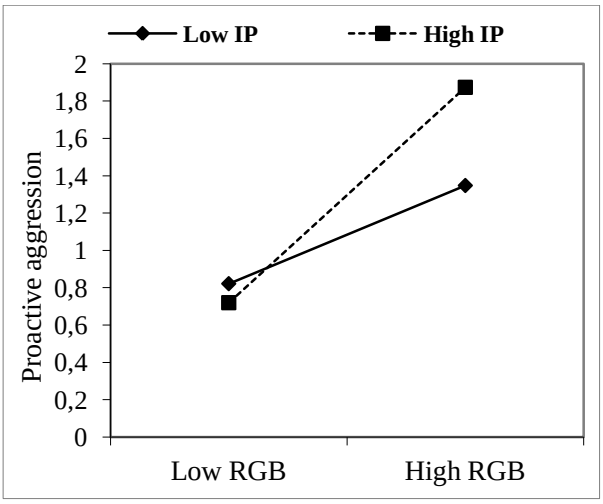


Figure 5
Moderator parental individualism (IP) on reinforcement of good behaviour (RGB) and proactive aggression.



4. Discussion

4.1. Summary

This study showed that parenting practices in the Netherlands and Malaysia did not have equal effects on aggression in Dutch and Malaysian adolescents. The findings showed that induction was a very useful parenting practice for Dutch parents in terms of decreased proactive aggression in their children. On the contrary though, induction was associated with an increase of reactive aggression in Dutch adolescents. Individualistic and collectivistic values in Dutch parents seemed to, generally, have the same effect on the relationship between parenting practices and aggression. By this means we noticed that the parental cultural values in Dutch parents strengthened both favourable and unfavourable effects.

For the Malaysian group our study indicated that none of the parenting practices investigated in this study could be associated with a change in proactive and reactive aggression. When comparing the two groups we further concluded that the parenting practices investigated were not as prevalent for Malaysian parents as compared to Dutch parents.

4.2. Group Differences

Before discussing the findings in more detail we want to direct attention towards the similarities and differences between the Malaysian and the Dutch samples (table 2). Firstly, Malaysian and Dutch adolescents reported the same levels of proactive and reactive aggression. Second, the parenting practices responsiveness and induction were both reported more frequently by Dutch parents compared to Malaysian parents. This is important to keep in mind, when discussing the influential parenting practices in the Dutch sample. Third, regarding parent´s cultural values, we found that Malaysian parents scored more individualistic and more collectivistic than Dutch parents. Interestingly, we found that Dutch adolescents scored more individualistic than Malaysian adolescents.

4.3. Influences on Proactive and Reactive Aggression

In the Dutch group parental use of induction was related to a decrease of proactive aggression in adolescents. This supported our hypothesis which was based on the findings by van Aken et al. (2008). As Pouw et al. (2013) established, proactive aggression is associated with anger and motives of self-gain. Based on our findings we can expect that induction might have been associated with reduced anger levels in adolescents, and furthermore have possibly inspired the adolescents to use other resources than aggression for reaching their goals.

On the contrary, induction was also related to an increase of reactive aggression in Dutch adolescents. This was unexpected because even recent studies reported opposite findings (see Rathert et al., 2015). As we know, reactive aggression is associated with emotion regulation and empathy (Pouw et al., 2013; Dodge, 1991). Hence, we can suspect that induction did not improve emotion regulation and did not lead to an increase in empathy in the Dutch adolescents.

Regarding the Malaysian group the investigated parenting practices were not associated with aggression in adolescents.

4.4. Moderation Effects

Three moderation effects were found in the Dutch sample. Interestingly, parental cultural values strengthened the existing relationship between parenting practices and aggression in adolescents in all three cases.

First, in case of the relationship between induction and proactive aggression, parental cultural values (individualistic and collectivistic) enhanced the favourable effect that induction had on proactive aggression. Consequently, proactive aggression decreased even more under the influence of induction, if parents held collectivistic or individualistic cultural values.

Second, the unfavourable relationship between induction and reactive aggression was strengthened by Dutch parent´s individualistic and collectivistic cultural values. That is to say, induction was associated with higher levels of reactive aggression in adolescents, which was even more pronounced if parents identified themselves as culturally oriented, regardless of being individualistic or collectivistic.

Finally, the relationship between reinforcement of good behaviour and proactive aggression was influenced by parental individualistic orientation only. Here reinforcement of good behaviour was related to higher levels of proactive aggression in adolescents. This relationship was even stronger under the moderating influence of individualism in parents.

We originally hypothesized that parental individualistic and collectivistic cultural values would have opposite effects on the relationship between parenting practices and aggression. Our findings clearly contradicted the hypotheses. The findings suggested that the

parental cultural values, regardless of being collectivistic or individualistic, have the same effect.

Despite higher self-reported cultural values in Malaysian parents, the orientation seemed to be less influential on the relationship between parenting and the adolescent's aggression compared to their Dutch counterparts.

4.5. Limitations

A major limitation of our study was that the parenting practices questionnaire was predominantly based on research that was undertaken in the Netherlands. It seemed likely that the Dutch cultural bias may have been inadvertently integrated in the questionnaire. These might not have corresponded to how Malaysian parents evaluate or practice parenting. It might explain why firstly, Dutch parents claimed to make much more use of the stated parenting practices, and secondly, why there was no significant influence of parenting practices on aggression found for the Malaysian group.

A second limitation of our study was possibly due to cross-cultural response bias. As Tellis and Chandrasekaran (2010) pointed out response bias in cross-cultural studies that are based on self-reports is a severe threat to reliable outcomes. People from different cultures have different strategies or manners of answering questions. There are differences in how important it is to give socially desirable responses, or the tendency to over- or underreport, which is highly influenced by cultural backgrounds. Since all our questionnaires were self-report, the study was at high risk to be subject to such a difference in response behaviour. Therefore we have to be careful with conclusive interpretations when comparing the results of the two cultures (Schwarz, & Oyserman, 2001).

Finally, according to Henggeler (1998), it is important to account for more than one influence on the adolescent, in order to understand the antecedents of aggression. The mixed

results of the present research possibly supported this view. Therefore in future research the parenting practices should be observed next to the adolescent´s personal characteristics, the peer´s influence, and further characteristics of the social environment (Henggeler, 1998; Bornstein, & Lansford, 2010). Especially the Malaysian adolescent´s own cultural values seemed to be highly associated with levels of aggression, and should therefore be investigated. Taking other factors into account will lead to a more refined understanding of the antecedents of proactive and reactive aggression in adolescents.

4.6. Future Research and Conclusion

The mixed findings of the present study indicated that deeper insight about the influence of parental cultural values has to be gained. Future research could e.g., investigate a mediation effect, meaning the direct effect of parental cultural values on parenting practices, and finally the effect of parenting practices on adolescent´s aggression. This model is likely to give us a more detailed understanding of the observed variables.

Summing up, the present study gave us insight into the effectiveness of parenting practices in different cultures. It also showed us that the role of parental cultural values is more complex than originally thought. Hence, parental cultural values as an influence on parenting and on adolescent´s externalizing behaviour stay an interesting as well as crucial topic to explore. Further investigation can be an exciting goal for future research.

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