Relational aggression and physical aggression among adolescent Cook Islands students

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Both physical and relational aggression are characterised by the intent to harm another. Physical aggression includes direct behaviours such as hitting or kicking; relational aggression involves behaviours designed to damage relationships, such as excluding others, spreading rumours, and delivering threats and verbal abuse. This study extended research conducted in New Zealand (Page & Smith, 2012) to explore perceptions of Physical Aggression (PA) and Relational Aggression (RA) of Year 7 to 13 boys and girls (*n* = 443) and their teachers (*n* = 8) in the Cook Islands. It also investigated teachers' strategies used to manage aggression. Using a mixed-methods approach, results indicated that there was no gender difference in the perpetration of PA. Girls, however, were more likely to perpetrate and be targets of RA than were boys, but were more likely than boys to act in prosocial ways. Boys were more likely to be targets of PA. PA and RA were highly correlated for both genders. Finally, teachers' perceptions of RA and PA behaviours corresponded with those of the students, but their perceptions of effective strategies differed from those of the students. The findings are discussed in terms of developing strategies for building healthy relationships within Cook Islands' schools.

Te manako ra tona au taeake e koia tikai aia, ia matou ra, e kite kore aia. Kare paa tona au taeke e kite ana e, te tamaemae ra aia i te tangata. Ka akaranga au e, e tangata viivii e te kino tikai aia.

His friends think he is awesome but we think he is dumb. I don't think his friends realise he is hurting people. I am going to describe him as cruel.

Background

The impression of the South Pacific conjures up images of a picture-perfect paradise, complete with swaying palm trees and friendly, smiling people. The popular image is that of people living in a utopia removed from the challenges faced by those living in an individualistic and competitive world. Once one steps away from the lens of the tourist tropical paradise, however, the reality is more complex. The quote above by a 14-year-old Cook Islands boy, struggling to navigate his way through the relationships of his adolescence, illustrates this point.

The Cook Islands comprise 15 islands with a total population of just fewer than 15,000, of which 12 islands offer some secondary level education (Henry, 2013). The educational system in the Cook Islands delivers a Cook Islands' curriculum but utilises the New Zealand Qualifications Framework for senior school qualifications. The largest island, Rarotonga, has three secondary schools, including the national college that offers the

widest opportunity for education through to Year 13 level. Most students wanting to complete their secondary school education to this level travel to Rarotonga. In 2014, forty-six students from the Pa Enua (the Outer Islands) attended the national college (Government of the Cook Islands, 2014). The Pa Enua are divided into the Southern group (Aitutaki, Mitiaro, Atiu, Mauke, Mangaia) and the Northern group (Manahiki, Penrhyn, Rakahanga, Pukapuka, Nassau, Palmerston). The official languages are English and Cook Islands Māori, with different dialects in the Pa Enua, apart from Pukapuka, which has its own language.

Corporal punishment was prohibited only recently in schools, in article 63 of the Education Act (2009): "A person who is at an educational institution must not – (a) verbally abuse any student who is attending the educational institution; or (b) use force, by way of correction or punishment, against any student who is attending the educational institution" (p.44) The Act was updated in 2012, adding a clause in article 109 (1) that schools must not "(c), require a student of the institution to do an act intended or likely to cause the students pain, discomfort, or humiliation" (p.40).

Although legislative changes have been achieved in the educational sector, corporal punishment remains lawful in the home. The Crimes Act (1969), still in force, states that:

(1) Every parent or person in the place of a parent, and every schoolmaster, is justified in using force by way of correction towards any child or pupil under his care, if the force used is reasonable in the circumstances.
(2) The reasonableness of the force used is a question of fact (Article 61).

However, it should be noted that Article 64 in the Act covers the use of excessive force, and children have some protection from violence and abuse under other provisions in the Crimes Act, the Cook Islands Act (1915), and the Cook Islands Protection of Children Ordinance (1954). Currently, the Crimes Act remains under review and a Family Law Bill is being discussed.

Aggression in Pacific countries

Both physical aggression (PA) and relational aggression (RA) are characterised by the intent to harm another. Physical forms of aggression involve direct behaviours (e.g., hitting, kicking, or punching), relational forms of aggression more indirect behaviours (Dodge, Coie & Lynam, 2006). RA, a term developed by Crick and Grotpeter (1995), involves behaviours that damage relationships and hurt peers (e.g., ignoring, excluding others, spreading rumours). RA, for the purposes of this study, included direct verbal aggression, where the intent was to threaten the social status of another.

Plange, Vakaoti, Finekaso, Schuster and Hughes (2002) reported that residents of most countries within the Pacific, if not all, accept acts of physical aggression, as well as sarcasm, ridicule, and humiliation, as valid forms of discipline. In most countries of the Pacific, the physical punishment of children is defended as being part of local culture. Across Pacific countries, discipline is considered a vital part of good parenting and

punishment is viewed as being for the child's own good (Plange et al., 2002). Although data on RA are not collected in the Cook Islands, the *Cook Islands Global Health Survey 2010 Report* (Ministry of Health, 2014) asked two questions on bullying as part of a comprehensive health survey of all students from Year 8 to Year 13. That report stated that 32% of male students were likely to have been bullied; they were "being hit, kicked, pushed, shoved around, or locked indoors" (p.25). In comparison, only 12.8% of girls reported being bullied in the same way.

Beyond PA, the extent of the different forms of aggression occurring in South Pacific countries is unclear. There has been no research specifically on RA within the South Pacific. The current study begins to address this issue through surveys and interviews of students in middle and high school settings, as well as through interviews with teachers, to investigate perceptions of students' relational and physical aggression as separate behaviours. Although teachers and students have their own perceptions of education, congruent perceptions contribute to an optimal learning environment (Könings, Seidel, Brand-Gruwel & van Merriënboer, 2015).

Aggression beyond Pacific countries

Beyond the Pacific, studies assessing the prevalence of RA and PA across cultures have been conducted by examining their relationships to collectivism and individualism. Individualism is characterised by independence, autonomy, self-reliance, achievement orientation, and competition; whereas, collectivism portrays a sense of duty towards one's group, interdependence, the desire for social harmony, and conformity (Green, Deschamps & Paez, 2005).

Bergmuller's (2013) research across 62 collectivist and individualist countries suggested that variations may be explained by the reinforcement and punishment of aggressive behaviours, and the cultural differences in the acceptance of conflict, where collectivist societies value harmony and strive to avoid conflict. It could be posited, therefore, that by virtue of being indirect actions, levels of RA might be greater in collectivist countries. Österman et al. (1994), in their study of children from Finland, America, and Warsaw, hypothesised that the particular type of aggression children use depends on the children's perceptions of the risks versus gains of using that type of aggression in a given cultural context. This argument rests on an assumption that RA behaviour is based on the importance of social relationships in a culture. Supporting this notion, in a study of Japanese students, Kawabata, Crick, and Hamaguchi (2010) argued that in collectivist cultures, in which intimacy and interdependence in social relationships are stressed, children may be especially likely to favour RA because they recognise the power of this form of aggression to hurt peers.

Conversely, Lansford et al. (2012) studied RA and PA in children aged between 7 and 10 years in China, Colombia, Italy, Jordan, Kenya, the Philippines, Sweden, Thailand, and the United States and argued that because harmony in social relationships is highly valued in collectivist cultures, children in those cultures might be less likely to use RA. However,

their research found that RA in countries regarded as collectivist (e.g., China, Colombia, Thailand) did not differ systematically from countries regarded as individualist (e.g., Italy, United States). Bergmuller (2013), using students' and principals' self-reports from 62 countries, also concluded that there was no relationship between individualistic versus collectivist countries for physical, verbal, or relational aggression from the student data. Principals, however, in the individualist countries reported more PA and verbally aggressive behaviour by students than did their collectivist counterparts.

Differences in aggression by gender and subgroups

Gender differences in PA and RA

Further research relevant to the current study has examined gender differences in PA and RA. In a comprehensive meta-analysis of 148 studies, Card, Stucky, Sawalani, and Little (2008) found that even when significant, gender differences within RA or PA were small, with boys more likely than girls to have engaged in acts of direct aggression, but with little difference between genders for indirect aggression. Basow, Cahill, Phelan, Longshore, and McGillicuddy-DeLisi, (2007) found no gender differences in experiencing PA or RA in college aged students. Bradshaw, Waasdorp and Johnson (2014) reported that overall levels of PA and RA in their study of Grade 9 to 12 students were not too dissimilar, although their results indicated that boys were more likely to experience PA and girls more likely to experience RA. Further, girls were more likely to experience multiple forms of bullying than were boys, and if girls were involved in RA, they were also likely to be involved in PA. Gender differences over the course of development were reported by Kawabata, Tseng, Murray-Close, and Crick (2012), who found that RA increased for girls as they got older, but remained stable for boys. Additionally, Kawabata et al. reported that although PA was stable for boys, it increased for girls, rising over time to equal mean levels of boys by Grade 4.

Popularity and RA and PA

There is a large body of research on the subgroup dynamics of students who engage in RA and PA (e.g., Dawes & Xie, 2014; Farmer, Estell, Bishop, O'Neal & Cairns, 2003; Rodkin, Farmer, Pearl & Acker, 2006). Often, an association between RA, PA, and popularity has been reported, with popularity defined as having visibility and social prestige. Lease, Kennedy, and Axelrod (2002) reported that popularity and social dominance were positively related. Girls and boys perceived as popular were cool and athletic, and socially aggressive. Popularity was a determinant of social power. Further, students in that study appeared to admire the popular students, and wanted to be like them. Similarly, Meisinger, Blake, Lease, Palardy and Olejnik (2007) suggested that, typically, there are clearly identified groups of popular students, identified as possessing qualities such as athletic ability, being "cool," and attractiveness.

There appears however, to be a difference by gender in how toughness affects popularity. Rose, Glick and Smith (2011) identified toughness as central to boys' popularity, where the word tough was used to describe overtly aggressive boys. That definition of tough,

however, has not been linked with popularity for girls. Instead, toughness has been used to describe unpopular girls who use RA (Page & Smith, 2012), and girls with average popularity who engage in PA (Estell, Farmer, Pearl, Van Acker & Rodkin, 2008).

Cross-cultural studies

One of the factors that seems to contribute to the characteristics that identify subgroups may be in part due to how subgroups are understood by adolescents, themselves. Although some research has reported that definitions of subgroups are similar across different cultures (e.g., De Bruyn, Cillessen & Weisfeld, 2012; Hawley, 2003), other research has challenged the cross-cultural stability of those descriptions. For example, cross-cultural studies have indicated that Western descriptions of popularity focus on asserting independence. In comparison, in countries such as China and Brazil, students are more likely to describe popularity in terms of internal qualities, social harmony, and more positive prosocial behaviours (see de Oliveira, Dias, Lisboa, Koller & DeSousa, 2011; Jean-Nestor & Zuo, 2012; Owens, Feng & Xi, 2014; Wright, Li & Shi, 2014). This may be explained by cultural factors of group reinforcement.

Findings from cross-cultural studies also have pointed to a correlation between RA and PA. Lansford et al.'s (2012) research found that children aged 7-10 years in nine countries shared common trends in aggression. Boys were more physically aggressive than girls, but there were no gender differences for RA. Additionally, a significant positive correlation across the nine countries indicated that children who used one form of aggression were likely to use the other form. Kawabata et al. (2010) reported similar findings from their research comparing children from Japan to American children, where children who used PA were likely to be involved in incidences of RA. This relationship was further supported by Card et al.'s (2008) meta-analysis, in which the average correlation between RA and PA in Western industrialised countries was .76.

Research questions

It remains critical, therefore, to understand how adolescents in different countries perceive themselves and others in acts of PA and RA, and also how their teachers perceive and deal with these behaviours. It is equally important to then use this understanding to reduce the use of RA and PA, and diminish their effects when they are used. Therefore, the current research explored these perceptions and the strategies used to address RA and PA with students in Years 7 to 13 in the Cook Islands. A mixed methods design was used to examine the following research questions:

1. How do middle- and high school-aged students engage in and/or experience PA and/or RA? Are there gender differences in perpetrating and/or experiencing PA and/or RA?
2. What are teacher perceptions of how middle- and high school-aged students perpetrate PA and/or RA?
3. What are student perceptions of how middle- and high school-aged students perpetrate PA and/or RA?

4. How do students and teachers differ in their views of effective strategies to address PA and/or RA?
5. How do students describe perpetrators of PA and/or RA? What are any gender differences in these descriptions?

Method

Participants

Participants were a convenience sample of 441 male ($n = 216$) and female ($n = 225$) students from Years 7 to 13 from nine secondary schools in the Cook Islands. They ranged in age from 11 to 19 years, with a median age of 14 years. In terms of ethnicity, 90.4% of the students identified themselves as Cook Islands Māori, 3% NZ European, and 2.3% New Zealand Māori.

The students reported their island affiliation as 37.9% native to Rarotonga, 23.9% native to Aitutaki, and 18.4% native to Mangaia. Many students in the Cook Islands attend secondary school on islands other than their home residence, and so residential information was also collected: 58.5% lived in Rarotonga, 23.1% lived in Aitutaki, 12.0% lived in Mangaia, and 5.9% in Mauke. Eight students and $n = 8$ teachers randomly selected from the Rarotongan sample also participated in interviews. Selection from the main island of Rarotonga was due to the difficulty of travelling to the Pa Enua (the Outer Islands).

Materials

The materials for this study were a brief demographic questionnaire, the Personal Experience Questionnaire (PEQ; Basow, Cahill, Phelan, Longshore & McGillicuddy-DeLisi, 2007) modified with the authors' permission to facilitate local language usage, and semi-structured interview questions (see Appendix). The PEQ comprises 13 items, with 7 RA items, 3 PA items, and 3 prosocial behaviour items. The items are responded to twice: once in terms of the behaviour as a perpetrator, then as a target. The original content for the items had been adapted from peer-nomination instruments designed to assess aggression and social behaviours (Crick & Grotpeter, 1995; Werner & Crick, 1999).

Examples of items regarding being the perpetrator of behaviours included: "How often have you hit someone when fighting?" (PA), "How often have you tried to steal someone's girlfriend or boyfriend when angry with them?" (RA), and "How often have you done nice things for others?" (Prosocial). Examples when worded as being the target of behaviours included: "How often has someone hit you when fighting?" (PA), "How often has someone given you the silent treatment?" (RA), and "How often has someone gone out of their way to help you?" (Prosocial). Responses were recorded using a 7-point scale that ranged from 0 (never) to 6 (always).

Procedure

Consent for this study was obtained from the Cook Islands Research Committee, teachers, student participants and parents. Students were first randomly assigned to counterbalanced conditions (perpetrator/target) for the PEQ. Following the administration of the PEQ and analysis of those data, 8 students ($n = 3$ girls; $n = 5$ boys) and 8 teachers were randomly selected (from Rarotonga) to participate in individual semi-structured interviews lasting approximately 30 minutes each. The interviews explored the results from the PEQ, and the qualitative aspects of the research questions. The female researcher who administered the questionnaires conducted the interviews.

The quantitative data from the demographics and the PEQ were analysed using IBM SPSS Statistics V22.0 (IBM Corp., 2013). The primary statistical techniques included descriptive statistics, independent samples *t*-tests, and correlations. For the qualitative data, transcriptions of the interviews were analysed following Strauss and Corbin's (1998) grounded theory approach, with an iterative approach using constant comparisons to responses, and was an approach consistent with the previous study. Each theme was given a defined parameter to facilitate accuracy in identification. The coded transcripts were entered into overview grids to compare the data across and within the groups interviewed, and permit an examination in relationship to the results from the PEQ.

Results

The first research question concerned how middle- and high school-aged students in the Cook Islands engage in and/or experience PA and/or RA, and whether there are gender differences in perpetrating and/or experiencing PA and/or RA. To identify the prevalence of the aggressive behaviours reported as being perpetrated and experienced by this sample, the mean responses to the individual items on the PEQ were calculated. Table 1 presents the responses to individual items for which the mean response was above 2.0. Scores below this threshold were considered too low to be considered relevant. Table 1 also shows the results of an independent samples *t*-test for each item, using gender as the independent variable and response as the dependent variable. Effect sizes, using Cohen's *d*, are shown for the results with significant differences.

As Table 1 shows, both boys and girls are most likely to report that they are targets of being yelled at or called names. In terms of gender differences, girls were significantly more likely than boys to be the perpetrators of yelling or calling others names and giving others the silent treatment. Girls were also significantly more likely than boys to report receiving the silent treatment. The effect sizes for these three items range from 1/5 to just over 1/3 of a standard deviation. None of the Prosocial items yielded mean responses over 2.0. In terms of PA, only hitting met the criterion for the table; however, the difference by gender was not statistically significant.

To determine whether there were gender differences in the overall types of PA and RA the students employ or experience, subscale scores were calculated for the Prosocial, RA,

Table 1: Results of responses to the individual PEQ items, to identify
the most prevalent aggressive experiences of perpetrator and target

Category of item	Item	Gender	M	SD	t	df	p	d
Target	Yelling at or calling mean names	Male	4.36	2.16	-1.24	440	.21	-
		Female	4.61	2.06				
Perpetrator	Yelling at or calling mean names	Male	3.99	2.29	-2.16	435	.03	.20
		Female	4.44	2.13				
Perpetrator	Silent treatment	Male	2.09	2.13	-3.89	437	<.01	.37
		Female	2.89	2.21				
Target	Intentionally ignoring someone	Male	2.18	2.20	-2.95	440	<.01	.28
		Female	2.80	2.25				
Target	Silent treatment	Male	2.34	2.13	-1.24	438	.22	--
		Female	2.59	2.20				
Target	Passing on negative information	Male	2.14	2.27	-1.68	439	.10	--
		Female	2.51	2.34				
Perpetrator	Hitting	Male	2.24	2.19	0.59	440	.59	--
		Female	2.12	2.26				

and PA items on the PEQ, and Cronbach's alpha was calculated for each subscale. For the seven RA items, Cronbach's alpha was $\alpha = .71$ for RA (perpetrator) and $\alpha = .77$ for RA (target). For the three physical aggression items, $\alpha = .54$ for PA (perpetrator) and $\alpha = .66$ for PA (target). For the three Prosocial items, alpha was $\alpha = .44$ (perpetrator) and $\alpha = .64$ (recipient). The subscale scores were then used as dependent variables in independent samples *t*-tests, with gender used as the independent variable. Means and standard deviations are shown in Table 2.

Table 2: Means and standard deviations for the PEQ
prosocial RA and PA subscales by gender

	Gender	Personal experience			
		Perpetrator		Target	
		M	SD	M	SD
Relational aggression	Male	1.74	1.07	2.15	1.17
	Female	2.06*	1.09	2.58*	1.42
Physical aggression	Male	2.08	1.86	2.27*	1.76
	Female	1.78	1.74	1.57	2.02
Prosocial	Male	4.09	1.46	3.65	1.57
	Female	4.57*	1.38	4.27*	1.51

Note: *$p < .01$ for gender difference

The results in Table 2 indicate that the reported amount of PA perpetrated by boys as compared to girls was not significantly different, However girls were more likely to perpetrate RA than boys, $t(421) = 3.00$, $p < .01$, $d = .30$. Girls were also more likely than boys to be targets of RA, $t(431) = 3.47$, $p < .01$, $d = .33$. Additionally, girls were more likely than boys to report being nice to others, $t(438) = 3.61$, $p < .01$, $d = .34$, and to report that others were nice to them, $t(437) = 4.25$, $p < .01$, $d = 40$. Finally, boys were

more likely than girls to report that they were targets of PA, $t(438) = 3.86$, $p < .01$, $d = .37$. It is noted that the effect sizes were either side of 1/3 of a standard deviation.

To further explore these results, correlations were computed to examine whether there were differences by age. The results indicated that the younger students were more likely to report being targets of PA as compared to the older students, $r(439) = -.12$, $p < .05$. The older students were more likely to report engaging in prosocial behaviours, $r(439) = .14$, $p < .01$ and having others be nice to them, $r(438) = .12$, $p < .05$.

Graphing the results of the subscale scores highlights patterns of the frequencies for perpetrating PA and RA by gender. Figure 1 indicates an increase in frequency for perpetrating PA at the highest end of the scale for males.
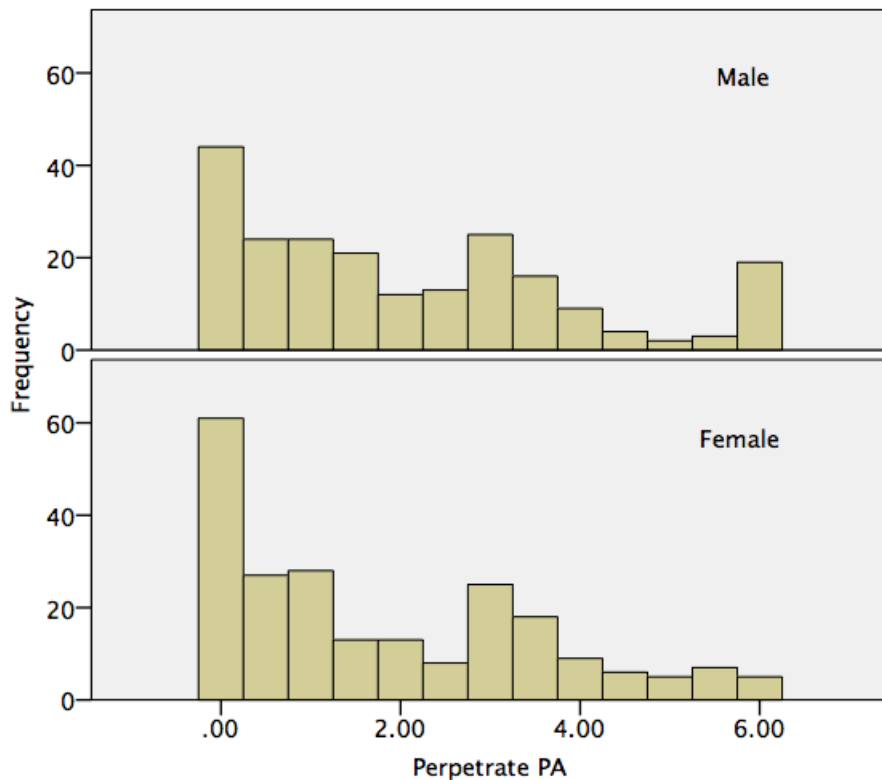

Figure 1: Subscale scores by gender for PA reported as perpetrated

Figure 2 shows the results of the subscale scores reported for perpetrating RA by gender. The responses in Figure 2 indicate that the frequency of aggressive behaviours for RA for boys drops out at the higher end of the subscale, with almost no frequency for scores above 4.5. A small number of girls, however, reported scores at the highest level, 6.
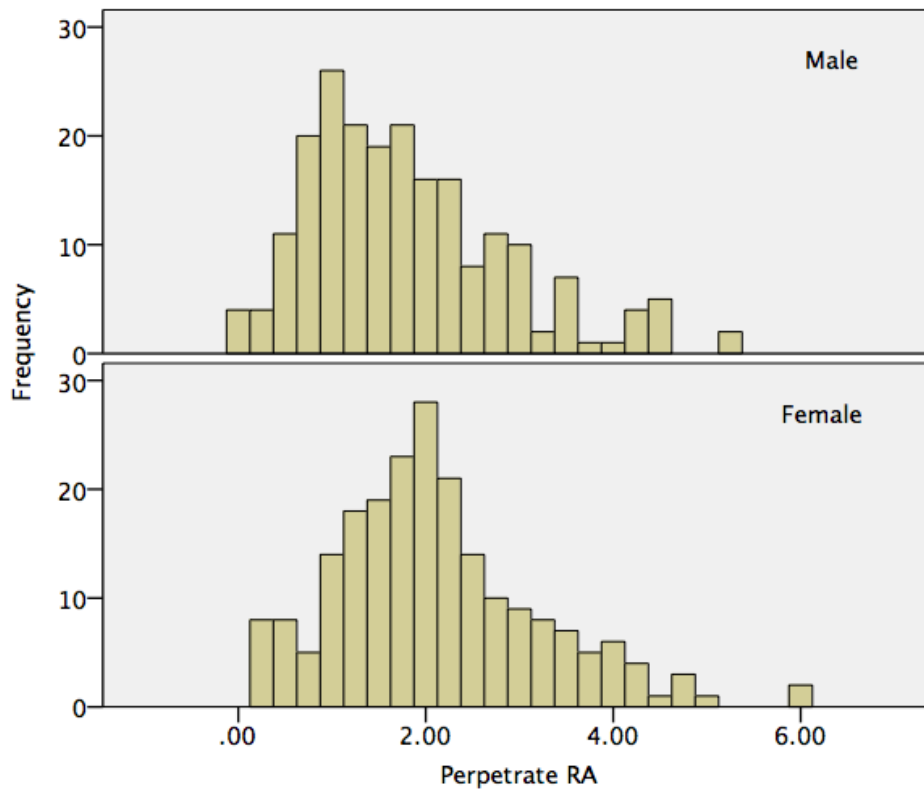
Figure 2: Subscale scores by gender for RA reported as perpetrated

Using correlation, the results were next examined to determine whether students who perpetrated aggressive acts were also the targets of aggressive acts. The analysis indicated that students who reported that they perpetrated PA were likely to also report that they were targets of PA, $r (440) = .43$, $p < .001$. The results were similar for RA, $r (416) = .40$, $p < .001$. Next, students who reported that they perpetrated RA were also likely to report that they were targets of PA, $r (422) = .24$, $p < .001$. Finally, students who reported that they perpetrated PA were also likely to report that they were targets of RA, $r (432) = .35$, $p < .001$. The PEQ results by gender showed these same patterns: both boys and girls who reported perpetrating PA and RA were likely to report being targets of PA and RA.

Interview data

Interview questions were used to investigate the remaining research questions. In terms of teachers' and students' perceptions of how middle- and high school-aged students perpetrate physical and/or relational aggression, the most common behaviour reported by both students ($n = 8$) and teachers ($n = 8$) was direct verbal put-downs (e.g., calling each other names). One gender difference noted by two students and four teachers was that on occasion, boys' verbal putdowns escalated to physical aggression. Girl 1 observed, "He teases around but sometimes he goes overboard and it gets a bit too violent."

The second most aggressive behaviour was threats, which boys were more likely to deliver in a direct manner. Teachers ($n = 4$) and students ($n = 2$) reported that boys used statements such as, "You wait" (Student 3). Four of the teachers reported that girls also were heard to make threats, but not in a direct fashion, such as, "I want to give her a hiding" (Teacher 3) and: "I wanted to smack her one" (Teacher 8). Five students reported that girls were likely to engage in punching. According to four of the teachers, isolation and exclusion was observed with girls but not boys; however, four of the students reported that this behaviour occurred for boys and not for girls.

Both students ($n = 3$) and teachers ($n = 8$) talked about aggression as being normal; five students also mentioned aggression as a means for getting attention. The teachers were marginally more likely ($n = 40$ total statements) to cite occurrences of aggression than students ($n = 36$ total statements). Four teachers also cited the lack of social skills as a reason for students acting in aggressive ways.

In terms of strategies for dealing with aggression, four students stated that talking to a teacher was a good strategy, although they also considered that this did not always work, because, "It doesn't stop, the teasing gets worse" (Girl 1). Other comments included:

> Going to a teacher is hard sometimes because this school is small and we only have a small group to go for help; it is harder here. What if you don't get on with that teacher? Then you are stuck (Girl 3).

> I could have told the teacher. It depends on who the teacher is, how you get on with them, whether you tell them things or not (Girl 1).

Students believed that what the teacher should do to address aggression is to telephone parents. Telling parents would signal that the situation is considered very serious, as Boy 3 noted:

> Kids are scared of their parents. They will give them a hiding if they do something bad, so once the teacher says they will ring, things change – things become different. I know when I tell a teacher that this might happen, so bullying has to be bad to tell a teacher, you have really stepped things up for the bully.

Four students reported that addressing the aggressor immediately was a good strategy. Two students stated that the noise level of the classroom had an impact on the amount of aggression in the classroom, where louder classes meant more opportunity for the perpetrator to act.

Four of the teachers considered the best strategy for the target was to talk to an adult, and for the teachers themselves, the best thing to do was to stop the behaviour straight away. The teachers also understood the process of *restorative justice*, even though this initiative has not been delivered as a professional development option in the Cook Islands for around 10 years. Restorative justice is a problem-solving mediation process focusing on the needs of the victim and offender, where restoration requires acknowledging the harm done to

the relationship and making an effort to repair that harm (Wearmouth, McKinney & Glynn, 2007). Three teachers considered this approach the best strategy to use. Another popular strategy for the teachers was to address aggression from a systems approach. Four teachers promoted this notion with suggestions for a social skills development program and teacher-led school initiatives in assembly. It was also evident that the teachers knew about their students' personal lives and the communities in which they lived, which reflects the Cook Islands in general. Teacher 1 reported on how this had an impact on behaviour management.

> You have got to know your students and understand their personalities, then you can pick up on bad behaviour. A poor teacher lets things go on too long. Small schools here help develop good relationships, and we know our students and their families.

A range of strategies considered effective by both teachers and students is shown in Table 3. It should be noted that several of these strategies support findings by Page and Smith (2012) in an earlier study in New Zealand.

Table 3: Strategies to address aggression in school
considered effective by teachers and students

Strategy	Explication of strategy
Early intervention	Immediately stop RA and PA when observed, thereby potentially avoiding escalation of the behaviours.
Address the behaviour	Talk to the individual or group, taking into consideration the timing in the context of the behaviour.
Engage in school-wide management	Publically offer support to students school-wide to raise awareness of RA and PA; publicise processes and procedures for getting help; practice zero tolerance. At the micro-level, engage in the restorative justice process or the restorative chat.
Teacher involving parents	Involve parents when the situation requires it, with awareness that there is a risk that this might lead to negative outcomes for some students.
Teach prosocial behaviours	Teach prosocial behaviours directly to help students recognise that RA and PA are not acceptable.
Build teacher-student relationships	In addition to school-wide programmes and policies, work toward building positive teacher-student relationships to reduce incidences of RA and PA and encourage students to talk to teachers when they occur.

In analysing the transcripts to identify and describe perpetrators of RA and/or PA, both students ($n = 8$) and teachers ($n = 8$) were consistent in their perceptions. Girls and boys were largely described as being popular, cool ("Others would say he is cool, but he does mean things" – Teacher 4), attractive ("She has the right look" – Girl 3), and as having lots of friends. They are outgoing and other students want to be like them. They have influence over others and are leaders. They want to dominate others and usually this is done via clever argument. Teacher 7 reported an example of a girl who used RA, stating "She is quick on the uptake, so she has all of the power."

Teacher 8 described a boy who was physically aggressive, reporting the following.

> He wants to be the man. He wants to be macho. He has mana [power, prestige] in his village and he brings that to school and wants to let everyone know who he is.

Teacher 2 stated,

> Boys use opportunities to physically fight on the sports field. Cook Islands people are good at using their mouths. Physical violence is hidden.

One theme – swinging between mean and good – was described by students, but not teachers, in which five students reported perpetrators as being mean, but nice at the same time. Boy 2 described one girl's behaviour as:

> … moody, but on some days she is good and then other days she is out of it. She goes through phases of mean and then happy.

Boy 5 reported a boy in his school as "nice and sometimes he is mean and then he doesn't want to know me." Another view was attributed to the type of person the perpetrator was interacting with. Girl 1 stated:

> They are nice to the cool people and not nice to the people they don't think are cool, they are mean to people they don't like.

This was supported by other students, such as Boy 5 again, who reported, "Others don't like him, but his friends think he is awesome."

There was a final group identified by three teachers, of girls who engage in aggressive behaviours as a normal friendship pattern. Students did not identify aggressive behaviours operating within their friendships, however, but attributed aggressive behaviours to students who were clearly in another group to which they did not belong.

Discussion and conclusions

This study set out to identify the types of RA and PA that occur among students in middle and secondary schools in the Cook Islands. It also aimed to identify strategies that teachers and students use to effectively prevent and/or manage incidences of RA and PA in schools. Overall, there were four main findings. The first main finding was that the most prevalent behaviour from the PEQ was an RA item, that of being yelled at or called names.

Next, the results showed that the levels of PA and RA significantly correlated, which supports previous findings by Lansford et al. (2012) and Bradshaw et al. (2014), and discounts premises that collectivist countries (like the Cook Islands) have different rates of RA compared to PA. It might be the case that the influence of television (especially from the United States) and the Internet may be contributing to similar findings (Wiederman, Black, Dolle, Finney & Coker, 2015). Additionally, it was evident that the students in this sample who perpetrated aggression were also receiving it, supporting research by Kawabata et al. (2014). Another important finding was that older students

were more likely to be prosocial, and this could be the outcome of a natural maturation away from early adolescent development.

Third, although most previous findings on gender differences for RA and PA have been reported as small, if significant at all (e.g., Basow et al., 2007), the results from the current study yielded several gender differences with effect sizes of roughly a third of a standard deviation. Girls were more likely to perpetrate and be targets of RA than boys; girls were more likely than boys to act in prosocial ways; and, boys were more likely to be targets of PA. These findings, though perhaps not surprising, suggest that in working with adolescent students to reduce RA and PA behaviours, special attention needs to be given not only to which behaviours are being perpetrated but to the gender involved. It would be an interesting next step to study RA and PA behaviours across genders, that is, girls to boys and vice versa.

Finally, returning to the notion that students in the Cook Islands may not behave as might be expected in collectivist cultures, students and teachers in the current study were consistent in giving an individualist description of aggressive girls and boys as being popular. Results of studies from collectivist countries have tended to describe unpopular students as being linked with aggression (Tseng et al., 2013) and popular students as nice (Schwartz, Gorman & McKay, 2006). Also of note, the students and teachers interviewed did not describe any additional categories or subgroups of aggressors. This differs from other research, in which not only popular, but also unpopular and 'tough' subgroups have been identified (see Estell et al., 2008; Page & Smith, 2012). One explanation for this might be the largely homogeneous nature of the Cook Island people (Townsend, personal communication, 7 January 2015), although with a dispersal of islands over an area of 2 million square kilometres, a national identity cannot be assumed; there also must be a consideration for the Cook Island Māori tribal identities (see Jonassen, 2009).

In terms of strategies, the results were similar to previous findings from Page and Smith (2012), in which students and teachers alike wanted to address any inappropriate aggressive behaviour and do so quickly, which is particularly relevant given recent research by Troop-Gordon (2015) that signified the importance of the teachers' role in mitigating acts of aggression in classrooms. Students suggested talking to a teacher and having a teacher contact parents. Telling a teacher can be problematic, however, as this can at times make the situation worse (Mishna, Weiner & Pepler, 2006).

Parental contact was considered to escalate the likelihood that an incident would get attention and therefore action. This finding is partly in contrast to Denny et al. (2014), who found little evidence that teachers who take action to stop acts of aggression actually worked, and recommended a more active role by bystanders as potentially more effective. Bystander involvement might be an intervention that would be effective in the Cook Islands at a systemic (school) level, especially if combined with the strong Christian values taught in the Cook Islands. However, Stubbs and Tawake (2009) have stated that these Christian values, which are heavily related to tolerance and respect, can also be exclusionary. Teachers considered the best strategy for the target of aggression was to approach a trusted adult, and for teachers, to stop the behaviour when they first observed

it. This last idea supports Bradshaw et al.'s (2014) recent work on how adult supervision of children in school contributes significantly to social control. Of note, the student and teachers did not report any occurrences of cyberbullying in the interviews. Although cell phones are used extensively on Rarotonga, in particular by young people, we cannot comment on this issue given the absence of data in this research.

Several limitations in the study are noted. First, the results may not be generalised to other countries or even to Cook Islanders living outside of the Cook Islands. It is also noted that because Cook Islands Māori is often the first language spoken in homes, the PEQ and interviews having been in English may have been a barrier to accuracy of the results. Social desirability in the responses may also have been an issue, particularly given that prosocial behaviours are highly valued in the Cook Islands. A further consideration is that the limited number of PA items compared to RA items may have skewed the results. There also may have been a bias in the interview sample, given that they were selected only from the main island of Rarotonga.

Even given these possible limitations, this study provides understanding of the nature of aggression in Cook Islands' middle and secondary school students. To date, most of the research in the area of PA and RA as separate forms of aggression has focused on Western individualist populations; the current research offers insight into the ways that aggression compares to that research. It is important, however, to look past whether the culture is collectivist or individualist to what makes sense in current times and contexts. Here, it seems that consideration of which strategies to apply must be determined by a combination of teachers, students, and the wider community (or at least parents).

Schools can and indeed must work with students and the wider community to provide targeted interventions to address RA and PA, as it is well documented that, especially in collectivist countries, the likely result of peer violence and abuse is emotional harm (Kawabata et al., 2010). Further research that measures the efficacy of different interventions would be beneficial in informing how to work toward reducing PA and RA among students just when they are at a sensitive time in their development. For the students in the Cook Islands, those images in the tourist brochures might then become a reality.

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Appendix: Interview questions

1. What do girls do when they want to hurt another girl?
2. What do girls do when they want to hurt another boy?
3. What do boys do when they want to be mean to another boy?
4. What do girls do when they want to be mean to another girl?
5. Can you describe the last time you saw a student acting in an aggressive way?
6. What is the best thing that students can do to do something about the aggression?
7. What is the best thing teachers can do to when they see or hear about aggression?
8. Why do you think students act in these ways? Is it normal?

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