Parenting Practices in Vietnam:

An Investigation of the Psychometric Properties of the PBS-S and PCS

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Abstract

Background. There has been an increase in externalizing problem behaviour in Vietnam over the last decade and parenting has been considered an important factor in the development of problem behaviour in adolescents in Western countries. However, few studies addressed parenting in a Vietnamese context, which may be due to the lack of a validated questionnaire.

Objective. The present study aims to translate and validate a Vietnamese version of the Parental Behavior Scale-Short form (PBS-S) and the Psychological Control Scale (PCS).

Method. We collected data from 529 Vietnamese parents (60% mothers; $M_{age} = 39.50$, $SD = 5.25$), who have children from 10 to 14 years old. A Confirmatory Factor Analysis was used to investigate the factor structure of the combined parenting questionnaires. Afterwards, the subscales Emotional Symptoms, Conduct Problems, and Prosocial Behavior from the Strength and Difficulties Questionnaire (SDQ) were used to establish criterion (i.e., convergent and divergent) validity.

Results. The combination of items of the PBS-S and PCS resulted in a six-factor structure representing the original six scales (PBS-S: Positive Parenting, Discipline, Punishment, Material Reward and Rule Setting; PCS: Psychological Control).

Conclusions. The Vietnamese version of the PBS-S and PCS proved to be valid and will be useful to investigate the perception of Vietnamese parents on their parenting behaviour and the association with psychosocial outcome measures in Vietnamese adolescents.

Key Words: Parenting, Vietnam, Validation study

Introduction

Throughout the literature, parenting is considered a multidimensional construct, consisting out of numerous parenting practices such as, among many others, parental support, punitive control, or rule-setting. This is reflected in different theoretical frameworks (Baumrind, 1991) as well as in numerous studies that have linked different aspects of parenting to several psychosocial variables, such as aggressive behaviour (Gershoff & Grogan-Kaylor, 2016). The associations with child outcomes showed that parenting is crucial in the development of children. Bornstein (1989) stated that parents are responsible for the larger part of the child's experiences, since parent-child interactions occur long before other (formal or informal) social interactions. Given this crucial role of parenting in the development of children it is important to adequately assess parenting practices.

Bronfenbrenner (2005) suggests that both proximal and distal factors are influencing parenting practices and one such important distal characteristic is culture. There is support for cultural differences in parenting practices as well as parenting beliefs (Ho, Bluestein, & Jenkins, 2008). The study by Ho et al. (2008) showed, for example, that the association between harsh parenting and child aggression differed between cultural groups. Specifically, when child reports of the outcome were used a positive association was found in European Canadian families versus a negative association in South Asian Canadian families. When parent reports of aggression were used, the direction remained the same, but the strength of the association did change across ethnic groups. The latter finding is also supported by a study by Gershoff et al. (2010) that found that a variety of parental discipline techniques (e.g., corporal punishment, time-out, love withdrawal) were all positively related to internalizing and externalizing problem behaviour, but that these associations were moderated by a cultural factor, perceived normativeness. In sum, we cannot assume that the parenting concept and related associations can be readily transposed from one cultural context to another and more research is needed in different cultures.

Vietnam is one example of a country in which very little research focuses on parenting and its associations with psychosocial development. One study that has been done in a Vietnamese context, showed that mothers and fathers believed that intrusive parenting, such as physical punishment, could be beneficial in the upbringing of their children (Hang & Tam, 2013). Furthermore, Hang and Tam

(2013) have indicated an increase in externalizing problem behaviour, more specifically school violence (e.g., bullying), in Vietnamese children over the last decade, which has detrimental effects on the psychosocial development of the victims of the bullying (Vu, Petry, Bosmans, 2016). However, it remains unclear which role parents play in the development of this problem behaviour of their child. In this regard, a pressing problem is the lack of psychometrically evaluated assessment tools that were developed or adequately adapted for the respective cultures. In the Vietnamese context there is one study by Del Vecchio, Jersulalmi, and Terjesen (2017) that validated a parenting questionnaire in parents of Vietnamese children aged 2-7 years. However, a parenting questionnaire for parents of early adolescents is lacking.

In general, the multidimensional construct of parenting is split up into three main constructs, namely parental support (similar labels are, among others, responsiveness, positive parenting, parental acceptance), behavioural control and psychological control (Baumrind, 1991). Parental support (or positive parenting) refers to “the extent to which parents intentionally foster individuality, self-regulation, and self-assertion by being attuned, supportive and acquiescent to children’s special needs and demands” (Baumrind, 1991, p. 62). Behavioural control refers to parenting practices that are aimed to restrict or change the child’s behaviour, whereas psychological control refers to intrusive parenting practices to obtain compliance from the child, but which also interfere with the child’s psychological development (Barber, 1996).

The Parental Behaviour Scale (PBS; Van Leeuwen & Vermulst, 2004) is a questionnaire that assesses parental behaviour and has already been used in a European (Meunier, & Roskam, 2007; Van Leeuwen & Vermulst, 2004) and in a South-American context (Manrique Millones, Ghesquière, & Van Leeuwen, 2014). The short version of the PBS consists of the following subscales (PBS-S; Van Leeuwen & Vermulst, 2010): positive parenting, rule setting, discipline, harsh punishment, and material rewarding. All subscales consistently showed good psychometric properties (Van Leeuwen & Vermulst, 2010). According to Van Leeuwen and Vermulst (2004), these subscales, except for material rewarding, tap into two out of three of the aforementioned main constructs, namely parental support (i.e., positive parenting and rule setting) and behavioural control (i.e., discipline and harsh punishment). An adequate measure to assess psychological control as a unidimensional construct is the Psychological Control Scale

(PCS; Barber, 1996), which consists of items pertaining to parenting practices such as constraining verbal expressions, personal attacks, and love withdrawal.

The aim of the present study is to translate and validate the PBS-S (Van Leeuwen & Vermulst, 2010) and PCS (Barber, 1996) in an Asian context, more specifically in Vietnam. We opted for these questionnaires since their combination seems to represent a parenting model that is in line with the three main constructs as suggested by Baumrind (1991). More specifically, we expect a two-level parenting model with six factors, representing the constructs of the two original questionnaires (PBS-S: Positive Parenting, Discipline, Punishment, Material Reward and Rule Setting; PCS: Psychological Control), organized in three higher order factors. The PBS is based on the social interaction theory by Patterson and colleagues (Reid, Patterson, & Snyder, 2002), stating that child problem behaviour (such as conduct problems or poor social skills) is the result of consistent circular, negative interaction patterns, in which children show aversive, negative behaviours which are reinforced by inadequate parenting practices. Therefore, we use conduct problems and prosocial behaviour, which are related to the general psychosocial development of the child, as criterion variables. We expect a positive association between harsh punishment and conduct problems (Gershoff & Grogan-Kaylor, 2016), between psychological control and conduct problems (Janssens et al., 2017), between psychological control and emotional symptoms (Barber, 1996) and between positive parenting and prosocial behaviour (Pastorelli et al., 2016). Negative associations are expected between harsh punishment and prosocial behaviour (Eisenberg, Fabes, & Spinrad, 2006) and positive parenting and conduct problems (Barber, 1996).

Methods

Declaration of conflicting interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Access to Data

The corresponding author takes responsibility for the integrity of the data and the accuracy of the data analysis.

Participants

The present study was approved by the Social and Societal Ethics Committee of KU Leuven (Leuven, Belgium) (G- 2016 01 442) and used a sample of 529 Vietnamese adults (60% mothers; Age : $M = 39.50$, $SD = 5.25$, Range [28-64]) who have children in the 6th, 7th, 8th, or 9th grade (age 10 to 14 years old). The average number of children in one family was 2.18 ($SD = 0.68$). In this sample, 4.8% finished primary school, 6.1% finished lower secondary, 18.5% finished higher secondary school, 56% percent attained a bachelor degree and 14.5% attained master's degree. The participants were recruited through the school of their child. The five schools in which the data collection was conducted, were selected at random. From these schools one parent (mother or father) per student in the aforementioned grades were invited to participate. After obtaining permission from the school director, researchers went to five randomly chosen schools in which they visited the classrooms to provide information on the study to the teachers and children. Afterwards, children received informed consent letters and questionnaires for their parents. The parents filled out informed consents and questionnaires at home independently from the other parent. The completed questionnaires were collected by the researcher through the schools in closed envelopes.

Instruments

All Cronbach alpha's were computed on the present sample.

Parental Behaviour

The Parental Behaviour Scale – short version (PBS-S, Van Leeuwen & Vermulst, 2004; 2010) consists of 25 items and comprises five subscales, namely Positive Parenting (8 items, e.g., “I make time to listen to my child, when he/she wants to tell me something”), Discipline (4 items, e.g., “When my child has been disobedient, I give him/her a chore as punishment”), Harsh Punishment (5 items, e.g., “I spank my child when he/she is disobedient or naughty”), Material Rewarding (3 items, e.g., “I give my child candy as a reward for good behaviour”), and Rule Setting (5 items, e.g., “I teach my child to be polite at school”). All items were rated on a 5-point scale ranging from 1 = (*almost*) *never* to 5 = (*almost*) *always*.

Psychological Control Scale (PCS, Barber, 1996) consists of 8 items (e.g., “I change the subject, whenever my son/daughter has something to say”) and is used to assess parental behaviours that ‘involved manipulation of the love relationship between the parent and the child as a means of controlling child behaviour’ (Barber, 1996, p3297). The original questionnaire uses child reports and was assessed on a 3-point Likert scale. In the present study, the items were adapted to the viewpoint of the parent (“My mother (father)” was replaced by “I” and “I” was replaced by “my son/daughter”) and were assessed on a 5-point Likert scale (ranging from 1 = (*almost*) *never* to 5 = (*almost*) *always*) for the sake of uniformity with the items from the PBS-S.

Prosocial and Problem Behaviour

The Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) consists of 25 items, representing 25 psychological attributes, equally divided over five subscales. The five subscales are Emotional Symptoms (Cronbach’s $\alpha = .68$; e.g., “Often unhappy, down-hearted or tearful”), Conduct Problems (Cronbach’s $\alpha = .61$; e.g., “Often fights with other children or bullies them”), Hyperactivity/Inattention (Cronbach’s $\alpha = .64$; e.g., “Easily distracted, concentration wanders”), Peer Relationship Problems (Cronbach’s $\alpha = .16$; e.g., “Generally liked by other children”), and Prosocial Behaviour (Cronbach’s $\alpha = .65$; e.g., “Helpful if someone is hurt, upset or feeling ill”). Parents indicate on each item whether the statement is “Not True”, “Somewhat True”, or “Certainly True”. Most Cronbach’s α ’s fall in the category of questionable reliability (e.g., $.60 < \alpha < .70$), which is in line with previous research (Stone et al., 2010), except for peer relationship problems, which has a very low reliability and will not be included in further analyses. The present study used the Vietnamese version of the SDQ for the ages 4 to 17 years.

Translation Procedure

The translation procedure was designed using suggestions from Van Widenfelt, Treffers, de Beurs, Siebelink and Koudijs (2005). The questionnaires were translated by two Vietnamese natives who were fluent in English and who had experience with both the Vietnamese and Western culture. The translation of each item was discussed and the translators came to an agreement on the best version of

the translated items. The back-translation was done by an independent translator with the same characteristics. A pilot study with 20 participants, recruited in the Vietnamese community at the University of Leuven who were fluent in both English and Vietnamese, was conducted in order to test the preliminary version of the Vietnamese questionnaires. The participants were asked for individual feedback on both the content and the language of the items. The proposed changes concerned issues of wording that sounded too formal in Vietnamese. Concerning the content of the items, all participants agreed on their relevance for assessing parenting in Vietnam. The researchers discussed these suggestions and adapted the items accordingly.

Statistical Analyses

Confirmatory Factor Analysis (CFA) was used to investigate the validity of a model with six factors (i.e., five factors in the PBS-S and one in the PCS). Model fit was assessed using four model fit indices, which are, the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), the Root Mean Square Error of Approximation (RMSEA), and the Standardized Root Mean Squared Residual Error (SRMR) (Chen, 2008). Concerning the CFI/TLI, a value above .90 is deemed an acceptable fit, but a value above .95 is preferred. Concerning the RMSEA, a value below .08 indicates an acceptable fit, but a value below .05 is preferred. Concerning, the SRMR, a value below .08 is indicative of a good model fit (Browne & Cudeck, 1992; Hu & Bentler, 1999). These cut-off values are a rule of thumb and come with a few caveats. For instance, when RMSEA values of the null model fall below .158 and RMSEA values of the hypothesized model approximate .05, CFI/TLI estimates are uninformative and are unlikely to exceed the generally suggested cut-off of .90 (Kenny, 2015). Because the CFI/TLI is an incremental fit index, it is based on the improvement in model fit of the hypothesized model in comparison with the null model. If the null model already shows a reasonable model fit (i.e. $RMSEA < .158$), the potential improvement in model fit is more modest. Even if the model fit of the hypothesized model is good in absolute terms, the CFI/TLI will not exceed .90 because the limited relative improvement in model fit (Kenny, 2015). When good overall model fit was established, we examined the standardized factor loadings and R^2 of the indicators in order to evaluate whether they were necessary in the model.

After we arrived at a final model, the problem of shared method variance was assessed. Because

parents reports were used for both the parenting and the child behaviours, it was possible that results from the analysis are invalid due to the problem of shared informant/method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). This entails that associations between variables are biased due to the fact that one common method (i.e., questionnaire reports from one informant) was used to obtain the data. In other words, the data reflects the used method rather than the association between the intended variables (i.e., parenting and child behaviour). Harman's single factor test checks how much of the total variance is explained by one factor, representing the common method. If the factor explains more than 50% of the variance, any further statistical analyses will likely yield biased results.

Next, Cronbach's alpha criteria of excellent ($> .90$) good ($> .80$), acceptable ($> .70$), questionable ($> .60$), poor ($> .50$), and unacceptable ($< .50$) were used to evaluate internal consistency (Cronbach, 1951). Finally, criterion validity was determined using Pearson product-moment correlations. More specifically, the correlations between the parenting variables and the subscales Emotional Symptoms, Conduct Problems, and Prosocial Behaviour of the SDQ were calculated. The confirmatory factor analysis was conducted in MPlus version 7 (Muthén & Muthén, 2012). In MPlus, the issue of missing values was handled with the Full Information Maximum Likelihood (FIML) method. Furthermore, the robust maximum likelihood estimator (MLR) was chosen in order to take into account non-normality of the data. The analyses concerning shared method variance, criterion validity, and reliability were conducted in SPSS version 24.0 (IBM Corp, 2016).

Results

Confirmatory Factor Analysis

In order to evaluate the usefulness of the CFI/TLI model fit index, the null model was tested. The RMSEA of the null model was .125, which falls below of the suggested .158 (Kenny, 2015). This means that the CFI/TLI can mathematically not exceed the .90 criterion and thus is not informative for model fit. The hypothesized model consisted of six factors: psychological control, positive parenting, discipline, rule setting, material rewarding, harsh punishment. The SRMR and RMSEA of the proposed six-factor model indicated good model fit (RMSEA = .047 90% CI: [.043-.051], SRMR = .071, CFI = .866, TLI= .853), with the CFI/TLI falling below .90 as expected. In conclusion, the six-factor model

showed good model fit.

After establishing a good overall model fit, we looked at the standardized factor loadings of the six-factor model, which are presented in Table 1. Additionally, we also looked at the R^2 values (See Table 2) of each indicator, which reflects the proportion of the variance that was explained by the factor on which the indicator loads. Three factor loadings (i.e., pcs1, pcs2, rul6) fell below the cut-off point of .4 as suggested by Stevens (1992). When we assessed the R^2 values of these indicators (See Table 2), we saw that the proportion of variance explained by the underlying factor was not significant for only one indicator (i.e., pcs1). After omitting the first item of the psychological control scale, the model fit was slightly better (RMSEA = .044 90% CI: [.040-.048], SRMR = .066, CFI = .885, TLI = 0.873). The factor loadings of the adapted model are presented in Table 3. By default, this indicator was omitted from the respective factor for the remainder of the analyses.

Table 1

Standardized Factor Loadings (and Standard Errors) of the Indicators per Latent Construct in the Original Model

Item	Factor					
	Psychological control	Positive parenting	Discipline	Punishment	Material reward	Rule Setting
Pcs1	.141 (.060)					
Pcs2	.279 (.046)					
Pcs3	.646 (.036)					
Pcs4	.674 (.039)					
Pcs5	.673 (.036)					
Pcs6	.737 (.033)					
Pcs7	.730 (.034)					
Pcs8	.608 (.041)					
Pos1		.599 (.044)				
Pos2		.639 (.040)				
Pos4		.529 (.048)				
Pos5		.576 (.039)				
Pos6		.585 (.040)				
Pos7		.654 (.033)				
Pos10		.627 (.036)				
Pos11		.530 (.045)				
Dis1			.627 (.048)			
Dis3			.576 (.046)			
Dis4			.587 (.051)			
Dis6			.690 (.046)			
Pun1				.735 (.037)		
Pun2				.648 (.039)		
Pun3				.744 (.035)		
Pun4				.688 (.036)		
Pun5				.738 (.030)		
Re1					.570 (.051)	
Re2					.616 (.054)	
Re3					.583 (.061)	
Rul1						.723 (.036)
Rul2						.740 (.041)
Rul4						.636 (.045)
Rul5						.648 (.043)
Rul6						.365 (.055)

Note. Pcs= psychological control scale; Pos= positive parenting ; Dis= Discipline; Pun= Harsh punishment; Re= Material rewarding ; Rul= Rule setting

Table 2

R² Values for the Separate Indicator Variable in the Six-Factor Model.

Indicator variable	Estimate	SE	p
Pcs1	.020	.017	.231
Pcs2	.078	.026	.003
Pcs3	.418	.047	< .001
Pcs4	.454	.053	< .001
Pcs5	.453	.049	< .001
Pcs6	.543	.048	< .001
Pcs7	.533	.049	< .001
Pcs8	.370	.050	< .001
Pos1	.359	.053	< .001
Pos2	.409	.051	< .001
Pos4	.280	.051	< .001
Pos5	.332	.045	< .001
Pos6	.342	.043	< .001
Pos7	.427	.043	< .001
Pos10	.393	.046	< .001
Pos11	.280	.048	< .001
Dis1	.393	.060	< .001
Dis3	.331	.053	< .001
Dis4	.345	.060	< .001
Dis6	.477	.063	< .001
Pun1	.540	.055	< .001
Pun2	.420	.051	< .001
Pun3	.554	.051	< .001
Pun4	.473	.050	< .001
Pun5	.545	.044	< .001
Re1	.325	.058	< .001
Re2	.380	.066	< .001
Re3	.340	.071	< .001
Rul1	.532	.054	< .001
Rul2	.561	.061	< .001
Rul4	.394	.057	< .001
Rul5	.413	.055	< .001
Rul6	.133	.040	.001

Note. Pcs= psychological control scale; Pos= positive parenting ; Dis= Discipline; Pun= Harsh punishment; Re= Material rewarding ; Rul= Rule setting

Table 3

Standardized Factor Loadings (and Standard Errors) of the Indicators per Latent Construct in the Adapted Model

Item	Factor					
	Psychological control	Positive parenting	Discipline	Punishment	Material reward	Rule setting
Pcs2	.272 (.045)					
Pcs3	.648 (.036)					
Pcs4	.675 (.039)					
Pcs5	.673 (.036)					
Pcs6	.736 (.033)					
Pcs7	.730 (.034)					
Pcs8	.606 (.041)					
Pos1		.639 (.040)				
Pos2		.600 (.044)				
Pos4		.529 (.048)				
Pos5		.576 (.039)				
Pos6		.585 (.040)				
Pos7		.654 (.033)				
Pos10		.627 (.036)				
Pos11		.529 (.045)				
Dis1			.627 (.048)			
Dis3			.576 (.046)			
Dis4			.587 (.051)			
Dis6			.690 (.046)			
Pun1				.735 (.037)		
Pun2				.649 (.039)		
Pun3				.744 (.035)		
Pun4				.687 (.036)		
Pun5				.738 (.030)		
Re1					.570 (.051)	
Re2					.616 (.054)	
Re3					.583 (.060)	
Rul1						.723 (.036)
Rul2						.740 (.041)
Rul4						.636 (.045)
Rul5						.648 (.043)
Rul6						.365 (.055)

Note. Pcs= psychological control scale; Pos= positive parenting ; Dis= Discipline; Pun= Harsh punishment; Re= Material rewarding ; Rul= Rule setting

In previous research, the included subscales are conceptualized to load on second-order factors, which are positive parenting, behavioural control, and psychological control. In the present model positive parenting consisted of positive parenting and rule setting, behavioural control consisted of discipline and harsh punishment, and psychological control consisted of the unidimensional scale psychological control. Results showed that this second-order model showed acceptable fit (RMSEA= .061; CFI= .799, SRMR= .074). Note that here also, the CFI/TLI remains uninformative due to relatively

good fitting null model.

After the confirmatory factor analysis, the Harman's single order test (Podsakoff et al., 2003) checked whether common method bias posed a problem in the adapted model. The single factor explained 17.18% of the total variance. This is well below the 50% cut-off, and thus, we can assume that common method bias is not a significant problem in the remainder of the analyses.

Reliability

The Cronbach's alphas are presented in Table 4. Three subscales (i.e., α psychological control = .81, α positive parenting = .81, and α harsh punishment = .84) showed good reliability. Two subscales showed acceptable reliability (i.e., α discipline = .75 and α rule setting = .74). The subscale material rewarding showed a Cronbach's alpha of .62, which reflected a questionable reliability.

Table 4

Cronbach's Alpha for the Factors (After Adaptation)

Factor	Cronbach's Alpha
Psychological control	.805
Positive parenting	.812
Discipline	.706
Harsh punishment	.835
Material rewarding	.617
Rule setting	.742

Criterion Validity

There were no significant differences in mean subscale scores between mothers and fathers who filled out the parenting questionnaire (See Table 5). Therefore, it was decided to use the sample as a whole in the analyses concerning the criterion validity. The Pearson correlations between the parenting practices and child behaviours are presented in Table 6. The hypotheses were confirmed with significant weak to medium positive associations between harsh punishment and conduct problems, between psychological control and conduct problems, between psychological control and emotional symptoms and between positive parenting and prosocial behaviour. Furthermore, weak to medium negative associations were found between harsh punishment and prosocial behaviour and between positive parenting and conduct problems.

Table 5

Independent Samples T-Test to Assess Differences Between Mothers and Fathers on Six Parenting Dimensions.

	<i>t</i>	<i>df</i>	<i>p</i>	<i>MΔ</i>	<i>SEΔ</i>	95% Confidence Δ	
						Lower	Upper
Positive parenting	-1.62	491	.107	-.108	.067	-.239	.023
Discipline	-0.70	489	.485	-.058	.083	-.222	.105
Harsh Punishment	0.75	488	.453	.060	.079	-.096	.215
Material rewarding	-0.56	488	.579	-.047	.085	-.215	.120
Rule setting	-1.19	488	.236	-.078	.065	-.206	.051
Psychological control	-0.58	480	.565	-.044	.077	-.195	.107

Table 6

Pearson Product-Moment Correlations Between Parenting Practices and Child Behaviours

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Emotional symptoms (1)	1										
Conduct problems (2)	.491*** < .001	1									
Hyperactivity/inattention (3)	.281*** < .001	.454*** < .001	1								
Peer relationship problems (4)	.326*** < .001	.302*** < .001	.257*** < .001	1							
Prosocial behaviour (5)	-.106* .018	-.206*** < .001	-.295*** < .001	-.103* .023	1						
Psychological control (6)	.437*** < .001	.471*** < .001	.234*** < .001	.213*** < .001	-.202*** < .001	1					
Positive parenting (7)	-.147** .003	-.190*** < .001	-.133** .003	-.208*** < .001	.290*** < .001	-.322*** < .001	1				
Discipline (8)	.196*** < .001	.218*** < .001	.183*** < .001	.005 .910	-.147*** .001	-.316*** < .001	-.118** .008	1			
Harsh punishment (9)	.453*** < .001	.485*** < .001	.272*** < .001	.288** < .001	-.217*** < .001	.573*** < .001	-.290*** < .001	.414*** < .001	1		
Material rewarding (10)	.142*** .002	.152*** .001	.086 .057	-0.12 .791	.026 .559	.151*** .001	.274 < .001	.057 .200	.196*** < .001	1	
Rule setting (11)	-.124** .006	-.148** .001	-.088 .057	-.234*** < .001	.148** .005	-.227*** .001	.495*** < .001	.011*** .805	-.284*** < .001	.159*** < .001	1

Note. Shaded area indicates the correlations mentioned in the hypotheses concerning predictive validity

* $p < .05$ ** $p < .01$ *** $p < .001$

Discussion

The present study aimed at validating widely used questionnaires on parenting practices, the PBS-S and PCS, in a Vietnamese context. After following a comprehensive translation procedure, 529 parents of children in the 6th, 7th, 8th, or 9th grade (age 10 to 14 years old) were asked to fill out the questionnaires. The data was used a) to test a six-factor structure of parenting practices in the Vietnamese sample, b) to examine the reliability of each subscale, and c) to assess criterion validity using child psychosocial behaviour as criterion variable.

The present study opted to include two questionnaires in order to represent a parenting model that is in line with Baumrind's parenting model (1991), comprising three main parenting constructs, namely parental support (or positive parenting), behavioural control and psychological control. The Parental Behavioural Scale - Short version (Van Leeuwen & Vermulst, 2010) consists of five subscales (positive parenting, discipline, harsh punishment, material rewarding, setting rules) and taps into the first two constructs, whereas the Psychological Control Scale (Barber, 1996) is a unidimensional questionnaire assessing psychological control. In the present study, we showed that the combination of items of both scales resulted in a six-factor structure representing the original six subscales. Furthermore, we also replicated the higher-order structure of parental support (or positive parenting), behavioural control, psychological control. This can be interesting for future studies if researchers want to investigate general concepts that are more closely related to the theoretical framework of Baumrind (1991).

When we take a closer look at the underlying indicators, only one item did not fit its original scale, which is "*I am always trying to change how my child feels or thinks about things*". This indicator is the first item on the psychological control scale and may load low on this factor because parents changing the opinion of their child is more covert and can be part of a long term process. In comparison, other items on the psychological control scale, such as "*I will avoid looking at my child when he/she have disappointed me*" and "*I interrupt my child*" reflect more intrusive, and thus more overt forms of psychological control. In this respect, the first item can potentially be omitted, because it reflects only to a limited extent the intrusive parenting practice, that psychological control is thought to be. Furthermore, people who experienced the Western and Vietnamese culture, indicated that it is common

in Vietnamese culture to be very directive in their parenting. As such, it is possible that Vietnamese parents did not see this item as an intrusive parenting practice. There were statistical as well as theoretical grounds to remove the item from the psychological control scale. This is also supported by a study on authoritarian parenting style in individualistic versus collectivistic cultures (Sorkhabi, 2012), which suggests that very strict parenting can be seen as a sign of affection and concern in collectivistic cultures and that it is not related to child maladjustment.

Internal consistency as an indicator of reliability, was acceptable to good for five out of six scales. The internal consistency of the reward subscale appeared to be questionable, which is in line with the validation of this subscale in a Peruvian context (Manrique Millones, Ghesquière, & Van Leeuwen, 2014). Field (2009) suggested that the low number of items in the subscale could (partially) explain this low reliability. Furthermore, the Vietnamese version of the PBS-S and PCS showed adequate criterion validity. Consistent with the literature, we found significant associations between, on the one hand, conduct problems and on the other hand harsh punishment (negative), psychological control (negative), and positive parenting (positive) (Barber, 1996; Gershoff & Grogan-Kaylor, 2016; Janssens et al., 2017). The positive association between positive parenting and prosocial behaviour (Pastorelli et al., 2016) as well as the negative association between harsh punishment and prosocial behaviour were also replicated (Eisenberg, Fabes, & Spinrad, 2006). This provides support for the practical usability of these questionnaires, which is important in the Vietnamese context, because there are few studies on the associations between parenting practices and developmental outcomes.

Concerning the parenting dimensions that were not used to establish criterion validity, we observed associations for rule setting and discipline that were in line with the literature. The former is considered to be a proactive form of parenting aimed at preventing unwanted adolescent behaviour, which has been shown to be beneficial in the development of the adolescent (Janssens et al., 2015), whereas the latter showed positive associations with negative adolescent behaviour (i.e., conduct problems, emotional symptoms, hyperactivity/inattention), but a negative association with prosocial behaviour. The subscale material rewarding showed interesting positive associations with both emotional symptoms and conduct problems. This parenting dimension is thought to represent rewarding of positive adolescent behaviour, but it appears to be associated with negative adolescent behaviour.

One possible explanation is that material rewarding is not beneficial without emotional reward, but further research is needed to gain more information on this parenting dimension.

Overall, the questionnaires proved to be valid in a Vietnamese context. This is an important contribution to research in Vietnam, because, to our knowledge, no validated parenting questionnaires were available for use in early adolescence so far. These questionnaires will aid future studies by giving a detailed picture of parenting practices and enable researchers to investigate associations with a wide range of developmental outcomes. The implications also go beyond academic research. This parenting questionnaire can help identify families who may benefit from a parenting intervention program to promote effective parenting practices and as a consequence, adolescent well-being. Furthermore, this questionnaire can be used to evaluate parenting programs by assessing the pre versus post change in parenting practices. However, parenting prevention and intervention programs are not well established in Vietnam at this time and more research is needed in order to adequately develop them.

Limitations

The present study only used self-report measures for the parenting practices and parent reports on their child's (problem) behaviour, which could induce social desirability bias. It is possible that parents underreport socially less accepted parenting practices, such as emotionally manipulating the child, as well as unwanted child behaviours, such as bullying other children. Related to this issue is that the data was obtained from one informant, that is the mother or the father. Despite the fact that it is not a problem statistically speaking as indicated by the Harman's single factor test, a multi-informant design could give more information and provide a more detailed picture of the parenting practices of Vietnamese parents. If future studies can, for example, obtain data from adolescents on parenting behaviour, it would prove to be an added value because it is likely that child reports on parenting would differ from parent reports on the same parenting practices (Leung & Shek, 2014). Furthermore, the validation of the parenting questionnaires would have benefited from convergent validity with another questionnaire on parenting practices. Providing a validated and reliable questionnaire on parenting practices in adolescence is an important contribution to the parenting literature, more specifically in Vietnamese context. The question remains to which extent a questionnaire that was designed in a

Western culture can capture all relevant parenting practices in another culture. A suggestion for further research is therefore a more thorough examination of parenting in Vietnam, for example by interviewing experts and parents, or through observation of real-life parenting situations.

Conclusion

Parenting is a crucial factor in the upbringing of a child, hence, it is of utmost importance that it can be investigated appropriately. Given the cultural differences in parenting, it is necessary to use instruments that are validated in the specific culture. The present study shows evidence that the Vietnamese versions of the PBS-S and PCS are reliable and valid instruments to investigate parenting practices. Specifically, measures of internalizing problem behaviour, externalizing problem behaviour and prosocial behaviour were used to establish convergent as well as divergent validity. These questionnaires have a strong theoretical basis and they are able to provide a detailed picture of parenting. The present study provides the groundwork on which future studies can build to describe parenting practices in Vietnam and consequentially investigate potential cultural differences in more detail. Furthermore, the questionnaires will aid in investigating the influence on the development of a child and will be useful instruments in future intervention programs.

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