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The Parenting Behaviours and Dimensions Questionnaire – Factor Structure and Psychometric Properties of the Polish Version

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Abstract

The aim of the study was to examine the factor structure, internal consistency, and other psychometric properties of the Polish version of the Parenting Behaviours and Dimensions Questionnaire (PBDQ). In two studies, 1035 Polish parents of children between 6 months and 12 years of age completed the PBDQ, a sociodemographic questionnaire, and two measures (resilience and emotional control) to examine external validity. Exploratory and confirmatory factor analyses support a six-factor model of parenting dimensions, including emotional warmth, punitive discipline, anxious intrusiveness, autonomy support, permissive discipline, and democratic discipline. The results indicate that the Polish adaptation of the PBDQ has good reliability and validity. This measure allows for an alternative assessment of parental behaviours among Polish parents based on these positive and negative dimensions. The findings highlight the relationship between parental behaviours and other parent and child variables.

Keywords: parental attitudes, parenting behaviours, PBDQ, psychometrics.

Introduction. Parental attitudes

Of all the tasks in adulthood, parenthood is arguably the most difficult and complex. It is defined as the upbringing of children by their parents, who also take responsibility for their emotional, social, intellectual, and physical development (Phillips et al., 2017; Massar & Patil, 2019). For many years, researchers have been interested in the issues related to parental practices, which have been described using different terminology, such as parenting (Rodriguez et al., 2022), parenting styles (Baumrind, 1971; Hou et al., 2020), parental attitudes and dimensions (Reid et al., 2015), or parental practices (Smokowski et al., 2015). Most measures intended to assess parental behaviour are based on the theoretical concept of the parenting style typology created by Diana Baumrind (1971). Parenting styles describe the ways and methods parents use to influence children, which have remained relatively constant over the years. Most research in this area has been based on a two-dimensional socialisation model (demandingness and responsiveness) using four styles, namely authoritative, authoritarian, permissive, and neglectful style (Zulkefly et al., 2021). However, this model has been criticised. First, parenting styles in this sense are only a characteristic of the parent and not of the parent-child relationship, which implies a one-way action of the parent on the child (Baumrind, 1971). Second, these styles allow to treat parental interactions only in terms of stability over time, omitting several other aspects known to influence parenting styles, including demographic factors or cultural differences (Phillips et al., 2017). Therefore, many researchers prefer to consider parenting in terms of dimensions, behaviours, and parental attitudes (Reid et al., 2015). The concept of parental attitudes has emphasised the role of reciprocity in parent-child interactions and has drawn attention to the importance of the parent and child characteristics (e.g. age, gender, personality traits, emotionality, reactivity) (Plopa, 2008). The division of parenting styles according plausible parental dimensions has been confirmed by factor analyses (Reid et al., 2015; Phillips et al., 2017). The emotional component plays an important role and determines the direction of the parent's behaviour towards the child. In addition, parental attitudes demonstrate more plasticity and changeability over time, and the intensity of parental attitudes changes according to the child's developmental stage.

More in-depth study of parenting should allow researchers to understand it better (Phillips et al., 2017).

Development of tools enabling multidimensional assessment of parenting can bring theoretical and practical benefits (Skinner et al., 2005; Zulkefly et al., 2021). Based on theoretical conceptualisations of parenting and psychometric evaluations of other measures available to study parenting styles, attitudes, and behaviours, Reid et al. (2015) developed a new tool to assess parental behaviour and dimensions in contemporary parents. The PBDQ (Parental Behaviour and Dimensions Questionnaire) distinguishes six dimensions and parenting behaviours crucial to contemporary parenting. The authors emphasise the importance of using disaggregated parenting dimensions rather than an aggregation of styles. Reid et al. (2015) characterise positive parenting with dimensions such as emotional warmth, autonomy support, and democratic discipline, and negative parenting with punitive discipline, permissive discipline, and anxious intrusiveness.

Previous studies on positive parental attitudes have identified a strong relationship between positive, accepting, warm parental behaviours and the development of secure attachment and self-regulation in the child (Zeinali et al., 2011), as well as higher level of social competence and self-esteem in children and adolescents (Milevsky et al., 2007). Other studies (Zhou et al., 2002) have confirmed a relationship between parental warmth, positive expressiveness and empathy and higher social functioning in children. Recent studies also have found that parental warmth is positively, and hostility negatively, associated with children's executive functioning skills (Lam et al., 2018). Moreover, some studies confirm that parental warmth during childhood can predict coping and well-being in adulthood (Moran et al., 2018) and health status in later adulthood (Alen et al., 2020). On the other hand, negative dimensions and parental behaviour can be strong predictors of behavioural problems in children (Stormshak et al., 2000). Punitive parenting has a negative effect on children and adolescents, leading to such problems as low self-esteem, decreased happiness, decreased academic success, increased alcohol and drug use, and increased anxiety (Eisenberg et al., 2015; Yaffe, 2018). Various studies have found that negative parenting and lack of acceptance and parenting warmth contribute to high level of hostility and verbal and physical aggression (Ruiz-Hernández et al., 2018; Lasota, 2019). Interestingly, permissive

maternal parenting have been related to child psychopathology and externalizing symptoms (Eisenberg et al., 2015). Other parental behaviours, particularly overprotection and anxiety about small children, have been more consistently linked with internalizing symptoms, such as anxiety in adolescents (Wolk et al., 2016).

The above findings suggest that positive parental behaviours and attitudes are conducive to the proper cognitive and socio-emotional development of children, while negative parental dimensions increase the likelihood of developmental disorders or dysfunction. Therefore, it is of great importance to develop new and better instruments to effectively assess parenting styles.

The PBDQ is used to assess the parental behaviours and attitudes of parents of children with typical and atypical development. For example, (Djordjevic et al., 2020) investigated the relationship between positive and negative parental attitudes and aggression in children with autism spectrum disorder. The results showed that punitive discipline of parents was associated with the severity of verbal and physical aggression in children with ASD. Parents' anxious intrusiveness was also positively correlated with children's aggressive behaviour.

The aim of the study

The aim of our study is to confirm the psychometric properties of the Polish version of the Parenting Behaviours and Dimensions Questionnaire (PBDQ), an instrument used to test parental attitudes. The aim is also to check whether the tested factors correspond to the parental dimensions and to confirm the reliability of subscales measuring attitudes/dimensions of parenting behaviours.

Method

Participants and data collection

A pilot study (Study 1) was carried out before the main study (Study 2) was conducted. In Study 1, we collected data with a battery of questionnaires using the paper-and-pencil method. The questionnaires were distributed

to parents of children attending kindergartens and primary schools in the southern part of Poland. The study sample consisted of 323 Polish parents of at least one child 3 to 12 years of age ($M = 7$, $SD = 2.7$; 54% daughters, and 46% sons); 80% of the respondents were female ($N = 259$) and 20% male ($N = 64$), aged 22 to 52 ($M = 35.6$, $SD = 6.06$). The first study was conducted in 2018 (Lasota, 2018).

The Second Study Was Conducted Between October 2019 And March 2020. It Was Completed Just Before The Onset Of The Covid-19 Pandemic In Poland. The Study Used Online Questionnaires: By Clicking The Link Provided In The Advertisement For The Survey, Participants Were Directed To An Information Sheet On The First Author's Website, Which Explained The Purpose Of The Study, Participants' Rights, And The Procedure. Participants Were Informed How To Consent To Participate In The Study. The Procedure Was Approved By The Ethics Committee Of The Pedagogical University In Krakow And Complied With The Declaration Of Helsinki.

Respondents from whom the consent was obtained were asked to provide their socio-demographic characteristics, i.e. age of children and parents, gender, nationality, parents' education, place of residence, and family structure (number and age of children in the family). The study population was 712 Polish parents between 20 and 56 years of age ($M = 34.6$, $SD = 6.3$) of children between six months and 12 years of age ($M = 6.1$, $SD = 3.1$). The group included 80% of mothers ($N = 567$) and 20% of fathers ($N = 145$), with 55% female and 45% male children. Most of the parents reported having completed higher education (mothers – 53%, fathers – 45%); however, 29% of mothers and 38% of fathers reported to have completed secondary education, 18% and 15% respectively completed vocational school, and a small number (2% of fathers) only completed primary education. The respondents came from all parts of Poland, 34.5% of the participants reported living in large cities of over 50,000 people, 33% in small towns and medium-sized cities with population up to 50,000 inhabitants, and 32.5% in villages.

Measurement

Parental attitudes. The Polish version of the Parenting Behaviours and Dimensions Questionnaire (PBDQ) (Reid et al., 2015) was used to assess pa-

rental dimensions and behaviours. It is a self-report measure of parenting behaviours consisting of 33 items scored on a six-point Likert scale. The PBDQ comprises six factors in two dimensions (positive and negative attitudes): emotional warmth (EW), autonomy support (AS), democratic discipline (DD), permissive discipline (PeD), anxious intrusiveness (AI), and punitive discipline (PD). In this study, reliability analysis indicated high internal consistency ($\alpha = 0.81$, $\omega = 0.85$). For the six factors, Cronbach's alphas and McDonald's total omega values range from 0.72 to 0.89.

Emotional control. Courtauld Emotional Control Scale (CECS) developed by M. Watson and S. Greer (1983) in the Polish adaptation by Z. Juczyński (2009) was measure to control of emotions. The CECS is a self-report instrument. It consists of 21 items in three subscales, each with 7 statements. This measure assesses subjective control of anger, depression, and anxiety in difficult situations. It is scored on a Likert scale (from 1 'almost never' to 4 'almost always'). The total emotional control index ranges from 21 to 84 points. The higher the score, the greater the suppression of negative emotions. The reliability of the Polish adaptation is good (Cronbach's α ranges from 0.77 to 0.80; for the total scale it is 0.87).

Resilience. The level of resilience was assessed using the Resilience Assessment Scale (SPP-25) developed by N. Ogińska-Bulik and Z. Juczyński (2008). The SPP-25 is composed of subscales determining five factors and the overall score: (1) persistence and determination in action, (2) openness to experience and sense of humour, (3) individual's ability to cope and tolerance of negative emotions, (4) tolerance of failure and viewing life as a challenge, (5) optimistic approach to life and the ability to mobilise in difficult situations. Participants respond to individual items using a five-point scale. Cronbach's alpha measurement reliability for the total scale is 0.89.

Statistical analyses

The data analysis was performed using SPSS version 27 software and AMOS 25 with maximum likelihood estimation (ML). The normality of distributions was tested using the Kolmogorov-Smirnov test. Levene's test was used to verify the uniformity of variance. Rho-Spearman's correlation coefficient

was applied to determine the relationships between variables. Exploratory Factor Analysis was used to check the structure of the questionnaire in Polish. Confirmatory Factor Analysis was performed to verify the assumed original six-factors model. The model fit was assessed using the following goodness of fit indices: chi-square test (χ^2), chi-square/degrees of freedom (χ^2/df), the comparative fit index (CFI), the Tucker-Lewis index (TLI), standardised root mean square residual (SRMR), the root mean square error of approximation (RMSEA) with a 90% confidence interval, Akaike information criteria (AIC) and Bayesian information criteria (BIC). Goodness of fit was considered when the CFI and TLI values were close to or above 0.90 and the RMSEA value was 0.60 (Schermelleh-Engel et al., 2003). The reliability of the method was assessed based on Cronbach's alpha and McDonald's total omega internal coefficient.

Results. Psychometric properties of the Polish version of the PBDQ

Factor structure

In order to examine the psychometric properties of the adapted measure, we performed factor analyses: exploratory (EFA – Exploratory Factor Analysis) and confirmatory (CFA – Confirmatory Factor Analysis), carried out on two different samples, in accordance with the assumption of not performing too many statistical calculations on the same data (van Prooijen & van der Kloot, 2001). We conducted Study 1 with one group ($N = 323$), and we calculated the EFA. Next, we conducted Study 2 ($N = 712$) and calculated CFA.

Horn's Parallel Analysis method was performed in the exploratory factor analysis. The adequacy of the sample was measured with the Kaiser-Mayer-Olkin test. $KMO (= 0.90)$ and Bartlett's Test of Sphericity ($\chi^2 = 9143$, $df = 528$, $p < 0.01$) confirmed the validity of the factor analysis. Table 1 presents the factor structure of the Polish version of the PBDQ.

Table 1. Factor structure of the Polish version of the PBDQ (N = 323)

Item	Factor Loading					
	DD	EW	PeD	AI	PD	AS
33. Wyjaśniam dziecku, jak się czuję w związku z jego zachowaniem	0.84					
17. Podaję dziecku powody, dla których nie wolno mu czegoś zrobić	0.70					
12. Informuję moje dziecko, jakiego zachowania od niego oczekuję	0.68					
23. Rozmawiam z moim dzieckiem o konsekwencjach jego zachowań	0.66					
10. Zachęcam moje dziecko, aby pomyślało o konsekwencjach jego wyborów, zanim ich dokona	0.57					
4. Okazuję zainteresowanie życiem mojego dziecka		0.69				
32. Rozpoznaję mocne strony i talenty mojego dziecka		0.68				
20. Znajduję czas dla mojego dziecka, kiedy mnie potrzebuje		0.68				
26. Odpowiadam na uczucia lub potrzeby mojego dziecka		0.62				
16. Pokazuję mojemu dziecku, że kocham je bezwarunkowo		0.57				
1. Mówię mojemu dziecku, jak bardzo jestem z niego dumna/y		0.40				
24. Robię rzeczy za moje dziecko, kiedy ono odmawia ich wykonania			0.71			
5. Ustępuję dziecku, kiedy jest zdenerwowane			0.70			
15. Robię rzeczy za moje dziecko, które ono jest w stanie zrobić samo			0.66			
27. Pozwalam mojemu dziecku przerywać innym dorosłym			0.63			
9. Nie karzę mojego dziecka, jeśli jest mu przykro			0.42			
31. Nie karzę mojego dziecka, gdy ono źle się zachowuje			0.31			
11. Bardziej zależy mi na uczuciach mojego dziecka niż na moich własnych				0.64		

Table 1. (continued)

Item	Factor Loading					
	DD	EW	PeD	AI	PD	AS
3. Staram się przewidzieć, jakie są pragnienia mojego dziecka i zaspokoić je, zanim będzie musiał o to prosić				0.62		
28. Staram się chronić moje dziecko przed doświadczaniem negatywnych emocji				0.59		
13. Staram się natychmiast zaspokajać pragnienia mojego dziecka				0.57		
22. Poświęcam więcej czasu mojemu dziecku niż komukolwiek innemu				0.53		
6. Martwię się o moje dziecko, kiedy nie ma go w domu				0.51		
21. Kary, na które się decyduję, zależą od mojego nastroju					0.83	
7. Tracę cierpliwość, gdy moje dziecko robi coś, co mnie denerwuje					0.68	
29. Karzę moje dziecko bardziej surowo, niż zamierzałam/łam					0.65	
18. W jednej chwili jestem pobłażliwa/y, a w drugiej surowa/y wobec mojego dziecka					0.51	
14. Grozę mojemu dziecku karami, których nigdy bym nie użył/a					0.35	
30. Pozwalam, by dziecko samo znajdowało odpowiedź na problemy, zanim podpowiem rozwiązanie						0.79
8. Zachęcam moje dziecko, aby podejmowało samodzielne próby, zanim poprosi o pomoc						0.61
2. Zachęcam moje dziecko do wyboru własnych zainteresowań i aktywności						0.59
19. Dostosowuję poziom pomocy w zadaniach w zależności od wieku i umiejętności mojego dziecka						0.53
25. Daję mojemu dziecku obowiązki odpowiednie do jego wieku						0.40

Note: DD – Democratic Discipline, EW – Emotional Warmth, PeD – Permissive Discipline, AI – Anxious Intrusiveness, PD – Punitive Discipline, AS – Autonomy Support.

Source: Authors' research.

A six-factor structure was adopted for the questionnaire based on a scree plot and Kaiser's criterion, with a recommended eigenvalue above 1. As in the original version, the Principal Axis method for factor extraction was used in combination with a Promax rotation (Kappa 4). A six-factor solution with 33 items was achieved, with all items meeting the minimum criteria of significant primary factor loading and negligible cross-loading. Factor loadings ranged from 0.31 (item 31) to 0.84 (item 33), with the majority exceeding 0.50. All items of the PBDQ questionnaire explained 46.1% of the variance. The first factor (Democratic Discipline) accounted for 9.8% of the variance, the second (Emotional Warmth) for 8.7%, the third (Permissive Discipline) for 7.3%, the fourth (Anxious Intrusiveness) for 7.0%, the fifth (Punitive Discipline) for 6.6% and the last (Autonomy Support) for 6.7%.

In the second step, to verify the predicted factor structure of the questionnaire, a Confirmatory Factor Analysis (CFA) was conducted. The goodness-of-fit indicators showed that the model, including six subscales, presented an adequate fit to the data: CFI = 0.91, TLI = 0.90, SRMR = 0.05, RMSEA = 0.05, (90% CI = 0.04, 0.05), $\chi^2 = 1240$, $df = 472$, $p < 0.001$. Since the model with six subscales exhibited satisfactory psychometric properties, and the assumption was to confirm the original version, only one model was tested.

Reliability of the Polish version of the PBDQ

The internal consistency of the PBDQ was found to be good for the overall score ($\alpha = 0.81$; $\omega = 0.85$) and satisfactory for the six parental dimensions (all above 0.70), determined based on Cronbach's alpha and McDonald's omega (composite reliability) (Peterson & Kim, 2013). The results are shown in Table 2. The absolute stability was determined by the test-retest method with an interval of two months in the group comprising 30 parents. The result was found to be 0.86 for the overall score, indicating that the tested structure has high stability.

Table 2. The internal consistency of the PBDQ in the original and Polish adaptation

	McDonald's ω		Cronbach's α	
	Study 2 N = 712	Study 2 N = 712	Study 1 N = 323	Original version N = 846
Emotional Warmth	0.86	0.86	0.82	0.83
Punitive Discipline	0.79	0.79	0.77	0.79
Anxious Intrusiveness	0.76	0.75	0.76	0.66
Autonomy Support	0.77	0.76	0.78	0.70
Permissive Discipline	0.72	0.72	0.73	0.70
Democratic Discipline	0.89	0.89	0.87	0.75

Source: Authors' research.

We checked the descriptive statistics of six parental attitudes assessed by the Polish version of the PBDQ (Table 3).

Table 3. Descriptive Statistics of Analysed Variables in PBDQ (N = 712)

Variables	Score Range	M	SD	K-S	p	Skewness	Kurtosis
Emotional Warmth	2.1–6.0	5.20	0.66	0.16	< 0.01	-1.70	3.82
Punitive Discipline	1.0–5.0	2.39	0.90	0.13	< 0.01	0.62	-0.35
Anxious Intrusiveness	1.8–6.0	4.39	0.82	0.07	< 0.01	-0.37	-0.28
Autonomy Support	1.8–6.0	4.88	0.68	0.12	< 0.01	-0.77	1.02
Permissive Discipline	1.0–5.5	2.78	0.85	0.08	< 0.01	0.45	0.20
Democratic Discipline	1.6–6.0	5.01	0.80	0.14	< 0.01	-0.99	1.02

Note: M – Mean, SD – Standard Deviation, K-S – Kolmogorov-Smirnov test with the Lilliefors relevance correction.

Source: Authors' research.

The Kolmogorov-Smirnov test indicated that the variables were not normally distributed; histograms and Q-Q plots suggested that all positive parental dimensions and Anxious Intrusiveness have negative skewness. Of all

the dimensions, the Emotional Warmth factor appeared to be significantly negatively skewed and leptokurtic, with the parents scoring high, while the Punitive Discipline scale was moderately positively skewed and platykurtic. Similar findings, i.e., that parents generally score high on the warmth and acceptance scales and low scores on the authoritarian and punitive discipline scales, have been confirmed in previous studies (Mahoney et al., 2000; Plopa, 2008; Reid et al., 2015).

Further analysis examined the correlations between the parental dimensions (Table 4). Some moderately to highly significant correlations were found between the PBDQ factors. Emotional warmth, autonomy support and democratic discipline were positively correlated, whereas they were negatively correlated with punitive and permissive discipline. In our study, we found weak positive correlations between anxious intrusiveness and autonomy support or democratic discipline; this relationship was not observed in the original research (Reid et al., 2015).

Table 4. Intercorrelation between the PBDQ factors (N = 712)

	1	2	3	4	5	6
1. Emotional Warmth	1	-0.35**	0.37**	0.47**	-0.10**	0.53**
2. Punitive Discipline		1	-0.12**	-0.23**	0.20**	-0.19**
3. Anxious Intrusiveness			1	0.19**	0.12**	0.20**
4. Autonomy Support				1	-0.22**	0.60**
5. Permissive Discipline					1	-0.21**
6. Democratic Discipline						1

Note: * $p < 0.05$, ** $p < 0.01$.

Source: Authors' research.

As indicated by the data in Table 5, a relationship was found between the age of the parents and children and parental attitudes. The mother's age is inversely related to anxious intrusiveness and positively related to democratic discipline. On the other hand, the father's age is positively associated with punitive discipline. Both the mother's and father's educational levels were neg-

atively related to anxious intrusiveness and positively correlated to autonomy support. Additionally, the mother’s level of education was associated with democratic discipline. The child’s age also was linked to parental behaviours. We found that child age was positively associated with punitive discipline and democratic discipline and negatively associated with emotional warmth, anxious intrusiveness, and permissive discipline. In other words, when children were younger, three parental attitudes were more intense – emotional warmth, anxious intrusiveness, and permissive discipline. However, when the children were older, parents were more likely to use democratic and punitive discipline. Parents gender correlated with all positive attitudes and AI (mothers more often presented positive behaviours than father), children’s gender only with anxious intrusiveness (more so for girls). Democratic discipline was negatively related to the number of children in the family.

Table 5. Correlation between the PBDQ factors and family characteristics (N = 712)

	Mother’s Age	Father’s Age	Mother’s Educ.	Father’s Educ.	Parent’s Gender	Child’s Age	Child’s-Gender	Number of Children in Family
Emotional Warmth	0.04	-0.01	0.07	-0.00	-0.32**	-0.10**	-0.04	-0.03
Punitive Discipline	0.07	0.18*	-0.05	-0.06	-0.03	0.14**	0.06	0.11
Anxious Intrusiveness	-0.15**	-0.10	-0.11**	-0.17**	-0.18**	-0.13**	-0.08*	-0.08
Autonomy Support	-0.01	-0.01	0.11**	0.09*	-0.17**	0.01	0.01	-0.01
Permissive Discipline	-0.03	-0.04	-0.06	-0.04	0.06	-0.12**	-0.04	-0.03
Democratic Discipline	0.10*	0.04	0.08*	0.04	-0.21**	0.08*	0.03	-0.12*

Note: * p < 0.05, ** p < 0.01.

Source: Authors’ research.

The External Validity of the Parental Behaviour Dimensions Questionnaire

We examined the correlation between the PBDQ subscales and other variables, such as emotional control, and resilience (Table 6), to assess the external validity of the PBDQ. We used two scales to check emotional control (The Courtauld Emotional Control Scale) and resilience (the Resilience Assessment Scale). These variables were selected for external validity because the literature suggests that they are associated with positive and negative parental attitudes. In the context of parenting, emotion regulation, emotional control, depression, and parental anxiety are linked with parental attitudes, children's functioning, and mental health (Guevara et al., 2013; Chapman et al., 2022; Şiţoiu & Pânişoară, 2022). Resilience has also been associated with positive parenting behaviours characterised by acceptance and involvement (Zakeri et al., 2010; Sorkkila & Aunola, 2022).

Table 6. The Spearman correlation of the PBDQ and validation measurements (CECS, N = 502; SPP-25, N = 204)

	CE	CA	CD	CAnx	RS	P	O	IAC	TF	OPT
Emotional Warmth	-0.14**	-0.05	-0.18**	-0.11*	0.34**	0.30**	0.35**	0.23**	0.28**	0.25**
Punitive Discipline	-0.00	-0.14**	0.08	0.00	-0.30**	-0.23**	-0.32**	-0.33**	-0.20**	-0.20**
Anxious Intrusiveness	-0.06	-0.05	-0.06	-0.01	0.12	0.14	0.14*	0.05	0.05	0.12
Autonomy Support	-0.10*	-0.05	-0.13**	-0.05	0.28**	0.18**	0.30**	0.23**	0.27**	0.22**
Permissive Discipline	0.09*	0.08	0.08*	0.06	-0.27**	-0.30**	-0.19**	-0.29**	-0.21**	-0.19**
Democratic Discipline	-0.13**	-0.11*	-0.14**	-0.06	0.30**	0.27**	0.32**	0.20**	0.24**	0.26**

Note: CE – Control of Emotion, total score, CA – Control of Anger, CD – Control of Depression, CAnx – Control of Anxiety, RS – Resilience, total score, P – Persistence, O – Openness, IAC – Individual's ability to cope, TF – Tolerance of Failure, OPT – Optimism; * $p < 0.05$, ** $p < 0.01$.

Source: Authors' research.

The correlation analysis showed the existence of significant relationships between parental attitudes, emotional control, and resilience. Emotional warmth was inversely related to emotional control, depressive control, and anxiety control, and positively associated with resilience (total score and all subscales). Punitive discipline was negatively correlated with anger control and resilience (total score and all subscales). Anxious intrusiveness was only positively related to openness to experience and a sense of humour. Autonomy support was inversely related to emotional and depressive control and positively associated with resilience (total score and all subscales). Permissive discipline was positively associated with emotional control and depressive suppression and negatively related to resilience (total score and all subscales). Democratic discipline was negatively related to emotional control, anger, and depressive control, but positively correlated with resilience (total score and all subscales).

Discussion

The aim of the study was to translate the Parenting Behaviours and Dimensions Questionnaire (PBDQ) into Polish in consideration of cross-cultural differences and to establish its psychometric properties. To our knowledge, this scale is becoming increasingly popular around the world and is being translated into other languages, such as Greek, German, or Serbian (Kyriazos & Stalikas, 2019; Djordjevic et al., 2020) and used to assess parental behaviours in Europe. Our findings indicate that the assumptions of the Polish version of the PBDQ are consistent with those of the original measure, and that the questionnaire may be used to better assess the functioning of the families in Poland. Both the original measure and its Polish adaptation demonstrate good reliability and validity, confirming that it can be successfully used in English-speaking and Polish-speaking countries and cultures. The results of the factor analysis of the Polish version were very similar to those of the Australian version. Spearman's rho correlation analysis showed a moderate positive relationship between the positive dimensions (emotional warmth, anxious intrusiveness, and democratic discipline), and an inverse correlation between the positive and negative dimensions.

The construct validity of the PBDQ was assessed using exploratory and confirmatory factor analyses. The six-factor model of the PBDQ by Reid et al. (2015) was tested, and the results indicated that the model met the goodness of fit criteria. In the Polish adaptation, the internal reliability scores for all six scales were higher than in the original version.

Our results showed several correlations between parenting attitudes and the age and gender of both parents and children. For example, parents with younger children tended to be warm and indulgent, while those with older children tended to be more democratic or authoritarian. These results are supported by outcomes from previous studies, which indicate that supportive parental behaviours improve children's emotional functioning and psychological adjustment (Eisenberg et al., 2005), and that parental attitudes that support children experiencing negative emotions help them regulate their emotions (Loop & Roskam, 2016) and develop prosocial skills (Eisenberg & Valiente, 2002; Zhou et al., 2002). Our outcomes also suggest that mothers and fathers have different parenting attitudes (mothers declared to have significantly more positive behaviours than fathers). This is consistent with the general understanding that mothers and fathers play different roles in the family, rooted in female and male social roles (Yaffe, 2020).

Furthermore, the results generally supported criterion validity. Parents with higher emotional warmth reported lower emotional suppression, particularly depressive and anxious suppression. These findings are consistent with Le and Impett's findings (2019), claiming that parents who showing love and giving a sense of security to their children report more positive emotions, relationship satisfaction, closeness, and sensitivity to the child's needs, and less negative emotions and conflicts during caregiving. Next, parents who used more punitive discipline tended to obtain lower results in anger control. In other words, parents who do not control their anger display criticism, hostility, aggression, harshness, ignorance, and neglect towards their children (Guo et al., 2022). Thus, this attitude is classified as psychologically controlling (Reid et al., 2015). Parents with higher autonomy support and democratic discipline reported weaker emotional control (anger and depression). For example, van der Kaap-Deeder et al. (2017) found that perceived daily autonomy support from mothers was positively related to changes in adolescents' daily well-being. By modulating their own emotions, parents model how to

deal with emotions in their children, which may lead to improved well-being. In contrast, parents with more permissive discipline tended to score higher on emotional suppression. Wischerth et al. (2016) suggested that permissive parenting provides children with many emotionally difficult experiences, perhaps because these parents are not able to manage their anger or other difficult emotions, making them unpredictable for their children.

In the presented research, attention should be paid to parental attitude referred to as Anxious Intrusiveness. Reid et al. (2015) originally found this attitude as negative. However, in the Polish research, it has a slightly different character. Correlation analysis showed that Polish parents achieved higher scores compared to the original research. This may be because the studies presented included parents of very young children (from 6 months to 12 years), whereas the study by Reid and colleagues included parents of older children (between 3 and 12 years). We know that parents of young children are more anxious and protective of their children. Moreover, correlational analysis showed that this attitude was positively associated with other positive attitudes and only negatively correlated with punitive discipline. It also showed a negative correlation with the age of parents and children, which may support our hypothesis.

Our results also showed that positive parental attitudes: emotional warmth, autonomy support, and democratic discipline were related to increasing resilience. By contrast, negative parental behaviours, especially permissive discipline, were linked to decrease resilience. These findings may support results of a previous study (Sorkkila & Aunola, 2022) in which it was concluded that resilience supports parenting.

In summary, the values of the goodness of fit indices are good, the internal consistency of the subscales is satisfactory, and the relationship between the subscales proves to be statistically significant. The obtained values of factor loadings for each item in all subscales are statistically significant and adequate. We believe that the Polish adaptation of the PBDQ will provide a reliable alternative assessment of parenting among Polish parents based on their positive and negative behaviours.

Limitations

There are several limitations to the reported study that should be addressed in future research in this area. First, in recent decades different typologies of attitudes and styles interpenetrating each other have been developed research on parenting, which makes it difficult to conceptualize and clearly distinguish between styles, attitudes, and dimensions of parental behaviours. Therefore it is necessary to use accurate terms and definitions of parental attitudes. Although we found good psychometric properties of the Polish version of the PBDQ, advisable to analyze the content of the questionnaire in future studies and use other convergent and discriminant measures to reduce the social desirability bias. Additionally, present results may not be generalizable to other group than the homogeneous Polish sample of parents included in the study. In further analyses, children's perspectives should also be considered, as only parents' perceptions were investigated. Finally, we are aware that parental attitudes should not be considered separately, but in the context of as many variable characteristics describing the family, the parent and the child as possible.

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