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# Intensive Parenting Behaviour Scale: Exploring its factor structure among South African mothers

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Intensive parenting practices are increasingly studied, but validated measures for diverse African contexts are limited. The Intensive Parenting Behaviour (IPB) Scale requires psychometric validation within South Africa. This study explored the factor structure and construct validity of the IPB among South African mothers of children in middle childhood (aged 6–10 years). Data were collected via an online survey completed by 507 South African mothers, with $N$ = 382 having complete IPB data. Exploratory factor analysis was used to examine the underlying structure of the IPB. Exploratory factor analysis revealed a multidimensional model comprising seven first-order factors (engagement, behavioural control, autonomy support, autonomy restriction, proactive protection, talent stimulation and child-centredness) loading onto two distinct second-order factors. Engagement, behavioural control and autonomy support formed an 'Adaptive Intensive Parenting Behaviours' dimension. Autonomy restriction, proactive protection, talent stimulation and child-centredness formed an 'Overinvolved Intensive Parenting Behaviours' dimension. The scale demonstrated good internal consistency and construct validity. Results support the reliability and validity of the IPB in the South African context, revealing a robust seven-factor first-order structure underpinned by two higher-order dimensions differentiating adaptive and potentially overinvolved IPB. The IPB shows promise for assessing intensive parenting constructs among South African mothers of children in middle childhood. Consistent with prior studies on intensive parenting, the IPB yielded a number of factors, suggesting multidimensionality for the construct.

**Contribution:** This is the first study to examine the psychometric properties of the IPB Scale in South Africa, demonstrating good reliability and validity among South African mothers.

**Keywords:** Intensive Parenting Behaviour Scale; exploratory factor analysis; factor structure; mothers; South Africa; middle childhood; cultural compatibility; reliability.

## Introduction

Intensive parenting, colloquially called helicopter, tiger or lawnmower parenting depending on the region, and sometimes referred to in the literature as overparenting (e.g. Cui et al., 2022; Luijk et al., 2024), has received increasing attention in the media and research. This parenting trend is associated with heightened parental, especially maternal, involvement in child caregiving, where parents dedicate significant attention, energy, time and financial resources to raising their children. The approach was initially suggested by Hays (1996) as intensive mothering and characterised as being 'child-centered, expert-guided, emotionally absorbing, labour-intensive, and financially expensive' (p. 8). This suggests that the child's needs are the mother's primary focus, that mothers are not specialists in child-rearing but rather rely on outside expert advice to properly raise their children, that mothering requires a large expenditure of various resources and that mothers are emotionally invested in their children. Given its prevalence in contemporary parenting practices, intensive mothering was later generalised to intensive parenting to acknowledge fathers' roles in child rearing (Faircloth, 2014).

Intensive parenting is often motivated by a desire to improve child outcomes. There is some evidence to suggest it may improve children's physical health and cognitive abilities to a limited extent (Schiffrin et al., 2015), thus supporting children's needs and development. However, more is not necessarily better, and this parenting strategy may have potential deleterious consequences for parents and children. In this regard, intensive parenting is

associated with increased guilt, stress and anxiety in parents, potentially contributing to parental burnout (Kim & Kerr, 2024; Novoa et al., 2022) and depression, stress and loss of autonomy in children (Doan et al., 2017; Schiffrin et al., 2015; Yerkes et al., 2021), thus undermining children's needs and development. It may also influence parent–child and romantic partner attachment (Jiao & Segrin, 2021, 2022). Paradoxically, even when parents only endorse, but do not necessarily practise, intensive parenting, they may experience similar negative consequences (Novoa et al., 2022).

Intensive parenting is conceptualised in a variety of ways in the literature, often reflecting cultural, contextual or socio-economic dimensions: in East Asia, tiger parenting norms emphasise achievement and dictate resource-intensive strategies, particularly within the academic context and socio-emotional development of the child (Bach & Christensen, 2021; Göransson, 2023; Gu, 2021), and hypervigilance, particularly in the context of media access and consumption (Pham, 2024). In the European and Western context, helicopter parenting emphasises close monitoring and is associated with excessive control and responsiveness to optimise child development and safety (Gomez Espino, 2013; Hays, 1996; Locke et al., 2012; Schiffrin et al., 2014), while snowplough or lawnmower parenting is associated with removing obstacles to ensure children's success (Locke et al., 2012). Within these contexts, socio-economic status may influence intensive parenting, among others, through resources and feasibility: high socio-economic status may facilitate financial investment and expert guidance, while limited resources, work demands and basic needs pressures may influence parenting behaviours in low socio-economic status families (Gu, 2021; Yerkes et al., 2021).

This variability in conceptualisations has contributed to the development of diverse measures of intensive parenting, measuring both parent and child perspectives, including the Helicopter Parenting Scale (LeMoyne & Buchanan, 2011), the Intensive Parenting Attitudes Questionnaire (Liss et al., 2013), the Overparenting Scale (Jiao & Segrin, 2021; Segrin et al., 2012), the Measure of Intensive Mother Ideology (Loyal et al., 2017) and the Intensive Mothering/Fathering Ideology Scale (Lamprianidou et al., 2025). Subsequent research has thus expanded intensive parenting beyond Hays' original framework, with some studies identifying domains that align closely with Hays' conceptualisation and others identifying additional dimensions. The domain *of child-centredness* appears to be consistent across the literature (e.g. Gauthier et al., 2021; Klímová Chaloupková & Pospíšilová, 2023; Liss et al., 2013; Loyal et al., 2017), while intensive parenting as *expert-guided* appears only partially supported (Gauthier et al., 2021). Intensive parenting, as emotionally absorbing and resource-intensive, has also received partial support, albeit termed differently as *challenging* (Liss et al., 2013; Loyal et al., 2017). Additional dimensions partially aligning with resource aspects of intensive parenting include *stimulation* – emphasising the importance of parents stimulating their children's development (Gauthier et al., 2021; Klímová Chaloupková & Pospíšilová, 2023; Liss et al., 2013; Loyal et al., 2017) – and *parental responsibility* – emphasising the sense of obligation to ensure parents do their best when raising their children (Gauthier et al., 2021).

Different models of intensive parenting may stem from differences in terminology, the specific items included in individual studies or the extent to which these items align with Hays' framework, as well as the extent to which parenting behaviours in a specific country are shaped by cultural and contextual factors. This lack of consensus regarding the conceptualisation of intensive parenting warrants further exploration. Given the contextual and cultural factors that may shape parenting behaviours, and the variety of domains measured by previous individual scales, a more comprehensive and cross-culturally validated tool is needed. The Intensive Parenting Behaviour (IPB) Scale, developed in Poland by Lubiewska et al. (2024), was created for this specific purpose to capture observable parenting practices aligned with intensive parenting across diverse domains and contexts. Lubiewska et al. (2024) derived the IPB's items from 12 established instruments that measure different dimensions of intensive parenting. The original pool of 232 items was reduced through expert analysis of appropriate items for mothers with young school-aged children. A pilot study provided data for the analysis of the structure of the scale and psychometric properties of the scale (Lubiewska et al., 2024). Based on these results, the IPB item pool was reduced to 69 items. The scale was then administered to a large sample of 2535 mothers in 11 countries representing different cultural contexts (Lubiewska et al., 2025). In the analysis of these data, nine factors were identified as follows:

- *Engagement* refers to mothers' time, attentional and material investment in the child, soothing the child in times of distress and displaying interest in the child's life (Lubiewska et al., 2025).
- *Autonomy support* addresses fostering the child's independence through encouraging autonomous problem-solving and decision-making.
- *Facilitation* addresses mothers' involvement in planning or organising extracurricular activities for the child (Lubiewska et al., 2025).
- *Academic engagement* refers to mothers' engagement in the child's academic activities (e.g. helping with homework and asking about school performance).
- *Prioritising the child* indicates mothers' behaviours of putting the child's needs before their own.
- *Proactive protection* addresses anticipating issues and acting before challenges arise, safeguarding the child from harms like criticism or conflict.
- *Restriction* refers to not allowing the child to do what peers do (e.g. because the child is seen as too young), doubts about leaving the child alone, doing tasks

for the child and controlling or interfering in the child's life.
- *Material indulgence* indicates the child receiving whatever material goods they desire, or even more.
- *Rule setting* refers to establishing and enforcing rules for a child, including saying no when necessary (Lubiewska et al., 2025).

A second-order factor analysis with these nine IPB factor scores revealed a two-factor pattern correlating negatively: (1) engagement, autonomy support and rule setting, which can be seen as 'supportive' factors, and (2) the other IPB factors (facilitation, academic engagement, prioritising the child, proactive protection, restriction and material indulgence), which can be interpreted as a child-'undermining' factor (Lubiewska et al., 2025). In this regard, supportive factors are considered conducive to child development and needs, such as promoting independence and providing structure, whereas undermining factors are considered to limit child development and needs, such as by limiting learning opportunities and restrictive control (Lubiewska et al., 2025). Its development across 11 countries makes it a particularly useful tool for investigating intensive parenting in diverse cultural settings, including those in the global South.

Despite the IPB's multinational development and the rising interest in intensive parenting, studies have still mostly been conducted in the Global North. There is, therefore, a paucity of literature on intensive parenting in the Global South in general and in South Africa in particular. A need for Southern perspectives on parenting has recently been highlighted (Cilliers, 2021). South Africa has a culturally diverse landscape, characterised by numerous ethnic groups, extreme socio-economic disparities and variable family structures. While traditional expectations continue to influence cultural expressions of parenting in certain contexts (Maqubela, 2020), modern parenting ideals are also espoused (Petersen & Lesch, 2022) in South Africa. The prevalence of dissemination of intensive parenting ideals globally, particularly through social media (Novoa et al., 2022; Scheibling & Milkie, 2023), may potentially lead to increased exposure and consequently internalised pressure to conform to intensive parenting trends, despite contextual realities. It is therefore important to explore intensive parenting within the South African context. The IPB Scale, with its comprehensive and cross-culturally developed framework, is ideal for this task. Establishing the factor structure and reliability of the IPB Scale in a South African sample is required to understand how IPBs may be expressed in this specific context. This study thus aimed to explore the factor structure and construct validity of the IPB Scale using data from a sample of South African mothers. The following research questions guided the study:

- *What is the factor structure of the IPB Scale among South African mothers of children aged 6–10 years, and does it demonstrate adequate reliability and construct validity in this context?*
- *Do the first-order factors of the IPB Scale among South African mothers cluster into higher-order dimensions, and if so, do these reflect adaptive versus overinvolved intensive parenting behaviours?*
- *How does the factor structure of the IPB Scale in South Africa compared with international findings?*

# Methods

## Sampling

Participants were eligible for the study if they were mothers of a child within the middle childhood age range (6–10 years old). Because most existing research on intensive parenting has been done among parents with adolescent children (Ryan et al., 2024), there is limited information about the parenting of younger children. Using mothers as informants maximises the ecological validity of IPB Scale target behaviours, such as daily engagement with the children, monitoring them and managing their activity. Furthermore, the South African sample, with its diversity of cultural norms, schooling quality and safety concerns, would have differential effects on parenting behaviours, thus addressing an area specifically lacking in documented research.

Mothers were recruited online through social media platforms by posting the research advertisement as a flyer on open Facebook parenting groups. The flyer contained information on the aims and nature of the study and the link for the survey, and voluntary participants were requested to complete the online (Qualtrics) survey anonymously. The invitation to participate in the research remained open for 2 months until 507 mothers completed the survey. It was thus a self-selected volunteering sample of mothers.

## Research design

A cross-sectional online survey design was used to determine the degree of mothers' IPB by means of an adapted IPB Scale. The aim was to evaluate the functioning of the scale, among others, by exploring its factor structure. This quantitative study assumes a critical realist stance, thus assuming latent constructs to be real but also that they are epistemically dependent on the quantitative approach used, thus rendering our inferences about them corrigible (Bhaskar, 2008; Boost et al., 2022).

## Data collection instrument

Mothers completed the 69-item IPB Scale, targeting mothers of children in middle childhood (age 6–10 years), developed in Poland (Lubiewska et al., 2024). Mothers rated the extent to which they practise certain parenting behaviours with their child between the ages of 6 years and 10 years on a 7-item Likert response scale ranging from (1) *never* to (7) *always* or (1) *definitely no* to (7) *definitely yes*. An example item is 'I encourage my child to make his/her own decisions and take responsibility for their choices'. In addition to the IPB

Scale, the questionnaire contained demographic mother-related information such as age, marital status, level of education, socio-economic status, ethnicity, vernacular and location where she stays (rural or urban) and child-related factors such as health, schooling, learning difficulties and extracurricular activities to contextualise the survey in the South African context.

The IPB Scale was adapted for use in South Africa to accommodate linguistic, cultural and contextual nuances, ensuring relevance across diverse communities. Specifically, (1) language was simplified and adapted to terminology commonly used across South Africa (e.g. 'secondary' changed to 'high' school; 'extracurricular' changed to 'after school') and (2) socio-economic inequalities were accounted for by adapting items measuring provision of material items (e.g. 'if possible' was added to 'I give my child more than what he/she asks for'). To ensure linguistic and cultural relevance, a cognitive debriefing interview was conducted, which is considered good practice in cross-cultural adaptation of instruments (Lee, 2014). The interview was conducted with a multilingual black African mother familiar with three cultural groups, four languages and rural upbringing, thus able to reflect on diverse cultural and linguistic contexts. The interview identified wording complexity (e.g. simplifying terms such as 'extracurricular' to 'after school') and highlighted cultural nuances regarding autonomy. As a result, two items were added to account for cultural variance related to child autonomy, differentiating between maternal beliefs ('I make decisions for my child, as children 6–10 years old cannot make decisions' indicated that children in this age range are not cognitively capable of making decisions; therefore, mothers should make them on their behalf) and cultural norms ('Children of 6–10 years old don't have a say', as in some cultures in South Africa, parents make decisions on behalf of the child). Although only one cognitive interview was undertaken, this step provided insight into item interpretation and informed the adaptation process. Finally, pretesting was done with two participants for ease of use on a mobile device (the device most likely to be used). This was done to ensure that the survey was readable, clear and easy to navigate on a mobile device. Their feedback was implemented with final minor adjustments to ensure understanding across a range of literacy levels. The minor adjustments included removing the use of a double negative in a sentence, which made the question confusing, and the orientation of the Likert scale responses (vertical as opposed to horizontal) to ensure mobile-friendly interaction.

## Procedure

Prior to participation, as part of the informed consent procedure, the mothers were informed about the study aims, the general content of the items and the possibility to withdraw from the survey without negative consequences. Before they could complete the survey, they had to provide consent. Informed consent was therefore obtained through an electronic consent form that participants were required to read and agree to by actively selecting to consent before accessing the survey. If they chose not to consent, they were unable to proceed to the survey. After completing the survey, participants received a brochure (developed by the head of the Parenting and Attachment across Cultures Lab and thus appropriate for the target population) with age-appropriate parenting information, which noted that parenting practices may vary across families and children. At the end of the study, mothers were also invited to voluntarily provide their email addresses, collected separately from the survey data to preserve anonymity and ensure no identifying information could be linked to participants' responses, for entry in a raffle for vouchers that could be used at a well-known online store, as a thank you for participation. Participation in the raffle was entirely voluntary and not a requirement for completing the survey. Provision was made for participants to contact the research team members if they felt distressed as a result of participating in the study. To maintain confidentiality, the data were stored securely on password-protected devices and were only available to the researchers.

## Data analysis strategy

An exploratory factor analysis (EFA) was done to determine the factor structure of the instrument. The requirements for an EFA are considered and indicated below, starting with the sample size considerations.

Empirical evidence shows that rules of thumb for sample size discount the complexity of considerations for EFA (Henson & Roberts, 2006). Thus, sample size does not straightforwardly determine the adequacy of a factor structure, which makes *a priori* decisions regarding sample sizes difficult (Henson & Roberts, 2006). Small sample sizes can be tolerated when communalities are high (> 0.60) and there are at least four or more items per factor (MacCallum et al., 1999). With low communalities (< 0.50), a larger sample size (> 100) and more indicators per factor (six to seven) are important, along with a smaller number of factors. When there are only three to four indicators per factor and communalities are low, the sample size should be at least 300 or more (MacCallum et al., 1999, p. 96). Missing values were deleted listwise, resulting in a final sample of $N = 382$ with complete responses. This yielded a variable-to-sample ratio of 1:18. The data were checked for distributional properties, indicating normality for each variable and/or item by Kolmogorov–Smirnov with Lilliefors adjustment ($p > 0.05$). Extreme skewness (> 2) and kurtosis (> 7) were identified (Fabrigar et al., 1999). The variable distribution was also visually inspected.

Bartlett's test of sphericity and the Kaiser–Meyer–Olkin (KMO) test were used to determine the suitability of the dataset for EFA. Kaiser–Meyer–Olkin values above 0.60 support the use of EFA, and Bartlett's test should be significant (Field, 2018). The software used for analysis was Statistical Package for Social Sciences (SPSS) version 30 (IBM Corp., 2024) and R (R Core Team, 2024). The items used in the EFA had seven categories and sufficient

distribution across these to be regarded as continuous (Tabachnick & Fidell, 2013). The Pearson correlation matrix was used for the EFA.

Principal axis factoring (PAF) was used as the factor model, with maximum likelihood (ML) as the extraction method. Communalities were determined with ML, both before and after extraction. Oblique rotation, specifically Promax, was used because the factors were expected to correlate. Promax begins with a varimax rotation to force a simple structure and then follows with an oblique rotation (Howard, 2016).

The number of factors to extract was based on the following criteria (with the suggested number of factors in brackets): eigenvalue >1 (15 factors) (Kaiser, 1960), Velicer's minimum average partial (MAP) test (seven factors) (O'Connor, 2000; Velicer, 1976), very simple structure (VSS) or simple MAP (two factors), scree plot (four or seven factors) (Cattell, 1966) and parallel analysis (PA) (eight factors) (Horn, 1965). Kaiser's criterion and the scree plot were not considered because of low accuracy (Taherdoost et al., 2014). The MAP suggestion of the seven factors was taken as a guide, along with the interpretability of the factor structure, which showed that extracting more than seven factors resulted in too few items per factor.

The factor interpretation strategy was based on at least three items loading above 0.30 on the target factor (Watkins, 2018), although Henson and Roberts (2006) recommend at least two items. Cross-loadings should be below 0.30 (Howard, 2016). The pattern matrix is reported with values of 0.25 and higher. Communalities after extraction are reported, as well as inter-factor correlations. Given the fact that we do not believe the sample is representative of the population of mothers in South Africa and the contingent nature of the realised sample, it is possible that items with low communalities and/or low loadings could function better or even worse in subsequent surveys in South Africa. We thus assumed a relatively conservative item selection strategy, and in the face of a lack of additional evidence to delete a few poorer functioning times, they were retained, as can be seen in the results section below. Therefore, reliability estimates for the factors – in this case, Cronbach's alpha ($\alpha$) – were reported for the retained factors after extraction but also after items were shifted or discarded.

A second-order factor was conducted with the factor scores from the first EFA using the same criteria as the first-order analysis. Previous research identified two bipolar constructs, which were investigated using the current dataset. In this instance, Kaiser's criterion and the scree plot concurred with an extremely clear gap between the second and third eigenvalues.

## Ethical considerations

Ethical clearance to conduct this study was obtained from the Ethics Committee of the Faculty of Humanities, University of Pretoria (No. HUM010/0124).

# Results

The results are presented in a stepwise manner, beginning with a description of the demographic characteristics of the sample to contextualise the findings. Thereafter, we examine item-level properties before turning to the EFA. In reporting the EFA, we first outline the adequacy of the data and extraction decisions, followed by the presentation of factor loadings, communalities and variance explained, with emphasis placed on the interpretability of the emerging factors. Reliability estimates for these factors are then reported. The process of refining the scales, including the reassignment or removal of items, is described, leading to the labelling and conceptualisation of the final seven factors. Finally, a second-order analysis is presented to explore the higher-order structure of IPBs in this sample.

## Sample characteristics

The sample demographic characteristics are set out in Table 1. One of the most striking findings in Table 1 is the substantial amount of missing data regarding employment type, with 52.6% of responses classified as missing for the part-time versus full-time employment status. This figure represents the highest missing data rate within the dataset. Furthermore, the income distribution among respondents highlights notable economic challenges. A considerable portion – 63.3% of participants – reported earning less than R20 000.00 per month, encompassing the first three income brackets. Conversely, only 2.4% of respondents reported earnings exceeding R70 000.00, indicating a highly skewed income distribution that favours lower earnings. These income data suggest that the sample predominantly represents a lower-to-middle-income population.

Patterns regarding relationship status also emerged from the analysis. The category 'unmarried but in a relationship' was the largest segment, accounting for 38.2% of respondents, surpassing the married category at 32.5%. When combining all unmarried individuals, they constitute 50.8% of the sample, significantly outnumbering the married individuals. The data reveal low numbers of divorcees (2.1%).

In terms of demographic composition, the sample is predominantly composed of black African respondents, who make up 68.8% of the population. Other ethnic groups are represented in much smaller proportions: white respondents account for 9.2%, mixed race respondents account for 3.7% and Indian respondents account for 1.8%, which roughly reflects the South African population (Statistics SA, 2024). The analysis also indicates a high level of language diversity within the sample, with 12 different languages represented; however, isiZulu is the most spoken language, dominating at 18.1%.

The data further uncover significant employment challenges within the sample, as evidenced by a notably high unemployment rate of 37.2%, which reflects the current high

national unemployment rate. Among those who are employed, full-time work is significantly more prevalent, comprising 35.9% of the workforce, compared to only 11.5% engaged in part-time employment. Additionally, a consistent pattern of missing data across most demographic variables was observed, with rates ranging from 14.4% to 16.5%. This indicates that a specific group of participants did not respond as expected – potentially because of survey fatigue, as the demographic section appeared at the end of the survey and may have been too long for some respondents.

Overall, the analysis of the data indicates that the sample reflects a South African population grappling with economic challenges, high unemployment rates and significant data quality issues, particularly concerning the classification of employment status.

## Item characteristics

Only seven items (9%) were markedly skewed, while four items (5.6%) had a kurtosis above |7|. The four items were also skewed > |2|, namely, IP2b.1, IP2b.4, IP2c.1 and IP2c.4. These items were flagged. Excluding these outliers, the average |skewness| was 0.90 (standard deviation [s.d.] = 0.56) and |kurtosis| = 1.26 (s.d. = 1.2).

## Factor analysis results

### Factor requirements

The KMO value was 0.91, which is considered excellent. Along with a significant Bartlett's test of sphericity ($p < 0.001$), this indicated that the data were appropriate for EFA. All items had a measure of sampling adequacy (MSA; KMO) above 0.72. Specifically, 7% of items (five items) had MSA values above 0.72, 35% were above 0.80 and 58% were above 0.90. Missing data were managed by listwise deletion, resulting in a realised sample of $N = 382$ with complete responses. As stated above, factor extraction was conducted from the Pearson correlation matrix using ML, with Promax rotation. The variance extracted before and after rotation is presented in Table 3.

The following items were flagged as outliers. However, their communalities before and after rotation were as follows: IP2b.1 (0.52, 0.42), which loaded substantially on Factor 6; IP2b.4 (0.46, 0.28), which did not load on any factor; IP2c.1 (0.47, 0.33), which loaded substantially on Factor 6; and IP2c.4 (0.50, 0.32), which also loaded substantially on Factor 6. All four flagged items had MSA values greater than 0.80.

All communalities before extraction were above 0.40, with the exception of items IP2a.28, IP2a.31 and IP2c.11, which were above 0.30 (M = 0.51, s.d. = 0.07). After extraction, the communalities declined somewhat (M = 0.40, s.d. = 0.09): 63% of items had communalities above 0.40, while the following items had communalities greater than 0.30: IP2a.3, IP2b.3, IP2a.11, IP2c.22, IP2c.16, IP2b.5, IP2c.15, IP2a.16, IP2a.27, IP2c.26, IP2c.20, IP2c.3, IP2a.23, IP2a.12, IP2a.18, IP2c.4, IP2c.1, IP2a.32, IP2c.10, IP2x.27, IP2c.17 and IP2a.14 (comprising 30% of items). An additional 7% of items – IP2c.5, IP2a.31, IP2c.11, IP2a.26 and IP2b.4 – had communalities above 0.20.

**TABLE 1:** Sample demographic characteristics ($N = 382$).

| Variable | Frequency (n) | % |
|---|---|---|
| **Marital status** | | |
| Unmarried; not in a relationship | 48 | 12.6 |
| Unmarried; in a relationship | 146 | 38.2 |
| Married | 124 | 32.5 |
| Divorced | 8 | 2.1 |
| Other | 1 | 0.3 |
| **Age (years)** | | |
| 20–30 | 145 | 38.0 |
| 31–40 | 134 | 35.1 |
| ≥ 41 | 46 | 12.0 |
| **Employment** | | |
| Yes | 185 | 48.4 |
| No | 142 | 37.2 |
| **Part-time or full-time** | | |
| Full-time | 137 | 35.9 |
| Part-time | 44 | 11.5 |
| **Educational level** | | |
| Early childhood education | 6 | 1.6 |
| Some grades of high school | 16 | 4.2 |
| Completed matric | 92 | 24.1 |
| Vocational or technical college | 35 | 9.2 |
| University or college diploma | 76 | 19.9 |
| Bachelor's degree or equivalent level | 67 | 17.5 |
| Master's or equivalent level | 22 | 5.8 |
| Doctoral or equivalent level | 5 | 1.3 |
| **Spendable income after deductions per month†** | | |
| Less than R4000.00 | 89 | 23.3 |
| R4000 to under R8000.00 | 72 | 18.8 |
| R8000.00 to under R20 000.00 | 81 | 21.2 |
| R20 000.00 to R40 000.00 | 40 | 10.5 |
| R40 000.00 to under R55 000.00 | 17 | 4.5 |
| R55 000.00 to under R70 000.00 | 11 | 2.9 |
| More than R70 000.00 | 9 | 2.4 |
| **Ethnicity** | | |
| Black African people | 263 | 68.8 |
| Coloured people | 14 | 3.7 |
| Indian people | 7 | 1.8 |
| White people | 35 | 9.2 |
| **First language** | | |
| Xitsonga | 24 | 6.3 |
| Tshivenda | 13 | 3.4 |
| SiSwati | 12 | 3.1 |
| Setswana | 32 | 8.4 |
| Sepedi | 30 | 7.9 |
| Sesotho | 26 | 6.8 |
| IsiZulu | 69 | 18.1 |
| IsiXhosa | 27 | 7.1 |
| IsiNdebele | 5 | 1.3 |
| English | 47 | 12.3 |
| Afrikaans | 26 | 6.8 |
| Other | 8 | 2.1 |

Note: Counts may not add up to the total because of missing information for some participants.

†, Income brackets according to tax brackets in South Africa, with the lowest bracket as the threshold point for the child support grant.

**TABLE 2:** Pattern matrix.

| Item | Label | Factor | | | | | | | Communality ($h^2$) | Uniqueness ($v^2$) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| IP2a.5 | I talk to my child about most of the things that he/she is currently involved in. | 0.68 | - | - | - | - | - | - | 0.42 | 0.58 |
| IP2a.6 | I give my child a lot of attention. | 0.59 | - | - | - | - | - | - | 0.47 | 0.53 |
| IP2a.4 | I try to give my child the very best, such as toys, clothes and food. | 0.58 | - | - | - | - | - | - | 0.45 | 0.55 |
| IP2a.3 | If possible, I try to ensure that my child has a variety of toys, books and movies. | 0.58 | - | - | - | - | - | - | 0.39 | 0.61 |
| IP2a.7 | I comfort my child immediately when he/she is sad or upset. | 0.58 | - | 0.28 | - | - | - | - | 0.46 | 0.54 |
| IP2a.2 | I dedicate my free time (time not working) to my child. | 0.55 | - | - | - | - | - | - | 0.43 | 0.57 |
| IP2a.1 | I put in a lot of energy helping my child notice and solve problems. | 0.53 | - | - | - | - | - | - | 0.41 | 0.59 |
| IP2a.9 | When my child gets anxious/upset, I will say things to calm him/her down. | 0.49 | - | - | - | - | - | - | 0.44 | 0.56 |
| IP2a.13 | I ask my child about his/her relationships with friends. | 0.46 | - | - | - | - | - | - | 0.37 | 0.63 |
| IP2b.3 | I am personally involved in preparing my child for tests and exams. | 0.36 | - | - | - | - | - | - | 0.32 | 0.68 |
| IP2c.21 | I control my child and his/her life too much. | - | 0.78 | -0.27 | - | - | - | - | 0.52 | 0.48 |
| IP2c.22 | I don't allow my child to do something that other children his/her age may already be doing. | - | 0.66 | - | - | - | - | - | 0.34 | 0.66 |
| IP2a.22 | I take tasks out of my child's hands without giving them a chance to do something on his/her own. | - | 0.62 | - | - | - | - | - | 0.41 | 0.59 |
| IP2c.34 | Children of 6–10 years don't have a say. | - | 0.59 | - | - | - | - | - | 0.38 | 0.62 |
| IP2c.16 | I often do things for my child that he/she could do on his/her own. | - | 0.53 | - | - | - | - | - | 0.32 | 0.68 |
| IP2c.28 | I treat my child as younger than he/she really is. | - | 0.49 | - | - | - | - | 0.26 | 0.40 | 0.60 |
| IP2b.5 | When it is difficult, I do my child's homework for her/him. | - | 0.45 | - | - | - | - | - | 0.31 | 0.69 |
| IP2c.15 | I often tell my child that it is too early for him/her to do the things his/her friends are already doing. | - | 0.45 | - | - | - | - | - | 0.29 | 0.71 |
| IP2c.19 | I interfere in my child's personal matters. | - | 0.43 | - | - | - | - | - | 0.39 | 0.61 |
| IP2c.5 | I would not allow my child to go out with family/friends if I were not present. | - | 0.37 | - | - | - | - | - | 0.21 | 0.79 |
| IP2c.33 | I make decisions for my child, as children 6–10 years old cannot make decisions. | - | 0.36 | - | - | - | - | - | 0.40 | 0.60 |
| IP2c.23 | I try to protect my child from making mistakes. | - | 0.35 | - | - | - | - | - | 0.41 | 0.59 |
| IP2a.17 | I protect my child from life's difficulties. | - | - | 0.84 | - | - | - | - | 0.61 | 0.39 |
| IP2a.15 | I protect my child from criticism. | - | - | 0.84 | - | - | - | - | 0.62 | 0.38 |
| IP2a.19 | I protect my child from conflict. | - | - | 0.79 | - | - | - | - | 0.63 | 0.37 |
| IP2a.10 | If I can see that my child will have some difficulty, I will take care of the situation before things get difficult for him/her. | - | - | 0.65 | - | - | - | - | 0.51 | 0.49 |
| IP2a.21 | I get actively involved to help my child solve his/her problems. | - | - | 0.58 | - | - | - | - | 0.52 | 0.48 |
| IP2a.20 | When a situation becomes too difficult for my child, I talk to him/her about trying to look on the bright side of things. | 0.30 | - | 0.56 | - | - | - | - | 0.47 | 0.53 |
| IP2c.24 | I try to help my child avoid any troubles that s/he might encounter in the world. | - | - | 0.49 | - | - | - | - | 0.54 | 0.46 |
| IP2a.8 | I am worried that something bad may happen to my child when I am not nearby. | - | - | 0.40 | - | - | - | - | 0.35 | 0.65 |
| IP2c.7 | I try to foresee and avoid situations where my child might do something risky. | -0.29 | - | 0.38 | - | 0.32 | - | - | 0.41 | 0.59 |
| IP2a.30 | I tell my child how to plan his/her activities. | - | - | 0.37 | - | 0.28 | - | -0.28 | 0.45 | 0.55 |
| IP2a.16 | I praise my child for everything he/she does. | - | - | 0.37 | - | - | - | - | 0.34 | 0.66 |
| IP2a.27 | I do not allow my child to climb trees or ride a bicycle in the street. | - | 0.28 | 0.36 | - | - | - | - | 0.31 | 0.69 |
| IP2a.24 | If my child wants a toy, s/he gets it if I am able to provide it. | - | - | 0.34 | - | - | - | 0.32 | 0.40 | 0.60 |
| IP2c.26 | I try to think of things that will prevent my child from reaching his/her goals and remove them before they become a problem. | - | - | 0.32 | - | - | - | - | 0.33 | 0.67 |
| IP2a.25 | I encourage my child to make his/her own independent decisions. | - | - | - | 0.66 | - | - | - | 0.49 | 0.51 |
| IP2c.12 | I encourage my child to make his/her own decisions and take responsibility for their choices. | - | - | - | 0.61 | - | - | - | 0.44 | 0.56 |
| IP2c.13 | I encourage my child to solve all problems with friends on their own. | - | - | - | 0.60 | - | - | - | 0.38 | 0.62 |
| IP2c.20 | I encourage my child to take risks and step outside of their comfort zone (beyond what is comfortable for them). | - | - | -0.30 | 0.55 | - | - | - | 0.35 | 0.65 |
| IP2c.3 | Even though I can see potential problems, I will let my child resolve them on his/her own to learn from it. | - | - | - | 0.53 | - | - | - | 0.34 | 0.66 |

Table 2 continues on the next page →

**TABLE 2 (Continues...):** Pattern matrix.

| Item | Label | Factor | | | | | | | Communality ($h^2$) | Uniqueness ($v^2$) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| IP2a.23 | I encourage my child to do things for himself/herself. | - | - | - | 0.48 | - | - | - | 0.35 | 0.65 |
| IP2a.12 | I encourage my child to try doing things his/her way. | - | - | - | 0.46 | - | - | - | 0.35 | 0.65 |
| IP2a.31 | I make my child help with household chores (e.g. cleaning). | - | - | - | 0.31 | - | - | - | 0.23 | 0.77 |
| IP2a.18 | I ensure that my child can develop their interests; my own interests are less important. | - | - | - | 0.29 | - | - | - | 0.31 | 0.69 |
| IP2c.6 | I plan a lot of after-school activities for my child, including sports. | - | - | - | - | 0.72 | - | - | 0.60 | 0.40 |
| IP2c.9 | I fill my child's daily schedule with many after-school activities. | - | - | - | - | 0.72 | - | - | 0.61 | 0.39 |
| IP2c.2 | I am very involved in organising various activities for my child. | - | - | - | - | 0.52 | - | - | 0.48 | 0.52 |
| IP2c.27 | I look for activities for my child to participate in. | - | - | - | - | 0.40 | - | - | 0.37 | 0.63 |
| IP2c.8 | I accompany my child on all outings. | - | - | - | - | 0.29 | - | - | 0.38 | 0.62 |
| IP2c.10 | I encourage my child to discuss any academic problems with his/her teachers. | - | - | - | 0.26 | 0.28 | - | - | 0.32 | 0.68 |
| IP2c.4 | I tell my child no when necessary. | - | - | - | - | - | 0.52 | - | 0.32 | 0.68 |
| IP2b.2 | I help my child with schoolwork (e.g. doing homework or preparing for tests). | 0.27 | - | - | - | - | 0.50 | - | 0.45 | 0.55 |
| IP2a.32 | I frequently ask my child about what happened at school. | 0.43 | - | - | - | - | 0.47 | - | 0.38 | 0.62 |
| IP2c.1 | I set rules for my child. | - | - | - | - | - | 0.44 | - | 0.33 | 0.67 |
| IP2b.1 | I try my best to improve my child's academic grades. | - | - | - | - | - | 0.44 | - | 0.43 | 0.57 |
| IP2c.25 | If I am able to, I do my best to provide my child with the best possible education, toys, programmes, the internet, and technology. | - | - | - | - | - | 0.36 | 0.30 | 0.54 | 0.46 |
| IP2c.14 | I am very worried that my child will hurt her/himself or get sick. | - | 0.30 | - | - | - | 0.35 | - | 0.41 | 0.59 |
| IP2a.29 | I make sure that my child follows the rules I set. | 0.26 | - | - | - | - | 0.33 | - | 0.47 | 0.53 |
| IP2a.26 | I check who my child spends time with. | - | - | - | - | - | 0.30 | - | 0.30 | 0.70 |
| IP2c.11 | I comment on things about my child, such as his/her clothes, hobbies, friends, and the music she/he listens to. | - | - | - | - | 0.27 | 0.29 | - | 0.27 | 0.73 |
| IP2b.4 | I ask my child about his/her grades. | - | - | - | - | - | 0.26 | - | 0.28 | 0.72 |
| IP2a.28 | When playing in the park, I keep my child a short distance from me. | - | - | - | - | - | - | - | 0.15 | 0.85 |
| IP2c.29 | I take care of my child's needs first, and then my own. | - | - | - | - | - | - | 0.57 | 0.45 | 0.55 |
| IP2c.17 | If I am able, I give my child more than what he/she asks for. | - | - | - | - | - | - | 0.53 | 0.37 | 0.63 |
| IP2c.18 | My child's schedule takes priority over my needs. | - | - | - | - | - | - | 0.48 | 0.40 | 0.60 |
| IP2a.14 | I spend extra money on a gift for my child rather than for myself. | 0.27 | - | - | - | -- | - | 0.47 | 0.33 | 0.67 |
| IP2c.30 | I'd rather do things for my child than see her/him stressed out/worried. | - | 0.31 | - | - | - | - | 0.36 | 0.40 | 0.60 |
| IP2c.32 | My child usually gets what he/she wants. | - | - | - | - | - | 0.27 | 0.33 | 0.40 | 0.60 |
| IP2a.11 | If my child wants some clothes, s/he gets them if I am able to provide them. | - | - | 0.27 | - | - | - | 0.30 | 0.39 | 0.61 |
| IP2c.31 | I worry too much about my child. | - | 0.28 | 0.27 | - | - | - | 0.30 | 0.46 | 0.54 |
| | Cronbach's $\alpha$ for items loading on a factor, excluding cross-loadings. | 0.87 | 0.84 | 0.88 | 0.78 | 0.78 | 0.78 | 0.77 | - | - |
| | Cronbach's $\alpha$ with items shifted or deleted. | 0.87 | 0.84 | 0.88 | 0.78 | 0.78 | 0.74 | 0.78 | - | - |

Note: All loadings and cross-loadings ≥ 0.25 are shown in the table. However, items and loadings not included in the final factors are struck through. Cronbach's $\alpha$ for the initial factor loadings (sans cross-loadings) before items were selected is shown in the table, as well as the reliability of the final items.

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Given the substantial loadings on a few factors (indicating that most of the factors are overdetermined), a sample size exceeding 300, and the fact that most communalities are moderately low (around 0.40), there is sufficient evidence for a stable factor structure that may represent the population factor structure (Beavers et al., 2013).

### Factor loadings

The pattern matrix is presented in Table 2. Item IP2a.28 was dropped from all factors because of a loading below 0.25. All other items loaded above 0.25 and at least above 0.30 on their target factor. The table also displays reliability in the last two rows, as well as communalities and uniqueness in the last two columns. All factors had items that loaded substantially, ranging from approximately 0.40 to 0.80: 9 out of 10 items on Factor 1, 9 out of 12 on Factor 2, 8 out of 14 on Factor 3, 7 out of 9 on Factor 4, 4 out of 6 on Factor 5, 5 out of 11 on Factor 6 and 4 out of 8 on Factor 7. Although all loadings above 0.25 are indicated in the table, items discarded for various reasons – as discussed below – were struck through. This ensures that only the items and loadings considered for the final factors are clearly shown in Table 2.

### Communality and variance explained

According to the last two columns of Table 2, the communalities ($h^2$) remaining after extraction were invariably lower than 0.50. The unexplained variance, or uniquenesses ($v^2$), further indicates that the overlapping variance between the variables was not as high as expected. The items with communalities below 0.30 include IP2c.15 and IP2c.5 on Factor 2; IP2a.31 on Factor 4; and IP2c.11, IP2b.4 and IP2b.28 (which is dropped) on Factor 6.

Seven factors accounted for 40% of the variance in the dataset (see Table 3). Upon rotation, cross-loading was allowed, meaning that the percentage of variance includes both unique and cross-loading variance. Therefore, the values in the last column of Table 3 cannot be summed to determine the total unique variance explained in the dataset. The explained variance was distributed relatively evenly across the seven factors, with the exception of Factor 3, which accounted for a substantial portion (12%) of the variance.

### Factor correlations

Table 4 presents the correlations between the extracted factors, indicating the degree of association among them. Factor 1 correlates highly with Factors 3–7, but not with Factor 2. Factor 2 correlates substantially with Factors 3, 5 and 7, but not with Factor 4, and only slightly with Factor 6. Factor 3 correlates slightly with Factor 4 and substantially with Factors 1, 2 and 5–7. Factor 4 correlates slightly with Factors 5–7. Factors 5, 6 and 7 show cross-correlations with one another. It would be interesting to compare the content of Factors 1 and 2, as well as Factors 2 and 4, which do not correlate.

### Internal consistency

Cronbach's $\alpha$, as reported in Table 2, was calculated for all seven factors, including all items that loaded on each factor, except for Item IP2a.28. If included, Item IP2a.28 would have lowered the reliability of Factor 6 from 0.78 to 0.77. Cross-loading items were not included in the calculation of $\alpha$.

### Finalising the scales

Two items were moved – IP2a.24 was reassigned to Factor 7 (Prioritising the child) because of a cross-loading of $r = 0.32$, and IP2c.8 was reassigned to Factor 3 (Overprotection) because of a cross-loading of $r = 0.21$. Both items cross-loaded relatively highly on the alternative factors, and based on item content, shifting them for scoring purposes was deemed appropriate. Item IP2a.28 was deleted. Item IP2c.10 loaded on both Factor 4 (0.26) and Factor 5 (0.28), which are relatively low values. However, the item was retained for this round as it aligns with the overall content of Factor 4. For this reason, its value was struck through in Table 2. Item IP2c.25 loaded on Factor 6 (0.39) and cross-loaded on Factor 7 (0.30). Given its poor conceptual fit with either factor and the somewhat clumsy formulation of the item (which includes a list of items), it was decided to drop it. Item IP2c.11 loaded on Factor 6 (0.29) and Factor 5 (0.27) and was dropped for the same reason as IP2c.25. Item IP2c.31 (a worry item) cross-loaded in the range of 0.27–0.30 on Factors 2, 3 and 7 and was removed because of its lack of contribution to a specific construct. Cronbach's alpha ($\alpha$) for the factors changed as follows: Factor 5 decreased from 0.78 to 0.76, and Factor 7 increased from 0.77 to 0.80 (see the last row of Table 2).

In Table 5, the final items selected for each factor are indicated in the last column, along with a factor label, a description based on the content of the items, and an explanation of what a high or low score would indicate for that particular factor. The rationale for selecting these labels and descriptions is discussed in the discussion section, along with some differences compared to the original IPB instrument.

**TABLE 3:** Explained variance.

| Factor | Extraction sums of squared loadings | | | Rotation sums of squared loadings (Total) |
|---|---|---|---|---|
| | Total | % of Variance | Cumulative % | |
| 1 | 15.25 | 21.47 | 21.47 | 8.76 |
| 2 | 4.94 | 6.95 | 28.42 | 6.80 |
| 3 | 2.77 | 3.90 | 32.32 | 12.27 |
| 4 | 1.67 | 2.35 | 34.68 | 4.17 |
| 5 | 1.48 | 2.08 | 36.76 | 7.72 |
| 6 | 1.25 | 1.76 | 38.52 | 7.58 |
| 7 | 1.21 | 1.70 | 40.21 | 7.22 |

**TABLE 4:** Factor correlations.

| Factor | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 1 | 1.00 | - | - | - | - | - | - |
| 2 | -0.02 | 1.00 | - | - | - | - | - |
| 3 | 0.46 | 0.42 | 1.00 | - | - | - | - |
| 4 | 0.31 | -0.02 | 0.10 | 1.00 | - | - | - |
| 5 | 0.35 | 0.38 | 0.47 | 0.17 | 1.00 | - | - |
| 6 | 0.37 | 0.11 | 0.49 | 0.21 | 0.37 | 1.00 | - |
| 7 | 0.29 | 0.34 | 0.55 | 0.11 | 0.32 | 0.30 | 1.00 |

### Second-order factors

Given that previous research identified two opposing or bipolar second-order factors, a second-order EFA was conducted using the first-order seven-factor scores, as shown in Table 6. The KMO value was 0.74, and Bartlett's test of sphericity was significant. Measures of sampling adequacy for all seven variables ranged from 0.57 to 0.85, with at least three variables exceeding 0.80. The extraction method was PAF with oblique rotation. Communalities after extraction were above 0.45, except for first-order Factor 4 (autonomy support), which was 0.16. The number of factors to extract was explored with R, which provided (1) VSS MAP = 1, (2) PA = 3, (3) eigenvalues > 1 only for the first two factors and (4) Heywood cases at three factors. The most defensible number of factors to extract was two, provided the factor structure was interpretable. The correlation between the two factors was -0.32.

As shown in Table 6, first-order Factors 1, 6 and 4 loaded positively on the first second-order factor, which was labelled '*Adaptive Intensive Parenting Behaviour*' (see the discussion below). Factors 2, 3, 7 and 5 loaded negatively on the second second-order factor, which was labelled '*Overinvolved Intensive Parenting Behaviour*'. The negative loading on the second second-order factor depends on the orientation of the factors with respect to the x- and y-axes; the sign can easily be reversed to positive by adjusting the item scoring on the second-order factor when negative or kept as is when positive (Gorsuch, 2015). Comrey and Lee (1992) recommend hand oblique rotation to allow researchers to manage the signs and positions of the axes. However, we accept the Promax rotation from SPSS as is, while clarifying the implications for scoring items, factors and second-order factors. The factors (2, 3, 5 and 7) loading on the second second-order factor all have high scores, indicating overinvolved IPBs. For our purposes, the valence of the original factors before loading on the second second-order factor implies less involved parenting when scores are low and more involved parenting when scores are high.

However, when the second-order factor loadings become negative, as in Table 6, the original scoring is reversed, and the factor should be interpreted as follows: high second-order scores indicate parents who allow appropriate autonomy, are less overprotective, balance family needs well and provide moderate activity management. Conversely, low second-order scores indicate parents who are overly restrictive, highly overprotective, strongly child-centred and intensively manage activities.

## Discussion

This was the first evaluation of the factor structure of the IPB Scale in a South African sample of mothers. Results indicate that the IPB demonstrates good reliability and validity in this population. The EFA identified a seven-factor first-order structure: *engagement*, *autonomy restriction*, *proactive protection*, *autonomy support*, *talent stimulation*, *behavioural control* and *child-centredness*. In social and behavioural sciences, explained variance between 30% and 60% is common, and a recent analysis of 1565 articles in psychological science revealed an average explained variance of 42.8%, with a 95% confidence interval of

**TABLE 6:** Second-order factors.

| First-order factor | Label | Second-order factor | |
|---|---|---|---|
| | | 1 | 2 |
| 1 | Engagement | **0.801** | - |
| 6 | Behavioural control | **0.581** | -0.209 |
| 4 | Autonomy support | **0.421** | - |
| 2 | Autonomy restriction | -0.282 | **-0.879** |
| 3 | Proactive protection | 0.435 | **-0.617** |
| 7 | Child-centredness | 0.283 | **-0.523** |
| 5 | Talent stimulation | 0.344 | **-0.479** |

Note: Bold values indicate the second-order factor on which each first-order factor loads.

**TABLE 5:** Factor labels and items.

| Factor | Label | Description | Meaning of low and high score | Items |
|---|---|---|---|---|
| 1 | Engagement | Dedication to childcare with emotional, financial, cognitive and physical and economic investments in many aspects of the child's life | High scores indicate strong endorsement of resource-intensive parenting behaviours; low scores suggest less emphasis on or reduced capacity for high engagement | IP2a.5, IP2a.6, IP2a.4, IP2a.3, IP2a.7, IP2a.2, IP2a.1, IP2a.9, IP2a.13, IP2b.3 |
| 2 | Autonomy restriction | Overinvolvement in the child's actions by doing things for the child that the child can or should be able to do | High scores reflect a tendency to limit a child's independence by intervening unnecessarily; Low scores reflect avoidance of unnecessary intervention | IP2c.21, IP2c.22, IP2a.22, IP2c.34, IP2c.16, IP2c.28, IP2b.5, IP2c.15, IP2c.19, IP2c.5, IP2c.33, IP2c.23 |
| 3 | Proactive protection | Protecting a child from possible and anticipated negative experiences and risks. Overprotect, not allowing the child to learn from experience | High scores reflect a tendency to seek out and remove potential perceived dangers; low scores suggest allowing the child to face challenges and learn from negative experiences | IP2a.17, IP2a.15, IP2a.19, IP2a.10, IP2a.21, IP2a.20, IP2c.24, IP2a.8, IP2c.7, IP2a.30, IP2a.16, IP2a.27, IP2a.24, IP2c.26 |
| 4 | Autonomy support | Encouraging a child's independence (through the child taking responsibility, exploring interests and learning from their own experiences) | High scores indicate actively encouraging a child's independence and self-directed decision-making; low scores reflect less encouragement of autonomy | IP2a.25, IP2c.12, IP2c.13, IP2c.20, IP2c.3, IP2a.23, IP2a.12, IP2a.31, IP2a.18 |
| 5 | Talent stimulation | Facilitating child development through activity management and/or extracurricular activities | A high score indicates active planning, organising and managing a child's activities and learning opportunities to enrich development; a low score suggests less planning and managing of structured activities | IP2c.6, IP2c.9, IP2c.2, IP2c.27, IP2c.8, IP2c.10 |
| 6 | Behavioural control | Active regulation of a child's behaviour through rule setting, guidance and monitoring | High scores reflect structured, achievement-oriented involvement; low scores suggest less behavioural oversight and academic involvement from the mother | IP2c.4, IP2b.2, IP2a.32, IP2c.1, IP2b.1, IP2c.14, IP2a.29, IP2a.26, IP2b.4 |
| 7 | Child-centredness | Prioritising the child by putting the child's wants and needs first, also in terms of material things | A high score indicates a strong focus on the child as the centre of the family, including material indulgence; a low score suggests less indulgent parenting with greater emphasis on shared family needs | IP2c.29, IP2c.17, IP2c.18, IP2a.14, IP2c.30, IP2c.32, IP2a.11, IP2a.24 |

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41.7% – 43.9% (Peterson, 2000; Smedslund et al., 2022). Thus, the 40% variance accounted for by the seven factors in this study is not unusual but low. It can be explained by the presence of measurement error, including unique item variance, random error probably because of sample variability, lower than expected commonality between items and overlap with other contextual variables in the dataset. Preliminary analyses indicated, for example, that 38.5% variance in the factor *proactive protection* is explained by ethnicity, urban or rural location and psychological characteristics of mothers such as warmth. Similar results were found for the other factors (Visser et al., 2025). The demographic characteristics of the sample are important for the interpretation of the factor structure. Given that the sample predominantly fell in the low-to-middle income bracket, this may explain why material indulgence clustered with child-centredness in the South African factor structure, discussed further below. Additionally, the high proportion of unmarried mothers may reflect parenting realities within the South African context and could influence maternal engagement and autonomy restriction. Finally, while the sample was linguistically diverse, the measure was presented only in English. This suggests that the IPB may be broadly interpretable across South African groups, but further validation in multiple languages is required. These sample characteristics indicate the contextual realities where the IPB may be most applicable in South Africa.

A second-order analysis suggests a two-factor structure: *adaptive* and *overinvolved* IPBs.

## Adaptive intensive parenting behaviours

Under the *adaptive* IPBs, the first-order factors loaded positively. *Engagement* reflects maternal involvement, support and interest in her child's life. In South Africa, where the quality of early education and childcare varies (Hatch & Posel, 2018), maternal involvement may enable optimal child development, because active parental engagement is known to promote child development (Baker et al., 2018). *Autonomy support* fosters child independence by encouraging autonomous problem-solving and decision-making and the development of their own interests. Research suggests that autonomy-supportive involvement from parents is associated with positive child outcomes in various contexts (Lerner et al., 2022), including Africa (Marbell-Pierre et al., 2019). *Behavioural control* relates to regulating the child's behaviour through monitoring, rule setting and guidance. This factor included four items related to academic involvement. This contrasts with the international data (Lubiewska et al., 2025), where academic engagement formed a separate factor within the child undermining the second-order dimension. Consolidating academic involvement into *behavioural control* may be a context-specific feature. Educational and socio-economic inequality is characteristic in South Africa, and maternal involvement may therefore be an adaptive strategy, as research indicates that parental academic involvement is an important predictor of academic achievement and upward social mobility in contexts of economic inequality (Zhang et al., 2020). Maternal monitoring and guidance in this area may therefore compensate for systemic shortcomings and align with broader literature associating behavioural control with limit setting and academics and with adaptive parenting resulting in positive child outcomes (Doan et al., 2017). As such, what may be classified as undermining in contexts with more resources may be considered supportive in South Africa.

Given South Africa's historical, social and cultural context, characterised by high socio-economic inequality and crime rates and low literacy and education levels, maternal engagement, autonomy support and behavioural control (rule setting, academic involvement, monitoring and guidance) are therefore considered adaptive IPBs. Extant literature suggests they encourage optimal child development, appropriate mother–child attachment and balanced interaction by combining responsiveness and support with boundaries and expectations within this context (Baker et al., 2018; Lerner et al., 2022; Yan et al., 2017).

## Overinvolved intensive parenting behaviours

Under the *overinvolved* IPBs, the remaining first-order factors loaded negatively. *Autonomy restriction* may potentially inhibit child development through maternal overinvolvement in daily tasks and infantilisation. This may prevent children from acquiring developmentally appropriate skills and contribute to maternal burnout by requiring mothers to perform tasks instead of the child (Shah et al., 2023). This factor contained the two items not in the original IPB Scale to differentiate between maternal beliefs and cultural norms regarding children's decision-making ability, both relating to autonomy restriction, but for different reasons. *Proactive protection* is aimed at safeguarding the child from harmful circumstances or criticisms, aligning with 'lawnmower parenting', where parents remove obstacles out of their children's way (Locke et al., 2012). While potentially well-intended or contextually necessary (e.g. high inequality and/or crime), this may undermine the development of, among others, resilience and coping strategies (Flamant et al., 2022) and requires intensive maternal energy to constantly seek out and prevent potential negative experiences. *Talent stimulation* involves maternal focus on child stimulation through extramural activities and achievement pressure. If excessive, this can leave little time for independent exploration and relaxation (Tany & Khanam, 2022) and requires significant maternal time and financial investment. This aligns with the concept of 'tiger parenting', a strict and developmentally focused parenting style (Xie & Li, 2018). Contextually (e.g. low socio-economic status), higher levels of talent stimulation may enable child and/or family achievement and thus upward social mobility (Zhang et al., 2020). One item ('I encourage my child to discuss any academic problems with his/her teachers') cross-loaded weakly on

*autonomy support* and should be flagged for future review, as it could reflect either teaching help-seeking skills (autonomy support) or pushing academic development (talent stimulation). Finally, *child-centredness* prioritises the child's desires and requirements over those of the mother and/or family. This requires substantial maternal time, energy and finances, potentially encouraging materialism and decreasing the emotional well-being of children (Denegri et al., 2022; Trzcińska et al., 2024). However, research on poverty and well-being (material and subjective) in children suggests mothers may sacrifice their own needs to protect children from feelings of deprivation or hardship (Gross-Manos & Bradshaw, 2022).

Prior literature generally associates high levels of autonomy restriction, proactive protection, talent stimulation and child-centredness with detrimental outcomes, potentially undermining child development and placing excessive demands on maternal resources (e.g. Flamant et al., 2022; Locke et al., 2012; Shah et al., 2023; Tany & Khanam, 2022). However, contextual factors are important: in settings like low socio-economic status or low literacy, greater maternal involvement may not be maladaptive, potentially ensuring child and/or family safety, well-being and achievement.

## Comparison with international studies

The identified multidimensional structure aligns with prior studies, suggesting intensive parenting is a complex construct where not all aspects are uniformly adaptive or maladaptive. The factors *child-centredness* and talent stimulation were identified using other measures in cross-national studies by Gauthier et al. (2021) and Liss et al. (2013). The current structure also incorporates the resource-intensive component originally identified by Hays (1996). Specifically, high levels of *proactive protection*, *child-centredness* (including providing material goods) and talent stimulation require significant cognitive, emotional, financial and *temporal investments*. Given the cultural variance in South Africa and cross-national findings, child-centredness and stimulation appear to be core features of intensive parenting more broadly.

Compared with the IPB international results (Lubiewska et al., 2025), the South African data share not only similarities (e.g. first-order factors: *engagement*, *autonomy support*, *talent stimulation* [termed facilitation internationally], *proactive protection* and *autonomy restriction*) but also differences in factor structure. This is to be expected given the heterogeneous nature of the South African population. *Child-centredness* loaded on two separate factors in the international data (*prioritising* and *material indulgence*). This may reflect the specific meaning that providing material goods may have in a context of economic constraint, and in that, instead of indulgence, it may represent a form of protection against feelings of deprivation. This is supported by research on poverty and child well-being (Gross-Manos & Bradshaw, 2022) and the association between material resources and lower levels of child well-being across various countries (including Africa) (Main et al., 2019; Sarriera et al., 2015). However, further qualitative research in this regard is required. Two items on this factor were not retained in the international structure (doing things for the child rather than seeing the child worried and worrying too much about the child). The first indicates prioritising the child's emotional well-being and is therefore appropriately loaded. The maternal worry item cross-loaded with similar values on three factors. It is thus not unique to this factor and was removed locally as well.

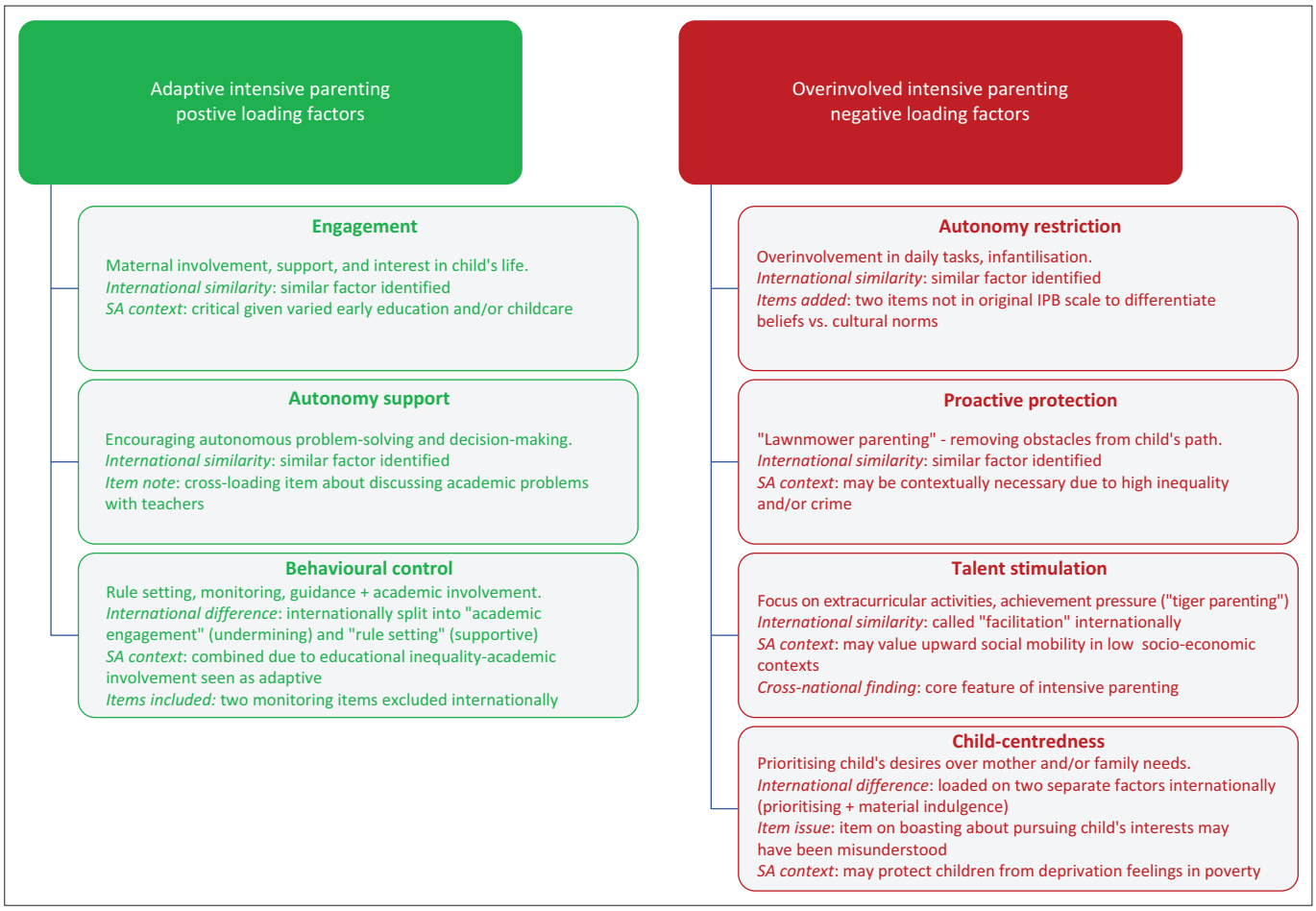
An item on prioritising the child's interests over the mother's loaded on *engagement* in the South African structure (but on *prioritising* internationally), potentially because of literacy levels and complex wording – the item was long and consisted of two parts: 'I ensure that my child can pursue their interests; developing my own interests is less important to me'. It is possible that most mothers did not read the full question and answered based on the first half. Removing the second half is suggested, as it did not cross-load on any other factor.

Finally, *behavioural control* formed a single factor locally (adaptive dimension), whereas the international structure separates these items into *academic engagement* (undermining dimension) and *rule setting* (supportive dimension). As previously discussed, a contextual explanation may be that in South Africa (high educational and socio-economic inequality), active academic involvement and rule setting may be adaptive strategies supporting child development and potentially enabling upward social mobility of the family (Zhang et al., 2020). Additionally, in sub-Saharan Africa, parental involvement in children's education is considered essential for development (Kambona, 2025). This factor also included two monitoring items (monitoring who the child spends time with and what happens at school) that were excluded internationally, but deemed adaptively important locally because of high crime and violence in the local context.

To synthesise these structural similarities and differences with the international IPB structure and prior conceptualisations of intensive parenting, a visual overview is provided in Figure 1. This mind map illustrates the alignment of the South African first-order factors within the identified adaptive and overinvolved second-order dimensions, while highlighting key divergences from the international IPB factor structure and core components identified in prior literature (e.g. Gauthier et al., 2021; Hays, 1996; Liss et al., 2013; Lubiewska et al., 2025).

## Limitations

This study is not without limitations. Firstly, despite the linguistic variance of South Africa, the language used in the measure was English. While the language of business and education in South Africa is predominantly English, and the measure was adapted for potential low literacy of respondents, the absence of translated versions may have influenced




SA, South African; IPB, intensive parenting behaviour.

**FIGURE 1:** Intensive parenting behaviour factor structure – South African versus international.

participants' understanding of certain items. Additionally, only one cognitive debriefing interview was conducted, and while the participant was multilingual, additional interviews would have been beneficial. Future studies should therefore include multiple cognitive interviews to further strengthen the linguistic and cultural equivalence of the measure. Secondly, the sample was relatively small and not representative of all cultural groups, and results may therefore not capture intensive parenting across all cultural groups in South Africa. As most participants were low-to-middle-income mothers, the results may not reflect parenting behaviours of higher income groups or fathers. Generalisations should therefore be made with caution. Future studies should include more mothers from different cultural groups in South Africa and fathers, to establish the applicability of the IPB across South Africa's population.

## Conclusion and recommendations

This is the first study to assess the psychometric properties and factor structure of the IPB in South Africa. The findings suggest good reliability and validity in measuring intensive parenting among South African mothers. The multidimensional factor structure in South African mothers aligns with findings from studies outside of this context, suggesting multidimensionality for the construct. Future studies in South Africa should translate the measure to ensure accurate responses across diverse linguistic groups and should aim to include a larger, more representative sample to enhance the generalisability of the results across different cultural groups. Finally, future studies should include fathers and other caregivers, such as grandparents, as IPBs may differ from those of mothers.

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### Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article. The author, D.M., serves as an editorial board member of this journal. D.M. has no other competing interests to declare.

### Authors' contributions

J.M. and M.V. contributed to the design and implementation of the research. D.M. analysed the data. J.M., D.M. and M.V. contributed to the writing of the manuscript.

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## Data availability

The data that support the findings of this study are available on request from the corresponding author, J.M. The data are not publicly available because of information that could compromise the privacy of research participants.

## Disclaimer

The views and opinions expressed in this article are those of the authors and are the product of professional research. They do not necessarily reflect the official policy or position of any affiliated institution, funder, agency or publisher. The authors are responsible for this study's results, findings and content.

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