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Original article

Cross-cultural translation and validation of the Brief Autism Mealtime Behavior Inventory (BAMBI-M) in Malay

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Abstract. *Background and aim:* The Brief Autism Mealtime Behavior Inventory (BAMBI) is extensively utilized for evaluating feeding challenges among children with autism spectrum disorder (ASD). However, its absence in Malay restricts its application within Malaysia. This study aimed to translate and validate the Malay version of BAMBI (BAMBI-M), ensuring both linguistic and conceptual appropriateness for Malay-speaking populations. *Methods:* The translation followed a structured protocol involving forward and backward translations, reviews by experts and parents, and comprehensive psychometric evaluations. Ten experts and ten parents assessed content and face validity. A total of 180 parents participated in the psychometric validation stage, comprising 90 parents of children with ASD and 90 parents of typically developing children. Reliability was determined through internal consistency using Cronbach's alpha, test-retest reliability, and validity was confirmed through known-groups analysis. *Results:* Content validity demonstrated robust agreement among experts, and face validity assessments confirmed item relevance through favorable item impact scores. The internal consistency of BAMBI-M showed excellent reliability, with a Cronbach's alpha of 0.97. Test-retest reliability coefficients ranged from 0.82 to 0.89, confirming temporal stability. Known-groups validity indicated significant differences between the scores of children with ASD and typically developing children ($p < 0.001$). *Conclusions:* BAMBI-M is a reliable and valid instrument for evaluating feeding difficulties in Malaysian children with ASD. Future research should further investigate additional psychometric properties and explore the scale's applicability across diverse Malaysian populations. (www.actabiomedica.it)

Key words: autism spectrum disorder, feeding difficulties, mealtime behaviours, BAMBI, validation

Introduction

Autism spectrum disorder (ASD) is a neurodevelopmental condition characterized by deficits in social communication, restricted and repetitive behaviours, and sensory sensitivities (1). Symptoms typically emerge in early childhood and significantly impact daily life, including feeding and mealtime behaviours. Feeding difficulties are especially common in children with ASD and occur more frequently than in typically developing peers (2–4). These challenges include food selectivity, texture preferences, and resistance to new foods, often leading to nutritional deficiencies and increased caregiver stress. Feeding challenges in

ASD are well-documented, with studies reporting that approximately 80% of young children with ASD are classified as picky eaters, and 95% refuse to try new foods (5). Another study found that 46% to 89% of children with ASD exhibit atypical eating behaviours, including food refusal, restricted food variety, and idiosyncratic mealtime behaviours (3,6). Many children strongly prefer processed foods while avoiding fruits, vegetables, and proteins, often due to sensory sensitivities and underlying medical conditions such as gastroesophageal reflux disease (GERD), further complicating dietary intake and nutritional adequacy (7).

These feeding difficulties are often closely linked to sensory processing differences in children with ASD. Many children with ASD experience hypersensitivity or hyposensitivity to oral stimuli, leading to food aversions, chewing and swallowing difficulties, and strong texture-based preferences (8). Studies show that these sensory challenges contribute to rigid food preferences and increased stress for caregivers during mealtimes (9). Additionally, feeding difficulties have been linked to broader ASD-related behaviours, such as repetitive routines and sensory avoidance, further complicating intervention efforts. However, findings using standardised diagnostic tools like the Autism Diagnostic Observation Schedule (ADOS) remain inconsistent, with some studies failing to establish a significant association between ADOS severity scores and feeding problems (10,11). Given the variability in feeding difficulties among children with ASD, early assessment and targeted interventions are essential to prevent these challenges from becoming deeply ingrained.

Parent-mediated interventions (PMI) have emerged as a promising approach to improving adaptive behaviours and promoting skill acquisition in children with ASD (12). Although often used for social-emotional development, PMI could also help address feeding challenges. To be effective, however, PMI must be guided by reliable tools that reflect cultural and linguistic differences. Various tools have been developed to assess feeding challenges in children with ASD, such as the Children's Eating Behavior Inventory-Revised, the Behavioural Pediatrics Feeding Assessment Scale, and the Screening Tool of Feeding Problems (13–15). However, the Brief Autism Mealtime Behavior Inventory (BAMBI) is the only validated tool specifically designed to assess ASD-related feeding challenges (16). BAMBI is an 18-item parent-report questionnaire that evaluates food selectivity, mealtime disruptions, and other ASD-related feeding behaviours. Parents rate their child's behaviours on a five-point Likert scale, with higher scores indicating greater feeding challenges. The tool has demonstrated strong psychometric properties, with high internal consistency ($\alpha = 0.88$ for the total score, $\alpha = 0.87$ for food selectivity, and $\alpha = 0.76$ for food refusal), making it a reliable measure for identifying feeding challenges in children with ASD (16).

Despite its effectiveness, BAMBI has only been translated into Brazilian-Portuguese and Turkish, with no validated Malay version currently available. The Brazilian-Portuguese adaptation demonstrated high internal consistency ($\alpha > 0.7$) and strong known-groups validity, effectively differentiating children with and without ASD (17). Similarly, the Turkish version showed high internal consistency ($\alpha = 0.79$) and strong reliability (18). However, cultural and linguistic differences can significantly impact the accuracy of parent-reported assessments, highlighting the need for a version that aligns with Malaysia's diverse population. Given the critical role of parent-reported measures in assessing feeding difficulties, validating BAMBI in Malay is essential to ensure accurate caregiver reporting and effective intervention planning. Therefore, this study aims to cross-culturally translate and validate the BAMBI into Malay (BAMBI-M) for use in Malay-speaking populations.

Materials and Methods

Study design

This study employed a cross-cultural translation and validation design to translate and validate the BAMBI into Malay (BAMBI-M), following established guidelines (19,20). The process involved three key stages: forward and backward translation, expert review and validation. The psychometric properties of BAMBI-M, including internal consistency, content validity, test-retest reliability, and known-group

validity, were evaluated. Ethical approval was obtained from the Universiti Teknologi MARA (UiTM) Ethics Committee (Reference no: REC/04/2021/MR238). Informed consent was obtained from all participants, who were assured of confidentiality, voluntary participation, and the right to withdraw at any time. Collected data were anonymised and used solely for research purposes by the Helsinki Declaration (21). Additionally, permission to translate BAMBI into Malay was obtained from the original author (16).

Study participants

For the content validity assessment, the purposively recruited participants comprised six occupational therapists and four speech therapists, which was considered an adequate sample size for achieving reliable Content Validity Index (CVI) results, including Malaysian occupational therapists or speech therapists with at least five years of experience in paediatrics, experience handling children with ASD, and fluency in Malay (22). However, professionals working outside Malaysia, those no longer in practice, or those who had retired were excluded from this study.

For face validity and psychometric testing, 180 parents were recruited: 90 with children diagnosed with ASD and 90 with typically developing children. Based on Sousa et al. (2020), this sample size meets the recommended minimum of 10 subjects per item for an 18-item instrument. Inclusion criteria for the ASD group required parents to have a child aged 5–11 years, diagnosed with ASD by a certified medical professional. Parents of children with other developmental disorders (e.g., Asperger's syndrome, ADHD, Rett syndrome) were excluded due to differences in feeding behaviour patterns. Participants were recruited from six private ASD centres in Johor Bahru, and data were collected via an online survey.

Inclusion criteria for the typically developing children required parents to have a typically developing child between 5 and 11 years who were not undergoing continuous medication or radiotherapy, as these factors may influence feeding behaviours. However, parents of children diagnosed with any developmental disorder, including ASD, Down syndrome, ADHD, Fragile X syndrome, or developmental delay, were excluded. Additionally, both parents (ASD and typically developing) who were illiterate or unable to complete the BAMBI-M questionnaire were excluded to ensure the accuracy of responses. Participants in the typically developing children were purposively recruited through the Johor Bahru Community Centres.

Study instruments and data collection procedure

Forward and backward translation

The original BAMBI comprises 18 items categorised into three domains: Restricted Food Variety (Items 10, 11, 13–18), Food Refusal (Items 1, 2, 4, 7, 8), and ASD-Related Mealtime Behaviours (Items 3, 5, 6, 9, 12). Responses are recorded on a five-point Likert scale ranging from 1 (Never/Rarely) to 5 (At Almost Every Meal), with a cut-off score of >34 indicating clinically significant mealtime challenges (23).

The translation of BAMBI followed internationally recognised guidelines to ensure linguistic and cultural equivalence (19,20). A professional translator from Institut Terjemahan Negara Malaysia (ITNM) first translated BAMBI into Malay. This draft was reviewed by two language experts for semantic and cultural accuracy. They identified inconsistencies and resolved them through harmonisation, producing a version that remained true to the original while fitting the Malaysian context.

To verify the accuracy of the translation, a backward translation was performed by another professional translator from ITNM, who was unfamiliar with the original English version. The back-translated version was then compared to the original BAMBI by the same language experts who had been involved in the forward translation. Any variations in meaning or intent were carefully examined to ensure that the Malay version maintained conceptual equivalence with the original instrument. Figure 1 illustrates the cross-cultural translation and validation process of the BAMBI-M.

Content and face validation

Data were collected using Google Forms for content and face validity, providing a convenient and accessible platform for participants to complete the

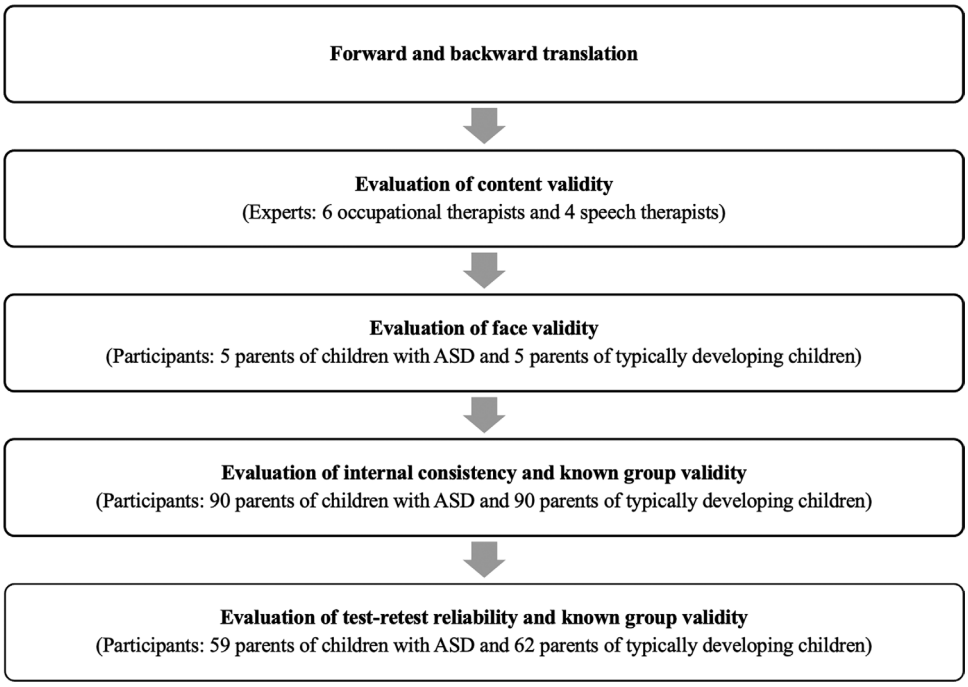

Figure 1. The cross-cultural translation and validation process of BAMBI-M.

questionnaire remotely. The information sheet and consent form outlined the study's objectives, procedures, and participants' rights.

For content validity, a content validation questionnaire was developed based on Polit and Beck's (2006) framework. Experts rated each item for relevance, clarity, ambiguity, and simplicity using a four-point Likert scale. Higher scores indicated stronger validity. Experts also completed demographic data and qualitative feedback on the translation. They were invited by email and provided with a study information sheet, the questionnaire, and the original BAMBI in English (24).

Following expert validation, BAMBI-M was tested on five Malay-speaking parents of children with ASD and five parents of typically developing children to assess the importance of each item using the item impact scale. Demographic details of parents were collected, and they rated the importance of each item on a five-point Likert scale. Any unclear wording, ambiguous terms, or suggested improvements were considered to ensure BAMBI-M was linguistically and culturally suitable for the target population (25).

Reliability and known-groups validity

To assess the reliability (internal consistency and test-retest reliability) and known-groups validity, data were collected using a Google Form with two sections: demographic details and the BAMBI-M questionnaire. Participants first completed the demographic section, which gathered key information about the child and the parents. The second section contained the BAMBI-M questionnaire to assess feeding challenges in children with ASD. To evaluate test-retest reliability, participants were re-contacted by phone seven days after the initial completion and asked to complete BAMBI-M again. This process ensured the measure's stability and consistency over time, a key indicator of reliability (26).

Data analysis

To evaluate content validity, the Content Validity Index (CVI) was calculated at both the item (I-CVI) and scale (S-CVI) levels. The I-CVI was determined

by dividing the number of experts who rated an item as 3 or 4 by the total number of experts, while the mean I-CVI was obtained by averaging all item CVI scores. The S-CVI was computed by dividing the highly rated items by the total items. A CVI of ≥0.80 was considered acceptable, with I-CVI ≥0.78 and S-CVI ≥0.90 indicating strong content validity (24). Additionally, weighted kappa (κ) values were calculated to account for chance agreement among experts, with agreement levels classified as fair (0.40–0.59), good (0.60–0.74), or excellent (>0.74) (27). For face validity, the item impact score was calculated using the formula described by Zamanzadeh et al. (2015). Items with an impact score of 1.5 or higher were retained (22).

For reliability, BAMBI-M's internal consistency was assessed using Cronbach's alpha, which measures the consistency of responses across items. A Cronbach's alpha between 0.70 and 0.95 was considered acceptable, indicating strong internal consistency (28). Test-retest reliability was evaluated using the Intraclass Correlation Coefficient (ICC) to assess the stability of BAMBI-M scores over time. ICC values were categorised as poor (<0.50), moderate (0.51–0.74), good (0.75–0.90), or excellent (>0.90) (21,26).

To assess known-groups validity, an independent sample *t*-test was conducted to compare BAMBI-M scores between parents of children with ASD and parents of typically developing children. A significance level of $\alpha < 0.05$ was applied, and differences in mean scores across the three BAMBI-M domains (restricted food variety, food refusal, and ASD-related mealtime behaviours) were analysed to determine the measure's ability to differentiate between the two groups.

Results

Content and face validation of BAMBI-M

Content validation was conducted by ten experts, comprising six occupational therapists and four speech therapists, each with 10 to 15 years of experience in paediatrics. Most occupational therapists held a PhD, while most speech therapists held a master's degree. Demographic details of the participants are shown in Table 1. The content validity index (CVI) analysis demonstrated high validity scores for relevance, clarity, ambiguity, and simplicity (Table 2), with Item-Level CVI (I-CVI) ranging from 0.90 to 1.00 and Scale-Level CVI (S-CVI) ranging from 0.97 to 1.00. The S-CVI/Universal Agreement (UA) scores ranged from 0.78 to 1.00, further supporting the validity of the BAMBI-M. Inter-rater agreement was also strong, as reflected in the modified kappa (κ) values, which were 1.00 for most items, indicating perfect agreement. Items 4, 5, 8, and 16 had κ values of 0.90 for relevancy and simplicity, suggesting excellent agreement even after adjusting for chance.

For face validation, five parents of children with ASD and five parents of typically developing children participated, as shown in Table 1. The item impact scores ranged from 3.15 to 4.05 for all items, confirming their relevance for retention in the scale (Table 2). The parents found the translated BAMBI-M to be clear and comprehensible. Their feedback led to minor refinements to enhance cultural and linguistic appropriateness in the final version of BAMBI-M (Table S1).

Internal consistency and test-retest reliability of BAMBI-M

A total of 180 parents participated, including 90 parents of children with ASD and 90 parents of typically developing children. The mean age of children with ASD was 7.25 years (SD = 1.98), while that of typically developing children was 7.19 years (SD = 1.63). Gender distribution showed a higher proportion of males in the ASD group (56 males, 35 females) compared to the typically developing group (35 males, 46 females). Most respondents were mothers, with 62 mothers and 28 fathers in the ASD group and 72 mothers and 18 fathers in the typically developing group. The mean parental age was 37.35 years (SD = 5.23) in the ASD group and 36.82 years (SD = 3.62) in the typically developing group. Table 3 presents the demographic characteristics of the participants. No significant differences were found between groups in demographic characteristics.

The internal consistency analysis of BAMBI-M yielded a high Cronbach's alpha (α) of 0.97, indicating strong reliability across the 18-item scale. All

Table 1. Demographic characteristics of participants for content and face validity

Experts	**Occupational Therapist (n=6)**	**Speech Therapist (n=4)**
Age, Mean±SD	34.5±4.15	37±3.79
Working experience	>10 years	>10 years
Qualification		
Bachelor's degree	1	1
Master's degree	2	2
Doctor of Philosophy	3	1
Nature of working		
Academic	4	2
Clinical	2	2

Parents	**ASD (n=5)**	**Typical Children (n=5)**
Age, Mean±SD	36.7±4.12	35.61±3.66
Marital Status		
Married	4	5
Divorced	1	0
Relationship with children		
Father	1	1
Mother	4	4
Educational Level		
Secondary	2	2
Tertiary	3	3

SD=Standard deviation

Table 2. Content validity and item impact score of the BAMBI-M

ITEMS	**I-CVI**				**Item Impact Score**
	Relevancy	**Clarity**	**Simplicity**	**Ambiguity**	
Item 1	1.0	1.0	1.0	1.0	3.15
Item 2	1.0	1.0	1.0	1.0	3.16
Item 3	1.0	1.0	1.0	1.0	3.42
Item 4	0.9	1.0	0.9	1.0	4.05
Item 5	0.9	1.0	0.9	1.0	3.15
Item 6	1.0	1.0	1.0	1.0	3.78
Item 7	1.0	1.0	1.0	1.0	3.38
Item 8	0.9	1.0	0.9	1.0	3.16
Item 9	1.0	1.0	1.0	1.0	3.42
Item 10	1.0	1.0	1.0	1.0	4.05
Item 11	1.0	1.0	1.0	1.0	3.88
Item 12	1.0	1.0	1.0	1.0	3.62
Item 13	1.0	1.0	1.0	1.0	3.74
Item 14	1.0	1.0	1.0	1.0	3.92

ITEMS	I-CVI				Item Impact Score
	Relevancy	Clarity	Simplicity	Ambiguity	
Item 15	1.0	1.0	1.0	1.0	3.44
Item 16	0.9	1.0	0.9	1.0	3.75
Item 17	1.0	1.0	1.0	1.0	3.42
Item 18	1.0	1.0	1.0	1.0	4.05
S-CVI/UA	0.78	1.0	0.78	1.0	-
S-CVI/Ave	0.97	1.0	0.97	1.0	-

I-CVI=Item-level Content Validity Index; UA=Universal Agreement, representing a unanimous agreement on the item's validity; S-CVI/UA=Proportion of items achieving universal agreement across experts; S-CVI/Ave=Average of item-level CVI scores across all items.

Table 3. Demographic profiles of participants

	Children with ASD (n=90)	Typically Developing Children (n=90)	test, *p*-value
Age of child, Mean±SD	7.25±1.98	7.19±1.63	t 0.22, p=0.82
Gender of child Male Female	 56 (61.5%) 35 (38.5%)	 44 (48.9%) 46 (51.1%)	X^2 2.98, p=0.08
Relationship with children Mother Father	 62 (68.9%) 28 (31.1%)	 72 (80.0%) 18 (20.0%)	X^2 2.92, p=0.09
Age of mother, Mean±SD	37.35±5.23	36.82±3.62	t 0.79, p=0.43

t= independent sample t-test; X^2 = Pearson chi square test; SD=standard Deviation.

Table 4. Internal consistency and test-retest of the BAMBI-M

BAMBI-M	Number of items	Cronbach's alpha(α)	Intraclass correlation coefficient (ICC)
Subscales Limited variety Food refusal ASD-related features	 8 5 5	 0.85 0.85 0.89	 0.82 0.84 0.89
Total Score	18	0.97	0.86

subscales demonstrated α values above 0.80, reinforcing the instrument's internal consistency. A total of 59 parents of children with ASD and 62 parents of typically developing children participated in the test-retest reliability assessment, with a mean time interval of 9.58 days (SD = 1.61). Test-retest reliability analysis showed excellent stability over time, with ICC values ranging from 0.82 to 0.89. The limited variety factor recorded an ICC of 0.82, while the food refusal factor had an ICC of 0.84. The ASD-related features factor exhibited the highest reliability at 0.89, confirming BAMBI-M's robustness in consistently measuring feeding challenges. These findings indicate that BAMBI-M provides repeatable and reliable measurements, making it a valid tool for assessing feeding challenges in children with ASD. Table 4 shows the internal consistency and test-retest reliability results of BAMBI-M.

Table 5. Significant difference in BAMBI-M total scores between children with ASD and typically developing children

BAMBI-M	Mean±SD (Test)			Mean±SD (Re-test)		
	ASD (n=90)	Typical (n=90)	*p*	ASD (n=59)	Typical (n=62)	*p*
Subscales						
Limited variety	29.38±6.51	18.30±4.84	<.001	27.66±9.50	17.82±5.74	<.001
Food refusal	15.22±6.18	6.31±1.91	<.001	15.14±6.54	8.50±4.38	<.001
Features of ASD	15.00±5.84	7.19±1.82	<.001	16.71±5.34	9.48±3.83	<.001
Total scores	59.60±17.11	31.80±6.98	<.001	60.20±20.51	35.97±12.61	<.001

Known-group validity of BAMBI-M

Significant differences ($p < 0.001$) between children with ASD and typically developing children across all subscales and total scores were observed, regardless of the test time point, as shown in Table 5. These findings strengthen that BAMBI-M effectively differentiates feeding challenges between children with ASD and typically developing children, supporting its strong known-group validity.

Discussion

This study aimed to cross-culturally translate and validate the BAMBI into Malay to assess mealtime behaviours and feeding challenges in children with ASD. Its strong psychometric properties establish it as a reliable and valid tool for identifying feeding challenges in this population (16). With only 18 items, BAMBI-M is practical for both clinical and research use. It offers an efficient, culturally relevant screening method that helps occupational therapists develop tailored interventions.

A key strength of BAMBI-M lies in its rigorous cross-cultural translation process, which adheres to established guidelines to ensure linguistic and conceptual equivalence (19,20). Refinements were made to ensure cultural clarity and avoid misunderstandings. For example, "disajikan [rarely used language]" was replaced with "dihidangkan [commonly used language]" to better reflect everyday language. These adjustments ensured that the final tool retained the original meaning while remaining accessible to Malay-speaking parents. Such careful adaptation is essential for maintaining validity and usability.

The content and face validation reinforced that BAMBI-M accurately captures ASD-related feeding challenges, as reflected in its high content validity scores. Expert evaluations demonstrated strong agreement on item relevance and clarity, reinforcing the instrument's effectiveness in measuring feeding challenges. The high CVI ratings indicate strong expert consensus. Additionally, the item impact scale and feedback from Malay-speaking parents affirmed the tool's usability, ensuring caregivers could easily interpret and complete the questionnaire. This step enhances real-world applicability, as parental input is crucial in assessing children's feeding challenges (25,29). Furthermore, structured PMI have been shown to improve adaptive behaviours and functional outcomes in children with ASD, particularly in areas such as social-emotional development and challenging behaviour (12). Given the role of structured parental involvement, PMI strategies may also be applicable in addressing feeding-related challenges, supporting the need for valid caregiver-reported tools like BAMBI-M.

BAMBI-M's ability to distinguish between children with ASD and typically developing peers supports its known-group validity. The significant differences in total and subscale scores between these groups confirm its effectiveness in identifying ASD-specific feeding challenges, aligning with findings from previous BAMBI translations (16–18). This reinforces its clinical utility, enabling practitioners to assess mealtime behaviours

effectively. Additionally, the feasibility of caregiver-administered tools like BAMBI-M can be further enhanced through a telehealth-based approach, which has been shown to expand access to therapy and assessments for children with ASD, particularly in the Malaysian context (30). Parents reported positive perceptions of telehealth-based PMI, emphasising its potential to complement traditional feeding interventions by providing structured guidance and remote assessments.

Reliability analysis further affirmed BAMBI-M's robustness. Internal consistency, assessed via Cronbach's alpha, yielded a high-reliability score of 0.97, consistent with prior studies. Similarly, the Brazilian-Portuguese BAMBI version demonstrated internal consistency above 0.7 (17). However, another study reported a Cronbach's alpha of 0.79 after removing four culturally specific items, highlighting the importance of preserving ASD-relevant content in translations (18). The strong internal reliability of BAMBI-M supports that all 18 items effectively measure ASD-related mealtime behaviours, reinforcing its clinical applicability (16).

Test-retest reliability was examined to determine BAMBI-M's stability over time. The ICC values ranged from 0.82 to 0.89, demonstrating excellent reliability. These findings are consistent with the Brazilian-Portuguese BAMBI translation (17). Similarly, test-retest reliability in the original BAMBI version, involving 128 parents of children aged 3 to 11, reported ICCs between 0.76 and 0.87 (16). The study's findings support BAMBI-M as a valid and reliable screening tool for assessing mealtime behaviours and feeding challenges in children with ASD. Given its efficiency and ease of use, BAMBI-M has the potential to be a valuable resource for Malaysian occupational therapists and researchers in evaluating feeding challenges and facilitating improved assessment and intervention strategies for this population.

Limitations

This study's primary limitation was the participant recruitment process, which was confined to private occupational therapy and Johor Bahru community centres. As participants were drawn from a specific geographic area and social network, the findings may not be fully generalisable to the broader Malaysian population. A larger, more diverse sample with randomised selection across different regions and healthcare settings would enhance external validity and provide a more comprehensive understanding of BAMBI-M's applicability in clinical practice. Additionally, this study focused on content validity, face validity, known-group validity, and reliability. Future research should examine other psychometric properties of BAMBI-M using more robust methodologies to establish its validity and applicability further.

Conclusions

BAMBI-M is a culturally appropriate, valid, and reliable tool for assessing feeding difficulties in Malaysian children with ASD. The translation process maintained conceptual accuracy, while validation confirmed strong content, face, and known-group validity. High internal consistency and excellent test-retest reliability further support its use. BAMBI-M can aid occupational therapists in clinical practice. Combining it with observational methods could offer a more holistic understanding and guide better management of feeding challenges in children with ASD.

Ethic Approval: Ethical approval was obtained from the Universiti Teknologi MARA (UiTM) Ethics Committee (Reference no: REC/04/2021/MR238). Informed consent was obtained from all participants, who were assured of confidentiality, voluntary participation, and the right to withdraw at any time. Collected data were anonymised and used solely for research purposes by the Helsinki Declaration. Additionally, permission to translate BAMBI into Malay was obtained from the original author.

Authors Contribution: All authors contributed to the study conceptualization. Material preparation, data collection, and analysis were performed by NEH, Md Tajuddin. The first draft of the manuscript was written by AZ, Che Daud and all authors involved in revising the manuscript. All authors read and approved the final manuscript.

Conflict of Interest: Each author declares that he or she has no commercial associations (e.g. consultancies, stock ownership, equity

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Declaration on the Use of AI: None.

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ANNEX

Supplementary files

Table S1. BAMBI-Malay Version. Inventori Ringkas Tingkah Laku Waktu Makan Kanak-kanak Autisme. Fikirkan masa makan bersama anak anda selama 6 bulan yang lepas. Nilai item-item berikut berdasarkan kekerapan setiap perkara yang berlaku, menggunakan skala berikut:

Tidak Pernah / Sangat Jarang	Jarang	Kadang-kadang	Selalu	Hampir Setiap Masa Makan
1	2	3	4	5
Bulatkan YA (Y) jika anda menganggap item itu adalah masalah untuk anda atau TIDAK (T) jika anda fikir ia bukan masalah.				

1	Anak saya menangis atau menjerit semasa waktu makan.	1	2	3	4	5	Y/T
2	Anak saya memalingkan muka atau badannya daripada makanan.						Y/T
3	Anak saya duduk di meja sehingga selesai makan.						Y/T
4	Anak saya mengeluarkan (memuntahkan) makanan yang telah dimakan.						Y/T
5	Anak saya agresif semasa waktu makan (memukul, menendang, mencakar orang lain).						Y/T
6	Anak saya menunjukkan tingkah laku mencederakan diri semasa waktu makan (memukul diri, menggigit diri).						Y/T
7	Anak saya mengganggu semasa waktu makan (menolak/membuang alatan makan, makanan).						Y/T
8	Anak saya menutup mulut dengan rapat semasa makanan dihidangkan.						Y/T
9	Anak saya fleksibel mengenai rutin waktu makan (cth., waktu makan, susunan tempat duduk, tetapan tempat).						Y/T
10	Anak saya sanggup mencuba makanan baharu.						Y/T
11	Anak saya tidak menyukai makanan tertentu dan tidak akan memakannya.						Y/T
12	Anak saya enggan makan makanan yang memerlukan banyak kunyahan (cth., hanya makan makanan lembut atau puri).						Y/T
13	Anak saya lebih suka makanan yang sama pada setiap hidangan.						Y/T
14	Anak saya lebih suka makanan yang “rangup” (cth., keropok, kerepek).						Y/T
15	Anak saya menerima atau lebih suka pelbagai makanan.						Y/T
16	Anak saya lebih suka makanan dihidangkan dengan cara tertentu.						Y/T
17	Anak saya lebih suka makanan manis sahaja (cth., gula-gula, bijirin yang bergula).						Y/T
18	Anak saya lebih suka makanan yang disediakan dengan cara tertentu (cth., makanan kebanyakannya makanan bergoreng, bijirin sejuk, sayur-sayuran mentah).						Y/T