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Exploratory Factor Analysis For The Development Of The 49-Item Children's Reading Motivation Scale (Crms-49)

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Abstract: Reading is crucial and serves as a fundamental building block for learning. There are different instruments available to assess the reading motivation of grade school children but, caution and careful thought is required because the validity and reliability of these measures cannot be generalized for use due to cultural and contextual differences. The aim of the study was to create a valid and reliable self-report measure. The measure was designed to assess the reading motivation of 280 intermediate-grade school pupils. The results of the analysis confirmed that the 49-item Children's Reading Motivation Scale (CRMS) developed in this study accounted for 28.4% of the variance with three factors such as children's reading self-efficacy, parental autonomy-supportive reading practices, and children's reading and behavioral problems. The Cronbach's α of the tool was between 0.793 to 0.864 among the three factors identified. The measure obtained good construct validity and will prove a useful tool to help Filipino teachers determine the intermediate graders' motivation to read through their self-efficacy in reading, support practices of their parents in reading, and their reading and behavioral problems.

Keywords: Reading motivation assessment, self-efficacy in reading, parental support in reading, children's reading and behavioral problems, and validity and reliability of reading motivation

INTRODUCTION

One of the most crucial language skills for pupils to master in school is reading, which must be done both at the foundation levels (Grades 1–3) and, more importantly, at the intermediate levels (Grades 4 to 6). Students in the Intermediate levels approximately 9-13 years old must be able to read

independently and master the skill because reading at this level is utilized to acquire new information, ideas, thoughts, and attitudes (Westberg, McShane, & Smith, 2006). However, learning poverty has increased by a third in low- and middle-income countries, and a new report from the World Bank, UNESCO, UNICEF, UK government Foreign Commonwealth and Development Office (FCDO), USAID, and the Bill & Melinda Gates Foundation estimate that 70% of 10-year-olds are unable to understand a simple written text (compared to 57% before the pandemic **(**World Bank, 2022).

In the Philippines, the Department of Education (DepEd) Literacy Council revealed in 2014 that Mindanao is home to nine out of the ten barangays (refer to the smallest administrative division, similar to a village or neighborhood in other countries) in the Philippines with the highest illiteracy rates (Rimando, 2014). Similarly, the World Bank reported that in the Philippines, learning poverty reached 90.9 percent in June 2022.

The significance of reading and understanding has prompted educators to determine how to best support students in acquiring functional literacy following national standards (Snow, Burns, and Griffin, 1998). The argument is that educators should not be exclusively bearing the entire burden of the obligation to develop children into excellent readers. It affects almost all citizens, including children, parents, teachers, and school officials. When the issue of struggling readers is taken into consideration, it has been asserted that standard schooling is insufficient (Brooks, Glanagan, Henkhuzens, and Hutchison, 1999).

Reading achievement is typically linked to reading motivation, which is a crucial component (Biancarosa & Snow, 2004). Additionally, it has been shown that reading motivation predicts later success in reading (Becker, McElvany, & Kortenbruck, 2010; Schaffner, Philipp, & Schiefele, 2016; Taboada, Tonks, Wigfield, & Guthrie, 2009).Thus, it would seem that reading motivation and reading skills are closely associated (e.g., Adelman & Taylor, 2000; Ellis et al., 1997; Zins et al., 2004). This paragraph encapsulates the core concept of the background. It emphasizes the pivotal issue this research seeks to address—the scarcity of reliable reading motivation assessment tools. Furthermore, it recognizes the substantial challenge posed by cultural differences, which is significant within the research context.

It is crucial to elucidate how the limited availability of reliable reading motivation scales can detrimentally impact the reading abilities of an entire population. Particularly, for children grappling with reading difficulties, investigating the connection between reading motivation and reading achievement becomes paramount. These studies necessitate the development and recognition of trustworthy and valid reading motivation scales.

While there are existing scales designed to assess the reading motivation of elementary school children, which educators can employ in the classroom, it is imperative to exercise caution due to the inapplicability of these scales in diverse cultural and contextual settings (Davis, Tonks, Hock, Wang, and Rodriguez, 2018).

This research is dedicated to addressing the central issue of the paucity of dependable measurement tools for assessing reading motivation. It underscores the significance of this problem by highlighting how limited options in reading motivation scales can negatively affect the reading abilities of a broader population. The study aims to provide classroom teachers with a specialized reading motivation scale tailored to students in intermediate grades, facilitating the discovery of motivational need-based reading interventions.

Every student has a set of three inherent, driving, and universal basic psychological requirements, including their need for relatedness, competence, and autonomy, by the self-determination theory (SDT), or basic psychological needs (Deci and Ryan, 2000). The capacity to exert behavioral control, enjoy psychological independence, and make independent decisions is referred to as autonomy (to feel connected with teachers and fellow students and to experience amicable relationships). Children who read independently and with competence will grow to believe in their self-efficacy. People's self-efficacy is related to their belief that they can take action to achieve a particular goal (Bandura, 1993). People who perform poorly may do so because they lack the efficacy beliefs to do so, rather than because they lack the knowledge and skills to employ them efficiently (Bandura, 2006). People who have high self-efficacy are more likely than those who have low self-efficacy to continue in the face of difficulties, to see a difficult situation as a difficulty, and to be less affected by failure or setbacks (Bandura, 2006). Self-efficacy is expected to be vital in the development of reading skills because reading involves a self-teaching mechanism. For instance, when a kid correctly decodes a written word, they can later learn to recognize it automatically (Share, 1995). These experiences are crucial for enhancing a child's reading vocabulary, fluency, and understanding. When a child tries to read a book that is a little difficult and succeeds (raising their self-efficacy), they are more inclined to try another task, like reading a book that is as difficult (Henk and Melnick, 1995). Researchers Wigfield and Guthrie (1997) and Zimmerman (2000) found that students with low reading self-efficacy tended to avoid challenging reading activities and withdrew from assignments they thought were too difficult.

Parents who support their children's autonomy and self-efficacy growth also ensure that their children's basic psychological needs are addressed. Parents can practice parenting that supports autonomy by creating an environment that values it. In addition to being concerned about their children's lives, parents who support autonomy also encourage their children's independence and capacity for problem-solving. Giving children age-appropriate autonomy and agency is essential for parents. By doing this, they assist them in growing to the appropriate level. Children are more likely to feel empowered to make their own decisions when they are autonomous. The satisfaction of these inherent needs during reading-related learning activities enables students to thrive and perform optimally as competent learners, particularly in the intermediate grade levels of elementary, where reading comprehension should be mastered and put under a lot of pressure (Ryan and Deci, 2017). As a result, children who have high levels of self-efficacy in reading and whose parents encourage their autonomy to develop as proficient readers and achieve success in reading. On the other hand, children whose needs

for autonomy, competence, and relatedness were not met will then have reading and behavioral issues that cause reading delays.

In addition, developing a measure for reading self-efficacy, parental autonomy-supportive reading practices, and reading and behavioral issues to categorize intermediate-grade school students' reading proficiency as well as identify kids who may need intervention due to reading delays. The requirement for instruction that is "more explicit and thorough, more intensive, and more supportive than that required by the majority of children" for pupils who are at risk of reading delays must be acknowledged. Reliable and valid reading motivation instruments remain limited, emphasizing the pressing need for this study. In addressing this scarcity, it becomes apparent that educators are faced with the challenge of equipping themselves with the necessary resources and professional development opportunities to effectively support their students. Teachers play a pivotal role in fostering students' motivation to read, as emphasized by Foorman and Torgesen (2001), underscoring the significance of this study.

The primary aim of this research is to bridge the existing gap in reading motivation assessment tools by designing an instrument tailored to measure the motivation to read among intermediate grade-level pupils. This instrument is envisioned to not only serve as a valuable resource for educators but also to contribute to the enhancement of the reading experiences and achievements of students. By developing a valid and reliable measurement tool, this study seeks to empower teachers with the means to adapt their instructional approaches to the unique requirements of their learners, ultimately promoting a culture of reading motivation and academic success.

METHODOLOGY

This part includes information on the research design, sampling design, study respondents, research instrument, validation, data collection procedures, and statistical data processing.

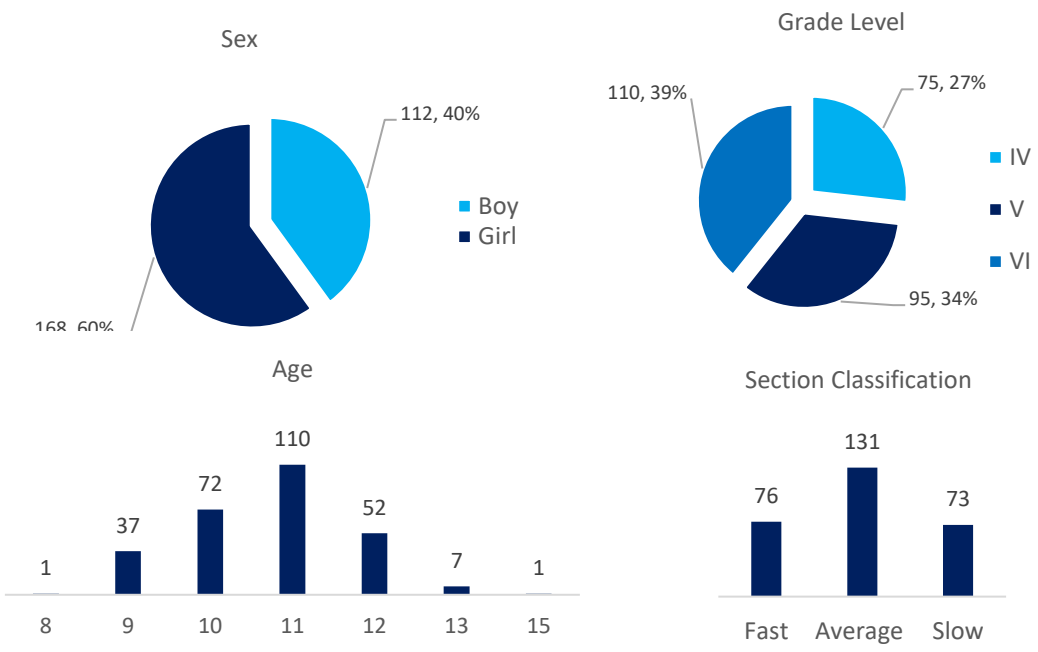
Two hundred and eighty students in intermediate grade levels from a school located in Kabacan, a municipality in the Cotabato Province of the Philippines, were included in this study. The participants were selected using a simple random sampling method under the supervision of their class adviser. Below are the characteristics of the sample such as their sex, age, grade levels, and section classification.

Out of 280 students, 168 (or 60%) were girls and 112 (or 40%) were boys. It suggests that many girls from the samples were able to take part in the study. Many of the intermediate grade school children who participated in the study were aged 11 years old or 39.3% of them, and 72, or 26% were 10 years old. According to the results, the respondents' grade levels were almost evenly distributed among the grade levels in the intermediate level studied. However, the majority of respondents (95 or 34%) and the remaining respondents (75 or 27%) were pupils from Grade V (95 or 34%) and Grade IV (75 or 27%), respectively. The three levels of classification required by the school were Fast, Average, and Slow. The assessment and categorization of students into 'Fast,' 'Average,' and 'Slow' levels in the

Philippines' Basic Education system is aimed at understanding students' cognitive abilities and academic performance. This categorization is determined through various assessment methods such as standardized tests, classroom performance, and teacher evaluations. These evaluations help in tailoring education to meet the individual needs of students effectively, as highlighted in a study on evaluating the academic performance of K-12 students in the Philippines (Almerino, Ocampo, Abellana, Almerino, Mamites, Pinili, Tenerife, Sitoy, Abelgas, and Peteros, 2020). Furthermore, within the Philippine educational system, the reading proficiency of young students is categorized into three tiers: *independent* readers, characterized by their strong reading skills and comprehension; *instructional* level readers meet the expected reading standards but might require assistance with more challenging texts; and *frustration* or *struggling* readers, who experience difficulty with reading and benefit from extra support and targeted interventions to bridge the gap with their peers. These classifications assist teachers in customizing their teaching approaches to address the unique requirements of each student.

These groups were then assigned in the classes of fast, average, and slow classes, respectively. According to the results, 131 respondents, or 46.79%, belonged to the average class, 76 respondents, or 27.15%, belonged to the fast class, and 73 respondents, or 26.07%, belonged to the slow class.

Fig. 1. *Sample characteristics of the Intermediate Grade School Students (n=280).*



In general, the result showed that the out of 280 participants were typically 10-year-old girls, many of whom were in Grade VI, and most of them were in *average* classes.

A letter of permission from the Schools Division Superintendent of Cotabato Division was submitted before the conduct of the study. Upon the approval of the research, it was forwarded to the

school principal for the schedule of the conduct of the study. The Children's Reading Motivation Scale (CRMS) was administered by the researcher to intermediate-grade school children.

At first, there were 50 self-report items generated for this study from the literature review and focus group discussions (FGD) from the 40 intermediate-grade school children in the Grade IV class. During the FGD, they were asked the question, "*What makes students independent in reading?*" "*Why reading is important?*" and "*What makes you feel when reading?"* The Children's Reading Motivation Scale (CRMS) consisted of 50 items for all subscales: self-efficacy and competence in reading, parental autonomy-supportive practices in reading, and reading and behavioral problems. For each item, a four-point Likert scale was employed (*4 - "Yes: Always", 3 - "Yes: Usually", 2 - "No: Not Usually", and 1 - "No: Never"*). Interviews with intermediate school pupils about learning to read independently produced the main items. Some of the items were adopted from the previously available reading motivation mentioned above, like the Motivation to Read Profile by Gambrell, Palmer, Codling, and Mazzoni and the Elementary Reading Attitude Survey (ERAS) by McKenna & Kear, published in 1990 and 1996 respectively. To avoid neutral and central categories, which respondents frequently choose to avoid committing even when a clear option exists, the scale used an even number of scale points (Kyriazos, 2018). A total of 50 items were developed, each related to aspects of self-efficacy, competence, reading difficulties, anxiety in reading, and parental supportive practices in reading. The instrument's prototype was subsequently tested with 280 pupils.

Exploratory factor analysis (EFA), reliability analysis, and criterion evaluation using Jamovi (Version 2.3) software were used to test the scales' psychometric qualities. The adequacy of the data for factor analysis was evaluated using Bartlett's Test of Sphericity and the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (Tavakol and Dennick, 2011). First, unrotated exploratory factor analysis (EFA) was carried out with eigenvalues > 1 and maximum likelihood extraction. Additionally, EFA was carried out using Varimax rotation and a three-factor solution was enforced to test the Children's Reading Motivation Scale's theoretical underpinnings (CRMS). In addition, a Parallel Analysis test was run utilizing primary axis factoring (O'Connor, 2000). The Bayesian information criterion (BIC), Tucker-Lewis Index (TLI), overall, 2 (Hooper et al., 2008), and root mean square error of approximation (RMSEA) (Steiger, 1990; Hooper et al., 2008) were all employed to assess the model's goodness of fit (Bentler, 1990).

RESULTS AND DISCUSSION

This study looked at the items' suitability and the internal organization of the scaled constructs that the instrument measures. To assess the scale's factor structure, an exploratory factor analysis was performed. The reliability of the draft questionnaire set was then examined using a reliability analysis on the pilot items.

Exploratory Factor Analysis (EFA), a statistical technique, boosts the reliability of the scale by spotting unsuitable items that may then be eliminated. It provides statistical evidence of validity. When

there is little information available on dimensionality, it also determines the dimensionality of constructs by looking at the relationships between items and factors (Netemeyer, Bearden, and Sharma, 2003). EFA is therefore carried out early on in the development of a new or amended instrument (Wetzel, 2011). Before executing EFA, the descriptive supportive practice was used to assess the measurement appropriateness for the 50 survey items. The mean of all responses and the standard deviations (SD) for each item was computed. Consider removing an item as inappropriate if the mean was determined to be near 1 or 5, as this could lower the standard of correlation for the remaining items (Kim, 2011). After this, skewness and kurtosis were looked at to see if the distribution was normal, and then an exploratory factor analysis was done. The exploratory factor analysis was carried out using the Jamovi computer program after the normality of the distribution was confirmed.

Descriptive Statistics

Table 2 displays the descriptive data for the Children's Reading Motivation Scale (CRMS) instrument's three recommended factors, including means, standard deviations, and minimum and maximum values. It revealed that the participating intermediate-grade school children had a high level of *(1) children's self-efficacy in reading* (*M*=3.27), *(2) children's parental autonomy-supportive practices in reading* (*M*=3.26), whereas they felt relatively low levels of (3) *children's reading and behavioral problems that hinder children's autonomy in reading* (*M*=2.44). All three factors, one through three, had the same minimum and maximum values.

Table 2.

Descriptive statistics of each factor of the Children's Reading Motivation Scale (CRMS)Subscales.

	Mean	Std. Deviation	Skewness	Kurtosis	Min	Max	N
Children's self-efficacy in reading	3.27	0.343	-0.822	2.09	1.46	3.93	280
Children's parental autonomy-supportive practices in reading	3.26	0.545	-1.10	0.946	1.50	4.00	280
Children's reading and behavioral problems	2.44	0.524	-0.131	-0.601	1.23	3.69	280

As a result of the variables' degrees of skewness and kurtosis being smaller than the absolute value of one, the results also supported the notion that the variables were regularly distributed. Because there were more than 200 participants in the sample, the rule of thumb was also used to determine

whether the data had a normal distribution before testing the statement's significance for skewness and kurtosis (Field, 2009).

Model Fit Measures

The goodness of fit of the model was investigated using several statistics. Overall, $\chi 2=1.32$, indicating that it is 5, a good fit (Hooper et al., 2008), root mean square error of approximation (RMSEA=0.0334), which indicates that the model has a good fit if the value is less than 0.05 (Steiger, 1990; Hooper et al., 2008), Bayesian information criterion (BIC=-4859), which indicates a better fit because smaller or more negative scores (Bentler, 1990).

Table 3.

Model Fit Measures

Fit Indices	*Model*	*Remarks*
• Chi-square/degrees of freedom	1.32 (It means <5)	Good fit
• Bayesian information criterion (BIC)	-4859 (Smaller or more negative scores are better)	Better fit
• Tucker Lewis Index (TLI)	0.876 (Closer to 0.90 which means acceptable)	Acceptable
• Root Mean Square Error Approximation (RMSEA)	0.0334 (which is below 0.05).	Good Fit

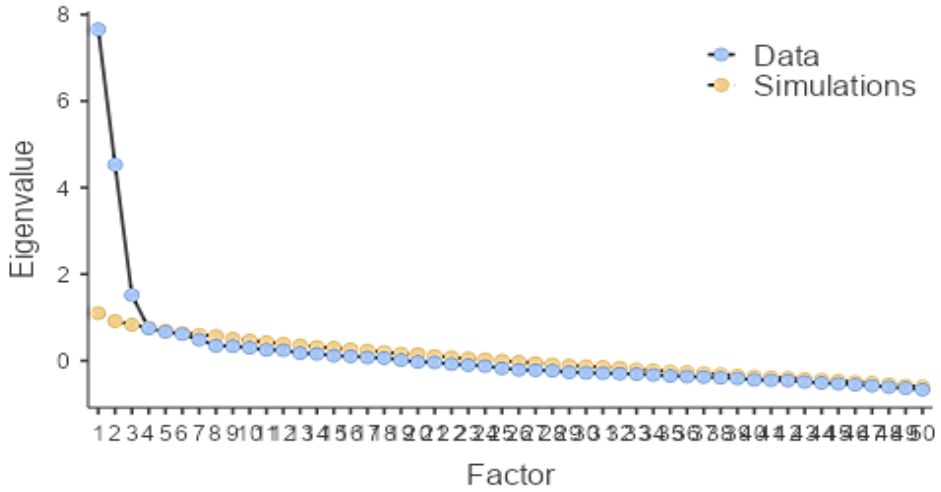
Exploratory Factor Analysis (EFA) for Validity

The Children's Reading Motivation Scale (CRMS) initial 50 questions were used in an exploratory factor analysis with a varimax rotation using Jamovi. When there is limited information on the dimensionality of the constructs, exploratory factor analysis is a statistical technique used to increase the reliability of the scale by identifying inappropriate items that can be eliminated and the dimensionality of constructs by examining the existence of relationships between items and factors (Netemeyer, Bearden, and Sharma, 2003). Children's self-efficacy in reading, parental autonomy-supportive reading practices, and children's reading and behavioral problems were the three factors in this study that were used to determine the pattern of the structure in the 50 items of the Children's Reading Motivation Scale (CRMS) instrument and were used to create a scree plot (Thompson, 2004).

The eigenvalues of each factor in the data were determined in the preliminary analysis of the study. The sample adequacy for the analysis was confirmed by the Kaiser-Meyer-Olkin measure, KMO= 0.849, which is above Kaiser's indicated threshold of 0.6. (Kaiser, 1974).

The correlations between the items were sufficiently high for EFA, according to Bartlett's test of sphericity (X2=4455, 1225, p.000). Additionally, based on the results of the initial exploratory factor analysis, there was one item that loaded on two factors in the preliminary structure. The item was hypothesized to load on the *children's self-efficacy* but it was also loading on the *children's parental autonomy-supportive practices*. The item was "Do your reading abilities help you achieve good grades?", the factor loading on the *children's parental autonomy-supportive practices* was 0.356, and the cross-leading on *children's self-efficacy in reading* was 0.394. Since this item was loaded onto two factors, it was removed. Thus, completing the final number of CRMC into 49 items. The scree plot in Figure 3 shows that three factors have eigenvalues greater than one.

Fig. 2. *Scree Plot for the Grade School Intermediate Students' Children's Reading Motivation Scale (CRMS)*



Final Three-Factor Structure

The pattern of associations among the items, as shown in Table 4, was found to be explained by the 49-item structure, which accounted for 28.4% of the variance. Children's reading self-efficacy accounted for 10.1% of this percentage, parental autonomy-supportive reading practices, and children's reading was 10.45%, and behavioral issues explained 20.6%. The three factors are seen to have eigenvalues greater than two under the Rotation Sums of Squared Loadings (2).

Table 4.

Summary of factor statistics

Factor	SS Loadings	% of Variance	Cumulative %
1	5.07	10.13	10.1
2	5.22	10.45	20.6
3	3.91	7.81	28.4

Factor Loading

The author repeated the EFA without including the item (Table 5). The results of the new analysis confirmed the three-dimensional structure theoretically defined in the research. The KMO MSA was 0.825. The three factors explained a total of 28.2 percent of the variance among items in the study. Bartlett's test of sphericity proved to be significant and all communalities were over the required.

Table 5.

The Items and Final Three-Factor Structure of the Children's Reading Motivation Scale (CRMS) Instrument after Factor Reduction Procedure

	Factor		
	1	2	3
Factor 1: Children's self-efficacy in reading			
1. Do you feel happy about reading a book at home for fun?	0.382		
2. Do you feel happy spending your free time in the library?	0.335		
3. Do you feel happy when a teacher asks you questions about what you have read?	0.457		
4. Do you feel happy about reading aloud in class?	0.366		
5. Do you feel happy about reading workbook pages and worksheets?	0.356		
6. Can you understand a story?	0.371		

	Factor		
	1	2	3
7. Can you find the meaning of difficult words on your own?	0.581		
8. Do you believe reading is an easy task for you?	0.366		
9. Do you remember the meaning of words?	0.422		
10. Are you good at correcting mistakes in reading?	0.461		
11. Do you use a dictionary to find the meaning of difficult words?	0.321		
12. Can you describe the order of events in your readings?	0.489		
13. Can you summarize important points in your readings?	0.514		
14. Can you provide the ending of the study?	0.458		
15. Do you read on your own to improve your reading abilities?	0.443		
16. Do you improve your reading to become independent?	0.463		
17. Do you challenge yourself to strive harder if you think reading is difficult?	0.345		
18. Do you feel more confident when you can read well?	0.375		
19. Do you easily handle your problems in reading?	0.527		
20. Do you remain calm when facing difficulties in reading?	0.459		
21. Do you give enough effort to solve your reading problems?	0.429		
22. Do you learn to read to become smart enough to learn easily?	0.422		
23. Do you learn to read to uncover new things?	0.322		
24. Do you enjoy reading tasks that require you to engage in conversation with a peer?	0.399		
25. Do you enjoy interacting with your peers to clarify information that you have read?	0.391		
26. Do your reading abilities help you achieve good grades?	0.341		
Factor 2: Children's parental autonomy-supportive practices in reading			
27. Do your parents read to you?		0.507	
28. Do your parents talk about the information they read to you?		0.509	
29. Do your parents encourage you to read?		0.491	
30. Do your parents emphasize the importance of reading?		0.403	
31. Do your parents tell you the importance of reading?		0.562	
32. Do your parents share their love of reading with you?		0.790	
33. Do your parents advise you to concentrate on all of your school reading activities?		0.380	

	Factor		
	1	2	3
34. Do your parents make time to teach you to read and understand what you are reading?		0.715	
35. Do your parents set out a time for you to read each week?		0.520	
36. Do your parents monitor you closely on your reading progress by communicating with your teacher?		0.353	
Factor 3: Reading and Behavioral Problems			
37. Is it difficult for you to read in class? (R)			0.715
38. Are the books you read in class too difficult? (R)			0.662
39. Do you make a lot of reading mistakes? (R)			0.618
40. Do you need extra help with reading? (R)			0.552
41. Are your tasks in reading make you feel unhappy? (R)			0.752
42. Do vocabulary questions bother you? (R)			0.577
43. Are complicated stories not fun to read? (R)			0.564
44. Don't you like reading something when the words are too difficult? (R)			0.517
45. Don't you like it when there are too many people in the story? (R)			0.546
46. Do you feel afraid of reading? (R)			0.571
47. Do you think you'll make mistakes while reading? (R)			0.416
48. When you're asked to read, does your voice shake? (R)			0.490
49. Do you refuse to read in class if you are asked? (R)			0.496

Notes: Factor loadings (direct varimax) for items onto assigned factors. Factor loadings <.3 are omitted from the Table. (R) indicates that the item is reversely scored.

Finally, the Rotated Factor Matrix in Table 5 was examined. Factor loadings are used to interpret factors. The correlations between the initial variables and the factors are known as factor loadings. These loadings can be squared to determine the proportion of variance in an initial variable that a factor accounts for. The loading chosen by Tabachnick and Fidell (2007) is .45 (20% variance overlap between variable and factor). Items display as rows, whereas factors appear as columns. Additionally, Tabachnick and Fidell advise a factor loading of at least .32. The variable is more accurately a pure measure of the factor the higher the loading. According to Comrey and Lee (1992), loadings greater than (a) .71 (50% overlapping variance) should be regarded as excellent, (b) .63 (40% overlapping variance), very good, (c), .55 (30% overlapping variance), good, (d) .45 (20% overlapping variance), fair, and (e) .32 (10% overlapping variance). The threshold for the size of loading to be interpreted is a question of personal preference for the researcher (Tabachnick & Fidell, 2007).

Item Analysis for Reliability

To assess the validity of each scale factor, an item analysis was done. Satisfactory internal consistency, according to Blunch (2008), falls between 0.7 and 0.9. The reliability of each of the three variables on this scale was rated highly.

Table 5.

Cronbach's Alpha for Each Factor of the Children's Reading Motivation Scale (CRMS).

	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Number of Items
Factor 1: Children's self-efficacy in reading	0.864	0.836	26
Factor 2: Children's parental autonomy-supportive practices in reading	0.831	0.836	10
Factor 3: Children's reading and behavioral problems	0.793	0.842	13

The Cronbach's α for children's self-efficacy in reading (0.864), children's parental autonomy-supportive practices in reading (0.831), and children's reading and behavioral problems (0.793).

CONCLUSIONS

The Children's Reading Motivation Scale (CRMS-49), a self-report scale provided by the study, measures three factors: children's self-efficacy in reading, parental autonomy-supportive reading practices, and reading and behavioral problems that may serve as the foundation for classroom instruction and remediation. The measure can help us understand why youngsters in the intermediate grades are motivated to read, determine the support of their parents in reading, and the reading and behavioral problems they encounter. Thus, the development of the reading motivation scale for intermediate-grade students has addressed a critical gap in the literature. We recognize the importance of acknowledging cultural differences in the context of measurement validity and reliability. The influence of cultural factors on reading motivation and behavior cannot be understated, and as such, our instrument was carefully crafted to consider these cultural nuances. Drawing from the Sociocultural Theory, the scale is designed to be adaptable and sensitive to diverse cultural backgrounds. Sociocultural Theory, developed by Vygotsky, emphasizes the role of social and cultural factors in cognitive development and learning. It posits that learning and cognitive development occur within a

social and cultural context, and individuals are heavily influenced by their cultural background, language, and social interactions (Vygotsky, 1978).

In the context of the Children's Reading Motivation Scale (CRMS-49), the sociocultural theory would be relevant in understanding how cultural factors shape children's attitudes and motivation towards reading, as well as the influence of parental practices on reading motivation within different cultural contexts. This approach ensures that the instrument remains robust across a range of cultural and contextual settings, allowing for more accurate and equitable assessments of reading motivation. The application of this measure offers valuable insights into the motivations of intermediate-grade students when it comes to reading, the level of parental support in their reading endeavors, and the reading and behavioral challenges they may encounter. By exploring these facets within the context of cultural diversity, we can better understand and address the specific needs of young readers from various backgrounds. It is our hope that this instrument will not only contribute to the enhancement of reading motivation but also serve as a means to bridge cultural differences and promote more inclusive and effective reading interventions in diverse educational settings.

Although the psychometric qualities of the measure are satisfactory, they still need to be verified in other school environments.

RECOMMENDATIONS

Future field research would be impacted by the study's findings. From a methodological standpoint, more research is required to examine the reliability and validity of the CRMS-49 scale in other school contexts in the Philippines and when employing the Filipino language. The scale could be refined and validated in a shorter form to maximize its time effectiveness.

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