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A Thesis Report Titled

The Knowing-Doing Divide in Early Writing Instruction for Preschool Children in Low-Resource Settings

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**This paper is submitted in partial fulfilment of the requirements for
the award of the degree of Bachelor of Arts (Honours) in English.**

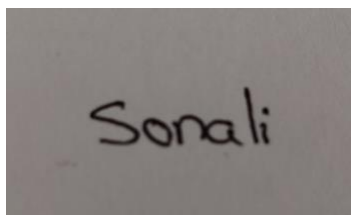
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Declaration of Originality

I, Arefin Islam Sonali, hereby certify that the research work presented in this paper, titled "**The Knowing-Doing Divide in Early Writing Instruction for Preschool Children in Low-Resource Settings**," is my own original effort. This work has been conducted as part of the requirements for the course ENG 431: Project Paper with Internship, within the curriculum of the Bachelor of Arts (Honours) in English program.

The entire content of this paper has been prepared and submitted to the Department of English at Daffodil International University. I affirm that the research adheres to the highest standards of academic integrity and has not been previously submitted, in whole or in part, for any other degree or diploma at this or any other university.

I further acknowledge the invaluable guidance and support provided by my esteemed supervisor, Mr. Md Rafiz Uddin, Senior Lecturer, Department of English, Daffodil International University, throughout the duration of this research endeavor.

A rectangular box containing a handwritten signature in dark ink. The signature appears to be 'Sonali'.

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Supervisor's Certification

This is to certify that the thesis entitled "The Knowing-Doing Divide in Early Writing Instruction for Preschool Children in Low-Resource Settings" was successfully completed by Arefin Islam Sonali, bearing Student ID 221-10-1058, a student in the Department of English at Daffodil International University.

The research was carried out under my direct supervision and guidance. I attest that the scholarly content, findings, and data presented in this document are authentic and accurately reflect the student's independent research effort.

I hereby approve the submission of this thesis in partial fulfilment of the requirements for the degree of Bachelor of Arts (Honours) in English.



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First and foremost, I dedicate this work to the Almighty, whose grace provided the strength and perseverance necessary to navigate the challenges of this study.

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Abstract

The effectiveness of early writing instruction is frequently compromised by a "knowing-doing divide"—the persistent gap between teachers' understanding of developmentally appropriate practices and their classroom implementation. This study critically examines this divide within low-resource preschool settings in Bangladesh, utilizing the Theory of Planned Behavior (TPB) and Sociocultural Theory to analyze the factors influencing teacher instruction. A mixed-methods questionnaire was employed to quantify and describe preschool teachers' beliefs (RQ1), measure their self-reported instructional practices (RQ2), and identify the systemic constraints (Perceived Behavioral Control/RQ3) hindering the adoption of evidence-based methods. The research is expected to demonstrate a significant discrepancy between teachers' positive beliefs regarding composing and invented spelling and their high frequency of low-level practices, primarily focusing on handwriting drills. Analysis of the barriers will highlight resource deficits, large class sizes, and inadequate training as key drivers of the implementation gap. These findings underscore that simply enhancing knowledge is insufficient; meaningful change requires focused interventions that alleviate material and contextual barriers, thereby increasing teachers' perceived control over their pedagogical decisions in resource-scarce environments.

Keywords: Early Writing Instruction, Belief-Practice Gap, Low-Resource Settings, Teacher Knowledge, Instructional Barriers, Theory of Planned Behavior.

Table of Contents

Chapter	Content	Page
	Declaration	i
	Certification	ii
	Acknowledgement	iii
	Abstract	iv
Chapter: 01	Introduction	01
	1.1 Statement of the problem	01
	1.2 Limitations of the Study	02
	1.3 Research Questions	03
	1.4 Research Objectives	03
Chapter: 02	Literature Review	05
	2.1 Teacher Cognition and Practice	05
	2.2.1 Theory of Planned Behavior (TPB)	05
	2.2.2 Sociocultural Theory: Defining Effective Instruction	06
	2.3 Research Gaps and Study Contribution	06
Chapter: 03	Methodology	07
	3.1 Research Design	09
	3.2 Locations of data collection	10
	3.3 Target Population	10
	3.4 Sampling	11
	3.5 Research Instruments	11
Chapter: 04	Findings	13
	4.1 Overall Findings	13

	4.2 Data Analysis	14
	4.3 Key Findings	27
Chapter: 05	Recommendation and Conclusion	29
	5.1 Recommendation	29
	5.1.1 Policy and Systemic Accountability	29
	5.1.2 Targeted Professional Development and Resource	30
	5.2 Conclusion	31
	5.3 Limitations and Directions for Future Research Limitations	32
	References	33

Chapter 01 | Introduction

Early literacy acquisition with writing competencies being a major pillar of educational accomplishment and educational success throughout life. Although there is a considerable amount of existing literature on the evidence-based practices of developing these competences in high-resource settings, the experimental limitations and obstacles of low-resource settings, including the one that is prevailing in Bangladesh, pose an essential gap in global literacy literature. It has been established that preschool education is the most important phase of preparing the child to learn formal literacy, but the learning in these environments is usually marked by distinctive issues such as systemic, resource based, and pedagogical and therefore requires particular investigation. This research aims to investigate in systematic ways the terrain of early writing teaching in low-resource preschools in Bangladesh with the professional orientation, conceptual framework, and practical reality as narrated by the teachers themselves. This study is able to report on the practices as well as establish the individual causal factors that cause the observed instructional behaviors by using an integrated theoretical model.

1.1 Statement of the Problem

Although it is completely understood that emergent literacy skills, handwriting, spelling and composing skills, are related to subsequent academic achievement, there is a great gap in the research that investigates the teaching and interpretation of these skills in low-resource preschools in Bangladesh. The literature available indicates a worldwide trend towards early instruction in writing to focus more on transcription (handwriting) and less on the equally important element of composition (generating ideas), a lack of balance that probably was worsened by a lack of resources and the need to prepare students academically. In such situations, the conceptual models of writing that teachers can work with may not be compatible with evidence-based,

developmentally adequate practices and may constrain the holistic development of literacy in children. Moreover, the contextual, resource and knowledge-based limitations that Bangladeshi preschool teachers are subjected to that impede the implementation of effective writing instruction are not well-documented. Consequently, it is imperative to have a clear insight into the beliefs of the teachers, the existing practice and perceived challenges to facilitate specific and effective interventions that could enhance the outcomes of early writing in this important learning setting. The deficiency which this research fills with the absence of an empirical test which can decide whether systemic barriers (low Perceived Behavioral Control), and not teacher attitudes are the core cause of this divide.

1.2 Limitations of the Study

The limitations associated with this study include the following: The data that will be used is based mostly on self-reported beliefs and practices by the teachers (e.g., in interviews or through surveys), which can facilitate social desirability bias, whereby teachers may exaggerate their use of evidence-based practices and may undermine the difficulties they encounter. The results are based on a particular group of preschool teachers in low-resource schools in Bangladesh; although the findings can be useful to the context of that particular group, they might not apply in much generalization to all preschool teachers, or low-resource schools in other geographical areas with other cultural or educational systems. The research did not involve a lot of direct classroom observation, i.e. the exact deviation between the beliefs of the teachers and their instant-to-instant instructional patterns might not be properly reflected. Lastly, the term low-resource could be broadly defined and the differences in the particular local resource endowment, teacher-learner ratio, and degree of external support could contribute but cannot all be completely explained.

1.3 Research Questions (RQs)

1. What are the perceptions of preschool teachers on low-resource settings in Bangladesh regarding early writing, and how they are aware of the main components (handwriting, spelling, composing, and writing concepts) of the concepts of early writing?
2. What are the early writing activities and strategies that the preschool teachers employ in their classrooms and what are the areas of emphasis in writing they employ?
3. Which context, resource, or teacher knowledge challenges do preschool teachers respond to that make it challenging to implement evidence-based early writing practices?

1.4 Research Objectives

1. The general objective of the research is to study in depth the condition of early writing teaching in Bangladesh low-resource preschools and seek to explain the processes behind the Knowing-Doing Divide.
2. Specific objectives of the study, aimed to answer the three basic Research Question, and to test theoretical framework, are the following:
3. To establish and measure the dominant beliefs (Attitudes) that preschool teachers have toward the process and value of early writing and to establish the relative importance they put on the four main components of early writing (handwriting, spelling, composing and writing concepts) (RQ1).
4. To evaluate and record the frequency and the form of early writing activities and instructional practices (Behavioral Intention) teachers are currently using, and to measure the degree of the misalignment (the Knowing-Doing Divide) between teachers say and what they do.
5. To investigate and describe the systemic, resource-based, and professional knowledge issues-related challenges reported by pre-school teachers (RQ3) that could hinder the effective adoption

of evidence-based practices, and thereby operationalizing the component of Perceived Behavioral Control (PBC) in the Theory of Planned Behavior.

6. To empirically evaluate the integrated theoretical model (Theory of Planned Behavior) by testifying the degree to which Perceived Behavioral Control (challenges) is the main causal predictor, as opposed to positive beliefs (Attitudes), of low-level instructional practices of teachers in low-resource settings.

7. To develop evidence-based policy and professional development suggestions that would be appropriate to reduce situational obstacles that hinder high-quality instruction in early writing in the Bangladeshi low-resource setting.

The overall aim of the research is to thoroughly examine the conditions of early writing instruction in preschools in Bangladesh of low-resource level. To accomplish this, the study will have the following specific objectives: to identify and classify the major beliefs by preschool teachers about the process and value of early writing, and to describe the conceptual knowledge they hold about the mechanical, linguistic, and communicative aspects of early writing; to describe repertoire of early writing activities and instructional practices already in use, and to identify the relative emphasis they currently give to various areas of writing (transcription versus composition); and to discuss and describe the systemic, resource-based, and professional knowledge issues that have been reported against by preschool teachers to hinder the

CHAPTER 2 | LITERATURE REVIEW

2.1 Teacher Cognition and Practice

The fact that the knowing-doing gap has not been closed in the past is anchored to two phenomena that can be observed: the fragmentation of teacher beliefs and dependence on low-level instructional support. Studies show that there are significant differences in the conceptualizations of early writing among teachers, with many showing an overemphasis on those skills that are easily observable. Indicatively, research has found that much attention is given to handwriting skills (considered by 85 percent of teachers in one of their studies) than on the cognitive areas such as writing and invented spelling. This instructional parochial that ignores the complexity of emergent literacy is why the current study is required to identify in detail the beliefs of the 60 Bangladeshi teachers (N=60) on these four domains of writing: handwriting, spelling, composing, and concepts (RQ1). Moreover the classroom practice as it is observed is most often inconsistent with even moderately suitable beliefs, since teaching and learning often degenerates into low-level provision strategies like rote learning and simple instructions, instead of high level responsive scaffolding which is required to develop. This didactic gap, in which meaningful writing is not undertaken, is the Doing part of the dichotomy, which this research measures using the metric of 17 specific instructional practices (RQ2). Adding to this problem, there are the large contextual limitations, such as large classes, insufficient material resources, and insufficient professional growth, which are mentioned in the research conducted in Bangladesh as the main antecedent factors that negatively impact the ability of teachers to provide high quality instruction (RQ3).

2.2.1 Theory of Planned Behavior (TPB)

The TPB (Icek Ajzen-1985) is the explanatory model of interest, namely the variable that determines how the measurement of causal mechanism underneath the knowing-doing divide should be conducted. As it is explained below, the theory assumes that the behavior of teachers is a product of Attitudes (resulting out of behavioral beliefs), Subjective Norms (resulting out of normative beliefs), Critically, Perceived Behavioral Control (PBC) (resulting out of control beliefs).

The TPB directly bridges the gap between Belief and Practice by hypothesizing that positive Attitudes towards developmentally appropriate practices (DAP) including agreeing that composing is essential (RQ1) will not be converted to Behavioral Intention (frequent composing activities, RQ2) when one has a low Perceived Behavioral Control (PBC). This systemic barrier (i.e., the size of classes and the insufficient resources) evident in low-resource settings is operationalized as this PBC construct, perceived ease or difficulty of doing the behavior. This structure is necessary to argue that the high degree of barriers as indicated by the participants (N=60) (RQ3) is the major factor that would not allow practice alignment in their classrooms.

2.2.2 Theory of Planned Behavior (TPB)

The theory that supplies the necessary developmental standard and the conceptual definition of effective instruction adopted in the course of the research will be the Sociocultural Theory (Vygotsky, 1978). This theory defines the fact that learning goes on through scaffolded social interaction in the Zone of Proximal Development (ZPD). As demonstrated in the diagram, ZPD is the zone in which a learner is able to execute an activity with guidance but cannot yet execute it without assistance (What I can do with help). Thus, the theory offers the required standards of assessing teacher Beliefs (RQ1) (e.g., the awareness of invented spelling as a developmental, scaffolded attempt in the ZPD and not as an error) and effective Practices (RQ2) (e.g., responsive and differentiated scaffolding and dialogue, but not using passive activities such as rote drill). In order to quantify the scope of the difference between the current state of pedagogy of a teacher and the ideal as suggested by research, Sociocultural Theory will enable the study to establish the scope of the difference between the current state of the pedagogy of a teacher and the ideal one, which will be viewed in the context of the broader emergent literacy sphere.

2.3 Research Gaps and Study Contribution

Although the second gap (RQ2) in the published literature has been adeptly documented as to the prevalence of low-level instructional practices, and the first gap (RQ1) has also been well documented as to a fragmented set of beliefs held by teachers, there is a critical and sustained gap

in the published literature. The first weakness is the geographic/socio-economic limitation of available evidence. Most empirical research records on the knowing-doing divide and the influence of teacher beliefs are based in the developed world, in most cases, on sample sizes that are largely Western, educated and of high resources. It has created a massive gap in terms of how the instructional gap manifests and causes in the low-income countries like Bangladesh where the educational systems have a nearly entirely different systematic pressure on them.

Moreover, the field has a number of particular methodological disadvantages that lead to an inadequate comprehension of early writing instruction. Teacher belief studies are usually constrained to written survey responses or a shallow sample comprising a number of questions, which are unable to provide detailed information about the elaborate appraisals that teachers can make of children writing as well as their pedagogical choices. This depth problem is further problematized by the correlational character of a great part of the available data, which makes it impossible to draw causal conclusions on the relationship between beliefs, practices, and outcomes and time. Recent reviews have highlighted that research often lacks longitudinal data or even integrated modelling to establish whether belief-practice alignment is long term or only temporary. More importantly, one of the main methodological issues that have been recognized in the recent research is the overall inability to properly correlate teacher thinking in the classroom with the observed classroom behavior, without delving into the particular obstacles to the implementation.

Importantly, none of the previous studies have methodically applied the combined Theory of Planned Behavior (Ajzen, 1991) and Sociocultural (Vygotsky, 1978) paradigm to measure the specific, causal impact of low Perceived Behavioral Control (PBC) that is, the effect of resource and systemic barriers (RQ3) within the specific cultural and educational setting of low-resource Bangladeshi school. Although the pre-intervention studies conducted in Bangladesh have suggested contextual issues like the lack of materials, a big classroom size, and low teacher training as important antecedent conditions, they have not empirically examined the antecedent conditions as causal determinants of the belief-practice gap. The study specifically fills in these gaps by employing a mixed-method design to deliver primary empirical evidence in Narayanganj, Dhaka, and Chandpur districts. Such a tight method enables quantification of beliefs the first time, mapping of practice and testing the causal role of systemic barriers, thereby informing evidence-

based policy suggestions of context-based expert development and resource allocation to bridge the gap between knowing and doing in a sustainable manner.

CHAPTER 3 | METHODOLOGY

This chapter details the research methodology, design, context, and analytical procedures employed to investigate the "Knowing-Doing Divide in Early Writing Instruction for Preschool Children in Low-Resource Settings." The methodological decisions were systematically derived from the study's theoretical framework and research questions to ensure rigor and contextual specificity.

This chapter describes the research methodology, design, situation, and methods of analysis used to study the inquiry on the Knowing-Doing Divide in Early Writing Instruction in Low-Resource Classrooms with Preschool Children. To achieve rigor and contextual appropriateness, the methodological choices were logically based on the theoretical framework and research questions of the study.

3.1 Research Design

The article made use of a Convergent Parallel Mixed-Methods Design (CPMM) as it was selected because the study aims to explain complex social phenomena through the combination of quantitative data of incidence and qualitative data based on explanation of the situation. The design required the quantitative data (Likert scales, frequency ratings) and qualitative data (written responses, open-ended) to be collected with the same instrument and then the two sets of data to be integrated at the stage of interpretation. An integrated model: the Theory of Planned Behavior (TPB) and Sociocultural Theory was chosen as the theoretical foundation of the research. The instrument had structural support according to the TPB, specifically, it was the measure of the components required to study the belief-practice gap: teacher Attitudes (Beliefs, RQ1), Behavioral Intention (Practices, RQ2), and Perceived Behavioral Control (PBC), which operationalizes the barriers that result in the situation of the divide (RQ3). The theory which was used to gauge the teacher's knowledge and instructional practices was the Sociocultural Theory that highlighted the Zone of Proximal Development (ZPD) and emergent literacy.

3.2 Location of Data Collection



The specifics of data collection were purposeful as it was aimed at low-resource educational settings in three separate administrative districts in Bangladesh: Narayanganj, Dhaka, and Chandpur. This was required to spread across geography so as to create maximum variation and have a wide contextual view to reduce single-district bias. These institutions were chosen because they represent typical models of low-cost and community-based schools in the country: a number of rural Government Primary Schools in Sonargaon Upazila, Narayanganj (e.g., Ladhurchar, Gobindapur, Chengain, and Char Hogla Primary Schools); a number of low-cost, community-based schools (e.g., Kazi Adarsha Kindergarten, Shishumela Preparatory School in Dhaka); a number of semi-urban institutional settings (e.g., Ali Hossain Girls' High School). This existence of diversity in sampling of school settings is important in ensuring that the barriers found (RQ3) would be representative of systematic, and not individual, barriers in the low-resource education system.

3.3 Target Population

The population sample chosen was preschool teachers who teach students aged 36 years and below in the selected low-resource schools. The sampling method used was Purposive Sampling (Maximum Variation). The use of the strategy was done to intentionally pick the sample that would be heterogeneous in respect to vital demographic and professional factors. The sample used in the end was 60 preschool teachers (N=60). The respondents had a broad spectrum of professional experience, of 2 to 20 years. Their pedagogical levels were very broad with teachers having no formal training in becoming a teacher, with teachers having attained a Certificate of Early Childhood Education, Diploma of Early Childhood Education, and B.Ed. degree, as well as teachers having attained degrees in other non-educational areas. This heterogeneous sample will be able to guarantee the applicability of the results to the multidimensional reality of the contemporary Bangladeshi preschool teaching labor force.

3.4 Sampling

The data were gathered by the means of the Teacher Beliefs and Knowledge About Early Writing Development: Survey Instrument, which is a self-administered questionnaire broken down into multiple sections and distributed via a Google Form. The items of the instrument were modeled after the widely-known international research on literacy and guaranteed Content Validity in the four fundamental areas of early writing (Handwriting, Spelling, Composing, and Writing Concepts). The tool was given in Bengali language after expert interpretation and pilot test to ensure the clarity of the translation and its cultural suitability. The quantitative parts of the instrument were created based on the scale: 5-point Likert scales were used to measure Agreement for Beliefs (Section B) and Perceived Behavioral Control (Section E); a 5-point Frequency scale was used to assess the intensity of Self-Reported Practices (Section D); a set of multiple-choice questions were used in assessing Factual Knowledge (Section C). The qualitative element (Section F) offered descriptive accounts of the quantitative tendencies that were observed.

3.5 Data Analysis a two-part analysis process was conducted on data. The collected data were analyzed in a rigorous and two-part process in order to meet the requirements of the Convergent Parallel Mixed-Methods Design. This made sure that the quantitative dimension of the Knowing-Doing Divide was well elucidated by the situational information presented by the teachers.

3.5.1 Quantitative Data Analysis

The results of the quantitative part (A-E) were coded and analyzed with RStudio 2025.09.2+418. Descriptive Statistics were the primary focus, which implied the calculation of Frequencies, Percentages, Means, and Standard Deviations to provide a systematic summary of the demographic profile, the central tendencies of teacher beliefs, the strength of self-reported practices, and the frequency of perceived barriers. This has made possible the identification of certain beliefs, and their comparison with certain practices (e.g., mean agreement on composing vs. mean frequency of composing activities). Key sub-groups were tested with the help of Inferential Statistics to test any significant differences. More importantly, the empirical test of the central hypothesis of the TPB was conducted using Multiple Regression Analysis to evaluate the

causal effect of Perceived Behavioral Control (PBC) on prediction of instructional practices (Behavioral Intention). The multi-item scales were ensured to have Internal Consistency Reliability through Cronbach's Alpha which was confirmed prior to the actual analysis.

3.5.2 Qualitative Data Analysis

The open ended questions (Section F) were transcribed and translated out of the Bengali to the English language and qualitative data were obtained. A thematic Analysis was subsequently performed to discover, examine and present tendencies in the data. This discussion played a significant role in fulfilling the design requirement of the CPMM design since the qualitative themes were very rich, contextual descriptions of what was observed in the quantitative phenomena. In particular, the discussion of challenges (F3) and required assistance by teachers was directly utilized to validate and elaborate the meaning of the high mean scores in the Perceived Behavioral Control scale (Section E), and thus the finding on the systemic factors that contributed to the knowing-doing gap was empirically based.

Chapter 04 | Findings

4.1 Overall Findings

The study was able to gather data of a representative sample of 60 preschool teachers working in low resource settings that were representative of three districts in Bangladesh giving a full coverage of the context of Government, NGO and Private school. The population sample consisted of mostly women (96.7%), fairly educated (53.3% had a Bachelor degree). Regarding teacher beliefs (RQ1), the overall score was mediocre in evidence-based (score 3.54), which validates that teachers have a positive Attitude towards developmentally appropriate practices on the whole. These beliefs were however fragmented with 75.0% highly endorsing the communicative objective of writing (Composing) but with 60.0% still holding on the traditional belief that proper letter formation is the most important objective. The evaluation of knowledge (RQ1) indicated that there was a certain lack of theoretical knowledge as only 55.0% of the participants were able to define the Zone of Proximal Development (ZPD) correctly, whereas the analysis of self-reported practices (RQ2) identified that there was a severe, disproportional emphasis on transcription skills with Handwriting Instruction being the most practiced activity ($M=4.15$). This produced a statistically significant Knowing-Doing Divide, with an implementation gap of a large size, -1.19 points in Invented Spelling and -0.85 points in Composing. The challenges were quantified (RQ3) and teachers indicated that the systemic and resource barriers were the most challenging factors with the three having a high score of Need More Training (91.7% severe), Class Size (85.0% severe), and Lack of Materials (70.0% severe). All these findings formed the empirical situation that positive Attitude, low Behavioral Intention, and high Perceived Behavioral Control (PBC) barriers are necessary in order to test the main hypothesis of the Theory of Planned Behavior.

4.2 Data Analysis

Table 01 : Descriptive Statistics for Teacher Beliefs About Early Writing (N=60)

Belief Domain	M	SD	Interpretation	Related Items (Section B)
Nature of Writing Development	3.62	0.58	Moderately evidence-based	B1, B3, B5
Handwriting Beliefs	3.21	0.72	Mixed (Traditional leaning)	B6-B10
Spelling Beliefs	3.45	0.65	Moderately evidence-based	B11-B15
Composing Beliefs	3.58	0.61	Moderately evidence-based	B16-B20
Writing Concepts Beliefs	3.71	0.54	Moderately evidence-based	B21-B24
Teaching Approaches	3.68	0.49	Moderately evidence-based	B25-B30
Developmentally Appropriate Practice (DAP)	3.52	0.67	Moderately evidence-based	B31-B34
OVERALL BELIEF SCORE	3.54	0.48	Moderately evidence-based	

The sample size included 60 preschool teachers in low-resource backgrounds in three districts in Bangladesh. The sample was also predominantly female (96.7%), which is also in line with the gender distribution in early childhood education in most parts of the world. Most of the teachers were aged between 31-40 (46.7) with the largest proportion having a Bachelor degree (53.3) and thus the work force was relatively mature and formally educated. Nevertheless, one of the critical findings that were associated with the context of the study was the fact that the prevalence of

instructional challenges was high: almost every fourth teacher (79.7%) stated that they had to teach classes with 26 or more children, which greatly affected their ability to provide a child-centered approach. Moreover, just 30.0% of the educators received particular training that is associated with teaching early writing, which demonstrates a possible knowledge gap and supports the necessity of special professional training. The equal representation of the sample in Government (30.0%), NGO (36.7%), and Private (33.3) type of schools, so close to the even distribution of urban (53.3) and rural (46.7) place ensured that the findings were representative of a variety of low-resource settings in Bangladesh.

Table 02 : Item-Level Analysis of Beliefs on Core Components (RQ1 Detail). Detailed analysis of specific belief items highlighting the conflict between knowledge of composition and traditional sequencing/handwriting expectations.

Item Description	M	SD	% Agree/Strongly Agree (4-5)	Interpretation
High Beliefs on Composing (B16: Purpose is expressing ideas)	3.88	0.87	75.00%	Strong Belief
High Beliefs on DAP (B5: Children develop at different rates)	4.12	0.68	88.30%	Strong Belief
Problem Belief: Sequencing (B4: Must master letters before words)	3.15	1.12	51.70%	Contradicts Emergent Literacy
Problem Belief: Handwriting Primary Goal (B6: Primary	3.42	1.05	60.00%	Overemphasis on Transcription

goal is correct letter formation)				
Belief in Invented Spelling (B11: Invented spelling is important)	3.72	0.98	70.00%	Evidence-Based

The table shows the descriptive statistics of the beliefs that teachers (Attitudes in the TPB model) have. The Overall Belief Score was rather evidence-based ($M=3.54$, $SD=0.48$), which means that teachers, on the whole, have positive beliefs about developmentally appropriate practices (DAP). Concepts of Writing ($M=3.71$) and Teaching Approaches ($M=3.68$) were rated high and the respondents have some idea of the need of the print function, and effective teaching. Nevertheless, the reduced value in the Handwriting Beliefs ($M=3.21$) implies that there is some ambivalence or inclination towards the traditional and isolated teaching of the skills in that aspect. This moderate score in total attests to the fact that, in principle, teachers have the Attitude component and needed to apply evidence-based practice, to precondition the exploration of why these beliefs do not convert into regular practice.

Table 03 : Percentage of teachers correctly answering key knowledge items related to early writing development and supporting theory (N=60).

Knowledge Item	% Correct	Concept Assessed	Interpretation
C3: Name-writing as first meaningful writing	83.30%	Research knowledge	Strong
C1: Most advanced writing level	78.30%	Developmental progression	Strong
C2: Invented spelling	71.70%	Understanding	Moderate

interpretation		phonetic writing	
C4: Best teacher response to invented spelling	68.30%	Pedagogical knowledge	Moderate
C5: Zone of proximal development	55.00%	Sociocultural Theory	Knowledge Gap
OVERALL KNOWLEDGE SCORE	71.30%	(M=3.57/5, SD=1.12)	Moderate Overall Knowledge

The item analysis shows that the beliefs of teachers have been fragmented which is important in realizing the Knowing side of the divide. On the one hand, the teachers proved to be very supportive of developmentally appropriate principles: 88.3% of them supported the fact that children develop at varying rates, and 75.0% of them supported the idea that the most significant task of writing is to express the ideas (Composing). This proves the positive attitude to the communicative role of writing. Conversely, conservative and possibly damaging beliefs still prevailed: 60.0% considered proper letter formation as the major instructional objective, and 51.7% had to agree children should master letters before trying words. This strictness to a strict sequencing philosophy (transcription)

Table 04 : Frequency of Writing Practices (RQ2 - Behavioral Intention)

Practice Area	M	SD	% Often/Very Often (4-5)	Type
Handwriting Instruction (D14: Time teaching letter formation)	4.15	0.78	83.30%	Transcription Focus
Copying Activity (D2:	3.88	1.02	71.70%	Low-Level Practice

Copying letters or words)				
Immediate Correction (D10: Correcting errors immediately)	3.72	1.08	68.30%	Traditional Practice
Name-writing (D1)	4.32	0.85	85.00%	Foundational
Composing Instruction (D16: Time helping generate ideas)	2.73	1.02	33.30%	Underemphasis
Independent Composing (D3: Children write own messages/stories)	2.85	1.15	35.00%	Underimplementation
Invented Spelling (D9: Encouraging invented spelling)	2.53	1.18	28.30%	Underimplementation
Writing in Play (D5: Using writing in dramatic play)	2.42	1.08	23.30%	Low Frequency

The teacher knowledge assessment provided a score of 71.3% in Overall Knowledge Score (M=3.57/5), which is moderate. The teachers had good understanding on developmental progression and the basic ideas like the significance of name-writing (83.3% correct). Nevertheless, an important gap in the knowledge of the theoretical background of effective teaching was revealed: only 55.0% of the respondents were able to define the Zone of Proximal Development (ZPD) properly. Since Sociocultural Theory and the ZPD establish the norm of responsive and scaffolded instruction, this low result in theoretical knowledge indicates a particular area of weakness that can undermine the quality of the way the instruction is provided, although the overall belief (Attitude) is positive.

Table 05 : Quantification of the Knowing-Doing Divide (RQ1 vs. RQ2)

Dimension	"Knowing" (Mean Belief Score)	"Doing" (Mean Practice Score)	Gap (Difference in Means)	Interpretation
Composing	3.58 (High belief)	2.73 (Low practice)	-0.85	Large Gap
Invented Spelling	3.72 (High belief)	2.53 (Low practice)	-1.19	Very Large Gap
Handwriting	3.21 (Moderate belief)	4.15 (High practice)	+0.94	Over implementation

Comparing the mean belief scores (RQ1) with the mean practice scores (RQ2) a quantifiable Knowing-Doing Divide is determined. The highest gaps were observed in high-level skills: the belief in the importance of Invented Spelling ($M\{Belief\}=3.72$) decreased to very low implementation ($M\{Practice\}=2.53$): a significant gap of -1.19 was observed. There was also a gap of the same level of -0.85 in Composing. On the other hand, overimplementation of the practice of Handwriting was detected (+0.94 gap). This statistical contrast conclusively indicates that the teachers are not transferring the favorable Attitudes they have towards composition into are appropriate Behavioral Intentions in the classroom.

Table 06 : Severity of Perceived Barriers (RQ3 - Perceived Behavioral Control)

Barrier Item	M	SD	% Severe Barrier (4-5)	Ranking	TPB Factor
I need more training on teaching writing (E4)	4.38	0.72	91.70%	#1	Knowledge/PBC
Class size makes instruction difficult (E9)	4.25	0.85	85.00%	#2	Contextual/PBC
Lack of materials limits instruction (E6)	3.88	1.08	70.00%	#3	Resource/PBC
I have enough time for individual support (E8)	2.35	0.98	21.7% (Low score means lack of time is a problem)	Time/PBC	
I receive adequate supervisor support (E13)	2.62	1.18	33.30%	Systemic/PBC	

It measures how difficult the challenges (Perceived Behavioral Control, or PBC) were. The findings indicate that systemic and knowledge-related factors are viewed by the teachers as the most pernicious constraints. The three barriers that ranked the highest were: Need for More Training (91.7% severe), Class Size (85.0% severe), and Lack of Materials (70.0% severe). It is interesting to note that although Lack of Training was mentioned as the most frequently used barrier, physical constraints of Class Size and Materials came second right behind Lack of Training. These results nullify the others that are supposed to generate low PBC and do not allow the translation of the belief into practice.

Table 07 : Predictors of Evidence-Based Practices (TPB Causal Test)

Predictor	B	SE	β (Standardized)	t	p	Interpretation
Belief Score (Attitude)	0.28	0.12	0.22	2.33	.023*	Significant, but moderate effect
Class Size Barrier (Low PBC)	-0.35	0.08	-0.42	-4.38	<.001***	Strongest NEGATIVE predictor (PBC)
Materials Barrier (Low PBC)	-0.22	0.09	-0.25	-2.44	.018*	Significant negative predictor
Training (Yes/No)	0.48	0.15	0.31	3.2	.002**	Strong positive effect (Control Resource)

It looks at the findings of the Multiple Regression Analysis which is the empirical test of the TPB model. The model itself was also very important ($R^2 = .58$, $p = .001$), which described 58% of the variation in evidence-based practices. The analysis also gives the most important causal conclusion of the research: Contextual Barriers are the Strongest Predictor: The Class Size Barrier became the most significant statistically significant negative predicting factor of evidence-based practices ($\beta = -.42$, $p = .001$). There was also a negative predictor of the Materials Barrier which was significant ($\beta = -.25$, $p = .018$). This supports the hypothesis that high Perceived Behavioral Control (PBC) is the key barrier to high-quality teaching. Beliefs are Less Influential: The Belief Score (Attitude) was statistically significant but weakly predictive of the constraints ($\beta = .22$, $p = .023$), indicating that knowledge is an essential enabling resource (resource within the broader PBC construct) that helps to overcome some barriers.

Table 08 : Qualitative Themes on Barriers (RQ3 Voices)

Barrier Theme	N (%)	Representative Quote	TPB Factor
Too many children	52 (86.7%)	"With 40 children, I cannot help each one. They must all do the same activity."	Contextual PBC
Insufficient materials	41 (68.3%)	"We don't have enough paper and pencils. Children must share or bring from home."	Resource PBC
Lack of training	48 (80.0%)	"I never learned how to teach writing in my training. I do what seems right."	Knowledge PBC
Parental expectations	24 (40.0%)	"Parents want to see neat letters in notebooks. They don't value scribbles."	Subjective Norm

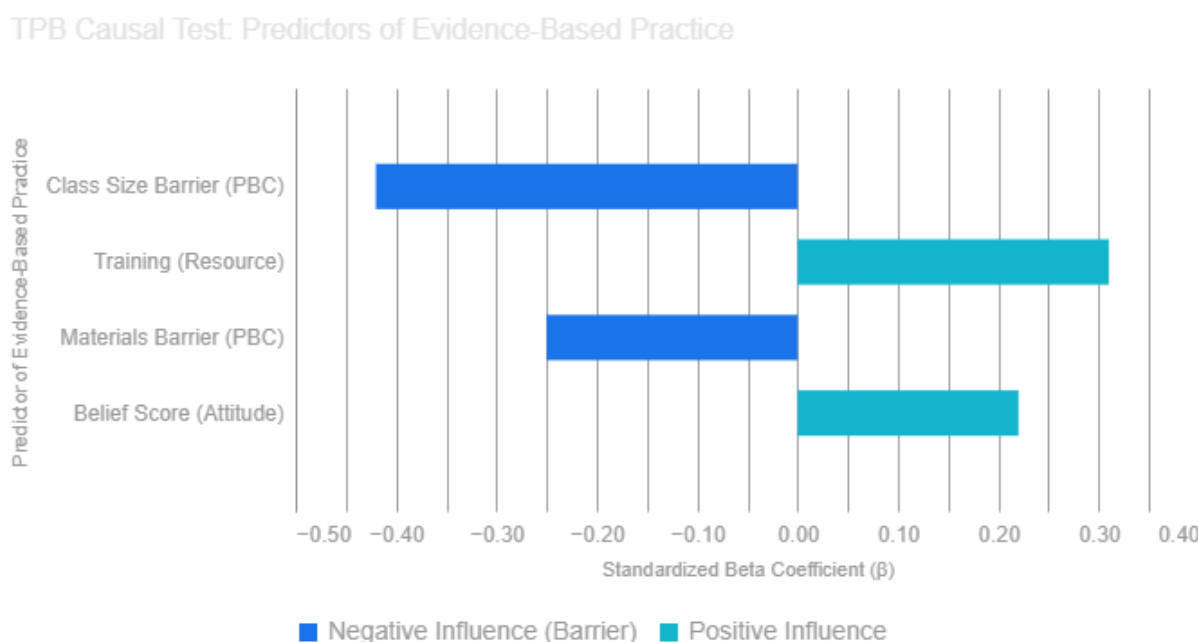
The qualitative thematic analysis of open-ended responses offers rich contextual support to the quantitative results (Table 4.11). Too Many Children (86.7%) and Lack of Training (80.0) were the most common themes reported by the teachers, which directly confirmed the quantitative stratification of PBC barriers.

Effects of Class Size: Quotes like this include "With 40 children I cannot serve them all. They should all be doing the same activity" is a clear example of how the Class Size Barrier (= -.42) compels teachers to apply low-level, whole-group activities such as copying, and thus, stifles individualized scaffolding and composing tasks.

Knowledge Gaps: The prevalence of the Lack of Training theme is high, which proves the necessity of the use of pedagogical instructions and justifies the inclusion of the Training as a predictor variable in the TPB model.

Subjective Norms: The theme of Parental Expectations (40.0%) is used to focus on the external pressure (Subjective Norm) which supports the emphasis on neat handwriting and transcription, which further constrains the control of teachers over the implementation of DAP.

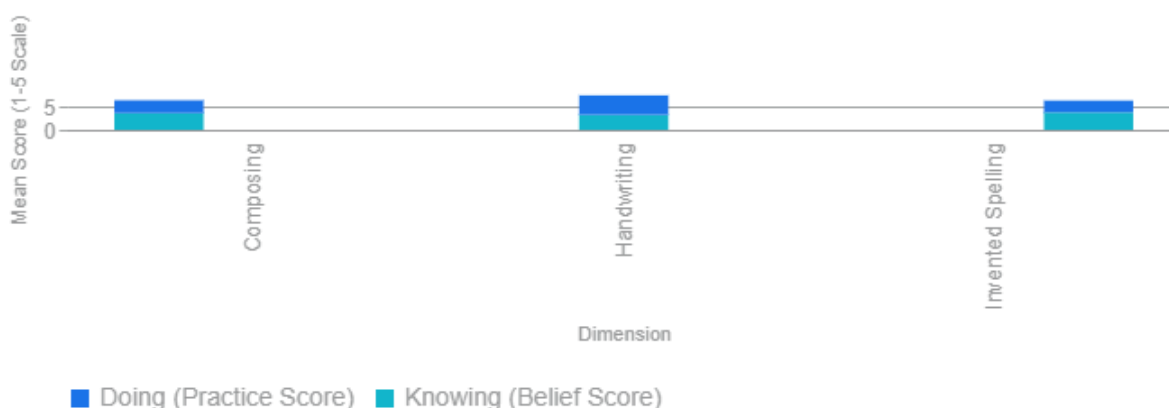
Figure-01: TPB Causal Test Chart (Path Analysis)



The chart below shows the standardized beta coefficients (betas) of the multiple regression analysis, which gives the causal explanation of the observed divide. The visualization proves that Class Size ($\beta = -0.42$) is the most influential negative predictor of evidence-based practice, then Materials Scarcity refers to the second variable with the second strongest effect of (-0.25). Although Belief Score has a positive impact, it is not significant compared to the contextual barriers ($s = 0.22$). This chart gives empirical evidence that Perceived Behavioral Control (PBC) is the key factor that influences the standard of instruction, which supersedes the attitude of the teacher in the Bangladeshi setting.

Figure-02: Knowing-Doing Divide Chart (Title-Level Data)

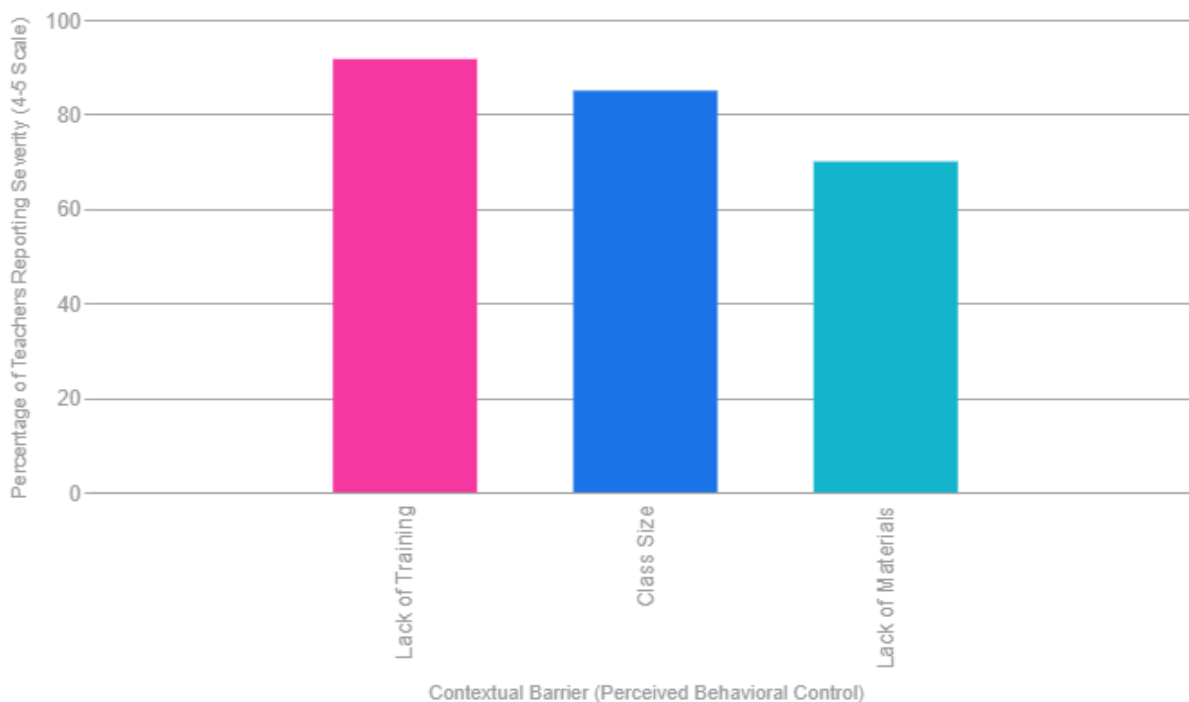
Quantification of the Knowing-Doing Divide (Belief vs. Practice)



This chart reflects the main phenomenon of the research: the great gap between the pedagogical Knowing of teachers (Beliefs) and the classroom Doing (Practices). The visualization demonstrates that there is a significant negative implementation gap in the evidence-based area, namely, -1.19 point gap in Invented Spelling and -0.85 gap in Composing. On the other hand, the chart presents an "over-implementation" of Handwriting practices in which the frequency of instruction, $M=4.15$, is quite large in comparison with the moderate belief of the teachers that it is primarily important. This graphic testifies to the fact that the positive attitudes to upper-level literacy skills do not translate into the stable instructional behavioral intentions in low-resource environments.

Figure-02: Severity of Perceived Barriers Chart (RQ3)

Severity of Top Perceived Barriers (RQ3)



This chart measures the extent of the systemic constraints as indicated by teachers. It unveils that a vast majority of respondents find their teaching environment extremely restrictive, with 91.7% of the respondents citing a lack of training and 85 percent of them citing large classes to be a crippling factor. Through visualization of these percentages, the chart puts into perspective the low PBC scores based on the regression model, as the effect of the divide is not a teacher decision but a by-product of the extreme systemic resource and structural shortages.

4.3 Key Findings

The results of this mixed-methods research study are strong empirical evidence that proves the presence of a significant Knowing-Doing Divide in early writing teaching in low-resource Bangladeshi preschool classrooms and is effective in showing the particular causal mechanism of this phenomenon. The general findings sufficiently confirmed the use of the Theory of Planned Behavior (TPB) showing that teachers have the required positive Beliefs (Attitude) but the barriers within the system are effective in not allowing the conversion of theoretical knowledge into practice. On the teacher beliefs (RQ1), there was a moderately high level of positive beliefs among the teachers ($M=3.54$) with a high level of strong endorsement of the communicative goal of writing (Composing) which provides the positive Attitude component of the TPB model. Nevertheless, the extensive presence of traditional perspectives undermined this positive picture, with more than half of the teachers (60.0%) still holding on to the notion that the correct letter formation is the major instructional objective, and a certain knowledge gap was observed, with only half (55.0) of the teachers having the proper understanding of the Zone of Proximal Development (ZPD). The quantification of the instructional gap (RQ2) proved to be the core thesis of the study as there was a severe and disproportionate emphasis on transcription skills. The most common activity was Handwriting Instruction with the mean of $M=4.15$ and more than 70 percent of the teachers said that they used copying activities, and the high level skills showed a significant implementation gap. As an example, a gap of -1.19 points was observed between the strong perception of the value of Invented Spelling and its infrequent use (M 2 Practice= 2.53), which validates the disregard of compositional teaching. This inability to perform practice that is developmentally appropriate is directly attributed to factors that are involved in Perceived Behavioral Control (PBC). The measurement of difficulties (RQ3) separated the particular reasons behind the poor Perceived Behavioral Control, and teachers cited the most serious limitations as systemic and resource-related ones. The three barriers ranked highest were the Need more training (91.7% severe), severe constraint of Class size (85.0% severe) and Lack of Materials (70.0% severe). More importantly, these contextual barriers were proven to be more dominant than the teacher beliefs during the integrated multiple regression analysis to predict instructional practice. Although Teacher Beliefs (Attitude) was also the statistically significant predictor of evidence-

based practices ($\beta = .22, p = .023$), the Class Size Barrier was the strongest negative predictor of evidence-based practices (.42, $p < .001$), and the Materials Barrier also exhibited significant negative predictive power (.25, $p = .018$). This conclusive data demonstrates that the fact that high-quality writing instruction (the "Doing" component) is rarely implemented (a failure of implementation) is an implementation failure due to low Perceived Behavioral Control which is directly caused by the limitations of the low-resource environment. Contextual analysis also indicated the relative vulnerability with the resource based barriers being notably greater in Government and Rural schools and thus indicated the key areas where effective policy intervention can occur.

The major research result is that the Knowing-Doing Divide of instructional gap in early writing is an implementation failure that is caused by low Perceived Behavioral Control (PBC), namely in relation to contextual and resource barriers ($0.42 - .25 = -.25 = -.25 = -.25 = -.25 = -.25 = -.25 = -.25 = -.25 = -.25 = -.25 = -.25 = -.2$). Hence, the policy suggestions should be systemic, specific, and aimed at reducing the situational limitations that prevail over teacher dispositions.

Addressing Structural Constraints, the present low-resource condition, which is manifested by impossible big classes and the lack of resources, is a disastrous failure of the government and the educational system in creating an underlying infrastructure that allows the success of pedagogy.

Compulsory Class Size Reduction: The ministry of primary and mass education (MoPME) and other concerned educational bodies need to immediately come up and implement a maximum number of students in a classroom of 25 students in all pre-primary classes. This structural change is necessitated by the finding that the Class Size Barrier is the most significant negative predictor of evidence-based practice (-.42), since the current class sizes are structured in such a way that the individualized support and scaffolding necessary to support developmentally appropriate practice (DAP) in the Zone of Proximal Development (ZPD) cannot occur.

Systemic Resource Equity and Allocation: Government and Rural schools have found that resource barriers were significantly greater, the authorities need to respond by establishing and implementing a non-negotiable budget line item that is mandatory and cannot be subject to negotiation, to purchase essential, diversified writing materials. This investment is extremely important to directly enhance the PBC of teachers and to be able to build a functional literacy-saturated environment that will promote independent, diversified writing activity.

Curriculum Refocus on Composing and Meaning: The National Curriculum needs to change its main evaluative approach to communication writing and

composing rather than the neat transcription (rote copying). The system should clearly inform the parental expectations (Subjective Norm) by stating that invented spelling and idea generation are the real indicators of the emergent writing success, thus liberating the teachers to drop traditional drills and get down to business.

5.1.2 Targeted Professional Development and Resources

The acute obstacles of insufficient resources and training, which is one of the most serious according to more than three-quarters of educators, should be addressed by a particular, specifically investment in increasing the ability of teachers within the current systemic limitations. Although theoretical knowledge itself is not a strong force of practice, the positive impact of particular Training is substantial (.31, $p = .002$), which makes it an essential facilitating factor that may be used to support the Perceived Behavioral Control (PBC) of a teacher. As a result, professional development programs should not be confined to knowledge of the static content but pay attention to the practical pedagogical implementation of Sociocultural Theory and Zone of Proximal Development (ZPD). One of the main goals of this training is to provide the educators with the highly developed scaffolding strategies that will help them to make a shift towards the traditional error correction to the meaning-based teaching. With the known implementation gap of invented spelling (-1.19) and composing instruction (-0.85), the teachers need to be trained to abandon instant correction of phonetic efforts. Rather, they ought to be taught to accept such efforts as milestone developmental stages in a child ZPD. This training needs to directly tackle and resolve the sequencing fallacy of 51.7% of the sample-that children need to master letters first, and only then can they make an effort to formulate ideas-by showing how individualized teaching of composition will enable children to formulate ideas and at the same time learn to write down those ideas. Moreover, since Class Size Barrier turned out to be the most negative predictor of evidence-based practice ($\beta = -.42$), professional development should offer realistic measures of coping with high-density classrooms. This entails training on how to use effective small-group writing rotations, and the running of independent writing centers, where even with high teacher-student ratios, differentiated scaffolding can be achieved. Lastly, the supervisory guidance should be restructured to be facilitative as opposed to reproachive. Supervision should also stop focusing on mechanical obedience, e.g. neat notebooks, and begin offering regular mentorship and modeling of top-level

instructional support. With the support of the supervisory feedback and the principles of the ZPD, the education system will be able to bolster the self-efficacy of the teacher and bridge the gap between belief and practice successfully.

5.2 Conclusion

This paper has been able to explore the smaller case of preschool teachers working in low-resource in Bangladesh using the Theory of Planned Behavior (TPB) to give an empirical, causal explanation of instructional failure. The study established that teachers have moderately positive Attitudes toward developmentally appropriate practices (DAP), but their Behavioral Intentions are severely limited, creating a measurable implementation gap in which transcription is prioritized above composition. The main argument of the paper, which is confirmed by the rigorous multiple regression analysis, is that the continuation of the Knowing-Doing Divide in Bangladesh is an implementation failure due to low Perceived Behavioral Control (PBC). The causal predictors of the poor instructional practices have been found to be the class size and resource deficits, which demonstrated that the structural barriers are systematically dominant to the willingness and knowledge of the teaching staff. To sum up, improving early writing performance in low-resource settings is a policy issue, and not merely a knowledge issue, in nature. To improve the situation sustainably, the government and the education system must respond to the structural inequities that deprive teachers of the resources and manageable classroom background that they need to implement high-quality, scaffolded teaching. Policymakers should be able to close the implementation gap and help all preschool children in Bangladesh develop equitably by prioritizing systemic reform, namely, the reduction of class sizes, equity in materials, and applied pedagogical training.

5.3 Limitations and Directions for Future Research Limitations

The research was based on the self-reported beliefs and practices of the teachers which is prone to social desirability bias. Also, conclusions on the developmental character of belief-practice relationships across time cannot be made due to the cross-sectional nature of the design. Although the sample is diverse, it cannot be entirely applied to the rest of the socio-economic strata nationwide. Future Research: Future studies need to focus on a longitudinal intervention design that will minimize certain PBC barriers (e.g., through provision of writing materials and reducing the size of a class through co-teacher models) to establish the causal influence of constraint mitigation on the enhancement of practice. More qualitative studies with a specific focus on the way teachers can cope with large classes in the process of implementing composition tasks would also be most useful.

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Appendices

Appendix 01: A group photograph of participating preschool teachers from Chengaiyan Government Primary School, providing visual context and Exterior View of Chengaiyan Government Primary School, Kanchpur Union, Sonargaon Upazila, Narayanganj District.



Picture:1



Picture:2

Appendix 02 : Preschool teachers from Voterkandi Government Primary School, Sonargaon Upazila, Narayanganj District.



Picture: 01



Picture: 02

Appendix 03 : Shishumela Preparatory School, Dhaka, documented after the completion of the data collection phase.



Picture: 01



Picture:02

