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AWARENESS OF DYSLEXIA AMONG PRE-SERVICE EFL TEACHERS: A CONTRASTIVE ANALYSIS ACROSS EDUCATIONAL CONTEXTS

Abstract. The present paper explores dyslexia awareness among BA and MA students enrolled in a TEFL program at a Polish university. Dyslexia, a language-related difficulty affecting reading fluency and accuracy (Gabrieli, 2009), necessitates greater awareness among pre-service teachers to ensure effective language support for dyslexic students. While research has primarily focused on teacher preparedness, studies on dyslexia awareness remain limited, particularly in Poland. This study replicates Soriano-Ferrer et al. (2016), which examined knowledge and beliefs about dyslexia among Spanish- and Peruvian-speaking pre-service and in-service teachers. By employing a replication methodology (McManus, 2023), the study facilitates a contrastive analysis of dyslexia awareness levels, both within the Polish sample (comparing undergraduate and graduate students) and between the Polish and Spanish/Peruvian educational contexts.

Keywords: awareness; dyslexia; pre-service teachers; EFL; contrastive analysis

ŚWIADOMOŚĆ DYSLEKSJI WŚRÓD PRZYSZŁYCH NAUCZYCIELI JĘZYKA ANGIELSKIEGO: ANALIZA KONTRASTYWNA KONTEKSTÓW EDUKACYJNYCH

Abstrakt. Celem badania jest analiza świadomości dysleksji wśród polskich studentów studiów licencjackich i magisterskich przygotowujących się do zawodu nauczyciela języka angielskiego. Dysleksja to zaburzenie językowe utrudniające płynne i poprawne czytanie oraz aplikowanie zasad ortografii (Gabrieli, 2009). Dotychczasowe badania koncentrowały się głównie na przygotowaniu nauczycieli do pracy z uczniami z dysleksją, natomiast świadomość tego zaburzenia była rzadziej badana. Niniejsze badanie oparto na bliskiej replikacji badania Soriano-Ferrer i in. (2016) przeprowadzonego w Hiszpanii i Peru, dotyczącego wiedzy i przekonań dotyczących dysleksji. Dzięki przyjętej metodologii replikacyjnej (McManus, 2023) możliwa jest analiza kontrastywna na dwóch

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poziomach: porównanie świadomości dysleksji w kontekście polskim i hiszpańsko-peruwiańskim oraz wpływu poziomu kształcenia (licencjackiego i magisterskiego) na wiedzę polskich studentów.

Słowa kluczowe: świadomość; dysleksja; nauczyciele; język angielski; analiza kontrastywna

INTRODUCTION

Dyslexia is a disorder characterized by a difficulty in acquiring accurate and fluent reading skills due to challenges in understanding and applying alphabetic or logographic principles (Gabrieli, 2009, p. 280). Investigations into the manifestations of dyslexia in various languages explore three main perspectives. To begin with, specific orthographic features present different demands, and therefore the distribution of reading difficulties in different languages is asymmetrical (Geva, 2006). In addition, reading in two scripts where English is a FL is observed to be motivated by the distance between the language systems, degree of transparency (deep or shallow orthography), and the type of dyslexia impairment characteristic of an individual (Ho & Chung, 2010; Siok et al., 2004; Wang & Koda, 2007; Wydell & Butterworth, 1999; van der Leij & Morfidi, 2007). The EU Dyslexia Charter (Broadbent, 2018) estimates that 50–100 million people in Europe struggle with dyslexia. Given the linguistic diversity of Europe, English language education presents challenges for dyslexic learners, teachers, and policymakers (EDA, 2020). According to the Charter, dyslexia prevalence varies across European countries, ranging from 5% in Luxembourg to 15% in Sweden, with disparities in national definitions and policies. Some countries, like Croatia and Bulgaria, lack an official definition of dyslexia. Thus, a major issue results from the inconsistency in defining, diagnosing, and supporting dyslexic EFL students. This, in turn, leads to gaps in teacher training and consequently, adds to low awareness of dyslexia among pre-service and in-service English language teachers.

At the same time, despite the consistently high rate of recognized dyslexia cases, teacher training programs often inadequately equip teachers to identify and assist dyslexic students (Mills & Clarke, 2017). Wadlington and Wadlington (2005) contend that the inadequate understanding of dyslexia among undergraduate and graduate students leads to significant frustration and feelings of helplessness. Interestingly, research indicates that teachers can possess accurate knowledge of dyslexia while still holding misconceptions about the condition (Washburn et al. 2011a, 2011b; Washburn et al., 2014). Washburn et al. (2011a, 2011b) found that most pre-service and in-service teachers

recognized that students with dyslexia often struggle with language-based tasks such as decoding and spelling. However, the majority of teachers in both studies also wrongly believed that colored overlays or tinted lenses could help those with dyslexia. In a subsequent study, Washburn et al. (2014) examined the understanding of dyslexia among pre-service teachers in both England and the USA. Consistently with previous research, both groups accurately recognized that dyslexia is not attributable to environmental factors and that poor spelling is a prevalent characteristic. Yet, both American and English pre-service teachers mistakenly believed that reversing letters and words is the main characteristic of dyslexia. A well-informed distinction between facts and beliefs is particularly important in EFL instruction, where dyslexia may be overlooked as a general challenge of second-language acquisition and linked to an inadequate proficiency level (Nijakowska, 2020). Therefore, EFL teachers need a well-developed understanding of dyslexia to differentiate between language acquisition challenges and dyslexia-related reading deficits to implement pedagogical adaptations that accommodate students' needs.

While substantial research has focused on dyslexia intervention strategies and teacher preparedness, fewer studies have looked at dyslexia awareness as a separate construct that includes teachers' knowledge, beliefs, and perceptions of dyslexia. Previous research has found that misconceptions about dyslexia persist, with many teachers still attributing reading difficulties to low intelligence, poor motivation, or visual impairments, rather than recognizing the phonological deficit that underpins dyslexia (Soriano-Ferrer et al., 2016; Washburn et al., 2014). This observation is particularly concerning in settings where teachers work with learners navigating both first-language (L1) and second-language (L2) literacy challenges. The additional cognitive demands of L2 learning, combined with the challenges associated with dyslexia, necessitate that EFL teachers be well-informed about dyslexia across language systems. Therefore, this study explores dyslexia awareness among pre-service EFL teachers in Poland, using a contrastive approach that compares its findings with Spanish data from Soriano-Ferrer et al. (2016). By replicating an initial study in a different educational context, this research provides a comparative perspective on the similarities and differences in dyslexia awareness across countries. Such a contrastive analysis facilitates a deeper understanding of the ways in which linguistic and educational factors shape teacher perceptions of dyslexia.

1. AWARENESS OF DYSLEXIA

Awareness of dyslexia among teachers is crucial for the early identification and effective support of students with reading difficulties. This section presents a comprehensive review of research studies examining teachers' awareness of dyslexia. The section synthesizes and organizes the findings to assess dyslexia knowledge among three groups: pre-service teachers, in-service teachers, and a mixed cohort comprising both. The analysis is structured around key themes, including general knowledge of dyslexia, common misconceptions, diagnosis and identification, teaching strategies, perceptions of responsibility, gaps in knowledge, and recommendations.

Research on pre-service teachers' awareness of dyslexia reveals significant knowledge gaps, as many teacher training programs provide insufficient instruction on the condition. Altar and Amir (2023) found that while pre-service teachers recognized dyslexia as a reading difficulty, they lacked an understanding of its neurological basis. Similarly, Faudzi and Cheng (2022) noted that limited coursework on dyslexia left many pre-service teachers uncertain about its causes. Washburn et al. (2014) found that many mistakenly viewed dyslexia as a visual impairment rather than a phonological processing disorder. White (2018) reinforced these findings, reporting that while some pre-service teachers identified dyslexia as a language disability, many struggled to distinguish it from general reading difficulties. At the same time, misconceptions about dyslexia are common among pre-service teachers, shaping their approach to reading difficulties. Washburn et al. (2014) found that a significant number of teachers incorrectly believed dyslexia was primarily related to letter reversals and could be outgrown. White (2018) observed that some teachers associated dyslexia with intelligence, assuming students were either highly gifted or had low cognitive ability. Faudzi and Cheng (2022) found that some pre-service teachers believed dyslexic students simply needed to try harder. Atar and Amir (2023) noted that cultural beliefs reinforced these misconceptions, with some attributing dyslexia to poor home literacy environments.

These misconceptions contribute to difficulties in diagnosing dyslexia, as pre-service teachers often struggle to differentiate it from general reading challenges. White (2018) found that many teachers relied on superficial indicators, such as slow reading speed, without recognizing phonological deficits. Washburn et al. (2014) found that pre-service teachers often misidentified dyslexic students as having attention issues rather than language-based impairments. Faudzi and Cheng (2022) found that those with no direct exposure to

dyslexic students had difficulty recognizing the condition, reinforcing the need for targeted dyslexia education. Atar and Amir (2023) reported that even when pre-service teachers correctly identified dyslexia, they often failed to associate it with phonological processing difficulties. In consequence, a lack of knowledge about effective teaching strategies further limits pre-service teachers' ability to support dyslexic students. Washburn et al. (2014) found that many endorsed ineffective methods, such as using colored overlays. White (2018) noted that while pre-service teachers were eager to help dyslexic students, they lacked familiarity with structured literacy approaches. Faudzi and Cheng (2022) found that most teachers relied on general teaching methods rather than evidence-based interventions. Atar and Amir (2023) emphasized that informal dyslexia training was insufficient for equipping pre-service teachers with effective instructional strategies.

Pre-service teachers' perceptions of their role in supporting dyslexic students also vary. White (2018) found that many believed dyslexia intervention was the responsibility of special education teachers rather than general educators. Faudzi and Cheng (2022) reported that while pre-service teachers wanted to support dyslexic students, they lacked confidence in their ability to do so. Atar and Amir (2023) found that some teachers felt overwhelmed by the idea of teaching dyslexic students due to limited training, while Washburn et al. (2014) noted that many expected dyslexic students to seek external tutoring rather than rely on classroom-based support. These gaps in knowledge stem from the inadequate inclusion of dyslexia education in teacher training programs. Washburn et al. (2014) found that, despite encountering reading difficulties in students, pre-service teachers lacked formal instruction on dyslexia. White (2018) observed that they often confused dyslexia with other learning disabilities. Faudzi and Cheng (2022) highlighted the absence of standardized dyslexia education, leading to inconsistent levels of preparedness. Atar and Amir (2023) suggested that cultural influences shape misunderstandings, reinforcing the need for cross-cultural research on dyslexia education.

To address these gaps, researchers recommend integrating mandatory dyslexia coursework into teacher training (Atar & Amir, 2023), providing hands-on experience with dyslexic students (Washburn et al., 2014), offering professional development workshops on structured literacy (White, 2018), and continuously updating teacher education curricula to align with dyslexia research (Faudzi & Cheng, 2022). Collectively, these studies highlight that pre-service teachers often lack foundational dyslexia knowledge, struggle with accurate identification, and have limited familiarity with effective instructional

strategies. Many also view dyslexia intervention as the responsibility of special education teachers rather than general educators. Training, not experience, emerges as the strongest predictor of dyslexia awareness, reinforcing the need for structured dyslexia education in pre-service teacher programs.

Research on in-service teachers' awareness of dyslexia consistently reveals a high prevalence of misconceptions, despite years of teaching experience. Studies conducted across various countries highlight the limited exposure teachers have to formal dyslexia training, which, in turn, contributes to persistent misunderstandings regarding its causes and appropriate interventions. Abed and Shackelford (2022) examined teachers in Saudi Arabia and found that only 19.9% had received dyslexia training, with over 80% holding misconceptions about its causes and treatment. A similar trend was observed by Ó Cadhla (2023) in Ireland, where primary school teachers demonstrated suboptimal knowledge scores, with 70% incorrectly believing that colored lenses could aid dyslexic students. In the United States, Peltier et al. (2022) reported that despite legislative mandates for dyslexia training, more than half of the teachers surveyed still believed dyslexia to be a visual disorder rather than a language-based difficulty.

In-service teachers' ability to diagnose and identify dyslexia is another area where challenges persist. Okechukwu et al. (2023) in Nigeria found that 76.06% of teachers had low dyslexia awareness, often mistaking reading difficulties for a lack of motivation rather than a neurological condition. Similarly, research on the Turkish teacher population (Sümer Dodur & Altındağ Kumaş, 2020) underscored an urgent need for improved dyslexia education in Turkey's teacher training programs. The misconceptions about dyslexia's causes, symptoms, and interventions are widespread, leading to potential misdiagnoses and ineffective teaching strategies. While Üstündağ and Odabaş (2023) show that training can improve knowledge, they also highlight its limitations, indicating that current programs are not comprehensive enough. The studies conducted by Sümer Dodur and Altındağ Kumaş (2020) and Altındağ Kumaş et al. (2021) further underscored the severity of the issue, with only 12% of teachers correctly identifying dyslexia as a neurological disorder, while 82% still attributed it to visual deficits. These findings suggest that many teachers lack a fundamental understanding of the nature of dyslexia. In terms of teaching strategies and perceptions of responsibility, research suggests that while many in-service teachers believe they can support dyslexic students, they often lack the actual knowledge needed for effective instruction.

Szymański (2024) in the United States found that, despite their confidence in their ability to support dyslexic students, many teachers lacked the training necessary to implement evidence-based strategies. This overconfidence aligns with the Dunning-Kruger effect, indicating that years of teaching experience alone do not necessarily improve dyslexia knowledge, formal training is essential. Further studies in Croatia (Martan et al., 2023) and Malaysia (Ramli et al., 2019) revealed that many in-service teachers continued to believe in ineffective interventions. Similar findings were observed in China, where Yin et al. (2019) found that early literacy teachers exhibited significant misconceptions about dyslexia's causes, symptoms, and interventions. More than 80% of teachers were unaware of the neurological basis of dyslexia, and many believed ineffective methods. Notably, teachers from less-developed regions had even lower knowledge scores, highlighting the importance of structured dyslexia education programs across different educational contexts.

In the same vein, the study on Polish in-service teachers of English as a Foreign Language (Siek-Piskozub, 2011) revealed significant gaps in teachers' knowledge, training, and instructional practices, highlighting the need for systematic dyslexia education in teacher training programs. A key issue identified in the study is the lack of formal training on dyslexia among EFL teachers. Less than half of the surveyed teachers had received any instruction on dyslexia during their professional education, leading many to feel unprepared when working with dyslexic students. Additionally, misconceptions about dyslexia were widespread, with some teachers mistakenly believing that dyslexia is solely a visual processing disorder or that students could overcome it through extra effort. These misconceptions can result in inadequate support and misdiagnosis, further complicating the learning experiences of dyslexic students. The study also reveals inconsistencies in teaching strategies. While some teachers relied on techniques such as using colored chalk and peer tutoring, few employed research-based interventions like structured phonics instruction. Moreover, assessment practices remained unchanged for dyslexic students, with many teachers applying the same grading criteria as for non-dyslexic students, potentially disadvantaging those with learning difficulties. Teachers who had received specialized training demonstrated greater confidence and awareness of effective interventions, yet such training remained rare. Most pre-service education programs were reported not to include dyslexia instruction, and opportunities for professional development in this area were limited. Thus, the study underscored the urgent need for comprehensive dyslexia training in Polish teacher education programs to ensure that EFL

teachers are equipped with the knowledge and skills to effectively support dyslexic students.

Finally, the studies involving a mixed population of both pre-service and in-service teachers highlight the impact of teaching experience, while also underscoring the persistent presence of misconceptions. The comparative study by Echegaray-Bengoa et al. (2017) in Peru found that while in-service teachers had a better knowledge of dyslexia than pre-service teachers, misconceptions remained prevalent in both groups. Similarly, Martan et al. (2023) in Croatia and Tosun et al. (2021) in Turkey found that exposure to dyslexic students improved teachers' knowledge, but structured dyslexia training was still necessary for accurate understanding. Interestingly, the Tosun et al.' study—that included also the population of speech-language therapist—indicated that while experience may enhance awareness, it does not eliminate misconceptions without formal instruction.

In summary, research across pre-service, in-service, and mixed teacher groups underscores that training, rather than experience, is the key determinant of dyslexia awareness among teachers. Martan et al. (2023) in Croatia found that teachers who had undergone in-service training had significantly higher dyslexia knowledge scores, whereas pre-service university education had little impact. Preschern (2021) emphasized the need for standardized dyslexia policies, as many IB teachers lacked clarity on whether to follow national policies or IB guidelines. While recommendations from these studies include mandatory dyslexia training for all teachers, professional development workshops on phonological interventions, and integrating dyslexia myth debunking into training programs, these measures remain inconsistently implemented. This, in turn, is crucial for improving dyslexia support in classrooms, ensuring that students with dyslexia receive appropriate, scientifically grounded instruction rather than interventions based on misconceptions.

2. RESEARCH AIM AND RATIONALE

Despite the growing body of research on dyslexia and teacher preparedness (e.g. Łodej, 2019; Nijakowska, 2018), limited studies have investigated teachers' awareness of dyslexia as a distinct construct encompassing knowledge and beliefs, specifically in the Polish educational context. In addition, there is a discrepancy between dyslexia awareness studies that focus on pre-service and in-service teachers, with the former group being underrepresented in

research. Previous studies indicate that numerous pre-service teachers hold inaccurate or insufficient knowledge on dyslexia, often mistaking it for a visual impairment or a general reading difficulty rather than a phonological processing disorder. This study adopts a contrastive approach by replicating Soriano-Ferrer et al.'s (2016) research on Spanish and Peruvian pre-service teachers' knowledge and beliefs about developmental dyslexia, thus offering insights into cross-cultural variations in teacher awareness of dyslexia. Addressing these gaps is essential for equipping future English teachers with the necessary knowledge and skills to identify and support dyslexic students in EFL classrooms. Therefore, this study aims to examine the level of dyslexia awareness among BA and MA students enrolled in a TEFL program at a mid-sized Polish university.

To achieve this aim, the following research questions were formulated:

1. Are there significant differences in dyslexia-related knowledge and beliefs between Polish pre-service EFL teachers enrolled in BA and MA TEFL programs, as measured by the General Information, Symptoms/Diagnosis, and Treatment subscales and a Total scale?
2. Are there significant differences in dyslexia-related knowledge and beliefs between Polish and Spanish pre-service teachers, as measured by the General Information, Symptoms/Diagnosis, Treatment and Total scales?

3. METHOD

A cross-sectional study was conducted within the Department of English at a mid-sized Polish university to assess the level of dyslexia awareness among Polish students majoring in TEFL. Data were collected using a Google Form survey, which was distributed to participants through a convenience sampling technique. This study utilized a quantitative approach to provide a comprehensive analysis of dyslexia awareness. The survey questionnaire consisted of two sections: a demographic data section and the Knowledge and Beliefs About Developmental Dyslexia Scale (Soriano-Ferrer et al., 2016), which served as the primary instrument for measuring participants' knowledge and beliefs regarding dyslexia.

3.1 PARTICIPANTS

The research sample consisted of 70 students from the English Department majoring in TEFL. Of these, 48 students were in their second or final year of a three-year Bachelor's program, while 22 students were enrolled in the first and second years of a two-year Master's program. The gender distribution within the sample was 51 female students (73%) and 19 male students (27%). First-year Bachelor's students were not included in the study, as specialization in either TEFL or Translation begins in the second year of the program. Consequently, the study's sample size was determined by the actual available student population, ensuring the inclusion of all eligible participants. In addition, 45 students (64%) had prior contact with people with dyslexia; 12 (17%) had experience teaching them, and their average self-reported preparedness indicated a moderate confidence in their ability to teach students with dyslexia.

3.2 INSTRUMENT

This study employs a modified version of the Knowledge and Beliefs about Developmental Dyslexia Scale (KBDDS) developed by Soriano-Ferrer et al. (2016). The KBDDS is a comprehensive 36-item rating scale designed to assess both knowledge and beliefs about dyslexia. The instrument consists of two main sections. Section I gathers background information related to participants' experiences with dyslexia, including: (a) prior contact with people with dyslexia, (b) experience in teaching students with dyslexia, and (c) self-reported preparedness to instruct dyslexic learners. Section II is subdivided into three distinct subscales: (1) general knowledge about the nature, and of dyslexia (17 items), (2) symptoms and diagnosis of dyslexia (10 items), and (3) treatment and interventions for dyslexia (9 items). The scale consists of statements about dyslexia, to which respondents indicate their response using a three-point Likert scale format: True, False, or I don't know.

3.3 STUDY DESIGN AND PROCEDURE

The study design follows a replication (cf. McManus, 2023) of Soriano-Ferrer et al.'s (2016) investigation on knowledge and beliefs about developmental dyslexia among Spanish-speaking pre-service and in-service teachers

from Spain and Peru. The present study, however, incorporates several changes: (a) population change (initial study: Spain and Peru; present study: Poland), (b) grouping factor change (initial study: PSTs vs. ISTs; present study: Bachelor's vs. Master's PSTs), and (c) instrument alterations (revised scoring system), which aligns with contemporary dyslexia research, instructional methods, and current standards for special educational needs. Despite these adaptations, the study retains the core structure, objectives and statistics of the original research, thereby qualifying as a close replication of the Soriano-Ferrer et al. (2016) study.

4. DATA ANALYSIS AND DISCUSSION

First, separate one-way ANOVAs (see Table 1) were performed for each KBDDS subscale and a total score to examine whether educational level (BA vs. MA TEFL students) affects dyslexia-related knowledge and beliefs about dyslexia among pre-service TEFL students. The results revealed a statistically significant difference in the General Information Scale ($F(1,40.1) = 5.21$, $p = .03$), with BA students ($MA = 9.31$, $SD = 2.13$) outperforming MA students ($MA = 8.05$, $SD = 2.17$). The associated effect size (Cohen's $d = 0.59$) shows a medium effect, suggesting a meaningful difference between the two groups. For the Symptoms/Diagnosis Scale, no statistically significant difference was observed ($F(1, 33.3) = 1.37$, $p = .25$), indicating that BA and MA students performed similarly on this measure. The effect size (Cohen's $d = 0.31$) suggests a small effect size but does not reach the level of statistical significance. Similarly, the Treatment Scale did not yield significant differences between the groups ($F(1, 37.6) = 0.71$, $p = .40$), and the corresponding Cohen's $d = 0.22$ suggests a small effect size, further indicating a negligible difference in scores. Finally, the Total Score, which represents the combined performance across all scales, did not show a statistically significant difference between BA and MA students ($F(1, 34.6) = 1.54$, $p = .22$). The effect size (Cohen's $d = 0.33$) suggests a small effect, though not strong enough to be statistically significant. In sum, BA students performed significantly better than MA students on the General Information Scale, suggesting they have stronger foundations in knowledge of dyslexia. In contrast, no statistically significant differences were observed between BA and MA students on the Symptoms/Diagnosis and Treatment Scales, indicating similar levels of understanding in these areas.

Similarly, the Total Score did not differ significantly between the two groups, suggesting that overall knowledge and beliefs about dyslexia are comparable.

Table 1. One-Way ANOVAs and Cohen's *d* Results: BA in TEFL vs. MA in TEFL

	<i>F</i>	<i>df</i> ₁	<i>df</i> ₂	<i>p</i>	Cohen's <i>d</i>
General Information scale	5.21	1	40.1	.03	0.59
Symptoms/Diagnosis scale	1.37	1	33.3	.25	0.31
Treatment scale	0.71	1	37.6	.40	0.22
Total score	1.54	1	34.6	.22	0.33

Note. Cohen's *d* effect size: 0.00–0.19 = very small; 0.20–0.49 = small; 0.50–0.79 = medium; 0.80 or higher = large.

Next, a *t*-test was utilized to compare the replicability of the present study on Polish pre-service EFL teachers ($N = 70$) with the initial study by Soriano et al. (2016) on Spanish and Peruvian pre-service teachers ($N = 246$). The results on the General Information Scale showed a mean difference of 2.35, indicating a statistically significant difference in knowledge of dyslexia between the Spanish and Polish pre-service teachers ($t(314) = 6.93$, $p < .001$, $SEM = 0.34$). The evidence suggests that the Polish pre-service teachers ($MA = 8.91$, $SD = 2.21$) performed better on the General Knowledge Scale than the Spanish/Peruvian pre-service teachers ($MA = 6.56$, $SD = 2.58$). When the results of the Symptoms/Diagnosis Scale were investigated, the *t*-test showed again a statistically significant mean difference of -0.78 , indicating significant discrepancies between Polish and Spanish/Peruvian pre-service teachers' responses regarding their awareness of symptoms and diagnosis of dyslexic students ($t(314) = 3.07$, $p < .002$, $SEM = 0.25$). This indicates that the Polish pre-service teachers ($MA = 5.54$, $SD = 1.81$) scored higher than their Spanish/Peruvian counterparts ($MA = 4.76$, $SD = 1.89$).

In contrast, there was no statistically significant difference found on the Treatment Scale ($t(314) = 0.29$, $p > .05$, $SEM = 0.28$), showing a mean difference of 0.08. This value signifies that while the Spanish/Peruvian pre-service teachers showed greater awareness of the treatment of students with dyslexia ($MA = 5.06$, $SD = 2.16$) than the Polish pre-service teachers ($MA = 4.98$, $SD = 1.62$), this difference did not reach the level of statistical significance. Whereas, the Total Score, which measures the collective awareness of dyslexia across all three categories of general information, symptoms/diagnosis, and

treatment, reached the level of extreme statistical significance ($t(314) = 4.38$, $p < .0001$, $SEM = 0.66$) with a mean difference of -2.92 . This result reveals that Spanish/Peruvian pre-service teachers had less knowledge of dyslexia ($MA = 16.38$, $SD = 5.05$) than Polish pre-service teachers ($MA = 19.30$, $SD = 4.37$). In sum, the findings demonstrate statistically significant differences in awareness of dyslexia between Polish and Spanish/Peruvian pre-service teachers, with Polish pre-service EFL teachers scoring higher on the General Information, Symptoms/Diagnosis, and Total Score, except for the Treatment Scale.

CONCLUSION

The present study contributes to the research line focusing on dyslexia awareness among pre-service teachers, specifically future EFL teachers who will be instructing students in a bilingual setting. Thus, the proposed research questions aimed to examine the knowledge and beliefs about dyslexia among Polish pre-service EFL teachers and to assess the replicability of the initial study in the Polish context.

The first research question aimed to examine differences in dyslexia-related knowledge and beliefs between Polish pre-service EFL teachers enrolled in BA and MA TEFL programs, focusing on the General Information, Symptoms/Diagnosis, and Treatment subscales, as well as the Total score. The results indicate that BA TEFL students exhibited significantly greater knowledge of general dyslexia-related concepts compared to their MA counterparts. The finding suggests that BA students may have a stronger foundational understanding of dyslexia. However, no meaningful differences were observed between BA and MA students in their understanding of dyslexia symptoms, diagnosis, or treatment, indicating similar levels of awareness in these areas. Similarly, overall knowledge and beliefs about dyslexia did not differ significantly between the two groups, suggesting that educational level alone does not necessarily predict higher dyslexia awareness among pre-service TEFL teachers.

The observation that BA students showed significantly greater knowledge of general dyslexia-related concepts compared to their MA counterparts was unanticipated. This counterintuitive finding could suggest that pre-service teachers receive more intensive instruction about dyslexia earlier on in their studies, or that BA students have just finished coursework that makes the

information more relevant. In contrast, MA students, who are further along in their studies, may have shifted their focus toward more specialized areas of TEFL, potentially leading to less emphasis on dyslexia-related content. This situation raises questions about how dyslexia education is integrated into TEFL curricula at different academic levels and whether advanced training adequately reinforces foundational knowledge. Interestingly, Abed and Shackelford's study (2022) reported no statistically significant differences in knowledge of dyslexia scores based on education level. In addition, the observed linear progression in awareness of dyslexia suggested a correlation with educational level; mean scores increased with higher levels of education. The divergence in findings suggests that the relationship between education level and dyslexia awareness is not straightforward and may depend on how dyslexia education is structured within TEFL programs.

In line with the replication-based design of the present study, the second research question examined the degree of replicability among Polish and Spanish pre-service teachers, as assessed through the General Information, Symptoms/Diagnosis, Treatment, and Total scales. The results show statistically significant differences in dyslexia awareness between the two groups, with Polish pre-service EFL teachers demonstrating higher scores on the General Information, Symptoms/Diagnosis, and Total scales compared to their Spanish/Peruvian counterparts. Specifically, Polish pre-service teachers outperformed Spanish pre-service teachers on the General Information Scale, with a statistically significant mean difference, suggesting a stronger foundational understanding of dyslexia among the Polish cohort. Similarly, Polish pre-service teachers exhibited significantly higher awareness on the Symptoms/Diagnosis Scale, indicating a greater ability to recognize and identify dyslexia-related characteristics. These findings suggest that Polish pre-service teachers may have had greater exposure to dyslexia-related content in their training or that their teacher education programs place more emphasis on these aspects. In contrast, no statistically significant difference was found on the Treatment Scale, indicating that despite some variations, both groups demonstrated similar levels of understanding regarding interventions and support strategies for dyslexic students. However, the Total Score, which encompasses all three subscales, revealed an extreme statistical difference, reinforcing that Polish pre-service teachers had a more comprehensive awareness of dyslexia than their Spanish/Peruvian counterparts. Overall, these results suggest that while the study achieved partial replicability, discrepancies between the two

cohorts highlight possible cross-cultural or curricular differences in dyslexia training.

On a final note, the findings of this study highlight the urgent need for the integration of dyslexia awareness into TEFL preparation courses at Polish universities, since they align with the findings of the 2011 study by Siek-Piskozub. This consistency emphasizes that, despite the passage of over a decade, significant gaps in EFL teacher preparedness persist. The continued lack of dyslexia-related knowledge among teachers stresses the need for comprehensive modifications in teacher training programs to ensure that future EFL teachers are equipped with the skills and understanding required to support dyslexic learners effectively.

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