QUBAHAN ACADEMIC JOURNAL
VOL. 4, NO. 2, June 2024
https://doi.org/10.48161/qaj.v4n2a611

Pragmatic Language of Students with Learning Disabilities: Cross-Cultural Research

Suhail Mahmoud Al-Zoubi [1]

[1] Department of Psychology, College of Education, Sultan Qaboos University, Muscat, Oman.

Corresponding author: Email: smalzoubi@squ.edu.om

ABSTRACT: This cross-cultural descriptive research aimed to identify the level of pragmatic language (PL) among students with learning disabilities (LDs) as perceived by the teachers of the resource room program (RRP) in Jordan and Oman. The research sample consisted of 453 Jordanian and Omani students with LDs enrolled in the RRP. To achieve the objectives of this research, teachers of RRP responded to the Children's Communication Checklist (CCC) that was translated into Arabic [1]. The CCC consisted of 38 items distributed into five subdimensions: inappropriate initiation; coherence; stereotyped language; use of context; and rapport. The results showed that the mean of PL level on all subdimensions of CCC was low among students with LDs. The results of the MANOVA test showed that there were statistically significant differences in PL in favor of female students in Jordan and Oman. The results of the t-test showed no statistically significant differences in PL due to country (Jordan and Oman). The research recommended that students with LDs be enrolled in counseling programs based on PL skills and that families have a vital role in teaching these skills to their children.

Keywords: PL, students with LDs, cross-cultural research, Jordan, Oman.

I. INTRODUCTION

Language is a means of expressing ideas and exchanging information between people. It enables us to express our basic needs and perform our functions as social creatures [2]. The term “communication” is used to refer to the process of interaction between people to express needs and desires. Thus, human societies place more value on spoken language than written language. Communication may be verbal or nonverbal through gestures, sign language, and body language. It does not necessarily require the use of only spoken words. Therefore, for the communication process to be effective, it must include a sender, a receiver, and a message [3]. The sender has an idea that turns into symbols that can be understood by the receiver. Thus, communication occurs when there is a common understanding of the message between the sender and the receiver. The process of communication requires the receiver to use the senses of hearing, and vision, or sign language for persons with hearing impairments [4].

Language is one of the elements of communication that is based on understanding and the use of symbols and signs. Linguistics is concerned with studying the spoken and written means of communication that occur between human beings [5]. While speech is the most widely used means of communication, and it is an audio production of language. Language disorders are classified as a communication disorders [6]. It is a disorder in spoken language, which involves listening and speaking skills, and written language, which includes reading and writing skills [7]. Language disorders are problems in receptive or expressive language [8]. In other words, it is a disorder in the form, content, or function of the language. Language form disorders include phonological, morphological, and syntax. Language content disorders include the semantics of spoken and written language. However, language function disorders include pragmatics [9].

The behaviours and social skills that children acquire in the family and school environment are essential to social development and emotional regulation [10]. Therefore, social interactions in early childhood affect the psychological, behavioral, and emotional aspects of children’s development [11]. Acquiring PL skills is necessary for children to establish friendships and practice positive social behaviors. There is agreement among researchers that the definition of PL deals with the ability to use language appropriately when interacting with others and in multiple social contexts [12,13, 9]. Whereas PL also involves the use of

language in various social contexts through the listener's perception of the speaker's speech [14]. The American Speech–Language–Hearing Association (ASHA) describes PL as the active use of language to achieve social goals and an awareness of social roles [15]. Karthik [16] showed that PL is one of linguistics branches that highlights speech and semantics in a social context. Accordingly, t PL contributes to social, emotional, and communication skills among peers.

The PL takes place through verbal and nonverbal language [17] or meta-language and social inference communication [18]. Parsons et al. [19] categorized the communicative and social behaviors of PL into responsiveness, nonverbal communication, social–emotional atonement, executive function, and negotiation with communicative partners. PL can be defined as the use of verbal and nonverbal language in different social contexts [20]. PL is also used to identify the pragmatic functions of words in local spoken dialects [21], Other researchers believe that the definition of PL has expanded to include social, interactive, and communicative functions [19]. This expansion reflects an understanding of the interrelationship between PL and these three functions. Therefore, students who are able to develop PL skills are more successful in their social interactions with their peers, families, and teachers [22]. Conversely, PL impairment may affect social skills, use of language in social contexts, and academic performance [23].

The term “PL impairment” refers to a disturbance in the sociolinguistic aspect of children compared to their ability to learn the mechanical aspects of language. In a social context, children with PL impairment have trouble making friends and they talk less with peers [24] as well as having problems listening and understanding narrative language [25]. It is expected that language skills are related to social and behavioral performance, as well as social competence and language abilities. Therefore, any problems the child has in expressing him/herself and understanding the messages of others may lead to feelings of frustration [26]. The Individuals with Disabilities Education Act (IDEA) considers language disorders to be one of the communication disorders that affect a child's academic skills [27]. Furthermore, the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) included the term “pragmatic social communication disorders” as a new category of neurodevelopmental disorders to describe children with PL impairment [28, 29], and in this regard, [30] hypothesized a relationship between PL and the theory of mind. This theory assumes that we attribute mental states to ourselves by understanding social interactions and the behavior of others [31, 32]. In sum, the issue of comorbidity between LDs and language disorders is controversial and needs to be highlighted in our Arab context.

Students with LDs have difficulties with language development. They may have difficulties with receptive language [33], which is associated with listening and speech, and difficulties with expressive language [34], which is associated with the vocal and speech systems they use to communicate with others. Students with LDs have problems with the mechanical aspects of language related to phonology, semantics, morphology, and syntax, as well as the social aspects of language associated with pragmatics. Sun and Wallach [35] indicated the relationship between language disorders and LDs, which transform from language disorders into LDs when children enroll in schools. Hence, language disorders in early childhood are predictors of academic LDs [34]. In this regard, Conti-Ramsden et al. [36] emphasized that early language disorders are predictive of difficulties in reading, writing, and nonverbal skills. Thus, LDs affect not only academic skills but also the ability of students with LDs to use language in appropriate pragmatic contexts [37]. Thus, early assessment and interventions may provide an opportunity to improve PL among children [38].

Generally, the prevalence of language disorders is estimated at 9.92% [39] while it was previously estimated at between 3 to 8% [40]. Thus, there is an increase in the prevalence of language disorders. However, children with disabilities are not isolated from the language disorders prevalent in the population, since such disorders are common in these children. While, it was estimated that 2.34% of children have intellectual disabilities [39], there is a comorbidity of 66% between language disorders and emotional disorders and this figure is 91.3% for students with LDs [41]. Despite this prevalence, 6% of children with disabilities suffer from one of the types of language disorders that may not be due to neurological causes, such as low intelligence or hearing loss [42].

II. LITERATURE REVIEW

Some research emphasized the relationship between PL impairment and disabilities, including LDs. Therefore, a literature review of foreign and Arabic studies related to the impact of PL impairment on students with disabilities will be conducted. In the context of previous studies, Adibi [43] indicated that students with dyslexia differ from their peers without disabilities in terms of PL engagement, and there was no relationship between this engagement and social competence. Ramus et al. [44] emphasized that students with dyslexia and specific language impairments have partial phonological deficits. Furthermore, Diken [45] showed that the majority of Turkish children with autism spectrum disorder and intellectual disabilities had weaknesses in PL skills. The review of literature conducted by Green et al. [46] concluded that there was a correlation between PL impairment and attention deficit hyperactivity disorder (ADHD).

Al-Sobh et al. [47] conducted a qualitative research to explore the causes of diglossia in the Arabic language, its different varieties, and the problems that lead to its occurrence. The findings demonstrated that standard Arabic was experiencing serious problems, including decreased proficiency and success in the language, a shift in language use towards foreign languages, cultural alienation, and the use of languages other than Arabic for instruction. Kumari et al. [48] showed that the performance of students with academic LDs (dyslexia, dysgraphia, and dyscalculia) in verbal and nonverbal PL skills is lower than that of their peers without disabilities. Cardillo et al. [12] confirmed that dyslexic students performed less well than students without dyslexia in tasks that measured PL skills. On the other hand, Diken [49] showed that students with intellectual disabilities had lower PL skills compared with their peers without disabilities. In the same context, the review of literature conducted by Korrel et al. [50] confirmed that students with ADHD showed a decrease in expressive and receptive language and PL skills compared to their peers without disabilities.

After reviewing the research from 1990 to 2022, Troia et al. [51] showed problems in verbal PL skills among students with primary language impairment and students with language-learning disabilities. In the context of Arabic studies, Emam and Farghali [52] emphasized the impact of PL impairment on emotional and behavioral disorders among Egyptian school students in favor of male students. Asaiady and Al-Fahad [1] revealed that there was a positive correlation between ADHD and PL impairment among Saudi students with ADHD in favor of male students. Husseiny and Al Harthy [22] confirmed that the majority of Saudi students with LDs had deficits in PL skills compared to their peers without LDs. Elshemy and Al-Otaibi [53] concluded that there was a negative correlation between PL impairment and nonverbal communication disorders (visual and emotional contact, and eye gaze) among Saudi students with autistic Asperger's spectrum syndrome. In other words, a higher level of PL leads to lower nonverbal communication skills. The results also indicated that there were no statistical differences due to gender. In this context, Al-Zoubi and Al-Zoubi [54] indicated that the prevalence of articulation errors among Jordanian gifted students with dyslexia was 36.36%; 75% of the articulation errors appeared among male students; the most prevalent type of articulation errors was substitution (66.67%), and 75% of the articulation errors in the word position appeared at the beginning of the word. The results of a quasi-experimental research conducted by Bataineh and Tawallbeh [55] revealed the effectiveness of training programs in improving the PL skills of Jordanian children with autism spectrum disorder. Abdel Aal cited in [22] emphasized the effect of PL impairment on self-efficacy and self-confidence among students with LDs. On the other hand, Algolaylat and Alomari [56] indicated that the level of pragmatics is low among Jordanian students with hearing impairments. It became clear from this review of literature that there is a lack of Arabic research that examined the relationship between PL and LDs. Therefore, this research reveals the relationship between PL and LDs. This may help to understand the nature of this relationship and open the way for other studies to provide programs to treat PL impairment among students with LDs. This research differed from previous studies in that it was a cross-cultural research dealing with students with LDs in Jordan and Oman.

III. RESEARCH PROBLEM AND OBJECTIVES

Theoretical literature and previous studies indicated that students with LDs have problems with PL that affect their social skills and the expressing of their feelings and emotions. Such problems contribute to students with LDs having difficulty using language grammar, contacting others, and forming friendships with their peers both inside and outside school. The majority of the terms that defined LDs indicated that

they involve a disorder in one or more of the basic psychological processes necessary for understanding or using spoken or written language. This disorder leads to problems in listening, thinking, speaking, reading, writing, or mathematics in students with LDs. As a result, it is important to examine the level of PL among Jordanian and Omani students with LDs. In other words, this research seeks to answer the following questions:

1. What is the level of PL among students with LDs?
2. Does the level of PL among students with LDs differ according to country (Jordan, Oman)?
3. Does the level of PL among students with LDs differ according to gender?

This research seeks to achieve the following objectives:

- To identify the level of PL among students with LDs in Jordan and Oman.
- To compare the level of PL among students with LDs according to gender and country (Jordan and Oman).
- To find the predictability of the impact of PL on the social and academic skills of students with LDs referred to RRP.

IV. MATERIAL AND METHOD

1. RESEARCH DESIGN

This research seeks to identify the level of PL among students with LDs as perceived by the teachers of RRP in Jordan and Oman. The quantitative descriptive method was used in this research. This descriptive method seeks to collect quantitative or qualitative data about a phenomenon using data collection by observation, interview, and questionnaire methods [57]. Figure 1 illustrates the research design.

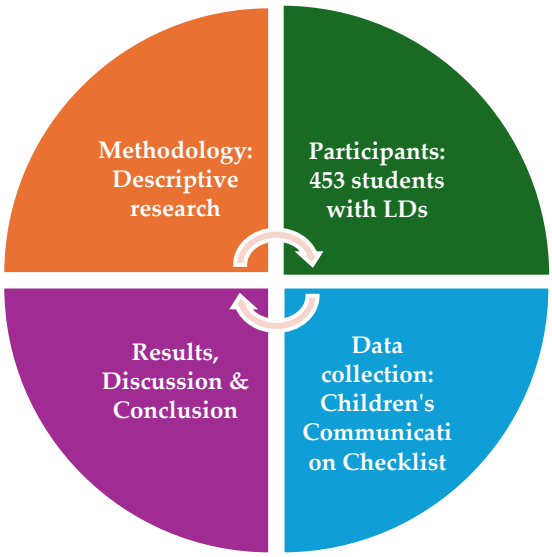

FIGURE 1. Research design

2. PARTICIPANTS

The research sample consisted of 453 students with LDs, aged between 7 and 12 years. These enrolled at RRP in the basic general education schools (Grades 1 to 6) in Irbid Governorate, Jordan and Muscat Governorate, Oman. These students were selected using the convenience sampling method based on their teachers' nominations. Convenience sampling is the most common type of nonrandom or nonprobability sampling [58]. Nonprobability sampling is used when the characteristics of the research population are difficult

to determine, and therefore a random sample that best represents the population cannot be selected because the characteristics of the research population are unknown [58]. In this research, the convenience sampling method was used because RRP provides remedial instruction services to Jordanian and Omani students with LDs who face academic difficulties in reading, writing, and mathematics without providing services related to PL impairment. Since RRP does not provide services related to PL impairment, the characteristics of the research population and sample regarding PL are unclear. Therefore, Table 1 and Figure 2 show the distribution of participants according to gender and country. Both show that the number of participants in Jordan was 243 students and in Oman 210 students. The table and figure also show that the number of female students is less than the number of male students in both countries.

Table 1. Participants' demographic data

Country	Gender	N	٪
Jordan	Male	146	60
	Female	97	40
	Total	243	100
Oman	Male	138	66
	Female	72	34
	Total	210	100

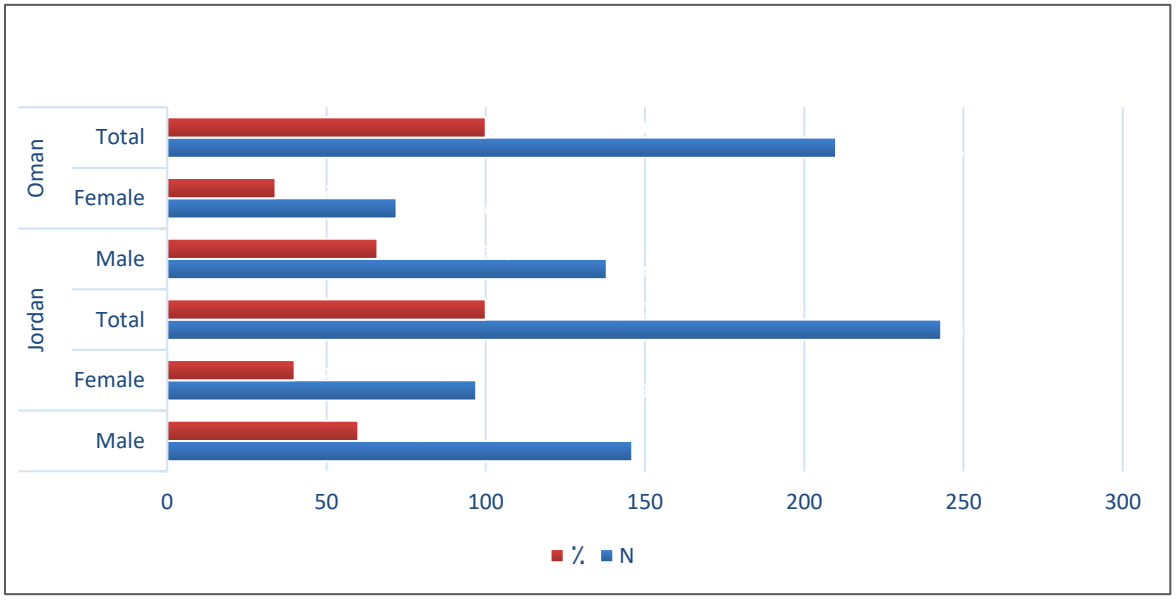

FIGURE 2. Participants' demographic data

3. DATA COLLECTION

To achieve the aims of this research, the Children's Communication Checklist (CCC) was adopted. Heimann and Helland [59] standardized the CCC on the Norwegian environment and examined its psychometric properties (reliability & validity). The CCC consisted of 38 items distributed into five subdimensions: inappropriate initiation (6 items); coherence (8 items); stereotyped language (8 items); use of context (8 items); and rapport (8 items). Therefore, the teacher of RRP responded to the CCC's items using a 4-point Likert scale: does not apply (= 0); applies somewhat (= 1); definitely applies (=2); unable to judge (×). The CCC's scores ranged from 38 to 76. In the Arab context, Asaiady and Al-Fahad [1] translated the CCC from English to Arabic. The psychometric properties of the Arabic version of the CCC were verified, and it maintained the same items

and subdimensions in the English version [1]. To ensure the reliability, Asaiady and Al-Fahad [1] applied the CCC to 150 students aged 6 to 11 years. Cronbach's alpha formula and the Spearman–Brown formula(split-half) indicated that the CCC has high reliability. The validity of the scale was also verified using discriminant validity. The results showed that CCC has high validity. To analyze the results of the current research, the following criteria were adopted to judge the means of PL level (range = maximum value – minimum value): Low (0.00 to 0.67), moderate (0.68 to 1.35), and high (1.36 to 2.00) [60].

4. RESEARCH PROCEDURES

The research procedures include the following:

- The CCC was designed via Google Forms.
- Participants were selected from Jordan and Oman because the philosophy of RRP is similar in both countries.
- An approval letter was obtained from the Education Department in the Irbid and Muscat Governorates.
- Contacts were made with the educational supervisors of RRP in the Irbid and Muscat Governorates.
- Educational supervisors distributed the CCC link by WhatsApp to all teachers of RRP in the Irbid and Muscat Governorates.
- The CCC included ethical considerations, response instructions and an indication that participation is voluntary.
- Teachers of RRP responded voluntarily and collaboratively to the CCC. Teachers were informed that the data provided would be treated confidentially and would only be used for scientific research purposes.
- Each teacher of RRP applied the CCC to four students with LDs enrolled in the RRP during the second semester of 2023. The teachers of RRP hold a bachelor's and/or master's degree in special education. They have the knowledge, skills, and teaching experience to teach students with LDs enrolled in this program.
- The teachers of RRP were given two weeks to respond to the CCC, then the response was closed and the results began to be analyzed.
- To answer the first question, means and standard deviations were used in the current research. A t-test was used to answer the second question. MANOVA was used to answer the third question. The Independent Samples T-test compares the means of two independent groups are significantly different from each other, while the MANOVA analysis aims to measure the multivariate differences between two or more groups using Hotelling's Trace.

V. RESULTS

The results of the first research question: What is the level of PL among students with LDs? Table 2 includes the mean (M), standard deviations (SD), and PL level among students with LDs according to the subdimensions of the checklist.

Table 2. Means and standard deviations according to subdimensions of the checklist

Subdimensions	M	S. D	PL
Inappropriate initiation	0.655	.7168	Low
Coherence	0.567	.8482	Low
Stereotyped language	0.571	.7655	Low
Use of context	0.660	1.155	Low
Rapport	0.633	1.108	Low

Table 2 indicates that the level of PL among students with LDs was low, according to their teachers' estimates. Figure 3 shows the level of PL according to the subdimensions of the checklist.

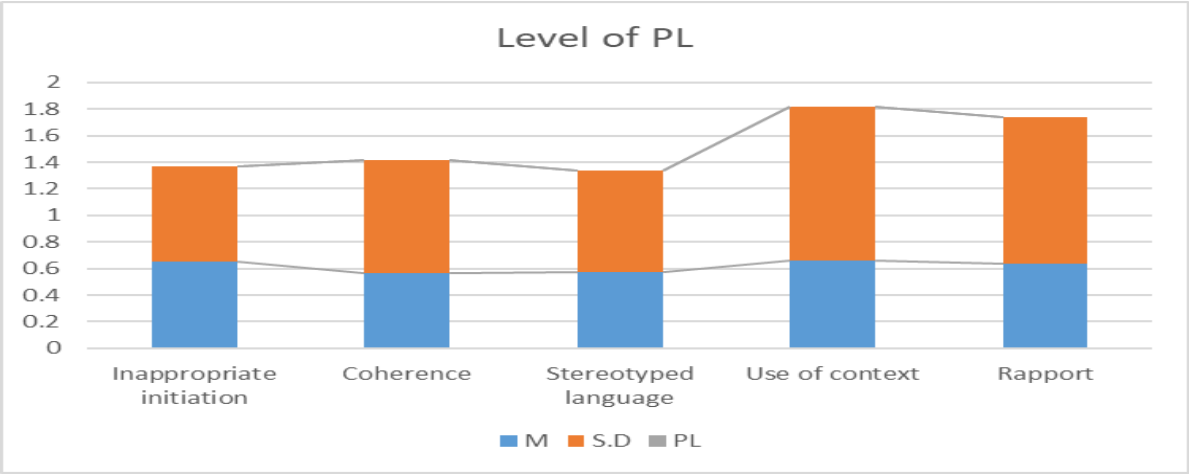

FIGURE 3. Level of PL

The results of the second research question: Does the level of PL among students with LDs differ according to country (Jordan & Oman)? Table 3 presents the t-test results.

Table 3. T-test results according to country

Subdimensions	Country	N	M	S. D	df	f	sig
Inappropriate initiation	Jordan	243	.633	.834	451	.699	.485
	Oman	210	.681	.551			
Coherence	Jordan	243	.539	.808	451	.762	.447
	Oman	210	.600	.892			
Stereotyped language	Jordan	243	.539	.656	451	.976	.329
	Oman	210	.609	.874			
Use of context	Jordan	243	.580	1.115	451	1.584	.114
	Oman	210	.752	1.196			
Rapport	Jordan	243	.572	.796	451	1.272	.204
	Oman	210	.704	1.382			

Table shows that there were no statistically significant differences according to country. The results of the third research question: Does the level of PL among students with LDs differ according to gender (male & female)? Table 4 illustrates the means and standard deviations according to country and gender.

Table 4. Means and standard deviations according to country and gender

			Gender			
			Male		Female	
Subdimensions	Country	N	M	S. D	M	S. D
Inappropriate initiation	Jordan	243	0.027	.2340	1.530	.5411
	Oman	210	0.841	.3663	0.366	.7018
Coherence	Jordan	243	0.784	.6784	0.239	1.1271
	Oman	210	.3900	.6166	0.863	1.0742
Stereotyped language	Jordan	243	.0820	.2767	1.214	.4367
	Oman	210	.6610	.6544	0.507	1.1937
Use of context	Jordan	243	.2550	.9411	1.061	1.1824
	Oman	210	.1510	.5762	1.929	1.222

Rapport	Jordan	243	.090	.3400	1.275	.7568
	Oman	210	.0210	.1891	2.042	1.7024

Table 4 indicates that there were statistically significant differences according to country and gender. To identify these differences the multivariate analysis of variance (MANOVA) was used. Table 5 shows these results.

Table 5. MANOVA results according to gender

Source of variance	Sub-dimensions	Sum of Squares	DF	Mean Square	F	Sig.
Gender Hotelling's Trace= 1.704	Inappropriate initiation	40.121	1	40.121	94.165	.001
	Coherence	23.710	1	23.710	35.469	.001
	Stereotyped language	32.163	1	32.163	62.320	.001
	Use of context	158.166	1	158.166	160.126	.001
	Rapport	250.549	1	250.549	370.944	.001

The results of Table 5 indicate that there were statistically significant differences due to gender in favor of female students in Jordan and Oman.

VI. DISCUSSION

This research aimed to identify the level of PL among students with LDs in Jordan and Oman. The results of the first question showed that the level of PL is low on all subdimensions of the CCC among students with LDs. It can be concluded that PL contains rules for using language in social situations and communicating with others [61]. In addition, the quality of conversation skills, eye contact, as well as awareness of nonverbal language affect the context of the conversation. Therefore, this research indicated that language consists of five basic components related to phonology, morphology, semantics, syntax, and pragmatics. In other words, any disorder in one of these components may affect the process of communication and learning as they present as verbal language disorders, language delay, aphasia, or communication disorders among students with LDs.

The results of the first question indicated a low level of PL on all subdimensions of CCC. These results give indicate that the students with LDs have levels of PL impairment. In this regard, Reindal et al. [62] confirmed that PL impairment or social pragmatic communication disorder (SPCD) is one of the types of neurodevelopmental disorders in DSM-5. The SPCD includes a primary deficit in verbal and nonverbal communication, which manifests itself in an inability to understand verbal and nonverbal signals, a failure to understand nonliteral language, and a failure to use language for social communication [29]. In terms of LDs, students with LDs display social and emotional problems such as with peer rejection, low self-concept, social perception, interpreting the feelings of others, reading social cues, and social isolation [63]. Therefore, students who display these social problems are classified as nonverbal LDs. It can be concluded that there are comorbidities between SPCD and nonverbal LDs. In this regard, the majority of definitions emphasize that LDs are heterogeneous group of basic psychological disorders that appear in understanding or using spoken or written language [35].

PL enables the social and emotional development of students with LDs. PL is linked to social performance, behavioral and emotional adjustment, and social-cognitive competence [26]. On the other hand, SPCD/ PL impairment affects the social skills of students with LDs who are unable to understand verbal and nonverbal messages addressed to them while speaking, and this leads to a decrease in their social interaction and forming friendships with their peers [24]. Therefore, low PL leads to a defect in communication and social relationships and low academic achievement for students with LDs. In this regard, Husseiny and Al Harthy [22] indicated that Saudi students with LDs have higher levels of PL impairment than their peers without LDs. Al-Noubi [64] found a positive correlation between social skills deficits and verbal language disorders among Egyptian students with LDs. Laws et al. [42] showed that placing students

with language impairment in RRP reduces their relationships with their peers without language impairment. This result agreed with the results of Aljbri et al. [65] who indicated that Omani students with LDs enrolled in general education classrooms had a higher level of social competence than their peers who had been referred to RRP. Hence, the results of Laws et al. [42] and Aljbri et al. [65] lead to thinking towards inclusive education, which aspires to educate students with LDs in general education classes with their peers throughout the school day. There is also a willingness among special and general education teachers to teach students with LDs in inclusive education environments through collaborative teaching or co-teaching models [66,67]. In general, the results of this question were similar to studies that emphasized the weakness of PL among students with special education and with LDs [22, 43, 44, 45, 48, 51].

The results of the second question revealed that there were no statistically significant differences according to country. These results can be linked to the results of the first question. Therefore, students with LDs have characteristics that have been agreed upon internationally. For example, a Jordanian or Omani student who has a weak ability to speak fluently is classified as suffering from PL problems. In other words, students with reading difficulties in Jordan have the same characteristics as students with reading difficulties in Oman. Consequently, the linguistic characteristics of students with LDs may be similar to those of students with LDs in Jordan and Oman.

The results of the third question indicated that there were statistically significant differences in the level of PL among students with LDs according to gender in favor of female students. In other words, female students have a higher level of PL skills compared to male students. This can be explained by the fact that females have higher levels of social intelligence and language development than males. Some studies have indicated that the language development of females in the early stages of life is higher than that of males, which gives them more opportunities to communicate and interact with others. A number of studies have indicated a higher level of social skills in females compared to males [68, 69] as well as a higher level of social competence and social competence in females with LDs enrolled in RRP compared to males with LDs [65]. On the other hand, growth and maturation factors in early childhood can contribute to the higher levels of PL in females, as they have more abilities to acquire language than males. In this regard, Rinaldi et al. [70] concluded that biological (maturation), neuropsychological (cognitive strategies), and sociocultural (parental socialization style) factors influence the development and acquisition of language among male and female children. Such factors may contribute to the development of a PL deficit of students with LDs. Also, the enrollment of students with LDs in RRP may lead to them experiencing social stigma and learned helplessness. Ketelaars et al. [71] confirmed that PL impairment can affect up to 7.5% of children and the prevalence among males is more than females, by a ratio of 2:1. In the Arab context, Asaiady and Al-Fahad [1] pointed out that male students with ADHD have higher levels of PL impairment than females on all subdomains of the CCC.

VII. CONCLUSION

The research results concluded that the level of PL was low among students with LDs on all subdimensions of the CCC, that there was no statistically significant differences according to country (Jordan and Oman), and there were statistically significant differences in the level of PL among students with LDs, in favor of female students. However, this research emphasized that PL skills are essential for making friends and various social situations. The results indicated weakness in PL among students with LDs, which could create social problems for them in adapting to their peers and society. This research included limitations that reduce the generalization of the results to all students with LDs in Jordan and Oman: First: the purposive choice of the research location in Irbid and Muscat Governorates; second: The method of selecting participants using t he convenience sampling method; third: The extent of transparency and objectivity of RRP teachers in responding to the CCC. This research recommends designing counseling programs to treat PL among students with LDs and enhancing awareness of PL impairment among teachers and parents of students with LDs.

Funding Statement

This research did not receive funding from any source.

Conflict of Interests

The authors declare no conflict of interest.

Acknowledgment

The author expresses his sincere thanks to the teachers of RRP in Jordan and Oman for their response to the CCC.

REFERENCES

1. Asaiady, M., & Al-Fahad, A. (2018). Pragmatics-language disorder and attention-deficit hyperactivity disorder in the light of some variables. *Journal of Special Education and Rehabilitation, 6*(2), 83–123.
2. Maulud, D. H., Zeebaree, S. R. M., Jacksi, K., Sadeeq, M. a. M., & Sharif, K. H. (2021). State of art for semantic analysis of natural language processing. *Qubahan Academic Journal, 1*(2), 21–28.
3. Van Ruler, B. (2018). Communication theory: An underrated pillar on which strategic communication rests. *International Journal of Strategic Communication, 12*(4), 367-381.
4. Young, A., Oram, R., & Napier, J. (2019). Hearing people perceiving deaf people through sign language interpreters at work: on the loss of self through interpreted communication. Journal of Applied Communication Research, 47(1), 90-110.
5. Ismail, A. M. B., & Al-Ajmi, F. J. (2024). Neuro-linguistic programming and its relationship with psychological flexibility among secondary school students in Najran region. *Qubahan Academic Journal, 4*(1), 210–223.
6. Marrus, N., & Hall, L. (2017). Intellectual disability and language disorder. *Child and Adolescent Psychiatric Clinics of North America, 26*(3), 539–554.
7. Lyons, R. (2021). Impact of language disorders on children's everyday lives from 4 to 13 years: Commentary on Le, Mensah, Eadie, McKean, Schiberras, Bavin, Reilly and Gold (2020). *Journal of Child Psychology and Psychiatry 62*(12),1485–1487.
8. Mohan, M., Bajaj, G, Deshpande, A., Anil, M., & Bhat, J. (2021). Child, parent, and play – an insight into these dimensions among children with and without receptive expressive language disorder using video-based analysis. *Psychology Research and Behavior Management, 14,* 971-985.
9. Socher, M., Lyxell, B., Ellis, R., Gärskog, M., Hedström, I., & Wass, M. (2019). Pragmatics language skills: A comparison of children with cochlear implants and children without hearing loss. *Frontiers in Psychology*. *10*:2243.
10. Cordier, R., Munro, N., Wilkes-Gillan, S., & Docking, K. (2013). The pragmatics language abilities of children with ADHD following a play-based intervention involving peer-to-peer interactions. *International Journal of Speech-Language Pathology, 15*(4), 416–428.
11. Darling-Churchill, K., & Lippman, L. (2016). Early childhood social and emotional development: Advancing the field of measurement. *Journal of Applied Developmental Psychology, 45*, 1–7.
12. Cardillo, R., Garcia, R., Mammarella, I., & Cornoldi, C. (2018). Pragmatics of language and theory of mind in children with dyslexia with associated language difficulties or nonverbal learning disabilities. *Applied Neuropsychology. Child, 7*(3), 245–256.
13. Matthews, D., Biney, H., & Abbot-Smith, K. (2018). Individual differences in children's pragmatic ability: A review of associations with formal language, social cognition, and executive functions. *Language Learning and Development, 14*(3), 186–223.
14. Philofsky, A., Fidler, D., & Hepburn, S. (2007). Pragmatics language profiles of school-age children with autism spectrum disorders and Williams syndrome. *American Journal of Speech-Language Pathology, 16*(4), 368–380.
15. Simmons, E., Paul, R., & Volkmar, F. (2014). Assessing pragmatics language in autism spectrum disorder: The Yale in vivo pragmatic protocol. *Journal of Speech, Language, and Hearing Research, 57*(6), 2162–2173.
16. Karthik, D. (2013). Pragmatics and language communication. *The Criterion: An International Journal in English, 4*(3), 1-9.
17. Parola, A., Gabbatore, I., Bosco, F., Bara, B., Cossa, F., Gindri, P., & Sacco, K. (2016). Assessment of pragmatic impairment in right hemisphere damage. *Journal of Neurolinguistics, 39*, 10-25.
18. Loukusa, S., & Moilanen, I. (2009). Pragmatic inference abilities in individuals with Asperger syndrome or high-functioning autism. A review. *Research in Autism Spectrum Disorders, 3*(4), 890-904.
19. Parsons, L., Cordier, R., Munro, N., Joosten, A., & Speyer. R. (2017). A systematic review of pragmatics language interventions for children with autism spectrum disorder. *PLoS ONE 12*(4), e0172242.
20. Muhammed, L. (2022). A pragmatic study of the verbal and non-verbal communication of Trump in some selected newspapers, *Journal of Language and Linguistic Studies, 18*(1), 1340-1351.
21. Hamdan, J., & Abu Rumman, R. (2020). The pragmatic functions of Yahummalali in Jordanian spoken Arabic. *Jordan Journal of Modern Languages and Literatures,12* (3), 327-345.
22. Husseiny, M., & Al Harthy, A. (2021). Level of pragmatics language skills between pupils with learning disabilities and their non-disabled peers: A comparative study. *Saudi Journal of Special Education*, (16), 53-82.
23. Saul, J., Griffiths, S., & Norbury, C. F. (2023). Prevalence and functional impact of social (pragmatic) communication disorders. *Journal of Child Psychology and Psychiatry, and Allied Disciplines, 64*(3), 376–387.
24. Murphy, S., Faulkner, D., & Farley, L. (2014). The behaviour of young children with social communication disorders during dyadic interaction with peers. *Journal of Abnormal Child Psychology, 42*(2), 277–289.
25. Ketelaars, M., Jansonius, K., Cuperus, J., & Verhoeven, L. (2016). Narrative competence in children with pragmatics language impairment: A longitudinal study. *International Journal of Language & Communication Disorders, 51*(2), 162–173.

26. Staikova, E., Gomes, H., Tartter, V., McCabe, A., & Halperin, J. M. (2013). Pragmatic deficits and social impairment in children with ADHD. *Journal of Child Psychology and Psychiatry, 54*(12), 1275–1283.
27. Prelock, P., Hutchins, T., & Glascoe, F. (2008). Speech-Language Impairment: How to Identify the Most Common and Least Diagnosed Disability of Childhood. *The Medscape Journal of Medicine, 10*, 136.
28. Swineford, L. B., Thurm, A., Baird, G., Wetherby, A. M., & Swedo, S. (2014). Social (pragmatic) communication disorder: a research review of this new DSM-5 diagnostic category. *Journal of Neurodevelopmental Disorders, 6*(1), 41.
29. Amoretti, M. C., Lalumera, E., & Serpico, D. (2021). The DSM-5 introduction of the social (pragmatic) communication disorder as a new mental disorder: A philosophical review. *History and Philosophy of the Life Sciences, 43*(4), 107-131.
30. Rubio-Fernández, P. (2020). Pragmatic markers: The missing link between language and Theory of Mind. *Synthese, 199*, 1125–1158.
31. Bosco, F., Tirassa, M., & Gabbatore, I. (2018). Why Pragmatics and Theory of Mind do not (Completely) Overlap. *Frontiers in Psychology, 9*, 1453.
32. Camia, M., Benassi, E., Giovagnoli, S., & Scorza, M. (2022). Specific learning disorders in young adults: Investigating pragmatic abilities and their relationship with theory of mind, executive functions and quality of life. *Research in Developmental Disabilities, 126*, 104253.
33. Javed, F., Batool, Y., & Baig, S. (2020). Challenges faced by language learning disabilities primary students in learning English as second language. *Global Educational Studies Review, V*(III), 294-307.
34. Balikci, O., & Melekoglu, M. (2020). Early signs of specific learning disabilities in early childhood. *International Journal of Early Childhood Special Education, 12*(1), 84-95.
35. Sun, L., & Wallach, G. P. (2014). Language disorders are learning disabilities. *Topics in Language Disorders, 34*(1), 25–38.
36. Conti-Ramsden, G., Durkin, K., Simkin, Z., & Knox, E. (2009). Specific language impairment and school outcomes I: Identifying and explaining variability at the end of compulsory education. *International Journal of Language & Communication Disorders,44*(1), 15–35.
37. Abdoola, F., Flack, P. S., & Karrim, S. B. (2017). Facilitating pragmatic skills through role-play in learners with language learning disability. *The South African Journal of Communication,64* (1), 1-12.
38. Davies, C., Andrés-Roqueta, C., & Norbury, C. (2016). Referring expressions and structural language abilities in children with specific language impairment: A pragmatic tolerance account. *Journal of Experimental Child Psychology, 144*, 98–113.
39. Norbury, C., Gooch, D., Wray, C., Baird, G., Charman, T., Simonoff, E., Vamvakas, G., & Pickles, A. (2016). The impact of nonverbal ability on prevalence and clinical presentation of language disorder: evidence from a population study. *Journal of Child Psychology and Psychiatry, and Allied Disciplines, 57*(11), 1247–1257.
40. Law, J., Boyle, J., Harris, F., Harkness, A., & Nye, C. (2000). Prevalence and natural history of primary speech and language delay: findings from a systematic review of the literature. *International Journal of Language & Communication Disorders, 35*(2), 165–188.
41. Benner, G., Mattison, R., Nelson, J., & Ralston, N. (2009). Types of language disorders in students classified as ED: Prevalence and association with learning disabilities and psychopathology. *Education and Treatment of Children, 32*(4), 631–653.
42. Laws, G., Bates, G., Feuerstein, M., Mason-Apps, E., & White, C. (2012). Peer acceptance of children with language and communication impairments in a mainstream primary school: Associations with type of language difficulty, problem behaviours and a change in placement organization. *Child Language Teaching and Therapy, 28*(1), 73–86.
43. Adibi, A. (2010). *Pragmatics language skills underlying social competence of reading disability in middle school students* [Ph.D thesis].
44. Ramus, F., Marshall, C., Rosen, S., & Van der Lely, H. (2013). Phonological deficits in specific language impairment and developmental dyslexia: Towards a multidimensional model. *Brain, 136*(2), 630-645.
45. Diken, Ö. (2014). Pragmatics language skills of children with developmental disabilities: a descriptive and relational study in Turkey. *Eurasian Journal of Educational Research, 55*, 109-122.
46. Green, B. C., Johnson, K. A., & Bretherton, L. (2013). Pragmatics language difficulties in children with hyperactivity and attention problems: An integrated review. *International Journal of Language & Communication Disorders, 49*(1), 15-29.
47. Al-Sobh, M., Abu-Melhim,A.& Bani-Hani ,N. (2015). Diglossia as a Result of Language Variation in Arabic: Possible Solutions in Light of Language Planning. *Journal of Language Teaching and Research, 6*(2), 274-279.
48. Kumari, S., Pyata, R., Afreen, B. K., & Paithankar, P. S. (2016). Pragmatic skills in children with different types of learning disability: a comparative study. *Language in India, 16*(9), 224-33.
49. Diken, Ö. (2019). Describing and comparing pragmatics language skills of Turkish students with typical development and inclusive education students with mild intellectual disability. *International Journal of Progressive Education, 15*(2), 157-166.
50. Korrel, H., Mueller, K. L., Silk, T., Anderson, V., & Sciberras, E. (2017). Research review: Language problems in children with attention-deficit hyperactivity disorder – A systematic meta-analytic review. *Journal of Child Psychology and Psychiatry, 58*(6), 640–654.
51. Troia, G. A., Hennenfent, L., & Shen, M. (2023). Pragmatic skills in school-age children with primary language impairment and language-learning disabilities. *Topics in Language Disorders, 43*(3), 210–250.
52. Emam, M., & Farghali, M. (2018). The impact of pragmatics language on emotional and behavioral disorders and interaction with peers among primary school children. *Journal of Education, 34* (12), 1-41.
53. Elshemy, R., & Al-Otaibi, B. (2020). The effect of pragmatics language disorder on nonverbal communication disorders in children with Asperger's syndrome. *Journal of Education,39*, 176-205.
54. Al-Zoubi, S., & Al-Zoubi, S. (2020). Prevalence of articulation errors among Jordanian gifted students with dyslexia. *Journal for the Education of Gifted Young Scientists, 8*(1), 533-547.

55. Bataineh, O., & Tawallbeh, T. (2020). The effect of training program in developing the pragmatics language skills in a sample of children with autism spectrum disorder in Jordan. *Journal of Educational Sciences* (16),72-95.
56. Algolaylat, A., & Alomari, L. (2023). The level of using pragmatic among students with hearing impairment in Jordan. Journal of the Association *of Arab Universities for Higher Education Research, 43*(1),1-14.
57. Denscombe, M. (2017). *The good research guide: for small-scale social research projects*. Open University Press.
58. Etikan, Ilke., Musa, S., & Alkassim, R. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, *5*(1), 1-4.
59. Helland, W., & Heimann, M. (2007). Assessment of pragmatics language impairment in children referred to psychiatric services: A pilot study of the children's Communication Checklist in a Norwegian sample. *Logopedics Phoniatrics Vocology*, *32*(1), 23–30.
60. Abu Saiba, M., & Al Hadidi, M. (2018). The degree life skills are included in the English language curriculum for sixth grade students in Amman and the degree these skills are acquired by students as perceived by their teachers. *Dirasat: Educational Sciences*,*45*(3), 370-387.
61. Mayrita, H., Fitrah, Y., Mukminin, A., Ariana, S., Hidayat, M., & Fortunasari, F. (2024). Verbal and nonverbal languages in online thesis examinations: An illocutionary act study. *Qubahan Academic Journal, 4*(1), 167–176.
62. Reindal, L., Nærland, T., Weidle, B., Lydersen, S., Andreassen, O. A., & Sund, A. M. (2021). Structural and pragmatics language impairments in children evaluated for autism spectrum disorder (ASD). *Journal of Autism and Developmental Disorders, 53*(2), 701–719.
63. Agaliotis, I., & Kalyva, E. (2008). Nonverbal social interaction skills of children with learning disabilities. *Research in Developmental Disabilities*, *29*(1), 1–10.
64. Al-Noubi, M. (2018). Verbal social skills deficit as an indicator of language disorders among learning disabilities children. *International Journal of Educational and Psychological Sciences*, (10), 187–238.
65. Aljbri, I., Al-Zoubi, S., & Abu-Shindi, Y. (2023). Social competence of Omani students with learning disabilities from their *teachers'* perspectives. *Journal of Arts & Social Sciences*,*14*(2),17-29.
66. Al-Khatri, T., Al-Zoubi, S., & Abu Shindi, Y. (2020). The effect of a training program on the attitudes of teachers of students with learning disabilities towards co-teaching. *International Journal for Research in Education, 44*(3), 13-40.
67. Al-Zoubi, S., Alfagih, M., & Awais, B. (2022). Awareness of co-teaching administration among teachers of resource room program. *International Journal of Learning, Teaching and Educational Research*, 21(7), 145–157.
68. Almeqdad, Q., Bataineh, O., & Al-Jarrah, A. (2011). The level of social skills amongst students with and without learning disabilities in Jordan according to their teachers. *Jordan Journal of Educational Sciences*,7(3),253-270.
69. Khazaleh, A., & Al Khateeb, J. (2011). Social and emotional skills for children with learning disabilities. *Dirasat: Educational Sciences*,*38*(1), 372-389.
70. Rinaldi, P., Pasqualetti, P., Volterra, V., & Caselli, M. C. (2021). Gender differences in early stages of language development. Some evidence and possible explanations. *Journal of Neuroscience Research, 101*(5), 643–653.
71. Ketelaars, M., Cuperus, J., van Daal, J., Jansonius, K., & Verhoeven, L. (2009). Screening for pragmatic language impairment: The potential of the children's communication checklist. *Research in Developmental Disabilities*, *30*(5), 952–960.