CANDIDATES OF WRITTEN LANGUAGE DISABILITIES AMONG UNDERGRADUATE STUDENTS AT THE UNIVERSITY OF JORDAN AS PERCEIVED BY STUDENTS AND THEIR TEACHERS

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This study aimed to explore writing problems among undergraduate students at the university level, based on students self reporting technique and the verification from their teachers' ratings. Twenty-eight students were considered good candidates for this research using two criteria of self reporting and high means of responses. Twenty-five faculty members teaching the previous sample were asked to fill in a similar survey conveying the current level of writing for the selected student. Results revealed four categories of handwriting problem; handwriting, sentence structure, vocabulary and spelling, and written expression. In addition, high agreement of written language problems from the perspective of both students and faculty members were also observed. A discussion of the results and implications for written language problems at the University of Jordan are provided.

Writing is a critical skill across the lifespan as it enables individuals to express, record, and transmit ideas, thoughts, and feelings (Dennis & Swinth, 2001; Hamstra-Bletz & Blöte, 1993; Tseng & Cermak, 1993). In the academic field, writing is considered to be a major mean to demonstrate knowledge (Graham, Harris, & MacArthur, 2004), and it is the primary instrument that teachers use to evaluate the academic performance of their students.

In order for individuals to convey their ideas in writing, certain aspects have to be met, including eligible handwriting, correct use of proper sentence structure which includes grammar and syntax, vocabulary, spelling, and the ability to brainstorm ideas, plan, and revise (Graham & Harris, 2002). These aforementioned skills are challenging for individuals with learning disabilities (LD). According to the definition of the National Joint Committee on Learning Disabilities of 1997, Learning disabilities (LD) is considered as an intrinsic life-long condition that occurs in children, adolescents, and adults with average or above-average intelligence. LD is a life-long disability that is manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. In their review of literature (Higgins & Zvi, 1995; Sills, 1995; Stracher, 1993), suggested that writing difficulties range from mechanical aspects of writing, that is, spelling, punctuation, and capitalization, to content aspects of writing, such as organization and coherence issues. Furthermore, LD students are likely to experience perceptual difficulties, have poor study and planning skills, and weak revision skills. These writing difficulties tend to intensify in secondary schools, where more complex curricular demands and higher teacher expectations compound the difficulties of adolescents with LD (Hallenbeck, 1995).

Substantial research indicated that students with written language problems usually perform significantly lower than their peers in written expressions tasks including spelling, punctuation, and word usage (grammar). Moreover, they are less effective in using planning strategies, lack of organization and coherence in written tasks, and illegible handwriting (C. A. Hoy, Gregg, & Clarke County Board of Education, 1984; Hull, 1987; Larkin & Ellis, 2004; Moran, 1981; Vogel & Konrad, 1988).

In a study by (Maughan et al., 2009) the authors indicated that spelling problems were highly persistent across a 30-year follow-up study, where poor readers' spelling remained markedly impaired at mid-life. By adolescence, individual differences in spelling and its related sub-skills were highly stable overtime. This notion was also supported by Harrison (2009) where cognitive, word-level reading, spelling and writing measures were administered to academically at-risk undergraduates with writing difficulties to examine their literacy profiles. Results indicated that students produced misspellings that were less orthographically plausible, and made more spelling errors and used less sophisticated vocabulary in their essays, despite their good oral vocabulary. The profile of performance used was replicated in the sample of students who did not have a current formal diagnosis of an LD, but who identified their writing difficulties through self-report.

In short, (Gajar, 1989; Ganschow, 1984; Gregg, 1983; Plata & et al., 1995; Scott, 1991) considered writing problems as a major concern of students with LD and their instructors. It is clear that many experts believed that these problems exceed students' other academic difficulties (Huijun & Hamel, 2003).

Despite the overwhelming research on written language disabilities, it is well noted that most of the literature was based on English speaking groups, thus little is known about similar problems facing Arabic language speakers, adults in particular. The literary Arabic language is considered as an alphabetical system with 28 basic letters. It is a system of consonants, and is read and written from right to left. This written language has certain irregularities that require considerable knowledge of literary aspect of Arabic – grammar, syntax, vocabulary, and contextual interpretations. Due to the great similarity among letters, a single stroke is used to distinguish similar letters from each other. In Arabic script, the form of a particular letter varies depending on its position in the word. Some letters have three different forms; furthermore, different rules are used for the writing of each form (Salim Abu-Rabia, Share, & Mansour, 2003). For further readings about Arabic language you are advised to see (S. Abu-Rabia, 1998, 2000, 2001; Ayari, 1996).

In the early years, research of learning disabilities among adults attending college programs had little consensus on appropriate measures for identifying learning disabilities (Blackburn & Iovacchini, 1982; B. K. Cordoni, 1982; Gray, 1981; C. Hoy & Gregg, 1986). Traditionally, the criteria for the assessment of LD varies widely among colleges and universities, some programs offer services upon request from students or parents (Blalock, 1982; C. Hoy & Gregg, 1986), whereas other programs require lengthy psychoneurological testing or psychoeducational testing to determine if there is a significant discrepancy between aptitude and achievement (Cordoni, 1979; Gajar, 1989; Miller & et al., 1979; Ugland & Duane, 1976).

In recent years, the controversy of means to diagnose students with learning disabilities continues. Proctor & Prevatt (2003) argues that selecting the appropriate criteria for diagnosing learning disabilities (LD) is undoubtedly one of the most debated and dubious tasks in the fields of special education, general education, and even more problematic in higher education. In accordance, number of students with LD attending colleges and universities is increasing (Henderson, 2001), and the postsecondary disabilities field is a growing area that presents new challenges in educating students with LD.

Not surprisingly, accurate and reliable information on the prevalence of writing disabilities in the general population is lacking; most estimates of the disorder of written expression are based on studies of reading disorders or learning disorders in general. Disorder of written expression is assumed to occur with a similar frequency to other learning disorders, with estimates ranging from 8 to 15 percent of the population (Lindstrom, 2007).

In Jordan, the field of learning disabilities is considered fairly new, where many obstacles are still facing professionals and policy makers regarding the assessment and diagnosis of school age students with LD (Al-Natour, AlKhamra, & Al-Smadi, 2008). Thus, it was expected that many adults at the college level were not formally diagnosed with LD during their childhood and adolescence years. In accordance, researchers in this study were looking for candidates who might manifest symptoms of writing disabilities based on a self-reported approach. The approach of self reported Learning disabilities (SRLD) among adults, although it is not the best mean for identifying learning disabilities, was used by many researchers especially when investigating such problems among adults (Heubeck & Latimer, 2002; Magajna, Kavkler, & Ortar-Krizaj, 2003; Vogel & Holt, 2003).

For several years, the researchers of this study, who taught many undergraduate courses at the University of Jordan, noticed a considerable number of problems related to written language among their students in essay exams or written assignments. These observations set the initial rationale of this study which aimed to explore writing problems among undergraduate students at the university level. Views about the different writing problems manifested in Arabic language were explored by both students and their faculty members. Our intention of this study was not to formally diagnose students with writing disabilities, but rather to examine writing problems among them in order to initiate the possibility of offering assistance to struggling students. Many researchers agrees that receiving appropriate supports and accommodations can be critical to the postsecondary school success and retention of students with LD who are enrolled in colleges and universities (Wagner, Newman, Cameto, Garza, & Levine, 2005).

Based on a self- reporting method, this study aimed to identify symptoms of written language disabilities among a sample of undergraduate students, further, the degree of correspondence by both students' and faculty members' ratings of these symptoms were investigated. Resulting from the above literature review and our understanding of written language problems, the following research questions are formulated:
1. What are the most written language problems facing undergraduate students from their own point of view?
2. What are the most written language problems facing undergraduate students from their faculty members' point of view?

Method
Participants
Students
The target population was restricted to The University of Jordan humanity faculties in which teaching is carried out in the Arabic language compared to the scientific faculties which use English language as a medium of instruction. The total enrolled number of students in humanity faculties, at the time of the study, was 12,256 (3,741 males and 8,515 females) of which six hundred students were asked to participate in this study. All respondents were assured confidentiality and were assured that their responses will be solely used for scientific research purposes. Surveys were numerically coded for further analysis by the researchers. The inclusion criteria was scoring an average of three or higher out of five on the second part of the survey, in addition to self reporting of writing problems (see below for more details on the survey scoring)

Faculty members
The sample of faculty members was determined based on students' responses. Faculty members, whose students met the criteria for this research, were asked to fill in the survey. The total number of faculty members included in this study was 25 (16 males and 9 females), three of the faculty members were requested to fill in for two students each.

Design
A descriptive study using a survey was used to investigate the research problem formulated in this study. Two surveys were prepared; one for the student and one for the faculty member. For the student's survey, the independent variables were students' gender, university grade point average (GPA), and student's self-report of handwriting problems during school years. The dependent variables were the students' responses and the rating of problems faced in handwriting during college years. The faculty members' survey was the same as the students' survey, however, it was written in a way to address them.

Instrument
The researchers developed two surveys; one for the students and one for the faculty member. The Student survey consisted of two parts; the demographics, consisting of gender, study major, GPA, and the student's self-report of handwriting problems during school years (yes/no question). The second part consisted of 25 items formulated based on a review of relevant literature (Salim Abu-Rabia et al., 2003; Crouch, Jakubecy, & 2007; Magajna et al., 2003; Raman & Weekes, 2005; Scheid, Linc Resources, & Materials, 1991; Wellington, 2010). The faculty member survey consisted of the second part of the student's survey but to be answered from the faculty member point of view. A 5-point Likert scale was used for the second part of the survey; (Highly Apply= 5, Mostly Apply= 4, Moderately Apply= 3, Minimally Apply= 2, Does not Apply at All= 1), with a higher score indicating more problems in writing.

To establish the face validity of the survey, an initial version of the survey was given to ten faculty members from the Department of Counseling and Special Education, the Department of Educational Psychology, and the Department of Arabic language at the University of Jordan. The panel of experts made comments and provided feedback on a few items including re-phrasing some for more clarity. Suggested changes were taken into consideration when formulating the second version of the survey which was piloted on 25 students who reported no handwriting problems. The final version of the survey was then formulated. To achieve further validity of the survey a factor analysis was calculated to obtain the main domains based on the responses of the original sample. The factor analyses revealed 4 domains: handwriting, sentence structure, vocabulary and spelling, and composition. Reliability of this instrument was also established using the test-retest method. The correlation coefficient was calculated for the survey: The test-retest method yielded a high correlation coefficient of (.93). Also, internal consistency was calculated using Cronbach Alpha with a value of (.89).

Procedure
The final version of the survey was distributed to the humanity faculties after obtaining approval from the head of the departments. A letter accompanied each copy of the survey explaining the study along with a consent form to be signed by the student. Consented participants were urged to respond to all items to the best of their knowledge. A research assistant collected the surveys back after a 2-week period from the departments and asked 50 of the participants to fill in the survey again for establishing test-retest reliability. Based on students' responses, selected faculty members were asked to fill in the questionnaire for their students.

Analysis
Descriptive analyses of the two parts of the student survey and the faculty member survey was conducted. Correlations were conducted to explore any significant differences between the students' and the teachers' responses.

Results
Participants
Out of the 600 distributed surveys, 574 were returned reflecting a return rate of 96%. Out of the 574, 28 students met the inclusion criteria (had an average of 3 or higher). Of these 28 students 24 students claimed that they had previous writing problems during their school years and scored higher than 3 on the survey. (A high mean represents more critical written language problems). Four more students were added to the final sample based on their responses to the survey instrument, as they obtained similar means to the previous 24 students. Accordingly, the final sample consisted of 28 students with means ranging from 3.04 to 4.28. Table 1 shows the total number of students according to gender and GPA.

Table 1. Total Number of Students according to Gender and GPA

Gender	GPA				Total
	2.00-2.49	2.5-2.99	3.00 – 3.64	3.65-4.00	
Male	4	4	0	0	8
Female	16	4	0	0	20
Total	20	8	0	0	28

Students' vs. Faculty Responses
Data analysis revealed that both students and faculty members ratings of written language problems were almost similar, with means of (3.25 and 3.91) respectively. However, higher means were obtained for faculty members on all subcategories. Furthermore, correlations have been calculated according to categories. There was a significant relationship on only one of the categories representing handwriting, $r = .87$, $p < .01$. In addition, the average mean of all responses correlated highly between students and faculty members, *r=0.94, p<.01*. Table 2 reflects means and correlations to both students and faculty members.

Table 2. Means and Correlations of Categories according to Students and Faculty Members

Category	Students Mean (SD)	Faculty Members Mean (SD)	Correlation
Handwriting	2.98 (.716)	3.85 (.704)	0.515**
Sentence Structure (Grammar and syntax)	3.41 (.435)	3.91 (.547)	0.121
Vocabulary and Spelling	3.24 (.598)	3.95 (.620)	0.161
Written Expression (Composition)	3.34 (.549)	4.01 (.452)	0.058
Average Mean	3.24 (.304)	3.92 (.448)	.944**

**Correlation is significant at the 0.01 level

Table 3. Student Item Responses with Means and Standard Deviations

Items	Mean (SD)
Handwriting	
I tend to type out my assignments instead of hand writing them to overcome my handwriting problems	3.5 (1.23)
I find it hard to keep standard spaces between letters and words	3.18 (1.25)
I omit some words and letters in writing	2.96 (1.07)
I'm slow in writing either in note taking or in written exams	2.82 (1.25)
My handwriting is eligible, others find it hard to read it	2.82 (1.28)
I find it hard to keep writing steadily on the line	2.82 (1.39)
I make many errors in using the stroke to differentiate similar letters in writing	2.79 (1.20)
Sentence Structure (Grammar and syntax)	
I use correct oral expression, but make many grammatical errors in writing	3.93 (1.02)
I find it hard to conjugate verbs	3.79 (0.88)
I make grammatical errors in writing (ex. using the correct verb tense, using adjectives and adverbs, homonyms)	3.64 (1.03)
I find it hard to use punctuation marks	3.36 (1.03)
I find it hard to convert singular to plural forms and vice versa	3. 25 (1.04)
I find it hard to arrange words in the right grammatical order	3.21 (0.99)
I miss write irregular words (letters written but not pronounced)	3.18 (1.09)
I find it hard to use the right pronoun	2.89 (0.99)
Vocabulary and Spelling	
I make many spelling errors while writing	3.75 (1.11)
I tend to use simple vocabulary in writing	3.54 (0.84)
I have limited vocabulary	3.11 (0.92)
I tend to use informal dialect instead of using standard formal Arabic in writing	2.57 (1.29)
Written Expression (Composition)	
I find it hard to organize my ideas in a reasonable sequence while writing	3.64 (0.83)
I use short sentences in writing	3.61 (1.06)
I find it hard to express my thoughts in general	3.54 (1.07)
I find it hard to express knowledge, thoughts and concepts into a written form	3.29 (1.15)
My sentences are too short and doesn't reflect what I originally want to express	3.11 (1.03)
I find it hard to express my thoughts in a written manner	2.89 (1.03)
Mean	3.24 (0.31)

Table 3 presents item means and standard deviations for student responses, while Table 4 presents item means and standard deviations for faculty members.

Table 4. Faculty Members' Item Responses with Means and Standard Deviations

Items	Mean (SD)
Handwriting	
My student find it hard to keep standard spaces between letters and words	4.12 (.833)
My student tend to type out his/ her assignments instead of hand writing them to overcome handwriting problems	4.12 (1.201)
My student handwriting is eligible, I struggle to read his/ her handwriting	4.08 (.99)
My student make many errors in using the stroke to differentiate similar letters in writing	4.08 (.86)
My student is slow in writing either in note taking or in written exams	3.84 (.90)
My student find it hard to keep writing steadily on the line	3.40 (1.04)
My student omit some words and letters in writing	3.24 (1.27)
Sentence Structure (Grammar and syntax)	
My student use correct oral expression, but make many grammatical errors in writing	4.48 (.71)
My student find it hard to use punctuation marks	4.44 (.87)
My student find it hard to conjugate verbs	4.40 (.65)
My student make grammatical errors in writing (ex. using the correct verb tense, using adjectives and adverbs, homonyms)	4.08 (.76)
My student miss write irregular words (letters written but not pronounced)	3.64 (1.32)
My student find it hard to convert singular to plural forms and vice versa	3.44 (.82)
My student find it hard to arrange words in the right grammatical order	3.40 (1.35)
My student find it hard to use the right pronoun	3.04 (1.10)
Vocabulary and Spelling	
My student make many spelling errors while writing	4.24 (.83)
My student have limited vocabulary	3.88 (.83)
My student tend to use simple vocabulary in writing	3.88 (1.39)
My student tend to use informal dialect instead of using standard formal Arabic in writing	3.80 (1.29)
Written Expression (Composition)	
My student sentences are too short and doesn't reflect what he/ she originally want to express	4.24 (.78)
My student find it hard to express knowledge, thoughts and concepts into a written form	4.20 (.76)
My student find it hard to express his/ her thoughts in general	4.08 (.50)
My student find it hard to organize his/ her ideas in a reasonable sequence while writing	3.96 (.79)
My student find it hard to express his/ her thoughts in a written manner	3.84 (.62)
My student use short sentences in writing	3.84 (.69)
Mean	3.92 (.45)

Discussion

The means obtained in this study reflect high agreement of written language problems from the perspective of students and faculty members; this agreement indicates that these problems are genuine and valid. It was noted that faculty members rating for the written language problems were slightly higher than students' responses. This may be due to the higher standards that faculty members might use to judge the quality of students writing.

According to figures shown in Table 2, the subcategory with the highest means and agreement between students and faculty members were written expression (Composition). This was expected due to the fact that written expressions is classified as the top of hierarchy in the written language, usually written

expression (composition) include most levels of writing including grammar, vocabulary and above all the ability of the individual to convey his thoughts and ideas in a written manner; in contrast, the subcategory of handwriting had the lowest means from both students and faculty members perspectives. Handwriting is considered a mechanical aspect of writing, where most undergraduate students posses the technical elements of writing during school years; in addition, it is expected that students mask their illegible handwriting through the use of typing, this approach is highly appraised at the university level. This conclusion is supported by the students' high rating of the item: *I tend to type out my assignments instead of handwriting them to overcome my handwriting problem,* which had the highest mean within this category.

By looking further at undergraduate students and faculty members' responses, item by item, it was interesting to see that both groups had the highest means under the category sentence structure *making grammatical errors in writing while using correct oral syntax.* This clearly indicates that students' problems were not related to spoken language but rather to written language. Having written language problems is not necessarily associated with spoken language problems, this was anticipated by Huang, Acero, and Hon (2001), who argued that spoken language is generally less formal, less precise and tends to be less sophisticated than written language; spoken language is much more dynamic and immediate, where almost in every language, precision in grammar tends to be used almost exclusively in writing but not in speech.

The second highest problem from the perspective of students was related to the item: *I find it hard to conjugate verbs.* Generally speaking and within the context of the Arabic language, conjugation of verbs is usually considered a hard task, where letters are added or omitted in the past, present, and future tenses. Meanwhile the second highest mean from the perspective of faculty members was given to the item: *My students find it hard to use punctuation marks*. It is understandable that faculty members focus more on the formal aspects of writing including the correct use of punctuation, while students tend to focus less on such formalities.

Conclusion
The aim of this study was to explore written language problems through a self reporting survey of undergraduate students at the university level, and was verified by their faculty members. Our intention of this study was not to formally diagnose students with writing problems, but rather to investigate symptoms of written language problems among this population. A study was needed to set a ground for exploring written language problems that may occur at the university level; hopefully this research may generate a more thorough foundation to identify future students with writing disabilities.

The University of Jordan is making great progress in providing specialized services for students with disabilities; however, officials usually tend to focus on noticeable disabilities such as physical, visual, and hearing disabilities, while hidden disabilities such as learning and social/emotional disabilities are almost absent. Findings of this research maybe a whistle blower for further investigations to ensure that student needs are met regardless of their disabilities at the university level. Our obligation is to look further at this matter so that no student is left behind at this crucial phase of their career development.

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