PRZESTRZEŃ Społeczna
Social SPACE
Volume 23 Issue 04
2023

Academic Learning Disabilities in Primary School for Children in Egypt and Kuwait, Considering Some Demographic Variables: A Cross-Cultural Comparative Study

Majed Mustapha Ali

Assistant Professor PhD. Educational Psychology, Kuwait University, Kuwait.
ORCID iD:https://orcid.org/0009-0003-9888-3189, Email: Majed.smekal@outlook.com

Abstract

The current study aimed to conduct a cross-cultural survey to detect the prevalence of academic learning disabilities in both Egypt and Kuwait considering several demographic variables, namely nationality, gender, and school type. The study sample comprised the third-grade elementary school students of both genders in Egypt (N=490) and in Kuwait (N=268). A scale assessing academic learning disabilities was utilized for application among students of all genders in Egypt and Kuwait. According to the current study, there is a statistically significant difference between genders among Egyptian students regarding academic learning disabilities in favour of females, and among Kuwaiti students in favour of males. Furthermore, differences were observed favouring government schools in Kuwait compared to private schools. Additionally, statistically significant differences were found indicating the interaction between gender and school type regarding the academic learning disabilities in favour of Kuwaiti male students in both governmental and private schools. Finally, statistically significant differences were noted indicating the interaction effect of nationality, gender, and school type on the scores of academic learning disabilities for both Egyptian and Kuwaiti samples in favour of the Egyptian female students in private schools, as well as Kuwaiti male students in governmental schools.

Keywords: Academic Learning Disabilities, Primary School Students, Nationality, Gender, School Type.

Introduction

Advanced countries base their developmental and growth-oriented plans and policies on human elements to drive their economy and various outputs towards

advancement and progress (Samans, 2024). Consequently, these countries design their future strategies to align and harmonize with the capabilities, qualifications, and individual differences of these human elements, which are nurtured and prepared according to suitable educational and pedagogical systems and curricula. Most children learn the basics of writing, arithmetic, and reading in the early years of the elementary school. However, some children fail to acquire these basics and skills, leading to continued lack of success and failure to advance in their education, whether in elementary or middle school levels. Scientifically, such children are referred to as children with learning disabilities (Fatiha, 2023). Therefore, children face many challenges during their schooling from kindergarten to elementary school (Aswasulasikin et al., 2023).

Learning is considered one of the fundamental educational issues (Indriyani, Atmazaki, & Ramadhan, 2024) that experts in the fields of education and psychology, with their various branches and specialties, have focused on extensively. It serves as the cornerstone in teaching experiences and life skills. In the case of any obstacle or educational problems in the field, such as the presence of children with academic learning disabilities, it is considered a problem and a barrier that must be addressed early, preferably in the pre-school age, or else it will become a prominent issue in the early grades of the elementary school. Therefore, childhood is considered an important stage that must be emphasized because it forms the basis of a child's identity and personality, upon which the child's future stages of life will rely. During this stage, the child grows in various psychological, cognitive, and social aspects (Alshaks et al., 2022).

The problem lies in the fact that the symptoms of academic learning disabilities are not always clear and prominent and can go unnoticed, which undoubtedly leads to delays in providing all types of support and care (Krumm et al., 2008). Furthermore, studies across various scientific disciplines in the field of academic learning disabilities remain limited and incomplete because the field is still relatively new (Al-Qadri et al., 2021). The term "Learning Disabilities" was crystallized and formulated recently in 1963 by the psychologist "Samuel Kirk" (Katsafanas, 2006). Five years later, the American National Advisory Committee provided a definition of children experiencing learning

disabilities, encompassing those with disorders in certain important psychological functions related to communication or language perception. Therefore, learning disabilities may manifest through difficulties in performing mathematical operations, reading, or writing and may result from various health conditions such as abnormal brain function or cognitive impairment or because of brain injuries (Macdonald, 2010).

Despite the emergence of numerous scientific studies on academic learning disabilities and related definitions, there seems to be a significant consensus on the definition of academic learning disabilities, which some believe. However, this is not the general view (Venkatesan, 2017). Some of these definitions vary from one country to another depending on the prevailing schools and scientific trends, leading to theoretical and philosophical obstacles in presenting a specific and clear definition of these disabilities. Therefore, the current study adopted the definition of academic learning disabilities according to the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5), where the difficulties individuals face in learning and using academic skills, including specific areas such as reading, spelling, and mathematical reasoning, are highlighted. These disabilities are supposed to be intrinsic to individuals and influenced by central skills controlled by the central nervous system, while excluding cases of intellectual disabilities from the category of individuals with learning disabilities (American Psychiatric Association, 2013).

The current researcher encountered a challenge in his study when he observed the scarcity of survey research focusing on academically challenged students in Kuwait. Even if there were some studies on this student category, they were limited within the boundaries of Kuwait and did not extend to international collaborations with other countries. Therefore, the current study aims to uncover the prevalence of academic learning disabilities among elementary school students in both Egypt and Kuwait, considering certain demographic variables such as nationality (Egyptian/Kuwaiti), gender (Male or Female), and school type (public/private). Through conducting this cross-cultural study between Egypt and Kuwait, the researcher perceived the significance of their study and the importance of addressing the research gaps identified in previous studies, aiming to bridge and complete them in the current research endeavour.

The research gaps encompass the following: spatial, temporal, analytical, and methodological gaps. Being from Kuwait, the current researcher chose Egypt for comparison as a cross-cultural study due to Egypt's distinguished educational and health services for students with academic learning disabilities, along with the availability of research in the field of learning disabilities. Additionally, such a study will unveil numerous shortcomings, obstacles, and challenges hindering the provision of outstanding educational services to students with learning disabilities in Kuwait. Diagnosing learning disabilities is one of the most complex problems facing the educational community, parents, and specialists in education due to its serious implications on the academic and professional futures of these students. Therefore, the current study addresses this issue in the West Governorate community in Egypt, characterized by high population density compared to a sample with similar specifications in Kuwait. The study's questions are as follows:

1. What are the essential differences among students in the third grade of elementary school in both Egypt and Kuwait?
2. What is the impact of certain demographic variables on learning disabilities among elementary school students in Egypt and Kuwait?

Based on the research questions, the objectives of the study are as follows:

1. Conducting a survey study on many third-grade students in Egypt and Kuwait to determine the prevalence of academic learning disabilities among these students.
2. Conducting a cross-cultural study to investigate the impact of some demographic variables on academic learning disabilities among a sample of third-grade students in Egypt and Kuwait, considering different environments and multiple demographic characteristics.
3. Presenting the study results in a way that educational decision-makers in Egypt and Kuwait can benefit from in addressing external environmental influences and factors that exacerbate symptoms of academic learning disabilities among students.

The study holds substantial significance as it delves into the elucidation of learning disabilities among children while also presenting viable solutions and interventions for addressing them. The results of this study can identify and reflect many educational indicators related to the current research topic, enabling comparisons between Egypt and

Kuwait regarding some demographic variables and their relationship to academic learning disabilities. This study represents a new initiative for cross-cultural studies in the field of learning disabilities, allowing us to apply comparisons between countries. Researchers can consider the results of this study as precedent studies that include many relevant results and indicators. Based on the results of this study, it is possible to develop new diagnostic measures and tools that keep pace with the various variables that may affect academic learning disabilities among students.

Literature Review

In the fields of psychological and educational studies, it is conventionally recognized that learning disabilities are classified into two main types: Developmental learning disabilities and academic learning disabilities. Additionally, Salem and Zaki (2009) introduced a new classification, namely Self-Regulated Learning Disabilities, which arise due to difficulties in self-regulatory organization, including strategic self-regulation, behavioral organization, and environmental self-learning disabilities. Individuals experiencing learning disabilities and the subsequent behavioral, educational, psychological, and even social problems have become a focal point of interest for specialists. It is acknowledged that these learners in early stages of education possess equivalent mental, cognitive, and sensory abilities but encounter educational disabilities in certain academic aspects such as reading, writing, mathematics, handwriting, and literacy. Added to these are disabilities in linguistic and social communication, along with potential deficits in cognitive processes such as memory, attention, perception, coordination, and certain thinking processes (Alsartawi, 1995). The danger of learning disabilities lies in their high prevalence rates among a wide sector of children. Estimates suggest that the prevalence rate among school children "ranges between 1-3%. Taking the lowest estimate, it may reach up to 4% at times" (Alfara, 2005). Finally, the current study aimed to conduct a cross-cultural survey to detect the prevalence of academic learning disabilities in both Egypt and Kuwait considering several demographic variables, namely nationality, gender, and school type. The academic learning disabilities in Egypt and Kuwait considering demographic variables especially nationality, gender, and school type were not addressed by the literature. Therefore, this study has unique contribution to the literature.

The Concept of Learning Disabilities

Learning disabilities refer to significant discrepancies between expected learner performance and their actual performance (Alfara, 2005). It encompasses students who struggle to benefit from available learning experiences and activities both inside and outside the classroom, unable to reach a level of proficiency commensurate with their abilities. This definition excludes mentally challenged, physically impaired, or sensory impaired children. Nearly all definitions agree on the presence of a deficiency or impairment in the regular growth of mental capabilities alongside academic inadequacies in skills such as reading, writing, spelling, or mathematical skills. One of the most precise definitions, as proposed by Hardy and Woodcock (2014), suggests that students with learning disabilities constitute a group with special needs requiring comprehensive classes. These students typically possess an average to above-average intelligence, distinguishing them from individuals with intellectual disabilities, neurological disorders, or those experiencing problems in information processing within the brain. They are often referred to as having General Learning Disabilities (GLD).

The definitions of learning disabilities encompass conditions such as cognitive impairments, brain injuries, minor functional brain disorders, dyslexia, or developmental aphasia. Learning disabilities have various forms, and their impact varies from individual to individual. They are associated with the following processes: inputting information into the brain (inputs), sensing and perceiving this information, organizing it (organization), retaining this information for easy retrieval (memory), and recalling information readily when needed (outputs).

Reasons and Explanation of the Occurrence of Learning Disabilities

Numerous social researchers and scientists have attempted to provide various explanations for the causes of learning disabilities (Firat & Bildiren, 2024; Wang & Chung, 2024). Some studies have indicated that internal factors, such as learning habits and interests, contribute to the emergence of learning disabilities, while external factors, including family and school environments, also play a significant role (Ariyati & Nurdini, 2013). Moreover, some researchers emphasize the

importance of external factors in the manifestation of learning disabilities. These factors include attention disorders, lack of motivation, and incorrect learning habits, while internal factors encompass the healthy functioning of sensory abilities like hearing and vision (Erviana, 2019).

Despite various perspectives on the causes of learning disabilities, some scholars attribute them primarily to functional impairments in the nervous system, which interact with multiple psychological, developmental, or environmental factors, culminating in learning disabilities. Research related to the central nervous system suggests that deficiencies in cognitive control are responsible for the occurrence of learning disabilities. Minor brain damage may underlie this type of disorder, while others attribute it to biochemical imbalances or hormonal disorders. Some consider these disabilities to stem from functional deficits resulting from delayed development (Ebrahim, 2014). A prevailing trend among behavioural theorists and those concerned with cognitive processes suggests that learning disabilities stem from disturbances or deficiencies in basic processes, especially visual and auditory perceptions, and the extent to which auditory, visual, and sensory memory are achieved. Some argue that these disabilities result from issues beyond the child's control, pointing to ineffective teaching, traditional curricula, inadequate assessment methods, and unfavourable school environments (Alfara, 2005).

Proponents of behavioural orientation posit that the functional relationship between behaviour (such as reading) and environmental elements associated with the learning process explains the occurrence of learning disabilities. Learning, as perceived by behaviourists, is a process through which children acquire skills according to the laws of learning. Thus, they view the most appropriate learning methods in the academic realm as breaking down knowledge into partial elements, with each part being learned sequentially alongside other parts. Accordingly, the most suitable methods for addressing learning disabilities involve modifying the teaching environment, which needs thorough adjustment to directly address the problem. For instance, if a child suffers reading disabilities, resolving this issue requires direct teaching and training of the necessary reading skills. One of the prominent programs in this context is known as the DISTAR program.

Furthermore, the advent of the virtual world has affected numerous aspects of human life, giving rise to various social phenomena (Ali, 2024). In addition, within the cognitive-oriented framework, metacognitive processes have become a significant element. Metacognition refers to an individual's awareness and understanding of their own information processing methods. In the realm of learning disabilities, researchers have developed modern models concerning memory and cognitive processing mechanisms. The research findings in this regard suggest that the information processing model has the most significant impact. This model likens information processing to that of a computer system: input, storage, processing units, and output. Therefore, malfunction may occur in any of these units regarding learning disabilities.

Diagnosis and Criteria of Learning Disabilities

Diagnosing learning disabilities is considered a fundamental issue among those interested in education, special education, and learning disabilities. Despite the variety of diagnostic measures and criteria, there are challenges surrounding the approaches to diagnosis, the nature of diagnostic measures, and their ability to classify learning disabilities into types (Ebrahim, 2014). Research indicates that common medical diagnoses are prevalent among individuals experiencing learning disabilities (Kinnear et al., 2018). For example, mental illnesses were found in 69% of research related to learning disabilities, nervous system disorders in 85%, and epilepsy in 50% (Power et al., 2023).

Diagnostic criteria for learning disabilities in the International Classification of Diseases (ICD) and the Diagnostic and Statistical Manual of Mental Disorders (DSM) are the rules frequently applied to determine whether individuals are experiencing learning disabilities (Zhang & Gao, 2015). When comparing the two diagnostic systems, one study revealed that the ICD is considered more valuable for clinical diagnosis and training, whereas the DSM is more important for scientific research purposes. Advanced education in developed countries is characterized by its educational system's ability to create tools and measures for conducting initial assessments of various student behaviours and then classifying them. This is because elementary school students face many challenges, including the possibility of discovering their cognitive abilities and abnormal behaviours to effectively deal with them, according to individual differences and different diagnostic

measures and tools (Aswasulasikin et al., 2023). It is undeniable that learning disabilities can be diagnosed in the early days of schooling, relying on teachers' experiences, observations, and the school's ability to use diagnostic tools and measures. Results from one study indicated that 53% of the study's samples believe that learning disabilities can be detected and diagnosed when students are in elementary school (Cortiella & Horowitz, 2014).

In this study, the diagnostic process refers to the ability to discover and identify the nature and the type of problem the student is experiencing, as well as the level and severity of it. The diagnostic stage cannot be carried out without applying diagnostic tools, measures, and tests to students to identify their learning disabilities, such as differences and variations in behaviours and cognitive abilities like thinking, perception, and attention, in addition to the degree of variation between these cognitive abilities and academic achievement and chronological age (Alabodi, 2005). Identifying students with learning disabilities and then diagnosing them require a general plan consisting of several stages: Identifying students with low academic performance. Besides, it needs observing and describing behaviours such as reading. Furthermore, it implements informal assessment for these cases. In addition, it conducts assessment and diagnosis based on multiple criteria and measures. Finally, documenting the diagnosis results (Kirk & Chalfant, 1988) is required. Diagnosing learning disabilities is one of the important and fundamental stages upon which the preparation and design of psychological and educational intervention programs rely, as it determines the nature, type, and degree of learning disabilities faced by students (Ebrahim, 2014). Several diagnostic criteria exist for students experiencing learning disabilities, including:

1. Discrepancy Criterion: This refers to significant differences in the development of certain cognitive functions and abilities such as memory and attention (Batayna, 2006).
2. Excursion Criterion: This involves excluding cases of learning disabilities resulting from other impairments due to the educational, environmental, or economic deprivation.
3. Special Education Criterion: This emphasizes the importance of providing special methods in teaching students with learning disabilities, in addition to providing specialized teachers and curricula tailored to the difficulties they face in their learning (Kirk & Chalfant, 1988).

The absence of a general diagnosis based on established criteria for learners in elementary school leads to an increase in the prevalence of learning disabilities.

Additionally, the lack of early intervention exacerbates and increases the severity of learning disabilities, resulting in negative consequences for learners such as low self-confidence and self-esteem (Alshdifat, 2017). Some researchers have pointed out various challenges and obstacles related to measuring and diagnosing learners with learning disabilities. These challenges include difficulty agreeing on a single definition of learning disabilities, lack of homogeneity among students with learning disabilities, disagreement among specialists on determining the difference between mental abilities and academic achievement, and limited training of specialists in using methods to diagnose learners with learning disabilities (Botrous, 2014).

Therefore, diagnosing and identifying criteria for learning disabilities are important and fundamental aspects of the educational process if we aim to achieve educational outcomes characterized by advancement, modernity, and alignment with the latest educational and psychological philosophies and theories. This requires providing fair and equitable educational services between regular students and those with learning disabilities. Strategic plans are needed in various educational environments to achieve short, medium, and long-term educational goals, building a modern and developed society that benefits from all its members regardless of their health conditions and mental abilities. They must be integrated into all civil society institutions to achieve the desired educational goals. Based on the discussion, hypotheses of the study are as follows.

1. There is a statistically significant effect of gender, school type, and their interaction on the academic learning disabilities scores of third-grade Egyptian students.
2. There is a statistically significant effect of gender, school type, and their interaction on the academic learning disabilities scores of third-grade Kuwaiti students.
3. There is no effect of nationality, gender, school type, and their interaction on the academic learning disabilities scores of third-grade students from both Egypt and Kuwait combined.

Methodology

The descriptive approach was employed in the current study to provide a realistic description of the phenomenon under investigation. A survey was conducted

among students in the first three grades of primary education in both Egypt and Kuwait to achieve the educational objectives sought in this study.

Participants

The study scale was applied to an Egyptian sample of third-grade elementary school students experiencing academic learning disabilities. Egyptian students (N=490), comprising (290) males and (200) females, participated in the study. On the other hand, the total number of Kuwaiti students (N=268) included (173) males and (95) females, all of whom were also enrolled in the third grade of elementary school in Kuwait.

Statistical Tools and Techniques

The researcher in this study used a scale for diagnosing academic learning disabilities prepared by Alsartawi (1995). This scale consists of (62) items and has been designed according to the Likert three-point scale to indicate the extent of learning disabilities among students, where: 1 = Rarely, 2 = Often, and 3 = Always. The scale is characterized by high validity and reliability indicators. The scale was applied to a sample of male and female students in the third grade, totalling eighty students. The purpose of this application was to ensure the psychometric properties of the scale in terms of its validity and reliability.

The validity of the scale was confirmed through various statistical methods, including the expert validity method (faculty members and special education teachers). Additionally, validity was confirmed through internal consistency by calculating the correlation coefficient between each item and the total score of the scale itself, where all correlation values were statistically significant and acceptable. Also, validity was confirmed through the method of concurrent validity, where statistically significant differences were found between regular students and students with learning disabilities through the current list. Regarding the reliability of the scale, it was verified through various statistical methods. The test-retest method yielded a correlation coefficient value of (r = 0.97). Additionally, reliability was confirmed using the Cronbach's Alpha method, where the alpha value was a = 0.98. Based on these findings, it was confirmed that the current scale exhibits statistically acceptable validity and reliability, allowing its application in the current study samples.

Results

Before presenting the findings of this study, it is scientifically important to highlight and present the key statistical values related to the descriptive statistics of the current study. This includes the academic disability scores of Egyptian and Kuwaiti students, as well as the total sample, considering several variables: Gender (Male/Female), nationality (Egyptian/Kuwaiti), and school type (Government/Private). These statistics are presented in Table 1.

Table 1: Descriptive Statistics for Scores of Academic Learning Disabilities According to the Variables: Gender, Nationality, and Type of Schools.

SD	M	N of Total Sample	SD	M	N of Kuwaiti Sample	SD	M	N of Egyptian Sample	Sub-Variables	Variables
21.9	78.6	444	18.3	92.5	173	19.1	69.7	271	Males	Gender
20.1	88.0	314	19.8	86.9	95	20.3	88.5	219	Females	
21.6	82.5	758	19.0	90.5	268	21.8	78.1	490	Total	
23.6	82.53	382	20.7	94.3	130	22.7	76.4	252	Gov	Schools
19.5	82.52	376	16.6	87.0	138	20.6	79.9	238	Priv	
21.6	82.53	758	19.0	90.5	268	22.7	78.1	490	Total	

Gov = Governmental, **Priv** = Private.

Source: All study tables and the numbers within them were obtained by applying the study measures to the students on October 24, 2023. Subsequently, the students' grades were entered into a well-known statistical program called SPSS.

After that, the scores were analyzed, and the obtained numbers and values are presented as they appear in all the current study tables.

Through Table 1, it is evident that the number of students exhibiting academic disabilities in the Egyptian sample amounted to N = 490, whereas in the Kuwaiti sample, it reached N = 286, reflecting a difference of N = 222 students. This discrepancy is logical considering that Egypt's population is several times larger than that of Kuwait. As for the study findings, the first hypothesis posited that there exists a statistically significant effect of gender, school type, and their interaction on the academic learning disability levels among third-grade Egyptian students. A Two-Way ANOVA analysis was conducted, and Table 2 delineates the obtained results.

From Table 2, it is evident that there are statistically significant differences at the 0.001 level between male and female Egyptian students in the third grade regarding academic disabilities. The significance level is Sig = 0.000 with F = 109.1, and the mean score

for females (M = 88.5) is higher than that for males (M = 69.7), as indicated in Table 1. This suggests that Egyptian female students in the third grade suffer more academic learning disabilities than their male counterparts. Additionally, the values in Table 2 indicate no statistically significant differences between students in government schools and those in private schools among third-grade Egyptian students regarding academic learning disabilities, where F = 1.79. Furthermore, there is no statistically significant interaction effect between gender and school type (government/private) on academic learning disabilities among third-grade Egyptian students, with F = 0.056. These results partially support the first hypothesis of this study.

Table 2: Results of the Two-Way Anova Analysis for the Effect of Gender and School Type on Academic Disabilities among Third-Grade Egyptian Students.

Source	Sums of Squares	Df	Mean Squares	F	Sig
Intercept	3023221.220	1	3023221.220	7785.540	.000
Gender (A)	42383.368	1	42383.368	109.148	.000
Schools (B)	667.541	1	667.541	1.719	.190
A * B	21.854	1	21.854	.056	.813
Error	188719.798	486	388.312		
Total	3224831.000	490			

Gender = Males and Females, Schools = Government and private.

The second hypothesis posits that there is a statistically significant effect of gender, school type, and their interaction on the academic learning disabilities among third-grade Kuwaiti students. Two-Way ANOVA analysis was conducted, and Table 3 presents the results.

Table 3: Results of Two-Way ANOVA Analysis for The Effect of Gender and School Type on Academic Learning Disabilities Among Kuwaiti Students in The Third Grade.

Source	Sums of Squares	Df	Mean Squares	F	Sig
Intercept	1957246.085	1	1957246.085	5846.858	.000
Gender (A)	2470.087	1	2470.087	7.379	.007
Schools (B)	2353.929	1	2353.929	7.032	.008
A * B	2382.595	1	2382.595	7.117	.008
Error	88374.475	264	334.752		
Total	2294367.000	268			

Gender = Males and Females, Schools = Government and private schools.

From Table 3, it is evident that there are statistically significant differences ($p < 0.001$) between male and female Kuwaiti third-grade students regarding to academic learning disabilities, favoring male students (Sig= .007) with (F=7.37). This indicates that

male Kuwaiti students in the third grade suffer more academic learning disabilities than females. As shown in Table 1, the mean value for males (M=92.5) is higher than that for females (M=86.9). Additionally, there are statistically significant differences between students attending government schools and those attending private schools among Kuwaiti third-grade students in terms of academic learning disabilities, favouring government school students (F= 7.032) with (Sig= .008). The mean value for government school students (M=94.3) is higher than that for private school students (M= 87.0).

Furthermore, there is a statistically significant interaction effect between gender and school type (government/private) on academic learning disabilities among Kuwaiti third-grade students, with (F=7.117) and (Sig= .008). This result leads to the acceptance of the second hypothesis. To determine the specific impact of this interaction, the researcher calculated the mean standard differences using Scheffe's Test to identify the significant mean pairs. Table 4 presents the results of this analysis.

Table 4: Scheffe's Test Results for Post-Comparisons for the Interaction Effect of Gender and School Types on Academic Learning Disabilities Among Third-Grade Kuwaiti Students.

Gender	Schools Type	Mean	Sig. Error	95% Confidence Interval	
				Upper Bound	Lower Bound
1.00	1.00	99.579	2.099	95.447	103.711
	2.00	87.041	1.858	83.383	90.699
2.00	1.00	86.889	2.490	81.986	91.791
	2.00	86.927	2.857	81.301	92.553

Gender: 1 = Males, 2 = Females, School Type: 1 = Government, 2= Private.

From Table 4, statistically significant differences were found in the interaction effect of gender and school types on academic learning disabilities among Kuwaiti third-grade students, specifically within the male sample across both government and private schools. The differences favoured male students in government schools (M=99.5), indicating that they suffer more significant academic learning disabilities compared to male students in private schools (M=87.0) due to substantial differences in the means between the two samples. However, there was no statistically significant interaction effect of gender and school types on academic learning disabilities among females in both government and private schools, as the mean values for females in both types of schools were equal (M = 86.8, 86.9) according to Table 1.

The third hypothesis states that there is no effect of nationality, gender, school type, and their interaction on the academic learning disabilities for third-grade students from both Egypt and Kuwait combined. Two-Way ANOVA was conducted to evaluate the hypothesis. Table 5 presents the results obtained.

The results from Table 5 indicate statistically significant differences between the mean scores of Egyptian and Kuwaiti students collectively, disregarding the variables of gender and school types, in favour of Kuwaiti students (F = 52.1) with (Sig = .000). This implies that Kuwaiti students (M= 90.5) suffer greater academic learning disabilities compared to Egyptian students (M= 78.1).

Table 5: Results of the Two-Way ANOVA Analysis for the Effect of Nationality, Gender, and School Types on Academic Learning Disabilities Scores Among Third-Grade Students from Egypt and Kuwait.

Source	Sums of Squares	Df	Mean Squares	F	Sig
Intercept	4605513.148	1	4605513.148	12465.558	.000
Nationality (A)	19272.267	1	19272.267	52.163	.000
Gender (B)	6122.371	1	6122.371	16.571	.000
Schools (C)	610.388	1	610.388	1.652	.199
A * B	25413.296	1	25413.296	68.785	.000
A * C	2973.776	1	2973.776	8.049	.005
B * C	1811.188	1	1811.188	4.902	.027
A * B * C	1380.966	1	1380.966	3.738	.054
Error	277094.273	750	369.459		
Total	5519198.000	758			

Nationality= Egyptian and Kuwaiti, Gender = Males and Females, Schools = Government and private schools

Furthermore, the results reveal statistically significant differences between the mean scores of both genders in academic learning disabilities among third-grade students, regardless of nationality and school types, in favour of females (F = 16.571) with (Sig = .000). This suggests that females (M= 88.0) suffer more learning disabilities than males (M=78.6).

Moreover, there were no statistically significant differences between the mean scores of third-grade students in governmental and private schools in both Egypt and Kuwait regarding academic learning disabilities, disregarding nationality, and gender, as indicated by the value of (F= 1.652). The results also show statistically significant interaction effects between nationality and gender (F= 68.7) with (Sig = .000), nationality and school type (F= 8.04) with (Sig = .005), gender and school type

(F= 4.9) with (Sig=.02), and nationality, gender, and school type (F= 3.7) with (Sig= .05) on academic learning disabilities among the combined Egyptian and Kuwaiti samples. Conclusively, these findings confirm the acceptance of the third hypothesis overall. To specify the statistically significant interaction effects, the researcher applied Scheffe's post-comparison test, and Tables 6, 7, 8, 9 and 10 present the results obtained in this regard.

Table 6: Scheffe's Test Results for the Interaction Effect of Nationality and Gender on Academic Learning Disabilities Scores Among Third-Grade Students in both Egyptian and Kuwaiti Samples.

Nationality	Gender	Mean	Std. Error	95% Confidence Interval	
				Upper Bound	Lower Bound
1.00	1.00	69.787	1.172	72.087	67.486
	2.00	88.532	1.300	91.084	85.980
2.00	1.00	93.310	1.472	96.200	90.420
	2.00	86.908	1.991	90.816	83.000

Nationality: 1 = Egyptian, 2= Kuwaiti, Gender: 1 = Males, 2 = Females

From Table 6, statistically significant disparities emerge between genders among Egyptian students, favouring Egyptian females, with a mean score of (M= 88.5), surpassing that of males at (M= 69.7). Similarly, among Kuwaiti students, significant differences are noted between genders, favouring males, with a mean score of (M=93.3) compared to (M= 86.9.9) for females.

Table 7 presents the Scheffe's test results for the interaction effect of nationality and school type on academic learning disabilities scores among third-grade students in both the Egyptian and Kuwaiti samples.

Table 7: Scheffe's Test Results for the Interaction Effect of Nationality and School Type on Academic Learning Disabilities Scores Among Third-Grade Students in Both the Egyptian and Kuwaiti Samples.

Nationality	Schools Type	Mean	Sig. Error	95% Confidence Interval	
				Upper Bound	Lower Bound
1.00	1.00	77.983	1.228	80.394	75.572
	2.00	80.336	1.247	82.784	77.887
2.00	1.00	93.234	1.710	96.592	89.876
	2.00	86.984	1.790	90.499	83.470

Nationality: 1= Egyptian, 2= Kuwaiti, Schools Type: 1= Government, 2=Private.

From Table 7, it is evident that there are statistically significant differences between the students of government and private schools among Egyptians in favor of

the private school students, because their mean (M=80.3) is higher than the mean of government school students (M=77.9). This means that private school students face greater academic learning difficulties compared to government school students. There are also statistically significant differences between government and private school students among Kuwaitis in favor of government school students because their mean (M=93.2) is higher than the mean of private school students (M=86.9). This also means that private school students face greater academic learning difficulties compared to the governmental school students. Table 8 is the results of a Scheffe test for the effect of the interaction between gender and school type on academic learning difficulty scores for third-grade students in both the Egyptian and Kuwaiti sample.

Table 8: Results of Scheffe's Test for the Interaction Effect of Gender and School Type on Academic Learning Disabilities Scores of Third-Grade Students in the Egyptian and Kuwaiti Samples.

Gender	Schools	Mean	Std. Error	95% Confidence Interval	
				Upper Bound	Lower Bound
1.00	1.00	84.201	1.358	86.867	81.535
	2.00	78.896	1.303	81.453	76.338
2.00	1.00	87.016	1.609	90.175	83.856
	2.00	88.424	1.750	91.860	84.988

Gender: 1= Male, 2= Female, School Types: 1= Government, 2=Private.

From Table 8, it can be observed generally that there are statistically significant differences between third-grade students, both male and female, in public and private schools in favour of females. This indicates that female students in private schools (M=88.4) suffer more academic learning disabilities than male students in public schools (M=84.2).

Statistically significant differences exist between male students in public schools (M=84.2) and private schools (M=78.8) in favour of students in public schools. Similarly, statistically significant differences exist between female students in public schools (M=87.0) and private schools (M=88.4) in favour of students in private schools. Additionally, there are statistically significant differences between male students in public schools (M=84.2) and female students in public schools (M=87.0) in favour of female students. Finally, there are statistically significant differences between male students in private schools (M=78.8) and female students in private schools (M=88.4)

in favour of females. We can review the results of the Scheffe test to examine the effect of the interaction between nationality, gender, and school type on the scores of academic learning disabilities of the third-grade elementary students, through the following table among the Egyptian and Kuwaiti samples.

Table 9: Scheffe's Test Results for the Interaction Effect of Nationality, Gender, and School Type on Academic Learning Disabilities Scores of Third-Grade Students in the Egyptian and Kuwaiti Samples.

Nationality	Gender	Schools	Mean	Std. Error	95% Confidence Interval	
					Upper Bound	Lower Bound
1.00	1.00	1.00	68.823	1.585	71.935	65.711
		2.00	70.750	1.726	74.139	67.361
	2.00	1.00	87.143	1.876	90.825	83.460
		2.00	89.921	1.800	93.455	86.387
2.00	1.00	1.00	99.579	2.205	103.907	95.251
		2.00	87.041	1.952	90.873	83.210
	2.00	1.00	86.889	2.616	92.024	81.754
		2.00	86.927	3.002	92.820	81.034

Nationality: 1 = Egyptian, 2= Kuwaiti, Gender: 1 = Males, 2 = Females.

What we can find in Table 9, it is evident that there are statistically significant differences among third-grade students in public and private schools, separated by gender, among Egyptians, favouring female students in private schools (M= 89.9). This suggests that female students in private school's suffer more academic learning disabilities compared to the Egyptian males in public (M=68.8) and private schools (M= 70.7).

The results also indicate statistically significant differences among Kuwaiti students in the third grade in public and private schools, across genders, favouring male students in public schools (M= 99.5). This implies that Kuwaiti male students in public school's suffer more from the academic learning disabilities compared to females in public schools (M=86.8) and private schools (M= 86.9). Finally, there are no statistically significant differences among Kuwaiti female students, either in public or private schools, regarding their academic learning disabilities, as there are no differences in the mean scores between the two types of schools.

Discussion

Contemporary societies face numerous educational challenges today, among which academic learning disabilities stand out as particularly significant. These

disabilities have profound educational, psychological, and social repercussions on all members of society, given the increasing numbers of students grappling with these challenges in one or more subjects, leading to academic underachievement and repeated failures. Consequently, they find it challenging to adapt to regular students and standard curricula. Some struggle with speech, writing, reading, or basic mathematical operations (Fatiha, 2023).

Advanced countries prioritize catering to their human resources by conducting various studies on students facing academic learning disabilities. The aim is to utilize the findings of these studies to mitigate the harms resulting from the mistreatment of this student group (Carroll Chapman & Wu, 2012). Hence, advanced nations allocate more resources to assist these students through programs and strategies implemented by various organizations and agencies responsible for providing special care services to this student group. Based on the theoretical framework and assumptions of the current study, this research was conducted to explore various educational aspects related to students with learning disabilities in Kuwait. This study was conducted as a cross-cultural study with Egypt, representing the first comprehensive educational survey between these two countries in the field of academic learning disabilities. The study yielded several important results concerning students with learning disabilities, whether in Egypt or Kuwait, by focusing on three key variables: nationality, gender, and school type.

The results of the first hypothesis indicated statistically significant differences between male and female Egyptian students regarding academic learning disabilities, favouring females. This means that the prevalence of academic learning disabilities among female students is higher than among male students in Egyptian society, according to the current study sample of (N = 490) Egyptian students. This finding contradicts numerous previous studies indicating that male students suffer more academic learning disabilities than females (Eslami et al., 2014; Fatiha, 2023; Joseph & Devu, 2022; Shabib & Haider, 2022). Undoubtedly, the results obtained in this study cannot be generalized comprehensively and universally to all Egyptian students with academic learning disabilities. The current study's sample size is small compared to the total number of Egyptian students facing academic learning disabilities. However, such results reflect numerous educational indicators, as previously explained in the

theoretical aspect of this study.

One of the causes of academic learning disabilities is the presence of external environmental and social factors that may contribute to increasing the prevalence of these disabilities among students. Egyptian female students have been exposed to environmental and social influences leading to a higher prevalence of academic learning disabilities compared to male students. These influences include societal and school bullying against female students, the teaching nature in girls' schools, the culture of female teachers in girls' schools, and gender-based discrimination in Egyptian schools and society. Such societal and familial factors negatively impact the academic performance of Egyptian female students, leading to higher levels of academic learning disabilities compared to males. This result partially supports the first hypothesis of the current study.

As for the differences between male and female students in academic learning disabilities in the Kuwaiti sample, according to the results of the second hypothesis of the study, the outcome here contrasts with the Egyptian sample. Kuwaiti male students exhibit higher academic learning disabilities than females, as indicated in table (3). This result aligns with and supports some previous study findings, contradicting the results of a study by Eshaq (2020), which reported no gender differences in academic learning disabilities. It seems that external factors, such as family and societal influences, have played a significant role and had a considerable impact on male students, negatively affecting their academic achievement. Consequently, symptoms of academic learning disabilities manifested more prominently among Kuwaiti male students than among female students. One study indicated that extensive exposure to complex environmental influences gradually leads to changes in the brain (Berenbaum et al., 2007), which undoubtedly affects students' cognitive abilities and academic achievement, leading to withdrawal, isolation, and psychological solitude, thus encouraging the emergence of academic learning disability symptoms.

Regarding students with academic learning disabilities, there is no clear data indicating that gender differences change over time. Therefore, this hypothesis is intriguing and should be evaluated through future research. The results of the second

hypothesis also indicate other dimensions and indicators related to the current study. Kuwaiti students have higher academic learning disabilities in government schools than private schools because private schools offer superior educational, psychological, and health environments compared to government schools. Consequently, there are excessive costs associated with attending private schools, as students must pay for these exceptional school services. Additionally, the results of the second hypothesis also indicate the impact of gender and school type interaction on academic learning disabilities among Kuwaiti students. Regarding gender, male students in government schools have an advantage, while there is no statistically significant effect of gender and school type interaction on academic learning disabilities for Kuwaiti female students in government and private schools because the average values for females in government (M=86.8) and private (M=86.9) schools are equal according to table (4). Therefore, decision-makers in Kuwait's educational institutions must focus on enhancing the level of services and the educational environment in government schools since students in these schools face higher academic learning disabilities than those in private schools, which stand out for their sophisticated services and environments that provide attractive educational settings for students.

Regarding the results of the third hypothesis of the study, according to table (5), numerous statistical values reflected several demographic indicators. They also showed nature of interrelationships in the total Egyptian and Kuwaiti samples. For instance, Kuwaiti students exhibit more academic learning disabilities than Egyptian students (F=52.1) with Sig=.000. This is undoubtedly due to the higher level of healthcare, education, and all services provided to Egyptian students compared to those in Kuwait. Moreover, Egypt's research and educational systems and institutions are older than Kuwait's, reflecting greater care for Egyptian students with academic learning disabilities. Female students in the combined samples of Egypt and Kuwait face more academic learning disabilities than males (F=16.5) with Sig=.000, attributed to the increased external environmental influences affecting female students compared to males across both samples.

The results of the third hypothesis also indicate a statistically significant interaction effect of nationality, gender, and school type on academic learning disabilities

among the total number of students in both the Egyptian and Kuwaiti samples. As revealed in Scheffe's table (9), the Egyptian female students have more academic learning disabilities than male students in both government and private schools. Similarly, Kuwaiti male students in government schools suffer more academic learning disabilities than females in both government and private schools. Such results can be interpreted by focusing on external factors that enhanced and highlighted symptoms of academic learning disabilities because external influences are observable and can be monitored, unlike internal, health-related, and genetic factors specific to the current study's students. It is essential to refer to individual health records and files for each student, requiring deeper, more extensive, and costlier future studies to document and track such records for possible utilization in future research endeavours.

Conclusion

Comparative studies in general, and cross-cultural studies between two countries in particular, are endeavours that require significant patience and effort to accomplish. The study samples are not readily available in one location but are dispersed across different and vast areas, as is the case in the current study. The researcher focused on three demographic variables: nationality, gender, and school type, among the Egyptian and Kuwaiti samples through the comparative survey study between the two countries. The researcher ultimately found that these variables significantly impacted the levels of academic learning disabilities between the two countries. Therefore, such variables should be the focus of future studies aiming to address academic learning disabilities among students.

On the other hand, school administrations should provide a comprehensive health, psychological, and social environment to mitigate external factors that may influence the emergence and increase of academic learning difficulties. Female students in Egypt exhibit more academic learning disabilities than males, while the opposite is true in Kuwait. The study results also indicated statistically significant differences in the interaction of gender and school type favouring male students in Kuwait. Additionally, there are statistically significant differences in the interaction of nationality, gender, and school type regarding academic learning disabilities between

the samples in Egypt and Kuwait. In general, such results reflect multifaceted and multidirectional indicators that should be studied carefully and deeply in future studies on academic learning disabilities among students.

Limitation

The boundaries of the current study are marked by numerous obstacles and challenges that the researcher endeavoured to overcome through various administrative and technical methods to surmount these field difficulties. Since the current study is considered a cross-cultural comparative study between Egypt and Kuwait, it required multiple trips to Egypt to monitor the study's application on the Egyptian sample. This led to increased financial costs due to travel expenses, accommodation, living expenses, and the salaries of the researchers who assisted in implementing the study tool on the Egyptian sample. Additionally, students with academic learning disabilities, whether in Egypt or Kuwait, are dispersed in different and distant locations. Therefore, the initial field survey to estimate their numbers was challenging, considering the variables of the current study. Moreover, obtaining consent from the parents of these students to apply the study tool on them was a necessary stage, as not all parents agreed to participate in the study. Thus, the sample size of the current study is relatively small, especially in Kuwait, due to the reasons. Therefore, if the sample were larger, its results would be more realistic and could be generalized to the Kuwaiti society. Despite these challenges, the researcher managed to complete this study by overcoming many field challenges and difficulties, allowing the study to be presented in its current form. Hence, this study serves as a precedent for future research endeavours.

Funding

No funding was received for conducting this study.

Declarations

Conflict of Interest

The authors have no conflicts of interest to declare that are relevant to the

content of this article.

Ethics Approval

The study was conducted in line with the ethical research guidelines. The data were collected and analyzed anonymously.

References

Al-Qadri, A. H., Zhao, W., Li, M., Al-Khresheh, M. H., & Boudouaia, A. (2021). The prevalence of the academic learning difficulties: An observation tool. *Heliyon, 7*(10), e08164. https://doi.org/10.1016/j.heliyon,2021.e08164

Alabodi, M. E. (2005). *Difficulties the Reading and Writing*. Zahra Alsharg Publishing House.

Alfara, E. S. (2005). *The early diagnosis of learning disabilities among kindergarten children from the special education point of view*. The 7th Meeting for Education Colleges Association in Arabian Universities, Cairo. http://elibrary.mediu.edu.my/books/MAL06100.pdf

Ali, M. M. (2024). Modelling the Relationship between Cyber Fraudulent Trolling and the Dark Tetrad Personality, Considering the Big Six Personality Factors among University Students. *Kurdish Studies, 12*(2), 362–381. https://kurdishstudies.net/menu-script/index.php/KS/article/view/1810

Alsartawi, A. M. (1995). Prepare survey tool for detect of learning disabilities students. *Journal of College of Education, 10*(11), 57-77. http://search.mandumah.com/Record/1438

Alshaks, A. A., Soulaiman, A. A., Hasanen, M. F., & Kotub, R. A. (2022). Psychometric traits of academic learning disabilities scale. *Journal of Psychological Counselling, 72*, 215-243. http://search.mandumah.com/Record/1415110

Alshdifat, A. (2017). A survey study to detect learning disability among the first-grade average in general education schools for girls in Makka using "the learning disability evaluation scale-renormed second edition (LDES-R2)". *Journal of Islamic University for Psychology and Education Studies, 25*(1), 231-247. http://search.shamaa.org/FullRecord?ID=115437

American Psychiatric Association, D.-T. F. (2013). *Diagnostic and statistical manual of*

mental disorders: DSM-5™. American Psychiatric Association Publishing. https://doi.org/10.1176/appi.books.9780890425596

Ariyati, E., & Nurdini, A. (2013). Description of Learning Diffeculties and Their Causal Factors in Fungal at Bawari Islamic High School. *Journal of Education and Learning, 2*(29). https://doi.org/10.26418/jppk.v2i9.3265

Aswasulasikin, A., Muhammad, H., Alodul, A., & Yul, A. (2023). *Early Identification of Students With Functional Learning Disabilitiesin Elementary Schools*. The 1st International on Innovation in Elementary Education, Malang, Indonesia.

Batayna, M. (2006). *Learning Disabilities of Special Needs*. Jedara Publishing House.

Berenbaum, S. A., Martin, C., Hanish, L., Briggs, P. T., & Fabes, R. (2007). Sex Differences in Children's Play. In *Sex Differences in the Brain: From Genes to Behavior* (pp. 275-290). Oxford University Press. https://doi.org/10.1093/acprof:oso/9780195311587.003.0014

Botrous, H. B. (2014). *Teaching Children With Learning Disabilities*. Almasira Publishing House.

Carroll Chapman, S. L., & Wu, L.-T. (2012). Substance abuse among individuals with intellectual disabilities. *Research in Developmental Disabilities, 33*(4), 1147-1156. https://doi.org/10.1016/j.ridd.2012.02.009

Cortiella, C., & Horowitz, S. H. (2014). The State of Learning Disabilities: Facts, Trends and Emerging Issues. *New York: National Center for Learning Disabilities, 25*(3), 2-45. https://www.myschoolpsychology.com/wp-content/uploads/2014/02/2014-State-of-LD.pdf

Ebrahim, E. A. (2014). Diagnosis and Early Intervention for Learning Disabilitiesin the Arabic Language and Mathematics Among Students in the First Three Grade of Primary School in Gharbia Governorate. *Journal of Education College*, 1-62. http://search.mandumah.com/Record/740398

Erviana, V. Y. (2019). Analysis Towards Factors of Students' Learning Difficulties at Muhammadiyah Elementary Schools In Sayegan Sub-District. In *Proceedings of the 2nd International Conference on Learning Innovation* (pp. 221-227). SCITEPRESS – Science and Technology Publications. https://doi.org/10.5220/0008410202210227

Eshaq, A. A. (2020). Academic learning disabilities among sample of primary school

students in Arbil Governorate. *Journal of Anbar University for Human Sciences, 2*, 362-382. https://search.mandumah.com/Record/1118153

Eslami, M., Akbar Haghdoost, A., Afsaneh, N., & Shahrbabaki Hamideh, R. (2014). Prevalence of Learning Disability in Primary School Students in Kerman City. *European Online Journal of Natural and Social Sciences, 3*(3), 534-540. https://european-science.com/eojnss/article/view/795

Fatiha, S. (2023). Academic Learning Disabilitiesamong Primary School Students. *Journal of Education, 12*(1), 79-96. http://search.mandumah.com/Record/1390239

Firat, T., & Bildiren, A. (2024). Developmental characteristics of children with learning disabilities aged 0–6 based on parental observations. *Current Psychology, 43*(4), 2909-2921. https://doi.org/10.1007/s12144-023-04526-z

Hardy, I., & Woodcock, S. (2014). Contesting the recognition of specific learning disabilities in educational policy: Intra-and inter-national insights. *International Journal of Educational Research, 66*, 113-124. https://doi.org/10.1016/j.ijer.2014.03.003

Indriyani, V., Atmazaki, A., & Ramadhan, S. (2024). Promoting environmental awareness through language learning: A study on the integration of environmental education in the classroom. *AIP Conference Proceedings, 3001*(1), 060001. https://doi.org/10.1063/5.0184170

Joseph, J. K., & Devu, B. K. (2022). Prevalence and Pattern of Learning Disability in India: A Systematic Review and Meta-Analysis. *Indian Journal of Psychiatric Nursing, 19*(2), 152-162. https://doi.org/10.4103/iopn.iopn_7_22

Katsafanas, J. (2006). *The Roles and Responsibilities of Special Education Teachers* [Doctoral Dissertation, The University of Pittsburgh]. https://d-scholarship.pitt.edu

Kinnear, D., Morrison, J., Allan, L., Henderson, A., Smiley, E., & Cooper, S.-A. (2018). Prevalence of physical conditions and multimorbidity in a cohort of adults with intellectual disabilities with and without Down syndrome: cross-sectional study. *BMJ Open, 8*(2), e018292. https://doi.org/10.1136/bmjopen-2017-018292

Kirk, S., & Chalfant, J. (1988). *Academic and Developmental Learning Disabilities*. Love Publishing House.

Krumm, S., Schmidt-Atzert, L., Michalczyk, K., & Danthiir, V. (2008). Speeded paper-pencil sustained attention and mental speed tests: can performances be discriminated? *Journal of Individual Differences, 29*(4), 205-216. https://doi.org/10.1027/1614-0001.29.4.205

Macdonald, S. J. (2010). Towards a social reality of dyslexia. *British Journal of Learning Disabilities, 38*(4), 271-279. https://doi.org/10.1111/j.1468-3156.2009.00601.x

Power, N., Harrison, T. L., Hackett, S., & Carr, C. (2023). Art therapy as a treatment for adults with learning disabilities who are experiencing mental distress: A configurative systematic review with narrative synthesis. *The Arts in Psychotherapy, 86*, 102088. https://doi.org/10.1016/j.aip.2023.102088

Salem, M., & Zaki, A. (2009). *Learning Disabilities and Self-Regulation*. Etrak Publishing House. https://www.taibahu.edu.sa

Samans, R. (2024). *Human-Centred Economics: The Living Standards of Nations*. Springer Nature. https://doi.org/10.1007/978-3-031-37435-7

Shabib, A. A., & Haider, K. A. (2022). Attention Difficulties in Primary School Students. *Journal of Nasaq, 33*(3), 35-50. http://search.emarata.net./detail/BIM-1431196

Venkatesan, S. (2017). Analysis of Attributes in the Official Definitions for Learning Disability. *The International Journal of Indian Psychology, 4*(2), 46-57. https://doi.org/10.25215/0402.027

Wang, L.-C., & Chung, K. K.-H. (2024). The influences of cognitive abilities on self-regulated learning in online learning environment among Chinese university students with learning disabilities. *The Internet and Higher Education, 62*, 100947. https://doi.org/10.1016/j.iheduc.2024.100947

Zhang, S. D., & Gao, X. Y. (2015). The Development of American Definition of Specific Learning Disabilities and Its Implications. *Journal of Comparative Review, 9*, 91-96.