

Implementing Creativity and Innovation from Pragmatic Philosophical Perspectives by Female Teachers in Jordan



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Abstract: The purpose of this study was first to ascertain the degree to which female educators in Jordan implement pragmatic philosophy in their teaching practices and examine the connection between pragmatic philosophy application and students' creative thinking. Second, the study examined whether this degree was influenced by such variables as age, area of specialization, and experience. The researchers employed two methods to collect data: a questionnaire and interviews-based dialogue. The results showed that the Means of the sample estimates regarding the extent of applying creativity and innovation from a pragmatic philosophical perspective among female teachers in the Northern Mazar District ranged between (3.13) and (3.99). The findings likewise indicated that no statistically significant differences in the Means of the study sample estimates due to the variable of educational qualifications. However, there were statistically significant differences due to the variable of years of experience but a significant difference among female teachers was found concerning the variables of age and years of experience. Based on the results and findings, the researchers recommended that the Ministry of Education design training programs for teachers regarding the topic of concern.

Keywords: Creativity, Innovation, Pragmatic Philosophical Perspectives, Female Teachers, and Jordan.

Introduction

From John Dewey's perspective, creativity and innovative planning are seeing something in a different light and then using it in a different way. Therefore, new perspectives and different methods are essential to understanding creativity, not the traditional materials used (Dewey, 1916). What is John Dewey's educational theory? Dewey is a prominent name in the history of educational theory and philosophy. As an American philosopher, he is known for his creative ideas on educational and social reform, his philosophies, his views, and his radically unique ideas about education. All of these were collected in his famous educational theory. His philosophy required an understanding of what constitutes a good society and the right way of living, as well as accepting that change is an inevitable part of life (Khasawneh et al., 2014).

John Dewey's theory lies in the idea that human experience should serve as a guiding light in education and social reform. According to him, experience is not a mental state that exists inside us; rather, experience exists within us (Boisvert, 1988; Campbell, 1995; Gouinlock, 1972; Sleeper, 1987; Welchman, 1995). All forms of knowledge must be based intimately on practical and realistic experience, and purposeful exploration and learning can only occur when students deal with their learning materials directly and through experimentation (Dewey, 1938; Dewey, 1944). Dewey's educational ideals call for the fact that the goal of education should be to help children think critically, has garnered widespread support. By incorporating other skills, such as critical thinking, creativity, and caring thinking, teachers can support learners in reaching their own reasonable conclusions and enable them to evaluate questions in addition to issues philosophically based on their own experience (Ab Wahab et al., 2022).

To date, no study has considered implementing creativity and innovation from pragmatic philosophical perspectives by female teachers in Jordan. This study aims to analyze Dewey's philosophical thought as an influential figure throughout the Jordanian public schools from the perspectives of teachers as the study purpose.

Study Purpose

The purpose of this study is twofold. First is to ascertain the degree to which female educators in Jordan implement pragmatic philosophy in their teaching practices and examine the connection between pragmatic philosophy application and students' creative thinking. The study pinpoints the elements that support or impede this philosophy presentation in the classroom. Second, it examines whether this degree is influenced by variables such as age, area of specialization, and experience. Specifically, this research is an attempt to respond to the study questions.

Study Problem

‘In education, the currency of these externally imposed aims is responsible for the emphasis put upon the notion of preparation for a remote future and for rendering the work of both teacher and pupil mechanical and slavish’ (Dewey, 1916, 110). Contemporary, it could be promising to revisit Dewey’s influences and his contributions in the field of education to simplify some delusions. In Jordan, the function of Dewey’s work has been disturbed by some dominant divine principles, values, and compassions of education. In recent times, Dewey’s educational thought in Jordan has been a concern by some educators. His views on education may possibly be pertinent to modern questions about education and schooling.

As a result, this study problem addresses the fact that there has been limited research on implementing creativity and innovation from pragmatic philosophical perspectives by female teachers in Jordan. Accordingly, to implement creativity and innovation from pragmatic philosophical perspectives in the Jordanian educational system. This study may provide insights into possible support of students' ability to make links between intangible ideas and lived experiences, think creatively regarding social issues, and provide feasible justifications. Providing students with opportunities to take possession over their learning provided that they are creative and active learners rather than row learners would be an extra advantage of being creative. Specifically, this research is an attempt to respond to the study questions.

Study Questions

The central study questions concern the degree to which female teachers in Jordan implement creativity from a pragmatic and philosophical perspective in their teaching practices and examine the connection between pragmatic philosophy application and students' creative thinking. The study pinpoints the elements that support or impede this philosophy presentation in the classroom. The secondary study question is concerned with variables such as age, area of specialization, and experience to find out if there are statistically significance differences. The study identifies the factors that either facilitate or hinder this philosophy presentation in the educational setting.

Study Sub Questions:

- Are there statistically significant differences, alpha level of 0.5 due to such variables as experience, age, and academic qualification?
- What practices do teachers use to support creativity in education?
- What are the challenges encountering teachers when implementing the philosophy of pragmatic education?
- What recommendations can be made to enhance implementing the philosophy of pragmatic education?

Study Significance

This study embodies a methodical contribution to education, providing a theoretical and practical framework for understanding the philosophy of pragmatism in education and implementing its ideologies in practice. The study may help in providing practical recommendations for educators to improve their teaching practices and enhance creativity and innovation among their students. In this context, this study highlights the influence of pragmatic education philosophy on the development of modern educational practices. By concentrating on practical experience and interaction with reality, pragmatism seeks to introduce such values as creativity and innovation in learners. Writings of Dewey and his inspiration regarding philosophy, education, politics, and social disciplines during the twentieth century places him along with other educational philosophers who became leading experts on modern thoughts and concepts. Given the lack of previous research studies, the researchers believe that this study would provide information to teachers in Jordan, particularly, if Jordanian teachers fully comprehend its findings and results.

Study Findings and Results

The study sample Means ranged between (3.13) and (3.99), as questionnaire item: “Failure is a natural part of the process of learning and achieving success to creativity” ranked first with a mean of (3.99) and a standard deviation of (0.85), with a high degree. The questionnaire item: “Creativity and innovation can be used to enhance physical and psychological health “was with a Mean of (3.13) and a standard deviation of (0.93). The overall Mean of the study sample was (3.71) and the standard deviation of the estimates (0.67). There are significant differences between the Means of the study sample due to such variables as academic qualification, years of experience, and age.

The table below shows the Means and Standard Deviations of the study sample estimates regarding Implementing Creativity and Innovation from Pragmatic Philosophical perspectives by female teachers in Jordan, according to the study variables, which are: Academic Qualification, years of experience, and age, the table demonstrate the ‘Level of Implementation’.

Bachelor’s Degree and Graduate Studies as academic qualifications scored high degrees. Years of experience (0-5 years) scored very high while (6-11 years) scored high and (2+ years) scored moderate. Additionally, the age (Under 30 years), (30-40 years), and (Over 40 years) scored very high, high, and high respectively.

Means and Standard Deviations of Study Sample Estimates Regarding Implementing Creativity and Innovation from Pragmatic Philosophical Perspectives by Female Teachers in Jordan, According to Study Variables (Academic Qualification, Years of Experience, Age)

Domain	Variable	Level	Mean	Std. Deviation	Implementation Level
Overall	Academic Qualification	Bachelor's Degree	3.65	0.74	High
		Graduate Studies	3.80	0.56	High
	Years of Experience	0-5 years	4.28	0.31	Very High
		6-11 years	3.46	0.63	High
		12+ years	3.35	0.60	Moderate
	Age	Under 30 years	4.33	0.31	Very High
		30-40 years	3.44	0.61	High
		Over 40 years	3.41	0.59	High

To determine the statistical significance differences between the Means of the study sample due to the study variables: academic qualification, years of experience, and age, a three-way analysis of variance (ANOVA) was used. The findings, collected by the study questionnaires, indicated that there were no statistically significant differences between the Means of the study sample due to the academic qualification variable. Furthermore, there were statistically significant differences between the arithmetic means of the study sample due to the years of experience variable between “0-5” and “6-11 years, 12 years and above” in favor of “0-5 years and due to the age variable. There was a statistically significant difference between the years of experience variable itself in favor of the study sample individuals whose experience was less than 30 years.

Furthermore, the results, collected by the study interviewees, indicated an assessment of the extent to which creativity and innovation are applied from a philosophical-pragmatic perspective among female teachers of the Northern Mazar school District in Jordan. A discrepancy in the extent of teachers’ awareness of creativity and innovation practices. Teachers strongly believe in the importance of failure as an essential step towards achieving creativity, which reflects a deep awareness of the importance of trial and error in the educational process. However, teachers may not see the relationship between creativity and innovation and improving physical and psychological health as strongly as they see other aspects of creativity. They possess an awareness of creativity and innovation from a pragmatic philosophical perspective.

These results can be explained by the fact that female teachers have a positive perception of the importance of creativity and innovation in education, but there are areas that need to be strengthened, such as linking these concepts to physical and psychological health. These results

can be a guide for concerned parties to develop training and development strategies to improve understanding and practices related to creativity and innovation in the educational process.

Collectively, the study participants responded to the study questions while interviewed articulating that from a pragmatic standpoint, creativity, in my opinion, is the capacity to apply theoretical understanding to real-world situations and find creative solutions to problems. The capacity to create novel solutions to the issues faced and to connect theoretical knowledge to real-world situations is known as pragmatic creativity. One participant said: “It is, in my opinion, crucial. It supports students' ability to make connections between abstract ideas and real-world experiences, to think creatively about social problems and offer workable solutions”. Another participant said: “From a pragmatic standpoint, creativity is the student's capacity to use newly acquired knowledge in real-world situations and to come up with creative solutions to challenges, making learning relevant to his everyday existence”.

One of the interviewees responses was that creativity aids in the development of life skills in female students and gets them ready for the evolving job market. From a pragmatic standpoint, creativity facilitates the connection between theoretical knowledge and real-world application, increasing the realism and relevance of education to the demands of everyday life. She sees how important it is to incorporate creativity into Islamic education since it aligns with the principles of our authentic religion, which value originality, creativity, and critical thinking. From an Islamic standpoint, creativity is the capacity to come up with novel ideas and solutions for issues that advance society. With Islamic education, we aim to achieve this. As an Arabic language teacher at the beginning of my career, I find applying creativity from a pragmatic philosophical perspective in my classroom to be an interesting challenge.

One of the interviewees believes that applying creativity from a pragmatic perspective in teaching Arabic language is extremely important. It helps students connect linguistic knowledge to their daily lives and transform it into an effective tool for expressing themselves and solving problems. Another interviewee believes that applying creativity in physical education allows students to discover innovative solutions for various exercises and sports movements. From a pragmatic perspective, this creativity helps connect theoretical knowledge with practical reality, making sports more fun and challenging. Another interviewee believes that creativity is the heart of the educational process, especially in teaching English. She claimed that by encouraging students to think outside the box and apply what they have learned in innovative ways. They seem to learn English deeper and faster when incorporating elements of creativity into all my classroom activities.

Discussion and Conclusion

Female teachers value creativity and innovation in school, but they need to improve their links to physical and psychological health. These findings can help stakeholders build training and development programs to increase educational creativity and innovation. This study is consistent with the study of Soraty (2010), who linked pragmatic philosophy to the lives of students and sought to develop teaching methods and consider the student as the center of the educational process.

The results also indicated that there are differences between the Means of the study sample due to such study variables as academic qualification, years of experience, and age. These differences highlighted the influence of personal and professional factors on how teachers perceive the concept of creativity and innovation in education. The results may be interpreted based on demographic variables: Educational qualifications: Female teachers with higher educational qualifications may show higher levels of appreciation for creativity and innovation as advanced education often provides individuals with tools and knowledge that enable them to think critically and experimentally.

According to research conducted on the impact of higher education on creative thinking (Feldman, 2009), advanced education encourages innovation. According to the variable years of experience, it is possible that teachers with longer teaching experience showed higher levels of creativity and innovation awareness. This result is consistent with the result of Hargreaves & Fullan (2012), which indicated that teaching experience enhances the teacher's ability to apply new and innovative strategies. The variation in results between different age groups can show how generations influence the understanding of creativity. Older generations may be less open to new ideas than younger people, as Tushman & O'Reilly (1996) noted in their study of the influence of generations on innovation.

These results highlighted the importance of considering personal and professional variables when evaluating the application of creativity and innovation in education. Concerned authorities in the field of education should develop professional development strategies that take these variables into account to enhance creativity and innovation among female teachers.

The results also indicated that there were noticeable differences in the application of creativity and innovation based on some variables, due to the academic qualification variable, while statistically significant differences were found due to the years of experience. Regarding the absence of statistically significant differences according to the academic qualification variable, this result indicated that the level of academic qualification did not significantly affect teachers' creativity and innovation. This may indicate that all teachers, regardless of their qualifications, have a common understanding of creativity and innovation. Sawyer's study (2012) revealed that academic qualification is not the only factor determining creativity in education.

There are statistically significant differences according to the variable of years of experience: This indicates that years of experience have a noticeable impact on the extent to which teachers apply creativity and innovation, and that teachers with long experience may have better strategies or deeper knowledge about how to integrate creativity into education, as Darling Hammond confirmed. Darling-Hammond (2000) indicated that experienced teachers have a greater ability to deal with educational challenges and adopt innovative teaching methods.

The Scheffé test was used to determine the differences between the years of experience, which provides detailed insights into which categories of years of experience show significant differences. This method is suitable for determining the precise dimensions of the difference between the different groups (Hsu, 1996). The results also indicated that there were statistically significant differences between the arithmetic averages of the study sample's estimates of the extent to which creativity and innovation were applied from a philosophical and pragmatic perspective among the teachers of the Northern Mazar District according to the variable of age. This reflects a clear effect of age on how female teachers perceive the concept of creativity and innovation.

According to the age variable, there are statistically significant differences which indicates that there are tangible differences in how female teachers evaluate creativity and innovation practices based on their ages, and this may be attributed to differences in life experiences and exposure to modern educational methods, as older female teachers may have deeper educational experience. Nevertheless, they may be less open to new approaches than younger teachers, as different age groups hold different views on innovation in education (Ingelhart, 2008). The Scheffé test was used to determine the locations of differences between the arithmetic means of the age variable, which enables us to determine which age groups differ significantly from others. This method is effective for identifying subtle differences between multiple groups (Hsu, 1996).

It could be concluded that age is an important factor that affects teachers' understanding of creativity and innovation, which requires educational institutions to consider how to design training and professional development programs to reflect age differences among teachers. The results indicated that there is a difference in the extent to which creativity and innovation are applied from a philosophical and pragmatic perspective among the teachers of the Northern Mazar school District, as it was noted that the age group "less than 30 years" is superior to the two categories "30-40 years" and "over 40 years." This reflects the influence of age on understanding and applying the concepts of creativity and innovation. However, the "under 30" category is superior as younger teachers are likely to be more flexible and open to new ideas, which may make it easier for them to adopt innovative teaching methods, as young people are often more willing to try new strategies in teaching (Levine, 2005).

On the other hand, teachers in the age groups "30-40 years" and "over 40 years" may be more conservative in applying new methods, due to the accumulation of previous experiences that may affect their openness to changes, and they may have established teaching methods. This makes

it difficult for them to adopt new methods that require changes in ways of thinking (Tushman & O'Reilly, 1996). These results indicate the importance of supporting older teachers in adapting to modern teaching strategies, in addition to enhancing the role of younger teachers as role models in the field of creativity and innovation.

To conclude, the results revealed that the Means of the sample estimates regarding the extent of applying creativity and innovation from a pragmatic philosophical perspective among female teachers in the Northern Mazar District ranged between (3.13) and (3.99). Likewise, the findings revealed that there were no statistically significant differences in the Means of the study sample estimates due to the variable of educational qualifications. Nevertheless, there were statistically significant differences due to the variable of years of experience nonetheless there was a significant difference among female teachers regarding the variables of age and years of experience.

Based on the study results and findings, the researchers provide several recommendations. The most important of which was that the Ministry of Education ought to design some training programs for female teachers regarding as to how and why the implementations of creativity and innovation in teaching from a pragmatic philosophical perspective, especially for female teachers with limited experience would be of a noticeable significance. Additionally, the researchers suggest conducting further research studies regarding the topic of concern employing other research instruments and referring to different references.

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