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Level Of Creative Thinking Among Teachers Of Sport And Physical Education In Middle Schools

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Abstract:

This study aimed to identify the level of creative thinking among teachers of sport and physical education in middle schools, it's also aimed at detecting the differences in the level of critical thinking that can be caused by some variables (years of experience, obtained diploma), and for this purpose we used descriptive method On a sample composed of 52 teachers, and for data collection, we used scale of creative thinking, the data was analyzed using SPSS version 21, The results showed: 1-the level of creative thinking was least among teachers. 2-There is no significant difference between license and master Teachers in the level of creative thinking.3-There is no significant difference between teachers considering the obtained experience in the level of creative thinking.

Keywords: creative thinking; teachers; sport and physical education.

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1. INTRODUCTION:

Thinking is an important subject that researchers have given attention, it is an ability each individual needs to accomplish his daily missions even the simple ones and through the deep studies, a lot of types of thinking have appeared, one of it what we call "creative Thinking"; Creativity has been defined as the ability to make something from nothing it has been described as thinking of a common idea in an uncommon way (DiYanni, 2015, p. 37). Indicators of creative thinking skills introduced by Guilford consist of fluency (generating ideas during creative process), flexibility (generating a variety of ideas and categories), originality (uniqueness of ideas), and elaboration (detailed additions). (Sugiyanto & Masykuri, 2018, p. 1)

With no doubts what human kind have achieved until the moment was thanks to the ability of creativity, the huge diversity in every subject was born from creativity and if any field need to step up to a better level, the start point will be creative thinking, and that exactly what we will talk about in this study, the relation of creative thinking and our field to underline the needed information for more interesting results.

All countries aim to develop and improve methods and educational curricula to provide a learning environment, that allows learners to gain knowledge in affective, and creative way because teaching is a very specific and important operation and for the person who is teaching, so he must have qualifications and creative abilities specially with the huge technological progress, so the learners won't think in a creative way if the teacher lacks this ability, Saoudi and others (2021), Houari Brahim and Bergoug (2021) confirmed that teacher is considered to be one of important axis in the educational process considering the role he plays in preparing individuals and giving them the right formation in future, specially for the physical education teachers, because he works in a learning environment that acquires a qualified creative person to fulfill the needs of learners, and being able to adapt to all the learning situations to break the routine with new creative ideas while doing his job.

Adair believes that The importance of creative thinking today needs no emphasis. In profession or sphere of work it will be a competitive advantage and develop the ability to come up with new ideas. In the personal life, too, creative

thinking can lead into new paths of creative activity. It can enrich person's, though not always in the way you expect (Adair, 2009, p. 1). For us, creative thinking is needed for the physical education teachers to choose the activities and exercises and also :

- The quick adaptation with the Circumstances.
- In choosing the educational tools and using it in unusual ways.
- Finding solutions fast for the problems that he faces using a new ideas that haven't been used before.
- -The diversity in activities which makes the students in curiosity all time.

So the characteristic of creative thinkers is that they like to do things in novel and unusual ways / there are not afraid to take risks and try new ideas even though they might be wrong and appear foolish (King, 2003, pp. 2-3) and Munandar specified Creative thinking characteristics are:

- Fluency is the ability to produce many opinions or answer which are relevant to the fluency way of think.
- Flexibility is shown by similar opinions that can change the way or approach and the different ways of thinking.
- Originality is the ability to answer in an uncommon way, which is different from the others, and the answer given is different from most people.
- Elaboration is the ability to develop, increase and enrich an opinion carefully to become more interesting. (Waluya & Asikin, 2020, pp. 92-93)

Our main goal here is to explore the level of creative thinking among physical education teachers. There are many studies that have talked about this type of thinking as Tatag Yuli Eko Siswono (2011) Aimed to describe the characteristic of the level of student's creative thinking in mathematics. The task-based interview was conducted to collect data from the 8 th grade students of junior secondary school, The result of this research pointed out the five levels of creative thinking which are from level 0 to level 4 and have a different characteristic. This difference is based on fluency, flexibility, and novelty in mathematical problem.

Marleny Leasa and others (2021), tried to diagnose students' creative thinking skills for four components including fluency, flexibility, originality, and elaboration on students in the islands, they found that students' creative thinking skills were still very low and thus require comprehensive learning improvement to improve students' creative thinking skills, We can mention also the study of Rusdi Hasan and others(2019) who also tried to explore and compare the student critical and creative thinking skills as well as student activeness in the inquiry and cooperative models combined with LS-based learning practice, The result showed that LS-inquiry learning improved the student critical and creative thinking skills that were significantly higher than LS-cooperative learning, at last the study of Kürşat Yusuf (2017), The purpose of his study was to compare the multiple intelligences and sport performance of male and female taekwondo students of Turkish universities.

Although the importance of previous studies and the fact that it focus on topics with Direct or indirect link to the subject of the study except that the current study differs from these studies in the knowledge.

We absolutly believe the importance of this study appears in The lack of the local studies specially in arabic that touched in the research creative thinking. so we asked three questions:

- What is the level of critical thinking among teachers?
- Is there any significant difference between teachers considering the obtained diploma in the level of creative thinking?
- Is there any significant difference between teachers considering years of experience in the level of creative thinking?

1.1. Objectives of the study:

- To know the level of creative thinking among teachers.
- To know if there is any significant difference regarding the obtained diploma teachers.

- To know if there is any significant difference among teachers considering years of experience.

1.2. Hypothesis of the study:

H01: -The level of creative thinking among HSE employees is high.

H02: -There is significant difference between teachers regarding the obtained diploma.

H03: -There is significant difference between teachers considering years of experience.

2. Method and Materials

2.1.Participants

The participants of the study consist of 52 teachers of sport and physical education in middle schools, from BATNA city, who worked during 2020-2021 academic year, they were randomly selected from the total population.

2.2.Materials

We did revised the literature reviews and previous studies that are related to critical thinking then we used a scale that business center (1989) for Princeton research and creative created, and have been translated and modified by the researcher Khalil Nacer (2014), it contains 48 items and the alternatives were according to LIKERT 's scale ,always (5),often(4), sometimes (3),rarely (2),never (1),where the scale degree is between 48-240.

Reliability and validity

Constrict Validity:

To achieve the validity of constrict for the scale. the Coefficient of correlation was calculated between each item and total score, and the results are in table 1.

Table 1. between each item and total score

Items	Correlation de Pearson	Items	Correlation de Pearson	Items	Correlation de Pearson
1	,825**	17	,916**	33	,875**
2	,771**	18	,924**	34	,774**
3	,731**	19	,851**	35	,897**
4	,613*	20	,767**	36	,774**
5	,667*	21	,844**	37	,909**
6	,785**	22	,704**	38	,593*
7	,825**	23	,825**	39	,578*
8	,776**	24	,569*	40	,774**
9	,700*	25	,650*	41	,710*
10	,705**	26	,877**	42	,968**
11	,809**	27	,814**	43	,820**
12	,724**	28	,938**	44	,631*
13	,693**	29	,873**	45	,759**
14	,806**	30	,820**	46	,754**
15	,754**	31	,740**	47	,829**
16	,873**	32	,902**	48	,725*

Source :author,2021

The table shows that the correlation coefficients of each item and the total scores are statistically significant at (0.01) and (0.05), indicating a high degree of consistency of the scale clauses and that they measure where they claim to be measuring.

Cronbach's Alpha reliability:

To achieve the reliability for the scale. the Coefficient of Cronbach's Alpha was calculated, and the results are in table2.

Table.2: Cronbach's Alpha reliability for scale

	Number of items	Cronbach's Alpha
Total score	1-48	,985

Source: author,2021

The reliability index for the whole questionnaire was 0.985. This means that the tool is characterized by high stability.

2.3. Design and Procedure

After viewing literature background, we chose the scale, we made sure of its clarity by passing it to judges for evaluation, it was approved to be given as a questionnaire for an exploratory sample of 13 teachers to calculate the reliability and validity, we kept the number of items as it is 48 items, to be distributed on a sample of 52 teacher.

2.4. Statistical Analysis

The data were analyzed using the Statistical Package for the Social Sciences (SPSS) for Windows (version 21), The data were analysed by employing Mean, Standard Deviation, T-test.

3. Results

- What is the level of multiple intelligences among teachers?

To determine the degree to which teachers have creative thinking, Mean Std deviation, iterations and percentages of the total score for the scale were calculated.

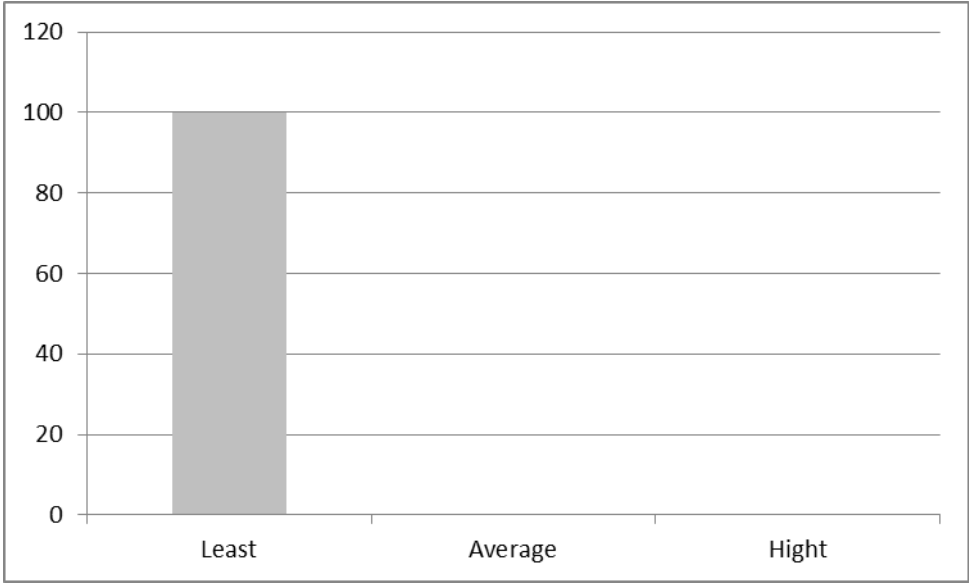
Table 3. Means and Standard Deviations of creative thinking

	N	Percentage	Mean	Std deviation
Least	52	100	91,5000	13,60868
Average	0	0		
High	0	0		
Total	52	100		

Source: author, 2021

From the table we see that the teachers have average level of creative thinking with 0%, and the percentage of low level was 100% , as for the high level is 0% .

Figure 1: histogram showed level of creative thinking



Source: author, 2021

- Is there any significant differences between teachers considering the obtained diploma in the level of creative thinking?

So to know if there is any significant difference we use independent-samples T test as it is being cleared in the table.

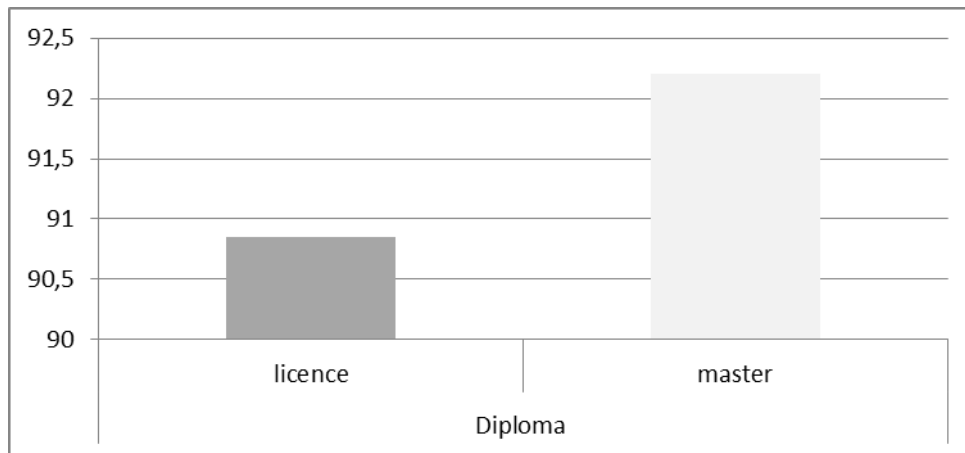
Table 4. Difference in creative thinking between groups (diploma)

	Diploma	N	Mean	Std deviation	T	Sig	Df
total Score	License	27	90,8519	7,44055	-,354	,725	50
	Master	25	92,2000	18,23687			

Source: author,2021

From the table we notice that there is no significant difference between groups in the total scores for licence (M=90,8519, SD=7,44055) and master (M=92,2000, SD=18,23687); $t(50) = 0,354$, $p=0,725 > 0.05$.

Figure 2. histogram showed Difference in critical thinking between groups (diploma)



Source:author,2021

- **Is there any significant difference between teachers considering the obtained experience in the level of creative thinking?**

So to know if there is any significant difference we use independent-samples T test as it is being cleared in the table.

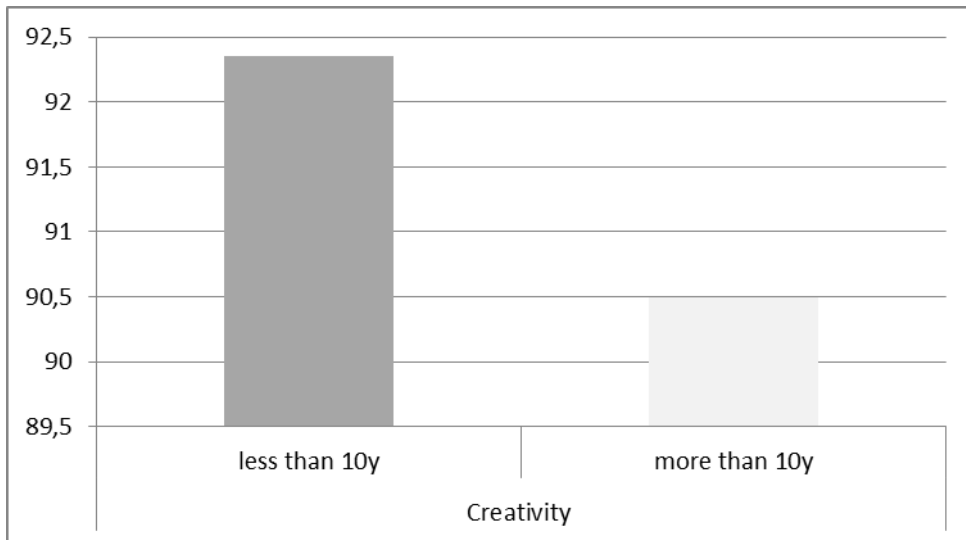
Table 5. Difference in creative thinking within the two groups (years of experience)

	Experienc e	N	mean	Std deviatio n	T	Sig	Df
total Score	Less than 10y	28	92,35 71	17,3423 4	,487	,628	50
	More than 10y	25	90,50 00	7,46004			

Source:author,2021

From the table we notice that there is no significant difference between groups in the total scores for licence ($M=92,3571$, $SD=17,34234$) and master ($M=90,5000$, $SD=7,46004$); $t(50)=0,487$, $p=0,628 > 0.05$.

Figure 3. histogram showed Difference in creative thinking between groups (years of experience)



Source: author,2021

4. Discussion

Through the table 3 we find that the level of all the sample's individual is low with 100% and that may be due to the fact that they didn't get the formation that allows them to have this type of thinking, Also the competent authorities did not take creative thinking as one of the standards of selecting and accepting employees teaching physical education.

It may be also due to the conditions and the provided means that do not allow them to improve and develop creative thinking, and at last we can also say one of the reasons that may go against is courier size of only 2 hours a week, and it is sort of little comparing to the important of this subject.

As we see from table 4 there is no significant difference between the obtained diploma (degree) master or license, and this can be connected to identical curricula followed in master and license formation, adding to it takes

two years to obtain master degree and this period is not enough to cause differences between the two groups, Therefore universities need to develop creative-thinking skills among their students. (Puccio & Amanda , 2020, p. 32).

So from the table 5 we see that there is no significant difference for the total score after applying the independent-samples T test for the teachers who worked less or more than 10 years in creative thinking, and that might be due to the fact that the educational system haven't changed neither considering the formation of teachers nor in the recruitment method, So the education system that is being used is the same old traditional system with only few changements that touch concepts and approaches, And it does not give any interest to the character of the teacher nor his abilities specially with the huge technological progress.

- Conclusion

Creative thinking is an important ability that must be provided in any type of individual in general, and specifically for physical education teachers due to what their job needs, as stepping up so as unleashing ideas and giving space for creativity and not just traditional limited way of thinking, here we give some recommendations:

- Taking in consider the level of creative thinking in the process of recruitment.
- Giving attention in the next studies to creative thinking based on the current study.
- Incorporate this type of thinking in the physical and sport classes.
- We recommend studying the topic of creative thinking more in the future in the sport.

References

1. Adair, J. (2009). *The Art of Creative Thinking: How to Be Innovative and Develop Great Ideas*. London: Kogan Page.
2. Brahim, H., & bergoug, a. (2021). Job commitment and its relationship to psychological stress among teachers of physical education and sports, a field study of some averages in the state of Djelfa. *Sport system journal*, 8(3), 229-245.
3. DiYanni, R. (2015). *Critical and Creative Thinking: A Brief Guide for Teachers*. UK: John Wiley & Sons.
4. Hasan, R., Marheny , L., Sri , U., & Anizar , A. (2019, March). The activeness, critical, and creative thinking skills of students in the Lesson Study-based inquiry and cooperative learning. *Jurnal Pendidikan Biologi Indonesia*, 5(1), 77-84.
5. King, D. L. (2003). *Test Your Creative Thinking*. Great Britain: Kogan Page Ltd.
6. Leasa, M., Batlolona, J. R., & Melvie, T. (2021). Elementary students' creative thinking skills in science in the Maluku Islands, Indonesia. *Creativity Studies*, 14(1), pp. 74-89.
7. Puccio, G. J., & Amanda , L. (2020). The Case for Creativity in Higher Education:Preparing Students for Life and Work in the21st Century. 8, pp. 30-47.
8. saoudi, d., azedine mahdi , & saoudi. (2021). The role of Practical Education in formation theTeachers of physical education and sports. *Sport system journal*, 8(3), 182-195.
9. Siswono, T. Y. (2011, July). Level of student's creative thinking in classroom mathematics Tatag Yuli Eko Siswono Department of Mathematics. *Educational Research and Review*, 6(7), 548-553.
10. Sugiyanto, F. N., & Masykuri, M. (2018). Analysis of senior high school students' creative thinking skills profile in Klaten regency. International Conference on Science Education (ICoSEd) (pp. 1-5). Bristol: IOP Conf Journal of Physics.
11. Waluya, A. S., & Asikin, M. (2020). THE IMPORTANT OF CREATIVE THINKING ABILITY IN ELEMENTARY SCHOOL STUDENTS FOR

- 4.0 ERA. International Journal on Education, Management and Innovation (IJEMI), 1(1), 91-98.
12. Yusuf, K. (2017). Comparison of multiple intelligence and exercise performance of male and female university students in taekwondo of turkey. *European Journal of Physical Education and Sport Science*, 3(8), 51-62.