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Distance Teaching in Higher Education: The Impact of Online Teaching of an English Content-Based Course on Motivation and Learning Quality

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Abstract:

In Algeria, higher education has gone online under the 19-Covid pandemic since 2019. However, after a five-year experience with remote digital learning student outcomes are far below standards of achievement. This article presents the results of a quasi-experimental study conducted in 2023 after five academic years of experience with distance teaching. It compares the effects of both onsite and online teaching of a content-based English course (Cognitive Psychology) on students' achievement and motivation. The study involved 249 undergraduate third-year English students and three teachers of Cognitive Psychology from the Department of English, Algiers 2 University. A mixed method was used in the study, the first consists of a post-test design that compares two semestrial exams' scores through a t-test (SPSS 27), and the second is a questionnaire administered to teachers and students. The findings indicate that while most students view online teaching favorably they and most of the teachers recognize that conventional classroom learning is more likely to trigger their motivation in the process of learning/teaching and more effective in enhancing learning quality than digital distance learning; however, the paired samples t-test revealed no significant difference between the two teaching modes in terms of students' achievement with a strong correlation between the scores in the two semesters' exams and a negligible size effect. Besides, results indicate a low achievement of students following the two instructional formats which informs that students took no advantage of the flexibility they were offered in a hybrid environment. The findings imply that the teaching mode cannot impact

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motivation and learning quality as long as students lack the motivation to learn synchronically online or physically in class.

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1. Introduction

Remote teaching was introduced forcibly in all the Algerian higher education institutions under the pandemic circumstances. At the beginning of its introduction, many issues such as technical problems and lack of digital skills slowed down the shift to the online mode but today it is a ubiquitous phenomenon that teachers and students use technological devices in their day-to-day activities as they have become more familiar with distance teaching/learning and more specifically with the technical resources of the Moodle Learning Management System. In fact, all other sectors in higher education have gone online since 2019; we can mention social services, academic management, and professional careers.

In 2023 distance teaching was no longer a new phenomenon and the question that was raised by the researcher was how far the expectations of digital teaching were met after some years. It was time to question the quality of online teaching after everyone got well acquainted with this mode. A unique and very interesting opportunity and situation happened in the Department of English where an English content-based course, namely Cognitive Psychology, was decided to be taught online in the second semester of the academic year 2023 after it was taught onsite during the first semester, all keeping the exam online in the two circumstances. This situation was ideal to compare the effects of the two teaching modes on the same cohorts' motivation and achievement mainly in the context of teaching a content-based course that imparts new and specialized knowledge. This situation helped keep most of the research variables such as population, setting, and evaluation mode constant, a condition that is required in empirical research. Thus, our research is significant in that it uses an objective measurement of student learning outcomes in the new digital environment and can contribute with insightful knowledge about the ways students and teachers can take advantage of distance teaching to enhance students' assimilation of information.

2. Theoretical Background

The five last years of the pandemic have seen an outbreak of technology use for distance learning in higher education. Undoubtedly, the use of the new technologies in distance teaching has many advantages that no one can deny. Flexibility is the most important advantage of e-learning as it allows learners to

stay home and learn (Radovic-Markovic, 2010; Dhawan, 2020). Such flexibility can also allow students to follow their education asynchronously at any time they want because the learning content is available on learning platforms such as Moodle and even video conferences and teachers' audio lectures can be recorded to be played back later by students (Dhawan, ibid).

However, there are still beliefs that e-learning is not as effective as traditional teaching which is mainly due to the lack of physical presence of students and teachers (Richardson & Swan, 2023). Physical class learning has the advantage of guaranteeing the teacher's availability, real interaction, instant feedback, and other elements that make the class more dynamic. More to the point is the fact that conventional teaching prevents students from procrastinating learning mainly if distant learning is asynchronous. Today and more than any time before, there has been an outbreak of research on distance learning to identify what goes right and what goes wrong to make it a successful and enjoyable learning experience. To do so, the research on distance education has shifted from a focus on technology itself to its effects on learners (Spiceland & Hawkins, 2002).

A great deal of research focused on some pedagogical and psychological aspects so as to understand if distance teaching is effective/ineffective and to know about the factors that increase or decrease its efficacy. Among the investigated factors are attitudes towards e-learning, the learning outcomes in the two environments (on- and off-campus), and interaction and motivation. These areas of research are of paramount interest to our study as they frame both our theoretical and empirical investigations.

Much research dealing with attitudes toward e-learning and internet-based learning outcomes showed positive effects (Burac, Fernandez, Cruz & Cruz, 2019; Radovic-Markovic, 2010). Radovic (ibid) reported that students at more than 90% in USA are satisfied with distance teaching and knowledge acquisition dispensed by virtual faculties. The same research indicates also that three quarters of leaders in state faculties and universities trust internet-based learning quality to be the same as face-to-face learning. These results are important mainly that American faculties have a long tradition in distance learning and are well advanced in this field. The positive effects of online learning were also found in studies carried out in developing countries where online learning is at its first stages. It has been found that online learning increased both students' good perceptions of online learning as well as learning quality (Jiang, 1998; Ward & Newlands, 1998; Wang, 2004; Shishakly 2016; Dookhan, 2018; Burac, Fernandez, Cruz & Cruz, 2019).

However, other studies showed low or equal to the in-class learning effect of online learning. For example, findings of a study carried out by Ifijeh, Osinulu, Esse, Adewole-Odeshi & Fagbohun (2015) revealed that there was no clear relationship between the use of e-learning tools and academic performance. Similarly, Wegner, Holloway & Carton (1999) compared the effects of distance learning and traditional in-class models on student achievement and found no significant difference between the test scores of the two groups who received either of the two modes of instruction. Other studies found that online learning is not as effective as traditional classroom learning due to lack of physical presence, real interaction, feeling of isolation from peers (Ward & Newlands, 1998; Bullen, 1998), teachers' lack of technical skills and poor communication between teachers and students (Comman, Tiru, Mesesan-Shmitz, Stanciu & Bularca, 2020), in addition to students' lack of motivation and delayed feedback (Yusuf & Al-Banawi, 2013).

Among all of the above-mentioned hindrances to successful distance learning, online interaction remains the most explored feature. Richardson & Swan (2003) explored the role of social presence in online learning environments and found a correlation between social presence online and perceived learning and this is in vein with Slavin's (1983) sociolinguistic theory which stipulates that learning is a cooperative process in which learners actively construct knowledge through interacting with each other. Richardson & Swan (2003, 81) argued that a teaching model "should not only present the information and materials to students but also incorporate the social aspects of learning in both the design and instruction of online courses". Lack of social presence online is what might lead learners to prefer traditional classroom because students believe that they assimilate more knowledge in physical class even though they perceive online learning positively (Lockner, Wieser, Waldboth & Mischo-Kelling, 2016; Alsaaty, Carter, Abrahams & Alshameri, 2016; Galy, Downey & Johnson, 2011).

In fact, it has been found that even when studying online, learners are keener on the asynchronous interaction than the synchronous one. In a study where they interviewed instructors and learners about the preferred type of online interaction, Soo & Bonk (1998) found a predominant preference for the asynchronous mode for all types of interaction. More to the point, Ifijeh, Osinulu, Esse, Adewole-

Odeshi & Fagbohun (2015) reported that students at 61.8% indicated that they used the e-learning tools mostly for downloading lecture notes. These findings suggest then that there is reluctance to engage in a digital synchronous interaction knowing that engagement is the most important factor that contributes to successful online learning as shown in many studies (Mainka & Benzies, 2006; Mohamed, 2012). Studies dealing with teachers' and learners' perceptions of the use of technology in learning/teaching have shown a strong association between the positive perception of the use of technology and the perceived learning. Many researchers adopted Davis' Technology Acceptance Model (1989) in their studies to gain insights into the relationship between students' perceptions of e-learning, students' decisions to take an online or campus-based course, and learning outcomes. Galy et al (ibid), for example, have concluded that students' positive perception of the usefulness of technology helped them engage in an online course and improve course grades.

There are recommendations to motivate and encourage learners to engage in online learning by providing for example positive feedback on their online activities to develop more positive perceptions of online learning which will translate into high learning outcomes (Kock, Vervile & Garza, 2007; Shroff & Vogel, 2009, Tham & Werner, 2005). Tham & Werner (2005) argued that teachers should capture students' attention to using technology online to ensure the effectiveness of online learning. Shroff & Vogel (2009) added that studying systematically the intrinsic motivation of learners can help in designing appropriate and effective technology-supported learning environments that cater to individual differences.

In sum, research on distance teaching today focuses very much on how to make learners use technology successfully in their learning by first measuring their achievement in both internet-based and in-class courses. This type of research very often focuses on perception, motivation, and interaction which are believed to be catalysts in the success of remote learning. Most studies found no significant difference between the internet-based and traditional in-class models of course delivery; besides, research indicators show positive attitudes towards online learning for its various advantages such as accessibility and flexibility but recommendations are made to motivate students to engage more online and be more interactive.

3. Operational Terms

In this article, we use terms like distant, online, and virtual teaching to refer to the type of instruction that is delivered remotely through using technological devices synchronically or asynchronically which may encompass few face-to-face meetings. On the opposite, the instruction given regularly within the physical class is qualified as traditional, conventional, onsite, or real even if some materials are provided online for asynchronous learning. In other terms, conventional teaching is a type of low-impact blend that is more focused on the traditional mode of teaching. We do not call it a blend in this research because the materials could be as well handed in to students in class but it is more practical to send them online. Similarly, distance teaching is also a type of blend format with the difference that it is more based on the off-campus instructional mode.

4. Research Methodology

4.1 Setting

The research took place in the Department of English, Algiers 2 University in 2023. Four classes in Cognitive Psychology were used to carry out the study. These classes were in charge of the researcher. The course was taught onsite during the first semester with delivering supporting materials online, but in the second semester, it went online with a once-a-month face-to-face meeting. This was perceived by the researcher as a good opportunity to investigate the effects of the two different modes of teaching on learning quality and students' motivation. The onsite course in the first semester consisted of lecturing and doing activities in physical class; all the used pedagogical materials including the lectures were regularly posted on the platform Moodle. The online course was an alternation between videoconferences using Google Meet for lecturing and Chat sessions via the university Moodle Platform to correct activities but in both cases, handouts of the lectures were posted on the university teaching platform of Moodle. In addition, one onsite session per month followed the online sessions. At the end of each semester, an official online exam was administered to students. The two exam scores were used as a database for statistical analysis in this study. The students' and teachers' answers to questionnaires were also collected online via Google Forms.

4.2 Population

The sample used in this study consists of 249 third-year license students and three teachers of Cognitive Psychology teaching at the same level (third-year license). The sampling was purposive because the population was at hand since the researcher is the teacher of the selected classes and the three teachers were the only ones, including the researcher, who were teaching the subject of cognitive Psychology in the department. All these teachers in charge of this module hold a doctorate in Applied Linguistics and Didactics.

4.3 Research Questions and Hypotheses

This study addresses two main research questions as follows:

1. Does distance teaching motivate students and teachers more than the traditional classroom environment?
2. Is there any difference between online and traditional instructions of a content-based course in terms of learning achievement?

The study sets two hypotheses as follows:

1. The Null Hypothesis

We hypothesize that the two teaching modes, online or onsite, make no difference in terms of learning achievement and motivation.

2. The Alternative Hypothesis

The alternative hypothesis is that either of the two modes (online or onsite) can have more impact on motivation and learning outcomes than the other.

4.4 Research Design

The study used a mixed-methods design that mixes quantitative and qualitative data collection tools. The quantitative data collection tool consists of a post-test design that compares scores obtained on two semestrial exams in Cognitive Psychology. A paired-samples t-test of the last and updated version of SPSS was conducted to analyze data statistically. The researcher decided to use the scores

of official exams to ensure the high commitment of students in providing answers. The qualitative instrument was a questionnaire that addressed motivation and quality of teaching/learning; it was handed to both teachers and students via Google Forms. The two data collection tools are described in what follows:

4.4.1 Post-Test Design

The course 'Cognitive Psychology' is a content-based course based on teaching important knowledge about the mental processes of the human mind. In the first semester four topics were covered: *Schools of thought, Research Methods, Memory, and Attention*; and in the second semester four other ones were added: *Perception, Problem Solving, Insightful Learning, and Decision making*. The program of the first semester was taught in physical class once a week for one hour and a half and the program of the second semester was taught online following the same schedule. After each semester, an online exam was administered to students for one hour and a half. The researcher used the same exam format in both semesters to ensure consistency. The exam format included a 10-item multiple choice questioning (MCQ) and a paragraph writing.

The scoring of each activity was counted out of 10 points making the total grade out of 20 points. The scoring scheme of the written production was very detailed to achieve an objective scoring as follows: 2 points for the topic sentence, 2 points for explaining concepts, 3 points for key ideas, and 3 points for language and mechanics. Plagiarism software was used to eliminate plagiarized responses from the internet. Students were also warned that any plagiarism or similar answers in the group would sanction their grades.

The scores obtained on both exams were compared with the use of a paired samples t-test to identify any significant difference in scores after using two different instructional modes. As the statistical significance is seen as insufficient to describe data in statistical studies, both correlation coefficient and Cohen d effect size were also reported to have more accurate and meaningful knowledge about the strength of the association between the variables and the size of the effect of one variable on the other.

4.4.2 The Questionnaires

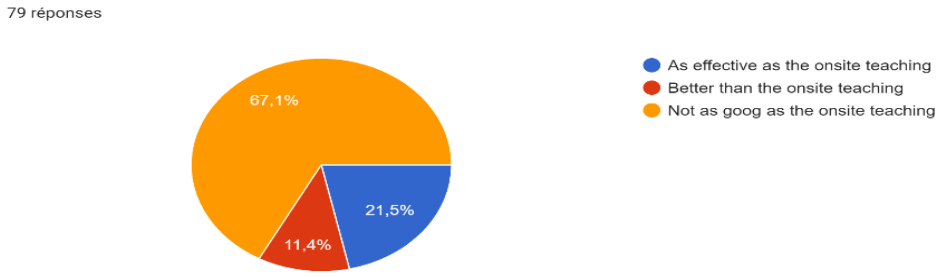
Google Form questionnaire format was used for the sake of making answer collection easy and for its practicality in analyzing data automatically. The students' questionnaire consists of 8 items, 7 multiple choice question items, and 1 open-ended question. The teachers' questionnaire includes 10 items, 9 multiple choice question items, and 1 open-ended question. The responses to MCQs were statistically described and the open-ended questions were content analyzed. Both questionnaires bear on the same content which concerns perceptions about online teaching, motivation, and quality of learning/teaching.

5. Results

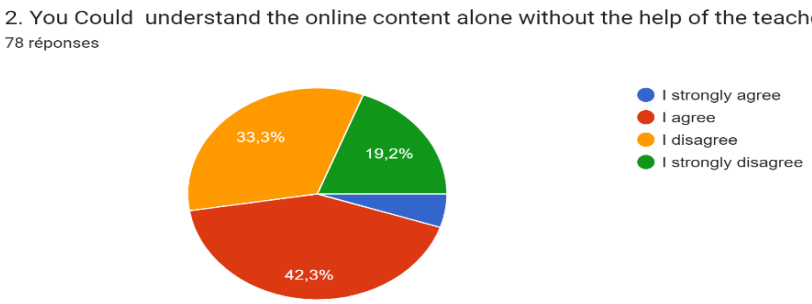
In this section, results obtained from students' and teachers' questionnaires and the paired-samples t-test of the exam scores are presented and analyzed.

5.1 Data Obtained from Students' Questionnaires

1: What do you think of the online teaching of Cognitive Psychology?

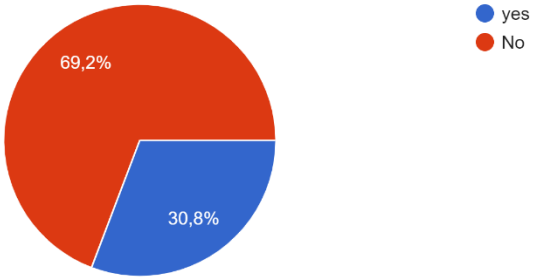


2. You Could understand the online content alone without the help of the teacher?



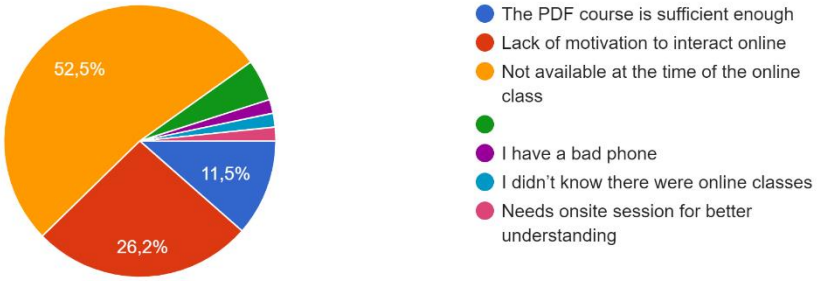
3. Did you participate in the online interactive classes?

78 réponses



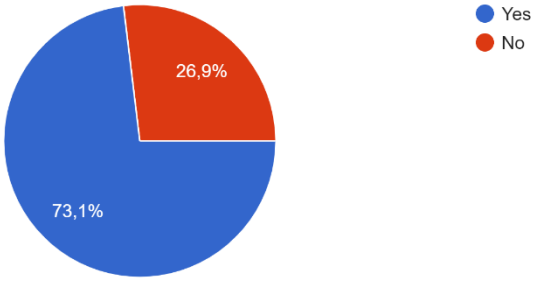
4. If no, give the most important reason for missing online classes.

61 réponses



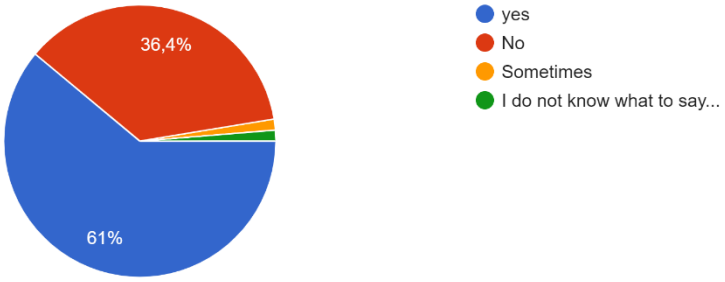
5. Are you more motivated to participate in the onsite class than in the online one?

78 réponses



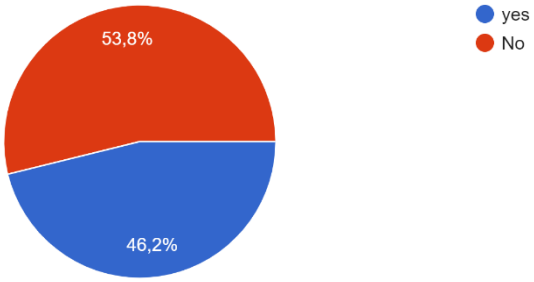
6. Did you find any difference in your performance on the exams whether the course was delivered face-to-face or on-line?

77 réponses



7. Do you suggest that this course remains online?

78 réponses



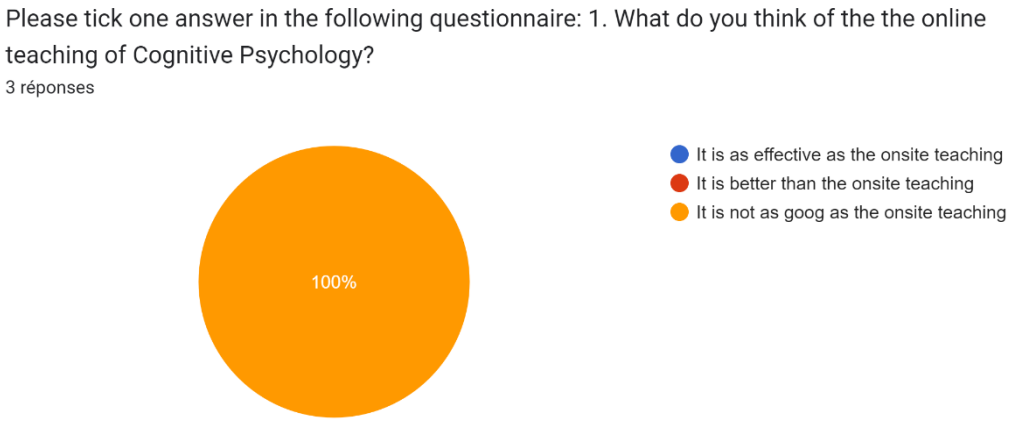
8. What do you recommend for the effective online teaching of this course?

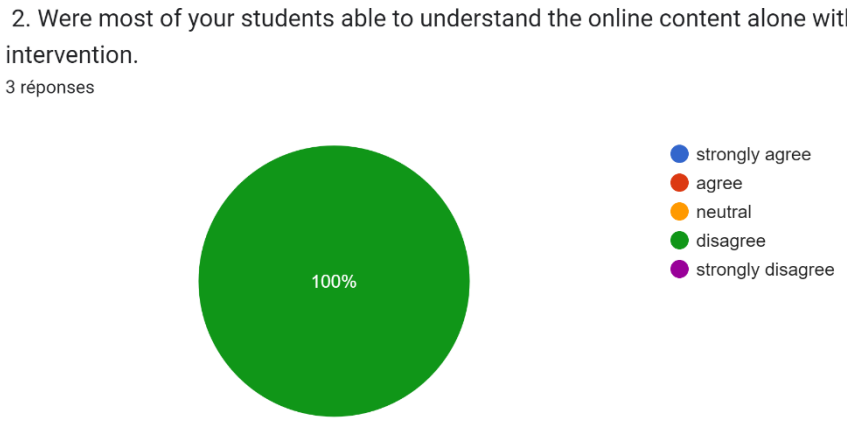
Categories of responses	Percentage
1. More interaction with the teacher via videoconferences than merely sending PDF's.	28%
2. The course shouldn't be online	24%
3. Rewarding students who participate online	22%
4. Consolidating learning with more activities and supporting materials like videos and manuals.	22%
5. No suggestion	12%

Summary of Students' Questionnaire Results

The above results show that the majority of students (67%) don't consider online teaching as effective as traditional teaching and that the majority of students (69%) do not attend the online sessions because of their unavailability at the time of the online class (52%) or because of lack of motivation (26%) as a second main reason. In fact, the majority of students (73%) are more motivated to interact in a real class and the majority (61%) also find that they perform better on the exams when they are instructed in a real class. However, the majority (53%) see no inconvenience in keeping the subject online. The two main recommendations for the online course are increasing the number of videoconferences (28%) and the extensive use of activities and supporting materials such as videos (24%).

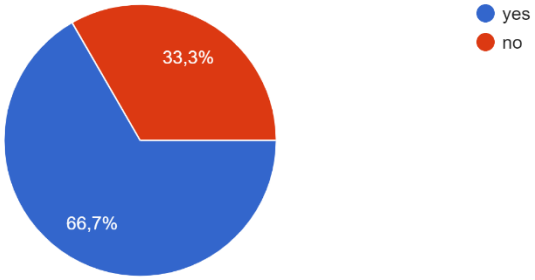
5.2 Data Obtained from Teachers' Questionnaires





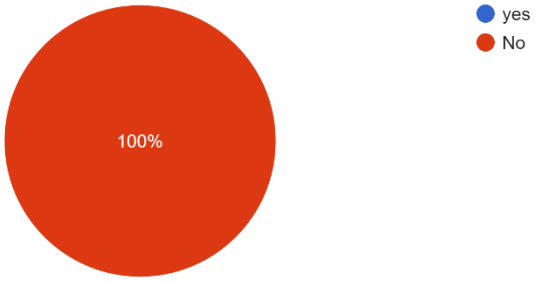
3. Did you use online interactive activities when the course was delivered online?

3 réponses



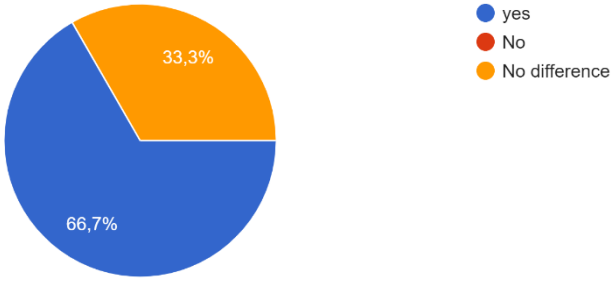
4. Did many students participate in the online interactive classes? (in case they were provided)

3 réponses



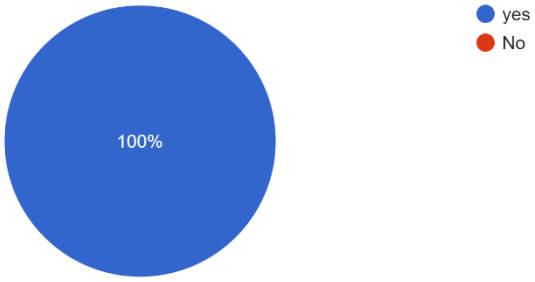
5. Are you more motivated to teach in the onsite class than in the online one?

3 réponses



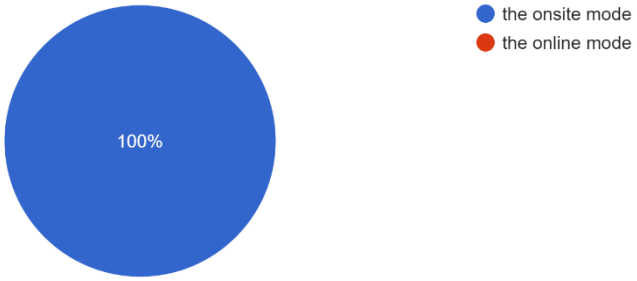
6. Did you find any difference in your students' performance on the two semestrial exams whether the course was delivered face-to-face or on-line?

3 réponses



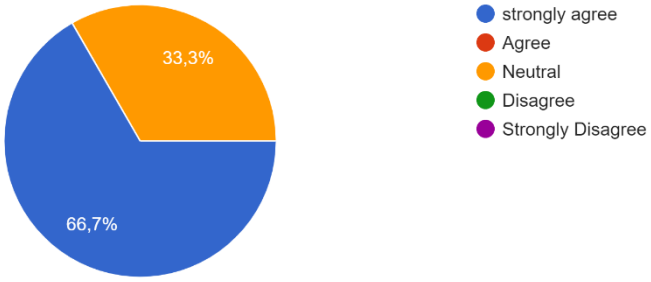
7. If the answer to the previous question is 'yes' say which instructional mode yielded better results.

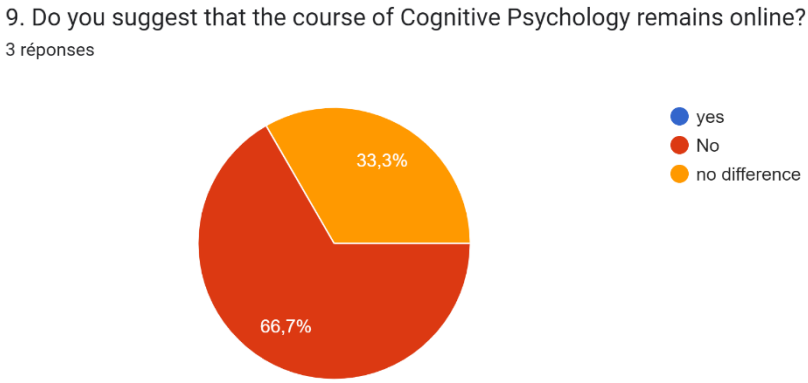
3 réponses



8. Do you think that the mode of instruction really impacts learning outcomes ?

3 réponses





10. What do you recommend for the effective online teaching of this course?

Categories of responses	Percentage
1. More online interaction and engaging activities	66%
2. Consolidating online learning with onsite sessions	34%

Summary of Teachers' Questionnaire Results

When it comes to data obtained from teachers' questionnaires, the results indicate that all of the teachers (100%) find that onsite teaching is more effective than online instruction and 66% of them see that students don't understand the content when delivered online without the teachers' intervention. All of the teachers (100%) affirm that not many students attend virtual classes and that 60% of them (teachers) are more motivated to teach in a real class, but for 33% of them motivation is not influenced by the mode of instruction. However, when it comes to students' performance on the exams all teachers observed that the performance is better after instructing students in the real class. 66% of the teachers believe that the mode of instruction has an impact on learning outcomes while only 33% are neutral to this idea. The teachers who consider that the mode of instruction impacts learning recommend that the course be taught onsite and the one who finds no relationship between the mode of instruction and learning outcomes sees no difference between the two modes of instruction. The teachers' recommendations for the online course consist of increasing interaction via videoconferences, using more engaging activities, and alternating between virtual and real classes.

5.3 Results of Paired Samples T-Test

A last version of SPSS, namely SPSS 27, was used to run a t-test of paired samples to compare the mean scores of two semestrial exams with the purpose of rejecting or holding the null hypothesis. The statistical measures that are reported are: correlation coefficient, significance difference, and effect size. The abbreviation 'Sem' in the tables refers to 'semester'.

		Mean	N	Std Deviation	Std Error Mean
Pair 1	sem1	**9,84**	**249**	1,569	,099
	sem2	**9,77**	**249**	1,601	,101

Table 1: Paired Samples Statistics

		N	Correlation	Sig.
Pair 1	sem1 & sem2	249	**,140**	,028

Table 2 : Paired Samples Correlations

		Paired differences					t	df	Sig. (bilateral)
		Mean	Std Deviation	Std Error Mean	Confidence Interval of the difference at 95 % Lower	Upper			
Pair 1	sem1 - sem2	,072	2,080	,132	-,187	,332	,548	248	**,584**

Table 3 : Paired Samples Test

				95% Confidence Interval	
		Standardisation[a]	Points Estimates	Lower	Upper
Pair 1 sem1-Sem2	Cohen d	2,080	,035	-,090	,159
	Hedges' correction	2,083	,035	-,089	,159

Table 4: Paired Samples Effect Sizes

Interpretation:

1. **Statistical Correlation**: The statistics in Table 2 show that the mean semester 1 scores and the mean semester 2 scores positively correlate (The correlation coefficient of **0.14** is greater than zero). This indicates a strong association between the mean scores of the two-semester exams. Practically, this means that students obtained around the same grades whether taught in class or online.
2. **Statistical Significance**: The statistics in Table 2 show that the difference between the mean scores in the two exams is not statistically significant (**0,58** is greater than the p-value of 0.05**).** Practically, this means that going online for the teaching of a content-based course has no effect on increasing or decreasing the students' exam scores.
3. **Size-Effect**: The size-effect reported in Table 3 indicates that the size effect is very small (**0.035**) much smaller than the Cohen d value of small size-effect that is 0.2. This shows that the results are not due to chance but reflect the reality. This means that the type of online teaching presented in this study would just have the same impact on students' learning outcomes as face-to-face teaching would have.

6. Discussion

The findings of this study support the null hypothesis which is that the mode of instruction makes no difference in terms of impact on motivation and learning

outcomes. This discussion will attempt then to explain and clarify this main finding in light of other results obtained in this study and research from the literature. First, this study has shown that while students perceive positively online learning, they also believe that they assimilate better and are more motivated in the physical class. In fact, the youths who are avid users of technology seem not to be motivated to learn distantly as the majority of the participants among students (73%) reported in the questionnaire. The majority don't believe in the effectiveness of online teaching and miss virtual classes mainly for lack of motivation to interact synchronically online. The teachers also recognize that conventional teaching is more motivating for them and more effective for students learning, and they also find that most students are not motivated to have online classes. But at the same time, most students (53%) don't reject the course being kept online. These findings are in vein with the results of other studies (Lockner, 2016, Galy et al, 2011) that showed positive perceptions of online learning but at the same time indicated that the physical class has a better effect on learning outcomes and motivation from the point of view of students.

Second, though the majority of students admit that the physical class benefits them more than online learning, the study hasn't found that the physical presence in real class made a difference insofar as achievement is concerned. The exam grades obtained after onsite and online instructions highly correlate and the difference is negligible; thus, claiming that conventional teaching is more effective than the distance one due to the physical presence and real interaction (as claimed by Richardson et al, 2023) doesn't hold. So our results are per those obtained by Wegner (1999) and Ifijeh (2015) who also found no correlation between the mode of teaching (online or face-to-face) and academic achievement.

Third, it is worth noting that in this study students' achievement was low in both real and virtual environments (Sem 1, Mean=9.84 & Sem 1, Mean=9.77) which seems to indicate that there are other factors than the nature of the environment that affect learning and probably, insofar as the online environment is concerned, the intrinsic motivation to hook students online can be one of them. This is suggested by some students who claim for more synchronous means of content delivery like videoconferences and expect more efforts to be invested on the part of teachers to boost and motivate them to engage in distant learning, through for example giving them rewards for their online participation. Moreover, regular attendance whether online or onsite could also be one factor

that is tightly linked with successful learning, and unfortunately students rejoice a high degree of flexibility and are not penalized for their lack of assiduity due to the regulation which doesn't allow for undertaking measures against absenteeism and this has been applied since the outbreak of Corona Virus pandemic and still goes on. Another factor that might have contributed to the low achievement of students is their reliance on asynchronous learning via the documents and videos provided via the university teaching platform Moodle. The asynchronous type of interaction was found to be the most preferred one in online learning in a study by Soo et al (1998). In the same vein, Ifijeh (2015) found that 61% of students use e-learning only to download lectures. In fact, given the fact that lack of assiduity is manifest in both online and onsite classes, the only alternative left to students is asynchronous learning. Out of this fact, we can deduce that the low achievement is a consequence of students' inability to grasp knowledge imparted online without the teacher's intervention and this is in line with the teachers' responses on the questionnaire where all of them agreed that students cannot understand alone and even 60% of the students confirmed this via their answers too.

Thus, this study implies that students need to get motivated to learn synchronically online to take advantage of e-learning. This study has shown that four factors seem to be important to enhance motivation and learning in this new blended environment: first, synchronous learning whether online or onsite is vital for understanding the new knowledge, so students need to regulate well their flexibility to attend classes (real or virtual) as often as possible because the low achievement is more likely due to lack of assiduity than to type of environment. Second, since students don't take advantage of the conventional classroom and see no inconvenience in learning distantly, the quality of the online environment needs to be increased to meet students' needs but this also requires motivating teachers to provide high-quality online teaching, for instance, adapting well their schedules to the hybrid teaching. Third, more pedagogical efforts are required to sustain students' motivation online and make asynchronous learning an aid to consolidate knowledge and not the main means for gaining it. Flexibility has to be monitored by students who need to know that flexibility is not a synonym for absenteeism which can have a bad effect on motivation and learning outcomes.

7. Summary of the Study

The study was carried out in a rare context where a shift from conventional to digital teaching occurred between two semesters, of the same academic year, for the teaching of a content-based course, namely Cognitive Psychology. This opportunity was seized by the researcher to compare the effects of the two instructional modes on the motivation and achievement of the same students. To meet this aim, a questionnaire was administered to teachers in charge of- and students enrolled in this course, and a paired-samples t-test SPSS (27) was used to compare students' exam scores at the end of each of the abovementioned instructional modes. Statistical analyses were run for statistical significance, correlation, and effect size. The results indicate that while students and teachers recognize the benefits of the conventional classroom which exceed those of the digital one, the majority of students prefer the course to go online but advocate that teachers deploy more pedagogical efforts to attract them and get them motivated to learn via this mode. On the other hand, the t-test results indicate no significant difference between students' first- and second-semester scores which implies that whether the teaching is online or in physical class learning achievement is the same and even low in both cases. Thus, enhancing motivation and learning is not linked to the mode of instruction but to its quality and the attempts to engage students in their learning and raise their awareness of the importance of regulating their flexibility and taking advantage of hybrid learning.

8. Further Research:

Additional studies are recommended to extend the research to find out the effects of students' flexibility regulation and assiduity on achievement. These further research directions can be encapsulated in the following inquiries:

1. Does attendance in a synchronous learning class motivate students to get more engaged in their learning as compared to studying asynchronously?
2. Is there a correlation between students' online/onsite assiduity and achievement?
3. How can students take advantage of their flexibility in a blended context?
4. What is the role of the teacher in working with students who opt for an online mode of instruction?
5.

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