ULRR

Exploring teacher educators' perspectives of play-based learning: A mixed method approach

Item Type	Article
Authors	Khalil, Nibal;Aljanazrah, Ahmad;Hamed, Ghadeer;Murtagh, Elaine M.
Citation	Education Sciences;12, 95
Publisher	MDPI
Download date	2026-10-24 21:46:31
Item License	https://creativecommons.org/licenses/by-nc-sa/1.0/
Link to Item	https://hdl.handle.net/10344/11033

education sciences

MDPI

Article

Exploring Teacher Educators' Perspectives of Play-Based Learning: A Mixed Method Approach

Nibal Khalil [1], Ahmad Aljanazrah [1,*], Ghadeer Hamed [1] and Elaine Murtagh [2]

[1] Department of Curriculum and Instruction, Birzeit University, Birzeit P.O. Box 14, Palestine; nikhalil@birzeit.edu (N.K.); ghamed@birzeit.edu (G.H.)
[2] Department of Physical Education and Sport Sciences, University of Limerick, V94 T9PX Limerick, Ireland; elaine.murtagh@ul.ie
* Correspondence: ajanazrah@birzeit.edu

Abstract: Background: This study examined teacher educators' perceptions of play-based learning in the context of university-based teacher education programmes in Palestine. Methods: Using a cross-sectional, multi-method design, we explored factors relating to teacher educators' capability, opportunity and motivation to incorporate play-based learning into their practice. Thirty-six staff from four Palestinian universities completed an online survey and 17 were interviewed. Results: Teacher educators recognise the value of play-based learning and are motivated to apply this pedagogical approach. However, attempts to incorporate play-based learning into their practices is affected by insufficient knowledge and skills to apply play-based learning in practical contexts. Furthermore, social cues, cultural norms and physical challenges currently limit their opportunity to adopt play-based approaches. Conclusion: Our findings highlight that Palestinian teacher educators are motivated to embrace play-based learning as a pedagogical approach and recognise the importance of using play-based learning in educational practices. The findings can inform future professional development programs for teacher educators.

Keywords: play-based learning; teacher educators' perspectives; teacher education; teaching practice; COM-B model; Palestine

check for updates

Citation: Khalil, N.; Aljanazrah, A.; Hamed, G.; Murtagh, E. Exploring Teacher Educators' Perspectives of Play-Based Learning: A Mixed Method Approach. *Educ. Sci.* **2022**, *12*, 95. https://doi.org/10.3390/educsci12020095

Academic Editor: Eila Jeronen

Received: 21 December 2021
Accepted: 25 January 2022
Published: 29 January 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

1. Introduction

1.1. Value of Play-Based Learning

Over 50 years ago, Vygotsky [1] asserted that "play is the leading source of development in the preschool years" (p. 62). Play is a tremendous asset to the development of children; benefits include, but are not limited to, enhancing learning abilities, advancing socio-psychological skills and building self-concept [2,3]. Further, play is a crucial element of learning, especially in early childhood settings [2,4–8]. However, the great impact of play-based learning can also be seen in the progress of children later during formal schooling [5,7,9,10]. Play-based learning shifts the teaching process from teacher-centred education to student-centred education by which students can build constructive knowledge and skills [11,12]. While there is no firm consensus on the definition of "play", recently Zosh and colleagues [13] proposed a multidimensional definition of play that creates a spectrum of play opportunities from free play through guided play to games and then playful direct instruction. Furthermore, they contend that guided play, where the adult arranges a context for learning, but the child directs the play within that context, "particularly harnesses active, minds-on thinking, engagement, meaning-making, joy, and iteration more so than other types of play, which helps it maximize learning" [13] (p. 4).

Key educational organisations, such as UNESCO, have argued that embedding play-based learning is one of the major modifications needed globally in education curricula [14]. Play-based learning is a source of learning and enjoyment when it is established in classrooms [15–18]. Several studies have shown that the integration of play and movement

activities into the teaching of academic subjects is positively perceived by both students and teachers, with high levels of enjoyment and satisfaction noted [6,15–19].

Play is not only enjoyable but rather it is the child's stimulator and motivational agent to creative thinking and cultural engagement [20]. There is growing evidence that teaching using physically active and playful approaches can enhance indicators of academic achievement [17,18,21–24]. A study with primary-school children in Ireland demonstrated that teachers reported enhanced student motivation for learning and increased engagement with academic content following the adoption of playful and movement-based pedagogies [25]. Similarly, the integration of physical activity into academic lessons led to higher effort and academic motivation for students in Crete [18,26]. U.S. students taking part in an "Active Science" programme reported enjoying the subject in addition to improving their alertness and focus for academic lessons [15]. While much of the research on play-based approaches has taken place in the U.S., Europe and Australia, Hammad and AlShaer [16] noted that Palestinian students' low achievement in certain subjects may be enhanced by introducing play-based learning in Mathematics' and Arabic language subjects. Recently the positive relationship between play-based learning and test scores in Mathematics has been demonstrated for Palestinian elementary school children [27].

In addition to the positive impact on academic achievement, play-based learning provides many benefits in terms of social and psychological behaviour, and health improvement [7,9,24]. Furthermore, through play children may develop their abilities to foster friendships and a sense of social competence, both of which are important for students' motivation to participate and achieve in school. Play has been proposed [28] as a solid mediator of learning different skills over the life of a child, including cognitive abilities, language abilities and self-reflection [9]. In addition, it enhances children's socioemotional skills, including the ability to reflect before acting, empathy, problem solving, cooperation with peers and interaction with teachers [22,23,29].

The successful enactment of play-based approaches is not without its challenges. Some of the constraints affecting the application of play-based pedagogy vary from one country to another but include inadequate resources for implementation, space constraints inside the schools, uncertainty about the teacher's role in the play-based environment, curricula and associated teaching materials, and insufficient knowledge and skills about play-based learning [23,30,31].

1.2. Teacher Professional Development

Improvement in the quality of education is closely associated with sufficient professional development for teachers [32–36]. However, less attention has been given to the professional development of teacher educators [37] or to policies that would support their ongoing learning [38]. The relationship between learning needs and contextual factors varies from one country to another, depending on the policies, cultural setting of the society and schools' situation of that country [26,32,39,40].

With respect to play-based learning specifically, much of the research has focused on teachers' perceptions of the approach and the impact of teacher professional development in terms of student outcomes [21,41,42]. This work has largely focused on in-service teachers working in early childhood and elementary school settings. A paucity of research has addressed teacher educator professional development with respect to play-based learned and related approaches. Thus, the facilitators and barriers to further professional development in this area are largely unknown and formative research is needed to better understand the needs of teacher educators to support their learning.

1.3. Understanding Teacher Behaviour

Teacher behaviour may be influenced by many factors, and a greater understanding of these will enhance our ability to design professional development opportunities [43] to support the enactment of novel approaches such as play-based learning. COM-B is a system that identifies sources of behaviour (B), namely capability (C), opportunity (O)

and motivation (M) [44]. The COM-B model represents the observation that a particular behaviour will occur only when the person has the capability and opportunity to engage in the behaviour and is more motivated to enact that particular behaviour than any other behaviours [45] (see Figure 1). Capability relates to the individual's psychological and physical capacity to engage in the behaviour; opportunity includes all the factors that lie outside the individual that make the behaviour possible or prompt it and can be classified as social or physical; motivation is defined as all those brain processes that energise and direct behaviour, including reflective (conscious planning and evaluations) and automatic (impulses, desires, emotional reactions) processes [44,46]. Through a systematic "behavioural analysis" we can understand behaviour in the context in which it occurs and subsequently identify key levers to support behaviour change [44]. Since its first publication in 2011 [46], COM-B has been widely used to understand a wide range of behaviours such as postnatal physical activity [47], nutrition adherence [48], antibiotic use [49] and the uptake of open science [50]. Within the field of education, the COM-B model has helped researchers to design programmes to improve collaborative and peer-assisted learning [51], youth mentoring and positive behaviour support [52]. Thus, through embracing key tenets of behavioural science [53], educationalists can understand aspects driving teacher behaviour and subsequently develop professional development opportunities that will effectively support changes to practice. This represents a shift from merely providing training and other supports, to implementing behaviour change strategies that are specifically tailored to teachers' capability, opportunity and motivation to engage in a given behaviour. A first step in this process is an in-depth analysis of the behaviour in question. In the present study, we consider teacher educators' perceptions of incorporating play-based learning into their practice at Palestinian universities by exploring their capability, opportunity and motivation to incorporate these approaches.

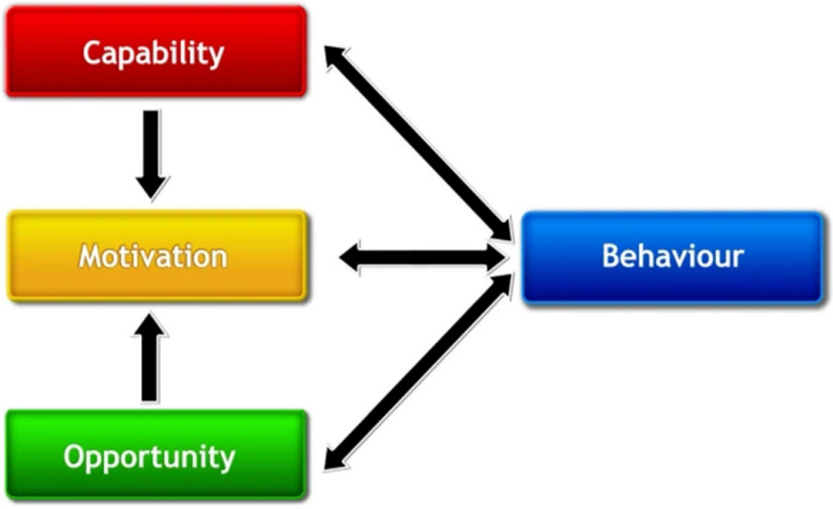


Figure 1. The COM-B model [46], https://doi.org/10.1186/1748-5908-6-42 (accessed on 11 October 2021); Reproduced under Creative Commons Attribution License 2.0.

1.4. Palestinian Context

The Ministry of Education and Higher Education in Palestine is tasked with developing the educational system and achieving high quality education, including teacher in-service training [54]. The concept of "play" is framed in the strategic plan of the Palestinian Ministry of Education and Higher Education as a valuable tool to be used for pre-schoolers and in kindergarten settings. Moreover, play is mentioned as a future challenge for the Ministry to be considered in developing educational policies [55]. However, the education system of Arab countries is still based on traditional teacher-centred learning and teaching [56]. Neither schools nor teachers have the authority to decide on the type of the curriculum or the amount of time allocated to various subjects. Thus, the lack of autonomy for teachers

and head teachers is often cited as a key reason why the curriculum is not changed and has remained conservative, rigid, and subject-based [57].

1.5. Research Gap

Designing teachers' education and professional development programmes often depends on the policies and socio-cultural setting of that country [32]. Usually, teachers' professional development programmes in Palestine are funded by donors such as UN agencies, the World Bank and NGOs [54]. In addition, there is a need to assess and evaluate the current educational systems in Palestine for more effective professional development strategies and programme application [58]. The educational system in Palestine is centralised and has been facing huge challenges in terms of teacher education and teacher professional development [54].

The research team found a lack of published research regarding embedding play-based learning in teacher education and teacher professional development in the higher institutions within the Palestinian context. Existing research in this area has focused on the school settings and has mainly been conducted in USA, Australia and UK. Thus, our research also adds to the evidence by focusing on teacher educators working in the specific social and cultural context of higher education in Palestine.

This research includes participants from different disciplines in education, including physical education, English and Arabic education, psychological and inclusive education, science education, and curriculum and instruction. Moreover, the teacher educators are teaching not only early childhood and primary teacher education programmes, but also secondary education.

1.6. The Purpose

The purpose of this study was to investigate teacher educators' perspectives about play-based learning. Specifically, we examined their capability, motivation and opportunity to change their behaviour towards incorporating play-based learning strategies in their practices at higher education institutions in Palestine.

2. Materials and Methods

We employed a multi-method design to address the research questions of this study [47]. This research was conducted during the second semester of the academic year 2020/2021; from March to June 2021. Ethical approval was received from the research ethics committee at Birzeit University. All participants provided informed consent. An online survey (using SurveyMonkey) and a semi-structured interview were designed based on the COM-B Model [44,46]. The reporting of this study follows the COREQ guidelines [59]. This research is part of a three-year research project investigating play-based learning and gender-responsive pedagogy teacher education in Palestine.

2.1. Participants

All participants were teacher educators working at universities in Palestine. Participants were recruited via an email sent through the Deans of Education at each university; the email included the informed consent details and a link to the online questionnaire. At the end of the online survey, participants were given the option to volunteer to take part in an interview at a future date. A total of 17 teacher educators from the four universities expressed their interest to be interviewed.

2.2. Data Collection

In order to explore participants' perspectives on play-based learning, an online survey and a semi-structured interview were developed and used.

The online survey consisted of closed and open-ended questions. The survey included the 6-item brief measure of COM-B developed by Keyworth and colleagues [60] and was adapted for the behaviour of interest in this study. Acceptable validity and reliability of

the measure has previously been demonstrated [60]. This measure includes one item for each of the following components: physical capability, psychological capability, physical opportunity, social opportunity, reflective motivation and automatic motivation. Participants were asked to respond on a Likert-type scale ranging from one (strongly disagree) to 10 (strongly agree). Additional open questions were used to ask participants about their knowledge and perceptions of play-based learning. Demographic information and data relating to teaching experience were also collected. The survey was translated to Arabic and piloted with seven participants. The final version of the online questionnaire was sent via email with a cover letter and a URL (linked to the online survey) to potential participants. A semi-structured interview was designed with open-ended questions framed by the COM-B model (Appendix A). The interviews took place via ZOOM due to the COVID-19 pandemic and lasted from 40 to 60 min each, and were recorded. The interview questions asked about the main COM-B components including capability, for example: What is your view/opinion of what play-based learning is? Explain in your opinion what is meant by play-based approaches in teaching and learning? In relation to opportunity, questions included: What do you think is needed to support you to use play-based teaching and learning approaches? Do you share information about your play-based practice with your colleagues, do you support each other? For motivation, questions included: Do you believe that there is value in developing play-based teaching/learning in teacher education programmes in the future? Do you have any plans to engage further in professional development in relation to play-based approaches?

We received a total of 36 responses using the online questionnaire from the four Palestinian universities (University (A): 10, University (B): 10, University (C): 10 and University (D): 6) and conducted a total of 17 semi-structured interviews (University (A): 6, University (B): 4, University (C): 4 and University (D): 3). The interviews were conducted by two female researchers: one postdoctoral researcher and one research assistant with an MSc qualification. The interviewers were experienced in conducting semi-structured interviews. All interviews were recorded and transcribed verbatim (i.e., in Arabic) for analysis.

2.3. Data Analysis

Data collected from closed questions in the online questionnaire were analysed using descriptive statistics in which percentages, means and standard deviations were obtained. We adopted narrative analysis for responses to the open questions in the online questionnaire in which similarities and differences were noted and summarised. For analysis of the semi-structured interviews, we followed the process of framework analysis as described by Gale et al. [61]. This involved transcription of the interviews, familiarisation with the interviews using the transcriptions and the audio recording, coding the data and charting the data onto the COM-B framework. Two researchers reviewed the transcripts and coded them independently. The resulting codes were compared and discrepant cases identified and reconciled. Codes were predefined and linked to the six components of the COM-B model: physical capability, psychological capability, physical opportunity, social opportunity, reflective motivation and automatic motivation. Through discussion with the author team, the categorisation of codes was refined. When the participants' quotations are presented in the results, they are identified by a pseudonym in order to maintain anonymity.

3. Results

3.1. Participants

Characteristics of the 36 participants who completed the online questionnaire can be seen in Table 1. Overall, there was good representation from the four universities with only University (D) providing a relatively lower proportion of participants. The sample represents 35% of the total teacher educators at the four universities. A high proportion of female teacher educators took part in the study (64%); therefore, females are slightly overrepresented in the sample. The majority of participants held a PhD level qualification (75%) and had been lecturing at a university for more than 10 years (72%).

Table 1. Characteristics of participants that completed the questionnaire (n = 36).

Variable		%	*n*
Current employment	University (C)	27.8%	10
	University (D)	16.7%	6
	University (A)	27.8%	10
	University (B)	27.8%	10
Gender	Female	63.9%	23
	Male	36.1%	13
Age	<25 years	0%	0
	25–34	2.9%	1
	35–44	28.6%	10
	45–64	62.9%	22
	65+	5.7%	2
Highest qualification	Bachelor's degree	0%	0
	Master's degree	25%	9
	PhD	75%	27
Years lecturing at university	<3 years	2.8%	1
	3–10 years	25%	9
	More than 10 years	72.2%	26
Previous teaching experience	Primary school	52.8%	19
	Secondary school	47.2%	17

Seventeen participants (six females and eleven males) from four universities in Palestine submitted their informed consent for the agreement to be interviewed by the research team. The 17 participants have various academic specialties, namely Special Education (3), Curriculum Design (4), Physical Education (3), English Language teaching (2), Educational Psychology Education (2), Teaching Methods (2) and Science Education (1).

3.2. Results of Online Survey

A share of 88% of participants stated that they had heard of play-based learning previously, and 53% stated that they included play-based learning approaches when they lecture. Sixteen participants provided examples, and these included: free play and discovery, drama and role play, math games for learning fractions, number and shapes, and other games to support learning English. Seventeen participants explained that using play-based learning activities in their classes encourages student-centred learning and enhances students' learning, knowledge, and skills. A share of 88.2% noted that they encourage pre-service teachers to include play-based learning methods in their practice. Details provided by the participants include: providing training workshops, practicum and specialised courses that include the application of play-based pedagogies; integrating traditional (cultural) games and design of interactive activities, in addition to real-life-based activities; and use of online videos, specialised websites and other available online games resources in teacher education. In addition, teacher educators reported including the ability to use play-based pedagogies as one of the criteria for evaluating teacher professional development.

Findings in relation to the brief measure for COM-B can be seen in Table 2. The highest scoring components were psychological capability (7.8 $\pm$ 2.2) and reflective motivation (7.8 $\pm$ 2.4). Both components relating to opportunity received the lowest mean scores: physical (5.2 $\pm$ 2.7) and social opportunity (5.4 $\pm$ 2.5).

Table 2. Responses to the brief measure for COM-B (n = 34).

Component **	Sub-Component	Mean *	SD
Capability	Physical capability	7.4	2.3
	Psychological capability	7.8	2.2
Opportunity	Physical opportunity	5.2	2.7
	Social opportunity	5.4	2.5
Motivation	Reflective motivation	7.8	2.4
	Automatic motivation	6.2	2.4

* Ten-point scale with 1 as strongly disagree and 10 as strongly agree.** Definitions [46]: Physical Capability, Physical skills, strength or stamina; Psychological capability, Knowledge or psychological skills, strength or stamina to engage in the necessary mental processes; Physical opportunity, Opportunity afforded by the environment involving time, resources, location, cues, physical 'affordance'; Social opportunity, Opportunity afforded by interpersonal influences, social cues and cultural norms that influence the way they we think about things; Reflective Motivation, Reflective processes involving plans (self-conscious intentions) and evaluations (beliefs about what is good and bad); Automatic motivation, Automatic processes involving emotional reactions, desires (wants and needs), impulses, inhibitions, drive states and reflex responses.

3.3. Results of Semi-Structured Interviews

3.3.1. Physical Capability

No issues in relation to having the physical capability to engage with play-based learning were reported. All the participants were physically capable and active so they engaged in physical activities with pre-service teachers inside and outside the teaching classes. "I apply play-based learning activities with my students, and sometimes we go out and practice our activities in front of other university students and we feel enjoyment and excitement." (X 17)

3.3.2. Psychological Capability

All the participants were involved in school teaching as school-based teachers at an earlier stage of their teaching career, before working at the education faculties at the universities. Prior experience of play-based learning was gained by participants through a variety of settings, including through teaching special courses at the university in play and education, from their PhD and MA studies, and from research visits and professional development programmes.

All the participants attended training for educational teaching methods during their time as a schoolteacher or a university lecturer. None of these prior trainings included a specific focus on play-based learning, but rather play-based learning techniques were part of general educational training and were mainly embedded with drama-based learning techniques. Play-based learning as a teaching method is not a major approach that is used by the teacher educators during their practice. The educators expressed that they had insufficient knowledge of play-based learning; moreover, all 17 participants expressed the need to enhance their abilities to design and plan play-based learning activities. All teacher educators claimed that they do not have the practical skills to apply play-based learning in their practices.

> I'm trying to apply some games for my students, but I don't have any previous professional development on play-based learning, so I think if I'm trained in play-based learning, my skills will be improved to allow a better application of play-based learning with my students. (X 8)

Three participants indicated that they have knowledge about the theoretical underpinnings of the role of play in educational practices, but they lack the knowledge to bring this theoretical framework as a practical experience for the university students. The play-based learning approach is not specialised as a unique approach in any of the education faculties in which the 17 participants taught. Five of the teacher educators reported that they teach some courses that include play-based learning activities such as Psychology of Play, Minor Games in Physical Education, Traditional Games, and Play for Special Education. Hence,

the practices of the teacher educators vary when applying play-based learning in their teaching practices. Seven teacher educators use play-based learning as a theoretical framework. This includes giving the pre-service teachers the structure and roles of the game to be played without practicing it with them in class, and subsequently the pre-service teachers are expected to apply this learning in their practical teaching at schools. Moreover, three teacher educators reported using play-based learning as an icebreaker activity, such as an English teacher educator joining students while playing "Tongue Twister", which enriches the pronunciation of English phrases. Seven other teacher educators noted practicing play-based learning activities along with the pre-service teachers for drama project-based learning (for example teaching the solar system through role-play).

Because our research took place during the COVID-19 pandemic in early 2021, all the participants expressed that their motivation towards using play-based learning activities was reduced due to an inability to teach face to face at the university campus. Nonetheless, teacher educators reported that they customised their practices while teaching online in order to integrate play-based activities by using different tools and strategies, such as using online games for ice breaking activities.

The teacher educators' practices relating to play-based learning often depend on the educator's interpersonal skills; in particular, how they approach the process of teaching and how they behave with students inside their teaching courses, while taking into consideration any variation in student's psychological, social and physical capabilities. "Play in teaching is a psychological exit for our feelings where we laugh and enjoy, and where we build positive mental health in students who are able to learn with excitement." (X 5)

It is interesting that the view of play-based learning varies between teacher educators and is affected by their pedagogical background. For example, educators with a psychology background felt that the role of play is to enhance psychological life skills and leadership of students including stress management, self -confidence and cooperation. Other educators with expertise in special education considered the huge impact of play to improve motor skills among students with disabilities. In addition, educators involved in language teaching believed that play is an effective tool to improve language skills such as English and Arabic. "During my English teaching course, I use Tongue Twisters and Translation Race to get their attention to English language special words which leads to enjoyment and learning." (X 6)

3.3.3. Social Opportunity

Cultural norms and social cues were the major challenges relating to social opportunity for enacting play-based learning. Participants reported that both teacher educators and pre-service teachers face social challenges in the teaching and learning processes. Factors relating to social opportunity for teacher educators stemmed from colleagues and university management. Fifteen participants mentioned that colleagues are cooperative and exchangers of knowledge; however, only three reported that colleagues would actually support them in the implementation of new approaches including play-based learning. Five participants felt that university senior management is supportive of applying new teaching techniques or strategies, although they still sometimes face challenges from faculty administration members. "I need more freedom and support from faculty administration to apply play-based learning who sometimes don't believe in play-based learning in teaching, especially as it contains movements, active learning and sharing with students." (X 17)

Issues relating to social opportunity to encourage pre-service teachers to engage in play-based learning in their own education vary from acceptance to low awareness and sometimes refusal. Teacher educators stated that the majority of pre-service teachers enjoy practicing play-based learning activities during the learning process. However, some female students refuse to practice some physical activities in front of male staff or male students, whereas other females are more at ease while practicing physical activity. "Female students from socially conservative communities refuse to practice physical movements and activities alongside male educators and students." (X 4)

All the participants stated that the key social supportive agent for pre-service teachers is the teacher educator. The teacher educator acts as a role model for pre-service teachers through her/his behaviour with them. The educator's behaviour motivates and indeed convinces pre-service teachers to apply play-based approaches. The educators believe that if they convince the students of their practices in education, this will lead to future teachers who are adopting similar practices. "If I apply play-based learning in proper way, the students will be convinced and copy my practices in their future career as teachers." (X 2). Teacher educators also believe that increasing awareness of play-based learning among pre-service teachers is also another supportive factor that enhances their acceptance to new play practices. This includes awareness inside the community, inside the schools, and inside the universities.

3.3.4. Physical Opportunity

Participants expressed different views about physical opportunity relating to play-based learning. Some participants noted encountering bureaucratic procedures within faculty administration regarding the logistical needs of the educators such as material, tools and budgeting. One teacher educator stated how the investment of time influences adopting new approaches, particularly regarding the administrative structure at the university.

> If I need to apply new techniques such as play-based learning, I need strong justifications and a proposed plan to convince the dean of faculty and the head of department about my new practices and to gain their agreement to apply it. (X 2)

All participants agreed that the university space for applying play-based learning is not suitable for most activities due to the high number of students inside the classes, insufficient open space (especially for Physical Education students), and the structure of the classes, which are not conducive to conducting play-based learning activities. Furthermore, they commented that shortage of time and lack of educational materials and tools inside the universities makes it difficult to use play-based learning activities. All participants confirmed that providing space, tools and materials, adequate time, and specialised courses in play-based learning would support embedding play-based learning strategies in Palestinian higher education institutions. "Our practices depend on the availability of tools and materials, so when we don't have these tools, we don't apply the activities." (X 14)

All 17 participants stressed that the university courses are an important factor that influenced physical opportunity when applying play-based learning. The views of the participants regarding the courses are that either the courses focus on theoretical knowledge (five participants), or courses do support applying play-based learning partially hence, the educator could adapt the course to embed play-based learning strategies (nine participants). By comparison, three participants claimed that the course itself is not the driving factor for applying play-based learning strategies, but rather applying play-based learning strategies depends on the educator's philosophy, whereas two participants indicated that applying play-based learning strategies depends on the content of the course and the inclusion of special play-based learning units inside the course. "The educator is the main agent in teaching any courses, the courses can be used as the educators' vision and belief of teaching." (X 13)

All the participants were previously schoolteachers and have experience in the school context. They commented that school management, mainly the principal, is the key person who determines whether play-based learning is applied inside schools. Our participants felt that in-service teachers face challenges with the schools' management regarding the application of new techniques because they are required to follow the school's supervisors and principal's evaluation criteria. All participants indicated that school curricula are not flexible enough for modifying or embedding new strategies such as play-based learning. "It is difficult to change or modify the school courses because its content is built by the curriculum committee at the Ministry of Education and Higher Education for all schools in Palestine." (X 12)

3.3.5. Automatic Motivation

The main factor mentioned by the 17 participants relating to automatic motivation was their enjoyment and excitement when applying play-based learning in their teaching classes. "I feel the time is passing quickly when I apply play-based activities in my classes, which leads to that everybody enjoying themselves; students and I." (X 13). Older teacher educators who we interviewed showed less desire to apply play-based learning than their younger counterparts. Teacher educators that have been lecturing for less than 10 years were enthusiastic to learn new strategies.

3.3.6. Reflective Motivation

Overall teacher educators' perspectives towards play-based learning were positive, with many noting the beneficial future value to all levels of education from early childhood to primary school level, secondary school level and university level. Applying this approach may depend on the extent to which educators' value play-based learning as a pedagogical strategy, with one participant noting, "I believe in the importance of play-based learning because it helps me to achieve my educational goals. I believe that play-based learning is a proper strategy for all levels in education." (X 10). Participants believed that engaging pre-service teachers in play-based learning provides excitement and a joyous atmosphere in the learning process, in addition to an adding motivational factor to learning. "Play-based learning is essential because it motivates students and raises their attention to learning; also it increases word processing and analysis in the memory." (X 16)

Some teacher educators have no clear strategies for play-based learning, which may explain why this approach is not utilised in their teaching practices. Many participants desired a clear strategy and policy for the application play-based learning. "There is no clear vision of play-based learning strategies or how to apply them inside the university, and I hope that there will be a policy for the inclusion for play-based learning." (X 16)

Teacher educators show hesitation towards applying play-based learning because they do not want to take responsibility in front of the faculty for applying new strategies. In contrast, other educators desired to improve their career in the future through adopting new strategies. "I desire that all education in future would be on play-based learning." (X 7)

All participants were highly motivated to learn more about play-based learning; when asked if they would like to engage in further training all responded positively.

4. Discussion

This study used the COM-B model [46] as a framework to better understand teacher educators' dispositions towards play-based learning at higher education institutions in Palestine. Findings were mapped to the COM-B components of teacher educators' capability, opportunity and motivations that would support enactment of the behaviour in their teaching practices. Our findings from both the online survey and semi-structured interviews indicate that social opportunity is the most salient component that would need to be addressed in order to support teacher educators to embed play-based learning in their practice. The importance of interpersonal influences has been noted in previous research with teacher educators; specifically, the important role that colleagues play in professional development [62] and the value of teacher educators learning through collaborative activity with each other [63]. Cultural norms were also found to be particularly relevant within the Palestinian context, where gender situations are extremely diversified—depending on the group attributes, experience with migration and community locations, the gender situation and issues of specific groups vary greatly [64]. This further exacerbates the challenges for teacher educators as they try to navigate the gender norms among an often diverse group of pre-service teachers. In relation to social opportunity, support from management and senior administrators was also identified as an influencing factor. The "bureaucratization" of universities [65], including increased managerialism [66], has been highlighted with reference to influences on an academic's day-to-day work. It is evident that this also extends to the adoption of novel pedagogical approaches in higher education, such as play-based

learning, and these influences must be considered during attempts to support teacher educators in their professional development.

The capability component of COM-B—the physical or psychological capacity to perform a behaviour—helps us understand the ability of the teacher educators to apply play-based learning activities in their teaching practices. The participants from the online survey and semi-structured interviews have the required physical capability, including physical skills, strength and stamina, to engage in the play-based learning activities. No specific issues related to physical capability were raised by any of the participants.

Our analysis revealed insights into the psychological capability of the teacher educators, including their knowledge, professional identity, interpersonal skills and perspectives of various educational practices. The survey results indicated that 88% of the respondents had heard of play-based learning previously; however more in-depth examination of this in the interviews showed that all the participants felt that they had insufficient knowledge due to a lack of professional development in play-based learning among teacher educators. In general, teacher educators in Palestine gain their educational knowledge from undertaking Master's and PhD degrees while studying the theoretical aspects of educational strategies including play-based learning, from prior experience in school teaching, either primary or secondary, and finally from professional development opportunities. Although all participants had prior experience in school teaching and they mentioned in the interviews that their understanding of play-based strategies was built on that experience, this perceived lack of knowledge came from the fact that the educators did not have sufficient specialised courses in their academic study, or prior experience and professional development specifically regarding play-based learning. Teacher educators' identity and self-concept have been shown to be major influencing factors on their practices [37,67], which suggests that teacher educators' behaviour is driven by their psychological capability through having the ability to engage in an appropriate manner of attention and decision-making processes [46].

All participants stressed that student-centred learning was of high importance when applying play-based learning, as has been previously demonstrated [11,12]. The results of the online survey and interviews assured that applying play-based learning is a source of enjoyment for both students and teachers, as has been noted in previous research [6,15–19,68]. In addition, the findings demonstrated that the teacher educators believe that play-based learning is a motivational factor for learning [2,3]. The interviewees cited that a range of skills are developed by the pre-service teachers when applying play-based learning, including socio-psychological skills, self-reflection, self-confidence, cooperation, stress management and language abilities; this is consistent with previous studies [9,10,22,23,29].

Both social and physical opportunity played a role in influencing teacher educators' behaviour in implementing play-based activities. Opportunity is an attribute of the environmental system that, together with capability, makes a behaviour possible or facilities it; the COM-B model contends that opportunity influences the relationship between motivation and behaviour [45]. As mentioned above, social opportunity for the participants was important with respect to colleagues inside the university and university managerial support. Participants are motivated when sharing new approaches with their colleagues, and these colleagues are supportive and affirming of their innovations; however, this does not translate into changing the practices of the other colleagues in the faculty. The findings showed visible university managerial support for teacher educators in the implementation of play-based activities; however, traditional teaching methods are still the dominant structure of the university. Participants' perceptions relating to social opportunity included social cues and cultural norms, and how it reflects the teacher educators' practices [69]. Moreover, Goh et al. [41] noted that teachers are role models and that their personal behaviour plays a role in influencing their students.

Physical opportunity is concerned with the opportunity afforded by the environment involving time, financial and material resources, location, cues, and physical "affordance" [44]. In the online survey, physical opportunity (5.2 ± 2.7 on a 10-point scale) was the lowest mean score of all six COM-B components. The results from the interviews

clarified these results. Time, educational materials, tools, space, place and courses were stated by all the participants as the physical challenges associated with implementing play-based learning approaches. The participants from the semi-structured interviews reported that the availability of essential learning materials and tools inside the university would encourage them to apply play-based learning in their practices. Conversely, they reported that the university bureaucracy and time required for approval of new initiatives is a barrier to implement changes in their practice, such as play-based learning. University space and adequate place were reported by the teacher educators as the major physical environment barriers that reduce the implementation of play-based learning activities and the engagement of the students; these observations are aligned with research in the school setting, with Bennet et al. [30] and Goh et al. [41] noting that limited space was a constraint for using play-based activities and movement integration inside the classroom. Minimum standards, in relation to space, heating/ventilation and lighting, for facilitating active classrooms in Palestine have been proposed [70]. It is feasible that these standards can be adapted to cater for the spaces used by pre-service teachers.

The findings from the online survey and interviews regarding automatic and reflective motivation are consistent. Reflective motivation scored particularly highly (7.8 ± 2.4), indicating that participants in both online survey and semi-structured interviews were consciously motivated to incorporate play-based learning into their practice. This was tied to their beliefs that the integration of play-based learning in education is valuable and crucial for all levels of education, which aligns with recent research by Lee and Blanchard [43], who noted that a teacher's motivation is influenced by his belief in the value of adopting new approaches and practices. Although the participants in our study placed a high value on play-based learning, they commented that many other teacher educators have neutral or negligent feelings about applying play-based activities in their educational practices. This may be explained by the fact that their colleagues do not have a clear vision about this approach, whereas the study of Dengerink et al. [71] examined that teacher educators mainly like to learn from their conversations with colleagues. Therefore, teacher educators reported that the need for professional development on play-based learning approach is essential for them to adopt play-based learning strategies.

This study has a number of limitations. Firstly, only teacher educators were interviewed and it may have been useful to also include pre-service teachers to capture their perceptions about the teacher educators' practices and behaviour. Secondly, it is noticeable that the participants from the online survey who volunteered to be interviewed showed higher mean score for automatic motivation (7.0 ± 2.2) than those who declined the invitation (5.7 ± 2.6); our findings may have been different if those who were less motivated to engage in play-based learning volunteered to be interviewed.

Despite the limitations of this study, it was the first study to assess Palestinian teacher educators' perceptions about play-based learning, and it takes into accounts the effects of the cultural and social differences of the community of the study. Moreover, this research was the first to use COM-B framework to investigate the educational behaviour of teacher educators.

5. Conclusions

In this study we found that teacher educators' behaviour of incorporating play-based learning into their teaching practices is affected by a lack of knowledge and skills in play-based learning. Nonetheless, teacher educators are motivated to apply this pedagogical approach. Furthermore, social cues, cultural norms and physical challenges currently limit their practices of applying play-based learning.

Our findings in relation to psychological capability, social opportunity and physical opportunity provide a useful starting point for those wishing to enhance the adoption of play-based learning in this cohort. Professional development and other supports are required to bolster these components of COM-B, in order to support teacher educators to successfully incorporate play-based learning into their practice at higher education

institutions. Shortcomings in physical and social opportunity may be overcome through environmental changes, whereas improvements in psychological capability can be achieved through imparting knowledge or understanding, training emotional, cognitive and/or behavioural skills, or through enabling interventions [46]. Therefore, developing a professional development programme will require more than simply the education/training traditionally seen in this space. Our findings can therefore be used to develop future teacher education and professional development programmes based on their unique needs. Our study also highlights that teacher educators are motivated to embrace play-based learning as a pedagogical approach, and that they recognise the importance of using play-based learning in educational practices in Palestine.

Future research should explore the impact of teacher education and professional development programmes on the practices of teacher educators at higher institutions, and their pre-service teachers. Moreover, future research should explore the impact of embedding play-based learning approaches in education in Palestine.

Author Contributions: Conceptualization, A.A. and E.M.; methodology, E.M., A.A., N.K. and G.H.; formal analysis, E.M., A.A., N.K. and G.H.; investigation, E.M., A.A., N.K. and G.H.; resources, N.K.; writing—original draft preparation, E.M., A.A., N.K. and G.H.; writing—review and editing, E.M., A.A., N.K. and G.H.; supervision, E.M. and A.A.; project administration, E.M. and A.A.; funding acquisition, E.M. and A.A. All authors have read and agreed to the published version of the manuscript.

Funding: This work was funded by the COALESCE Research Fund, co-funded by the Irish Research Council and the Department of Foreign Affairs.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Ethics Committee of Birzeit University (protocol code 210227 and approved on 27 February 2021).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Not applicable.

Acknowledgments: The authors would like to sincerely thank the staff at the faculties of Education at the four participating universities for supporting our research.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

A. General

1. What is your field of specialisation and experience in university teaching/teacher education?
2. Describe your role in the teacher education program that you are teaching? (philosophy of teaching "or your own concepts/views on teaching and learning", titles and numbers of courses that you are teaching, since when, provide sample of course descriptions and resources if possible). Which aspects of your teaching do you like it mostly, and you want to keep doing it?
3. What kind of teaching and assessment practices are you using mostly in your teaching those courses?
4. How did those practices (of teaching) change during the COVID-19 pandemic?
5. Are you as educator enrolled in any training regarding education? What, with whom? Are you introduced to new educational tools, approaches? Examples?
6. What do you want to modify in your future teaching? Or new ideas?

B. Play-based pedagogy

B.1. Capability (skills and knowledge)

1. Have you heard of play-based learning?

2. What is your view/opinion of what play-based learning is? Explain in your opinion what do we mean by play-based approaches in teaching and learning?
3. Do you ever use it in your practice? Can you provide examples of embedding those (Play-based learning) in your practices in teacher education, if any?
4. Have you ever been in trained regrading Play-based learning? If yes, when, with whom, any curricula changes, any influence in application?
5. What are the challenges that are related to Play- based learning in teacher education?

B.2. Opportunity (physical and social)

1. Do your colleagues incorporate play-based strategies? If yes, do you cooperate, exchange knowledge about it?
2. What do you think needed to support you in teaching a Play-based teaching?
3. How might university-level courses assist student-teachers in enhancing Play-Based learning/teaching practices?
4. What support would teacher-educators need to do this?
5. What support would student-teachers need?

B.3. Motivation (conscious planning, desire, need)

1. Would you be interested/motivated to learn more about play-based learning?
2. What do you want to modify (the completely educational process) in case of developing Play-based approach, explain?
3. Do you believe that there is value in developing play-based teaching/learning in teacher education programmes the future?

References

1. Vygotsky, L.S. Play and its role in the mental development of the child. *Sov. Psychol.* **1967**, *5*, 6–18. [CrossRef]
2. Baker, F.S. Tensions in policy and practice: Influences on play in Abu Dhabi's New School Model KG framework. *Early Child Dev. Care* **2014**, *184*, 1830–1842. [CrossRef]
3. Chen, S.; Gu, X. Toward active living: Comprehensive school physical activity program research and implications. *J. Phys. Act. Health* **2018**, *15*, 161–168. [CrossRef]
4. Alison, W. Rethinking play and pedagogy in early childhood education: Concepts, contexts and cultures. In *Emotional and Behavioural Difficulties*; Rogers, S., Ed.; Routledge: Abingdon, UK, 2011; p. 330. ISBN 978-0-41548076-5. [CrossRef]
5. Jay, J.A.; Knaus, M. Embedding play-based learning into junior primary (Year 1 and 2) curriculum in WA. *Aust. J. Teach. Educ.* **2018**, *43*, 112–126. [CrossRef]
6. Kangas, J.; Harju-Luukkainen, H.; Brotherus, A.; Kuusisto, A.; Gearon, L. Playing to learn in Finland: Early childhood curricular and operational context. In *Policification of Early Childhood Education and Care*; Garvis, S., Phillipson, S., Eds.; Routledge: Abingdon, UK, 2019; pp. 71–85. [CrossRef]
7. Lynch, M. More play, please: The perspective of kindergarten teachers on play in the classroom. *Am. J. Play* **2015**, *7*, 347–370.
8. McInnes, K. Playful learning in the early years–through the eyes of children. *Educucation* **2019**, *47*, 796–805. [CrossRef]
9. Ali, E.; Kaitlyn, M.C.; Hussain, A.; Akhtar, Z. The effects of play-based learning on early childhood education and development. *J. Evol. Med. Dent. Sci.* **2018**, *7*, 4682–4685. [CrossRef]
10. Ashiabi, G.S. Play in the preschool classroom: Its socioemotional significance and the teacher's role in play. *Early Child. Educ. J.* **2007**, *35*, 199–207. [CrossRef]
11. Baidoun, F. *Minimum Standards for Palestinian Active Classrooms*; Right to Play: Toronto, ON, Canada, 2018.
12. Khales, B.; Meier, D. Toward a new way of learning—Promoting inquiry and reflection in Palestinian early childhood teacher education. *New Educ.* **2013**, *9*, 287–303. [CrossRef]
13. Zosh, J.M.; Hirsh-Pasek, K.; Hopkins, E.J.; Jensen, H.; Liu, C.; Neale, D.; Whitebread, D. Accessing the inaccessible: Redefining play as a spectrum. *Front. Psychol.* **2018**, *9*, 1124. [CrossRef]
14. Harris, R.; Miske, S.; Attig, G. *Embracing Diversity: Toolkit for Creating Inclusive Learning-Friendly Environments*; UNESCO Bangkok: Bangkok, Thailand, 2004; Available online: https://unesdoc.unesco.org/ark:/48223/pf0000183995 (accessed on 1 September 2021).
15. Finn, K.E.; McInnis, K.J. Teachers' and students' perceptions of the active science curriculum: Incorporating physical activity into middle school science classrooms. *Phys. Educ.* **2014**, *71*, 234. Available online: https://scholarworks.merrimack.edu/tolle/13 (accessed on 29 August 2021).

16. Hammad, K.; AlShaer, A. *Tajrobat Wazarat al-Tarbeyah Wa al-Ta'leem Al-ali Alfalasteeneyah fe Ilaj Tadani Al-Tahseel Al-Derasi Lelmarhalah al-Dunya: Al-Taalom Men Khilal al-la'ob Namothajan* [The experience of Palestinian Ministry of Education and Higher Education in improving the low academic achievements in primary schools: Play-based Learning as a model]. *Majallat Jamiat Falastin Lil-Abhath- Jamiaat Falasteen* **2015**, *8*, 109–129. Available online: http://search.shamaa.org/FullRecord?ID=125103 (accessed on 11 October 2021).
17. Martin, R.; Murtagh, E.M. Teachers' and students' perspectives of participating in the 'Active Classrooms' movement integration programme. *Teach. Teach. Educ.* **2017**, *63*, 218–230. [CrossRef]
18. Vazou, S.; Gavrilou, P.; Mamalaki, E.; Papanastasiou, A.; Sioumala, N. Does integrating physical activity in the elementary school classroom influence academic motivation? *Int. J. Sport Exerc. Psychol.* **2012**, *10*, 251–263. [CrossRef]
19. Howie, E.K.; Newman-Norlund, R.D.; Pate, R.R. Smiles count but minutes matter: Responses to classroom exercise breaks. *Am. J. Health Behav.* **2014**, *38*, 681–689. [CrossRef]
20. Fleer, M. Acultural- Historical Perspectives on Play: Play as a Leading Activity Across Cultural Communities. In *Play and Learning in Early Childhood Settings: International Perspectives*; Samuelsson, I.P., Fleer, M., Eds.; Springer: Berlin/Heidelberg, Germany, 2008; Volume 1.
21. Benes, S.; Finn, K.E.; Sullivan, E.C.; Yan, Z. Teachers' perceptions of using movement in the classroom. *Phys. Educ.* **2016**, *73*, 110–135. [CrossRef]
22. Edwards, S. Play-based learning and intentional teaching: Forever different? *Australas. J. Early Child.* **2017**, *42*, 4–11. [CrossRef]
23. McInnes, K.; Howard, J.; Miles, G.; Crowley, K. Differences in practitioners' understanding of play and how this influences pedagogy and children's perceptions of play. *Early Years* **2011**, *31*, 121–133. [CrossRef]
24. UNICEF. *Learning through Play: Strengthening Learning through Play in Early Childhood Education Programmes*; UNICEF: New York, NY, USA, 2018; Available online: https://tinyurl.com/fkj2v4b7 (accessed on 20 July 2021).
25. Martin, R.; Murtagh, E. Effect of active lessons on physical activity, academic, and health outcomes: A systematic review. *Res. Q. Exerc. Sport* **2017**, *88*, 149–168. [CrossRef]
26. Nestor, O.; Moser, C.S. The importance of play. *J. Occup. Ther. Sch. Early Interv.* **2018**, *11*, 247–262. [CrossRef]
27. Murtagh, E.; Sawalma, J.; Martin, R. Playful Maths! The influence of play-based learning on academic performance of Palestinian primary schoolchildren. *Educ. Res. Policy Pract.* 2020; in publication.
28. Lillemyr, O.F.; Søbstad, F.; Marder, K.; Flowerday, T. A multicultural perspective on play and learning in primary school. *Int. J. Early Child.* **2011**, *43*, 43–65. [CrossRef]
29. Monkevičienė, O.; Stankevičienė, K.; Autukevičienė, B.; Jonilienė, M. Pedagogical Strategies that Improve Children's Play-Based Learning. In Proceedings of the International Scientific Conference "Society. Integration. Education", Rezekne, Latvia, 26–27 May 2017. [CrossRef]
30. Bennet, N.; Wood, L.; Rogers, S. *Teaching through Play: Teachers' Thinking and Classroom Practice*; Open University Press: Buckingham, UK, 1997.
31. Leggett, N.; Newman, L. Play: Challenging educators' beliefs about play in the indoor and outdoor environment. *Australas. J. Early Child.* **2017**, *42*, 24–32. Available online: https://journals.sagepub.com/doi/10.23965/AJEC.42.1.03 (accessed on 11 October 2021). [CrossRef]
32. Avalos, B. Teacher professional development in teaching and teacher education over ten years. *Teach. Teach. Educ.* **2011**, *27*, 10–20. [CrossRef]
33. Danniels, E.; Pyle, A. Defining play-based learning. *Encycl. Early Child. Dev.* **2018**, 1–5. [CrossRef]
34. Guskey, T.R. Professional development and teacher change. *Teach. Teach. Theory Pract.* **2002**, *8*, 381–391. [CrossRef]
35. McGuinness, C.; Sproule, L.; Bojke, C.; Trew, K.; Walsh, G. Impact of a play-based curriculum in the first two years of primary school: Literacy and numeracy outcomes over seven years. *Br. Educ. Res. J.* **2014**, *40*, 772–795. [CrossRef]
36. Stoll, L.; Bolam, R.; McMahon, A.; Wallace, M.; Thomas, S. Professional learning communities: A review of the literature. *J. Educ. Change* **2006**, *7*, 221–258. [CrossRef]
37. Braund, M. Teacher educators' professional journeys: Pedagogical and systemic issues affecting role perceptions. *Afr. Educ. Rev.* **2015**, *12*, 309–330. [CrossRef]
38. Cochran-Smith, M. Learning and unlearning: The education of teacher educators. *Teach. Teach. Educ.* **2003**, *19*, 5–28. [CrossRef]
39. White, S. Teacher educators for new times? Redefining an important occupational group. *J. Educ. Teach.* **2019**, *45*, 200–213. [CrossRef]
40. World Health Organization. *School Policy Framework: Implementation of the WHO Global Strategy on Diet, Physical Activity and Health*; World Health Organization: Geneva, Switzerland, 2008; Available online: https://apps.who.int/iris/handle/10665/43923 (accessed on 5 August 2021).
41. Goh, T.L.; Hannon, J.C.; Webster, C.A.; Podlog, L. Classroom teachers' experience implementing a movement integration program: Barriers, facilitators, and continuance. *Teach. Teach. Educ.* **2017**, *66*, 88–95. [CrossRef]
42. Pyle, A.; DeLuca, C.; Danniels, E. A scoping review of research on play-based pedagogies in kindergarten education. *Rev. Educ.* **2017**, *5*, 311–351. [CrossRef]
43. Lee, H.C.; Blanchard, M.R. Why teach with PBL? Motivational factors underlying middle and high school teachers' use of problem-based learning. *Interdiscip. J. Probl. Based Learn.* **2019**, *13*, 2. [CrossRef]

44. Michie, S.; Atkins, L.; West, R. *The Behaviour Change Wheel: A Guide to Designing Interventions*; Silverback Publishing: London, UK, 2014; ISBN 978-1-912141-00-5.
45. West, R.; Michie, S. A brief introduction to the COM-B model of behaviour and the PRIME theory of motivation. *Qeios* **2020**, 1–6. [CrossRef]
46. Michie, S.; van Stralen, M.; West, R. The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implement. Sci.* **2011**, *6*, 42. [CrossRef]
47. Ellis, K.; Pears, S.; Sutton, S. Behavioural analysis of postnatal physical activity in the UK according to the COM-B model: A multi-methods study. *BMJ Open* **2019**, *9*, 1–12. [CrossRef]
48. Bentley, M.R.; Mitchell, N.; Sutton, L.; Backhouse, S.H. Sports nutritionists' perspectives on enablers and barriers to nutritional adherence in high performance sport: A qualitative analysis informed by the COM-B model and theoretical domains framework. *J. Sports Sci.* **2019**, *37*, 2075–2085. [CrossRef]
49. Duan, Z.; Liu, C.; Han, M.; Wang, D.; Zhang, X.; Liu, C. Understanding consumer behavior patterns in antibiotic usage for upper respiratory tract infections: A study protocol based on the COM-B framework. *Res. Soc. Adm. Pharm.* **2021**, *17*, 978–985. [CrossRef]
50. Norris, E.; O'Connor, D.B. Science as behaviour: Using a behaviour change approach to increase uptake of open science. *Psychol. Health* **2019**, *34*, 1397–1406. [CrossRef]
51. Sevenhuysen, S.; Haines, T.; Kiegaldie, D.; Molloy, E. Implementing collaborative and peer-assisted learning. *Clin. Teach.* **2016**, *13*, 325–331. [CrossRef] [PubMed]
52. Nylén, K.; Karlberg, M.; Klang, N.; Ogden, T. Knowledge and will: An explorative study on the implementation of school-wide positive behavior support in Sweden. *Front. Psychol.* **2021**, *12*, 618099. [CrossRef] [PubMed]
53. Hatzikiriakidis, K.; Hillman, C.; Soh, S.E.; Savaglio, M.; O'Donnell, R.; Ayton, D. The implementation of Australian youth mentoring programmes: An examination of strengths and limitations through stakeholder engagement. *Int. J. Adolesc. Youth* **2021**, *26*, 266–283. [CrossRef]
54. Aljanazrah, A. *Development, Implementation and Evaluation of a New Chemistry Teacher In-Service Training Mode Based on Blended Learning*; Shaker Verlag: Herzogenrath, Germany, 2006.
55. Ministry of Education and Higher Education (MoEHE). *Education Sector Strategic Plan (2017–2022) in Palestine*; MoEHE: Doha, Qatar, 2017; Available online: https://tinyurl.com/37y5zmxv (accessed on 4 November 2021).
56. Alanazi, M.; Widin, J. Exploring the role of teacher talk in Saudi EFL classroom: Importance of F-Move in developing students' spoken skill. *Arab. World Engl. J.* **2018**, *9*, 307–320. [CrossRef]
57. Al-Ramahi, N.; Davies, B. Changing primary education in Palestine: Pulling in several directions at once. *Int. Stud. Sociol. Educ.* **2002**, *12*, 59–76. [CrossRef]
58. Khalili, O.M. Teacher Professional Development Programs in Palestine: Changes Beliefs and Practices. Ph.D. Dissertation, University of Massachusetts, Amherst, MA, USA, May 2010. [CrossRef]
59. Tong, A.; Sainsbury, P.; Craig, J. Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *Int. J. Qual. Health Care* **2007**, *19*, 349–357. [CrossRef]
60. Keyworth, C.; Epton, T.; Goldthorpe, J.; Calam, R.; Armitage, C.J. Acceptability, reliability, and validity of a brief measure of capabilities, opportunities, and motivations ("COM-B"). *Br. J. Health Psychol.* **2020**, *25*, 474–501. [CrossRef]
61. Gale, N.K.; Heath, G.; Cameron, E.; Rashid, S.; Redwood, S. Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Med. Res. Methodol.* **2013**, *13*, 1–8. [CrossRef]
62. Loughran, J. Professionally developing as a teacher educator. *J. Teach. Educ.* **2014**, *65*, 271–283. [CrossRef]
63. Ping, C.; Schellings, G.; Beijaard, D. Teacher educators' professional learning: A literature review. *Teach. Teach. Educ.* **2018**, *75*, 93–104. [CrossRef]
64. Japan International Cooperation Agency (JICA). *Gender Profile: Palestinian Territories*; Kokusai Kogyo Co., Ltd.: Tokyo, Japan, 2016; Available online: https://openjicareport.jica.go.jp/pdf/1000026844.pdf (accessed on 5 July 2021).
65. Schneijderberg, C.; Merkator, N. The new higher education professionals. In *The Academic Profession in Europe: New Tasks and New Challenges*; Kehm, B.M., Teichler, U., Eds.; Springer: Berlin/Heidelberg, Germany, 2013; pp. 53–92. [CrossRef]
66. McKenna, S. The rise of the executive dean and the slide into managerialism. *Educ. Res. Soc. Change* **2020**, *9*, 78–91. [CrossRef]
67. Korthagen, F.A.J. In search of the essence of a good teacher: Towards a more holistic approach in teacher education. *Teach. Teach. Educ.* **2003**, *20*, 77–97. [CrossRef]
68. McMullen, J.M.; Martin, R.; Jones, J.; Murtagh, E.M. Moving to learn Ireland–Classroom teachers' experiences of movement integration. *Teach. Teach. Educ.* **2016**, *60*, 321–330. [CrossRef]
69. Milner IV, H.R. What does teacher education have to do with teaching? Implications for diversity studies. *J. Teach. Educ.* **2010**, *61*, 118–131. [CrossRef]
70. Right To Play. *Right to Play in the Palestinian Territories*; Right to Play: Toronto, ON, Canada, 2019; Available online: https://tinyurl.com/bfvnxbue (accessed on 5 July 2021).
71. Dengerink, J.; Lunenberg, M.; Kools, Q. What and how teacher educators prefer to learn. *J. Educ. Teach.* **2015**, *41*, 78–96. [CrossRef]