AN EXAMINATION OF CONTINUING PROFESSIONAL DEVELOPMENT EXPERIENCES FOR PHYSICAL EDUCATION TEACHERS IN KURDISTAN REGION-IRAQ

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By

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Abstract

The purpose of the present research was to examine the PE teachers' CPD experiences in KRI. The research sought to answer the following research questions: (i) how do specialist supervisors in KRI support PE teachers to grow as professionals (i.e., develop their knowledge and practice)?; (ii) in what formal CPD opportunities do PE teachers in KRI participate and, what do they fined effective?; (iii) what informal CPD activities do PE teachers engage in and, what do they fined effective in KRI?. A mixed method was employed in order to address the research questions. Data were collected through three overlapping data collections phases such as semi-structured interviews with eight supervisors; 450 surveys distributed to PE teachers in both basic and preparatory schools and 302 returned with (67%) return rate; 16 interviews with PE teachers who working in both basic and preparatory schools.

One of the key findings was that supervisors are not adequately prepared to supervise PE teachers under their remit. It appears that there is very little guidance on what their role and entails (at a policy level) and how best to undertake it (lack of training). Despite some deficiencies identified in the current system, most PE teachers involved in the study either as survey respondents or case studies appeared to value the potential of meaningful supervisory support and demanded more and better support from their supervisors. PE teachers' years in the profession (level of experience) did not appear to be a factor shaping their views. There was consensus from both male and female PE teachers across different stages in their career that supervisors can play an important role. They however acknowledged that supervisors need to be in a position to offer them new ideas, new ways of teaching to expand their teaching repertoire. They believed that more support of the same (i.e. what is already available) is not adequate and better-quality support was vital.

Results suggested that PE teachers are overall positive about the purpose and importance of formal CPD, despite a clear decline in the number of formal CPD pursued in recent years. Their actual participation in formal CPD was, on average, less than one formal CPD per year. Lack of funding was a concern discussed. Especially after the financial crisis which has had a powerful impact on the limited provision of formal CPD as well as the quality of CPD provision. The role of the CPD

providers was also discussed as concern have been raised by PE teachers in relation to the content and relevance of PE-CPD in KRI to ensure that public funds are used wisely and CPD is relevant to teachers' need. Findings regarding the patterns of the available formal CPD suggested that training programmes appeared to vary in terms of content, duration and providers. especially, half of the PE-CPD provided to PE teachers was relevant to curriculum content. However, only one-tenth of them were related to teachers' pedagogical knowledge. Duration of the available PE-CPD was also varied. Half of the CPD programmes which PE teachers could recall were short duration within 1-6 hours, and the one-day programme was prevalent at 37%. However, the majority of the available formal PE-CPD were delivered in a practical, applied way and universities have delivered most of the CPD programmes.

Findings from the study three indicated that PE teachers in KRI in overall were positive about the purpose and importance of informal CPD. However, the analysis also showed that there was great variation in teachers' perceptions. Almost one fifth on the teachers did not believe engaging in informal learning is important to the reasons of sharing unreliable information among teachers and non-input from experts directly within teachers' informal professional learning. However, informal learning was perceived as beneficial to the PE teachers' pedagogical knowledge such as enhancing teaching practice, exploring a new way of teaching and, understanding their mistakes by analysing their own and other teachers' work. Concerning the nature of informal CPD undertaken by PE teacher in KRI, evidence form study three identified that teachers appeared to have a preference (overall) for the individual compared to social learning. While teachers' responses to the purpose and importance of informal learning were more related to the social aspect (e.g., interaction with colleagues), the actual informal activities that undertaken by these teachers were more in the individual level. Specifically, teachers believed that reflection was more influential compared to other individual and social forms of learning.

Dedication

To my parents, *Kamil* and *Khawar*,
my sisters and brothers

Acknowledgement

I would really like to thank all who have helped and supported me over the years of my study.

First and foremost, many thanks to my supervisors Dr. Kyriaki Makopoulou for her endless help and support. She has been an excellent supervisor who advised me, supported me and believed in my abilities to keep going. Without her support and encouragement, this work has not been possible to complete.

I would also like to thank all the research participants for believing in the aim of this study, giving me their free time and sharing their beliefs and experiences about supervisory system and PE-CPD in Kurdistan Region-Iraq.

Thanks go to my parents, sisters and brothers. They all helped me to complete this thesis. They pushed me and helped me to follow my dream and they gave me strength and confidence.

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CHAPTER ONE: INTRODUCTION

1.1. An introduction to the Continuing Professional Development

It is now widely accepted that the nature of teachers' work is far from stable and predictable (Rayes et al., 2016). In some contexts, teachers work in an ever-changing and increasingly challenging educational landscape, expected to successfully implement curriculum reforms, innovate in their pedagogy, and to teach an increasingly diverse student population (Jones and Dexter, 2014). In order to improve, extend and renew the practice as well as raise student achievement, teachers need to engage in different forms of Continuing Professional Development (formal, non-formal and informal) (De Vries et al., 2014, King, 2014)

CPD is defined as any activities that teachers engage over their professional career to the purpose of enhancing their work (Day and Sachs, 2004). Concepts such as staff development, continuing education, training, in-service education, lifelong learning and, on-the-job learning have also been used interchangeably to CPD (Villegas-Reimers, 2003, De Vries et al., 2014, McMillan et al., 2016, Muijs and Lindsay, 2008). It is also frequently the case that CPD is associated with short courses or workshops that are designed with the aim to 'transfer' knowledge from the 'experts' (i.e., CPD providers) to teachers. Yet, there is increasing recognition that as teachers engage in CPD, they also engage in professional learning. Professional learning often 'represents the process that, whether intuitive or deliberate, individual or social, result in specific changes in the professional knowledge, skills, attitudes, beliefs or actions of teachers (Fraser et al., 2007, p. 157). Thus, it is important to underline that CPD and professional learning will be used interchangeably in the context of the present research.

There is, therefore, consensus that CPD / professional learning is one of the fundamental mechanisms for improving classroom instruction and student achievement (Cohen and Hill, 2000, De Vries et al., 2014, King, 2014, Beach, 2017). There is substantial evidence that well designed CPD programmes can make a difference in teachers' learning and students' achievement (Yoon et al., 2007,

Cordingley, 2015), ‘the links between CPD participation and teacher practice (let alone pupil learning outcomes) are not examined robustly. It is therefore impossible for researchers and CPD stakeholders to draw any safe conclusions about CPD forms or strategies that make a difference to teachers and most importantly, pupils. This limitation has been acknowledged in various policy documents (DCSF, 2003) and CPD researchers (Borko, 2004, Opfer and Pedder, 2011) have been challenged to draw upon a range of methods to offer robust process and impact evidence to inform future CPD provision’ (Amin, 2015, p. 3).

‘In this context, experimental research is considered the ‘golden standard' (Guskey, 2009) in CPD research’ (Amin, 2016, p. 7). The aim of such studies is to measure the effects of CPD participation on a range of teacher- or student-related outcomes adopting an experimental approach (compare results between teachers who attend a CPD programme and teachers who are allocated in control conditions). Results across studies are promising albeit mixed. Specifically, although there is encouraging positive evidence that CPD is effective in supporting teachers grow their knowledge and confidence (Nolan and Molla, 2017) and improve their practices (Cordingley et al., 2005, Martin et al., 2008), ‘the findings are unclear in terms of the impact of such interventions on pupils (Garet et al., 2008, Gersten et al., 2010, Opfer and Pedder, 2011). In this context, Hill et al. (2005) claimed that the apparent consensus about the features of effective CPD reached over the last decades had been shaken up’ (Amin, 2016, p. 7).

‘It has been argued, however, that CPD has the potential to improve student achievement through improvements in teacher's knowledge, skills and teaching classrooms. CPD scholars have claimed that if any of these steps is weak or missing (for example, if the CPD programme fails to support teachers to develop their knowledge or to make substantial and meaningful improvements in their practices), it is less likely (or even impossible) that students will benefit from the CPD programme. Nevertheless, as evident in the vast body of CPD literature (Harris and Sass, 2011, Lumpe et al., 2012), establishing or measuring the links between CPD participation and student learning outcomes is a challenging task’ (Amin, 2016, p. 7).

Three main reasons are frequently discussed as making impact CPD studies difficult. ‘Firstly, studying CPD impact requires substantial resources in terms of time and

funding available and these are not always available at times of considerable pressures on educational budgets. Secondly, the multifaceted nature of CPD means that it is very difficult to measure the effects of the myriad of CPD strategies on pupils and to, subsequently, isolate the effect of CPD that ‘causes' improvements in pupil learning. Thirdly, random allocation of participants to intervention and control groups – a necessary requisite in experimental research – is not always possible, for ethical or practical reasons’ (Amin, 2016, p. 7).

1.2. Physical Education (PE)-CPD

In the last two decades, the amount of research on the Continuing Professional Development (CPD) for Physical Education (PE) teachers has increased significantly. Ample support has provided by research in PE to the assertion that student learning is depending fundamentally on the continuing growth and quality of teachers (Patton et al., 2013). It could also be argued that research findings on PE-CPD are very similar to research studying CPD for teachers more widely (Braga et al., 2017, Armour et al., 2017). Thus, for high-quality and successful PE teachers, there is a need for consistent and methodical CPD (Commission/EACEA/Eurydice, 2013).

There are many studies that focus on PE-CPD initiatives, effective programmes, models and practice (Armour, 2015). However, recent studies argued that traditional types of CPD were still extensively applied (Armour et al., 2017, Korthagen, 2017, Makopoulou et al., 2019). With less attention that made to teachers' voice and their learning needs, many PE-CPD is believed to adopt a 'one-size-fits-all' approach, implemented off-site in short periods of time (e.g., one-shot activities), without follow-up support, and with limited opportunities for PE teachers to work collaboratively (Jess and McEvilly, 2015, Makopoulou and Armour, 2014). However, different researchers (e.g., Makopoulou and Armour, 2014, Parker and Patton, 2017, Tinning, 2015, Makopoulou and Armour, 2011a, Armour and Makopoulou, 2012) have attempted to identify activities, practice and trends that potentially lead to PE-CPD effectiveness.

Armour and Yelling were the first who attempted to explore PE teachers’ CPD experiences and view in England (Armour and Yelling, 2007, Armour and Yelling, 2003, Armour and Yelling, 2004). The aim of this study had two broad objectives: To

explore the patterns of PE-CPD participation as understood and experienced by PE teachers themselves; and to capture how these PE teachers understood 'effective' and ‘ineffective’ PE-CPD. The researched highlighted a number of findings that resonated with the international literature. For example, the PE teachers in their study stressed that existing PE-CPD provision was generally off-site, traditional and, it limited in scope. The researchers also noted that the teachers’ patterns of CPD participation were ad-hoc, without a clear pattern of participation and impact. In relation to teachers’ views on what is effective CPD, their views focused on the following key elements. CPD is effective when it is ‘practical, relevant and applicable, able to provide ideas and practices; delivered by a charismatic tutor; challenging and thought provoking, and able to provide time for reflection and collaboration’ (cited in Makopoulou (2009, p. 34).

One of the most recently published studies seeking to examine the features of effective PE-CPD was undertaken by (Lee et al., 2019). The study was located in South Korea and examined secondary PE teachers’ views on CPD provision. In line with other PE teachers in other countries (e.g., Armour et al., 2017, Hadjimatheou, 2017, Makopoulou and Armour, 2011a, Makopoulou and Armour, 2011b), the Korean teachers argued for CPD to be novel, relevant and practical, fostering collegial interaction and led by CPD providers (i.e. tutors or facilitators) who are knowledgeable and who foster risk-taking. Makopoulou et al. (2019) recently suggested that CPD providers need to foster critical appraisal of the practices promoted during CPD opportunities, as a key factor to ensure that teachers review and develop their practices in a way that benefits pupils.

Despite the findings from the two previous studies and many attempts to identify the effectiveness and ineffectiveness of PE-CPD (e.g., Attard, 2017, Elliot and Campbell, 2015, Miller et al., 2017, Parker and Patton, 2016, Tsangaridou, 2016), fundamental questions about what is effective PE-CPD remain. Furthermore, as Armour et al. (2017) asked, it is also important to explore ways to challenge and transform existing provision; but this is not always an easy task: ‘How can we move away from the ineffective CPD that is routinely offered despite strong evidence that it is likely to be unsatisfactory for many teachers and, by default, their pupils?’ (p. 2). In this context, it could also be argued that effective CPD might mean different things in different

national contexts (Makopoulou & Armour, 2011a). It is still unclear how PE teachers in different countries engage in PE-CPD. Research into the patterns of CPD participation is thus needed to better understand on how PE teachers in different national contexts engage in PE-CPD and what they find effective. Thus, this type of research can inform CPD policy and practice in the specific contexts studied but also make a contribution to the existing knowledge base internationally.

1.3. Aim and research questions

The purpose of the present research is to examine PE teachers' CPD experiences in KRI. In particular, the research aimed to address the following research questions:

1. How do specialist supervisors in KRI support PE teachers to grow as professionals (i.e., develop their knowledge and practice)?

2. In what formal CPD opportunities do PE teachers in KRI participate and, what do they find effective?

3. In what informal CPD activities do PE teachers in KRI engage in and what do they fined effective?

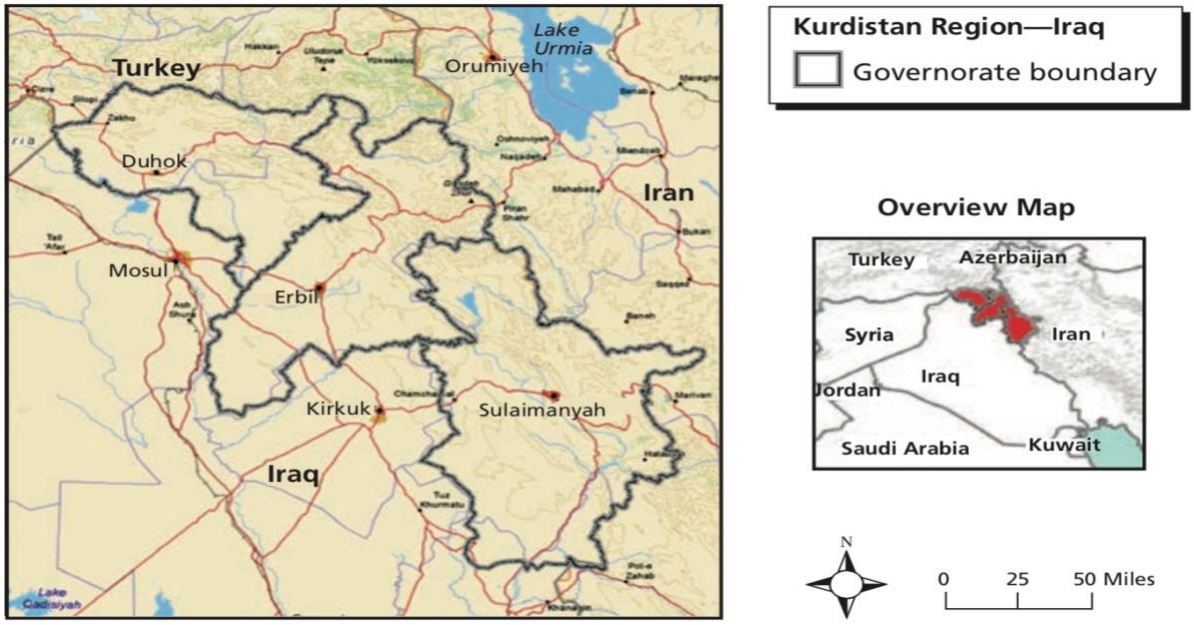
Each question was addressed in a separate study. Research question 1 was addressed in the first study. The importance of the first study was not only to inform supervision policy and practice in KRI, but also provide supervisors and PE teachers thoughts regarding the effectiveness of the supervision system. The second study focused on developing understanding about formal PE-CPD from the perspective of PE teachers themselves, to identify patterns and frequency of participation in formal PE-CPD and the perceived effectiveness of these opportunities on their practice. The third study sought to understand the PE teachers' perception on informal learning, unpick the patterns and frequency of engagement and its impact on their practice.

1.4. Setting the Context of The Study

1.4.1. Location, background, population and economy of KRI

Kurdistan Region-Iraq (KRI) is located in the north part of Iraq and it is a semi-autonomous region. Its independence is acknowledged internationally. In 1991, Iraqi people upraised against Saddam Hussein and as a result, most of the Kurds fled to the borders of the country and they become refugees in Iran and Turkey. However, after the First Gulf War, the United Nations (UN) has established the no-fly zone which helped Kurdish people to return to their homes. Political changes after the Iraq invasion in 2003 have led to the ratification of a new constitution that defines the Kurdish part in the north as a federal entity. Currently, KRI is democracy parliamentary with a regional assembly that consists of 11 seats. The KRI consists of three governorates such as Erbil, Sulaimanyah and Duhok (figure 1.1).

Figure 1. 1 Current KRI's Geographical Boundaries



SOURCES: RAND *MG1140-1.1*

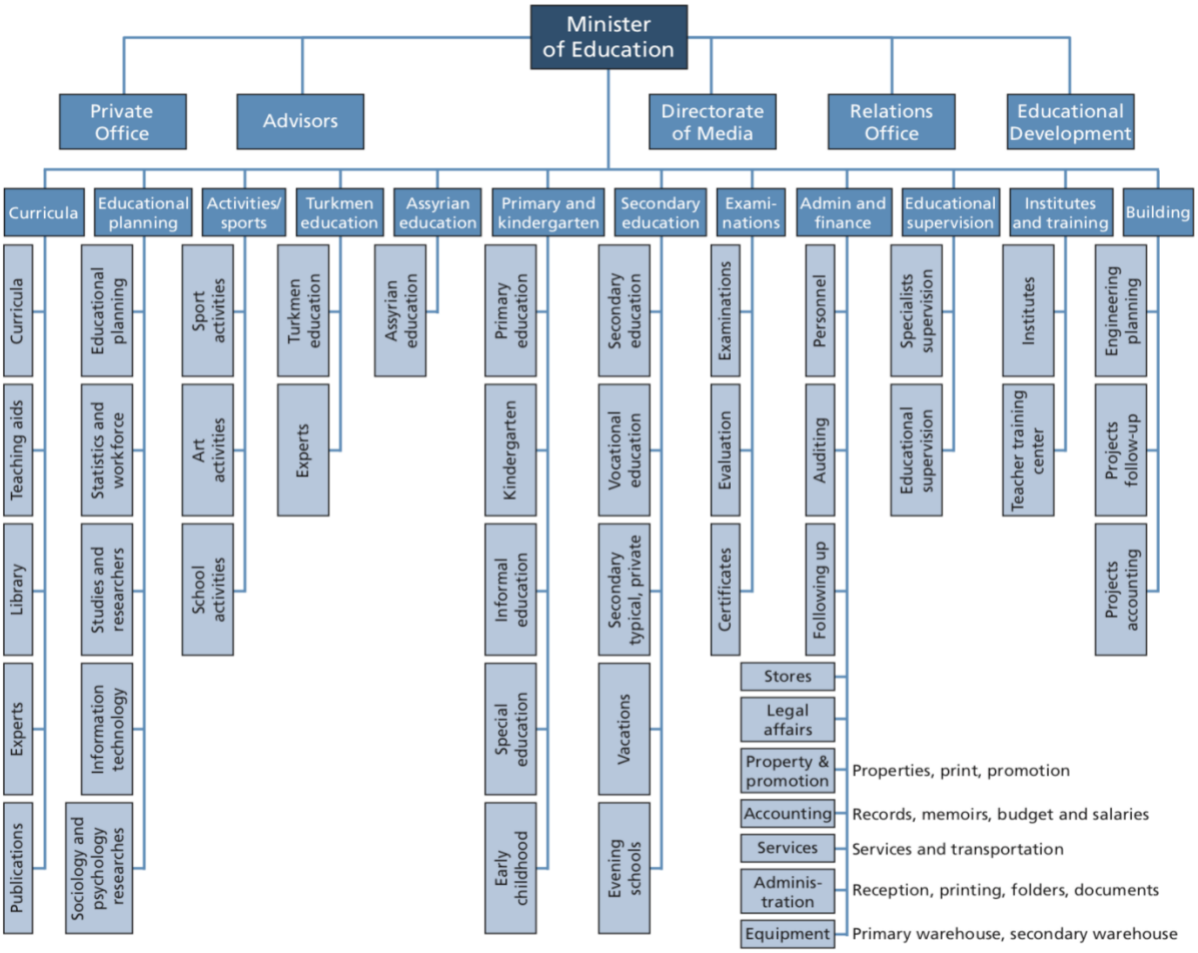
The population of the KRI was estimated at about 3.9 million in 2007 (IHSES, 2007). However, some references have estimated as around 6 million in 2015 (e.g., UK FCO) with 50% of the population is under the age of 20. In KRI, both Kurdish and Arabic languages are official, but the Kurdish language is most spoken. Also, 50% of the wage earners in KRI are stat employee (Vernez et al., 2014b). The economy in KRI is

dominated by the oil industry, however, there is also agriculture and tourism. The stability of the region has allowed improving housing, road and power infrastructure (Vernez et al., 2016).

1.4.2. Education system in KRI

'In KRI, the education system is highly centralised, with all major policy decisions made by the Ministry of Education (MoE), which not only oversees all aspects of public education but also organises private education (figure 1.2)' (Amin, 2015, p. 4). Approximately all decisions regarding the policy, operational managerial in KRI are made by the MoE. This also includes small decisions such as the appointment of new teachers. Directors general are not able to implement an initiative without approval from the minister. This centralisation of decision-making includes all levels of education even appointing teachers by governorates must be approved by the MoE.

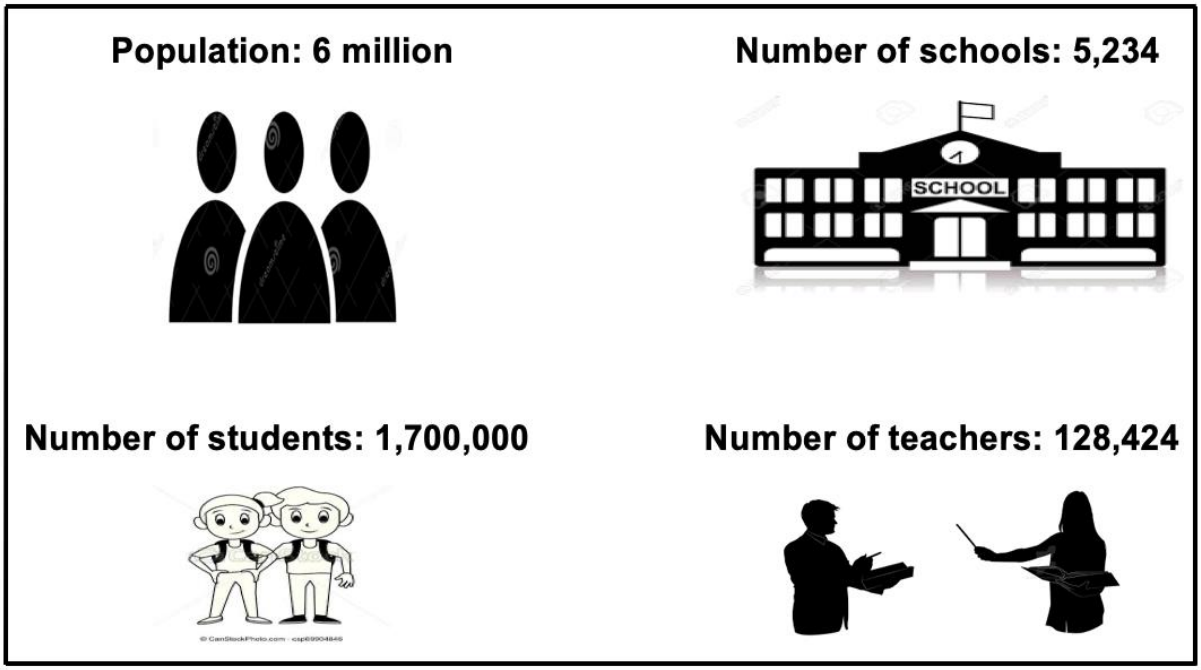
Figure 1. 2 Organisational structure of KRG's Ministry of Education MoE



SOURCES: RAND *RR960-2.2*

Since 2008, the KRG undertook an ambitious reform that covered all aspects of the education system, from kindergarten through grade 12. This reform was the result of a specialist conference held in 2007, when ‘educational experts' made the case for the importance of such a reform. One of the most significant aspects of this educational reform was the curriculum reform. ‘A new primary curriculum aim was introduced: to support students to learn effectively and to prepare them to become ‘loyal citizens' (Vernez et al., 2014b) with the ability to think critically and analytically. Specifically, the previous curriculum had memorisation of information as a key goal. To address the limitation of such a monolithic approach, the new curriculum placed emphasis on developing students’ understanding and ability to think and analyse information (Vernez et al., 2014b). Alongside seeking to develop pupils’ thinking skills, the new curriculum placed greater emphasis on learning two languages, Arabic and English, in addition to Kurdish; and this was applied to all grades’ (largely cited from Amin, 2015, p. 4).

Figure 1. 3 Population in KRI, number of schools, students and teachers 2017-2018



‘The educational reform included three additional major changes. Firstly, the traditional system consisting of three distinct levels of education—primary, Intermediate and Preparatory—was replaced by a two-level system consisting of Basic schools (grades 1-9, students aged 6-14) and Preparatory schools (grades 10-12, student aged 15-17). Secondly, made education compulsory to grade 9 rather the grade 6. The third

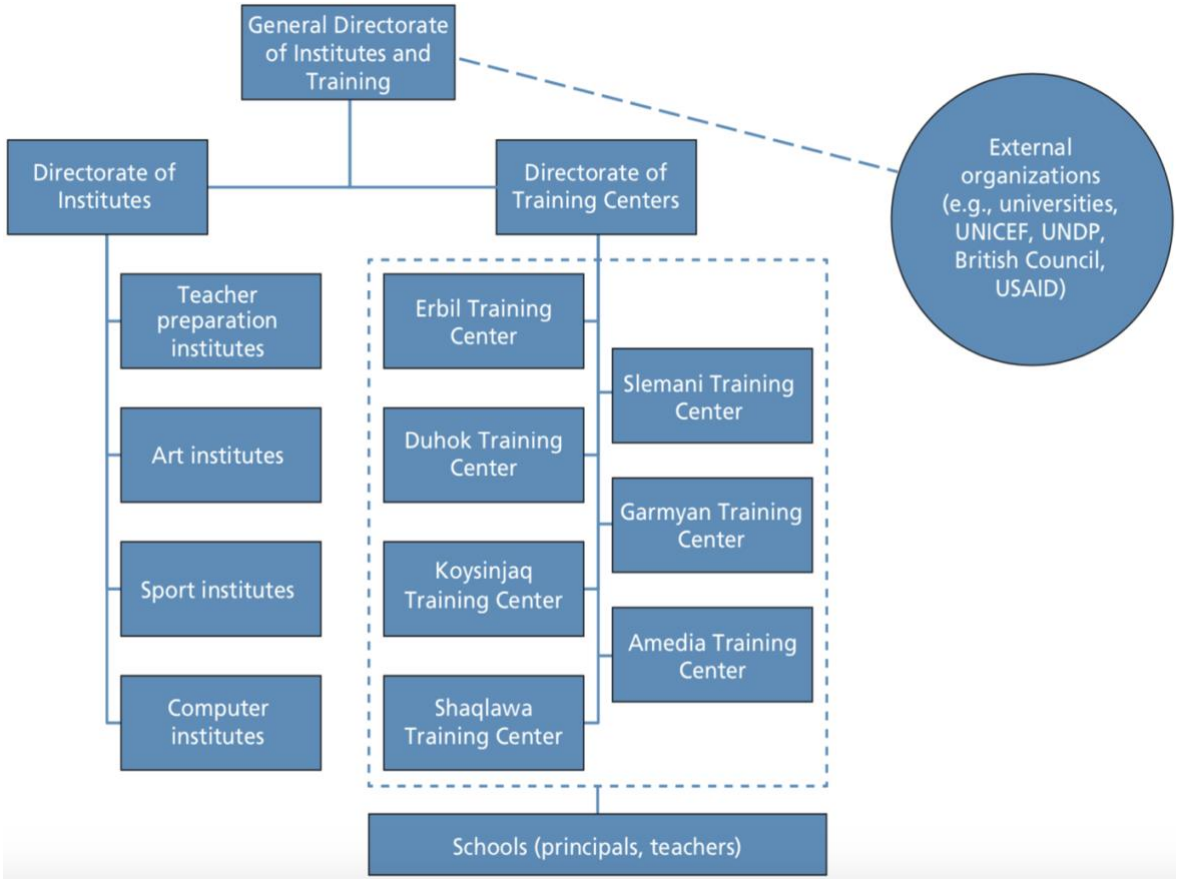
change involved the education and preparation of teachers, which is particularly relevant to the focus and purpose of this study. The requirement for teachers to teach in the basic grades was upgraded to the bachelor's degree (4 years in the University) instead of teacher's institute's degree (2 years in the institutes). This change provided teachers with the opportunity to develop a much more in-depth understanding of the subject they teach. However, the computer, physical education and arts institutes continue to operate as before (Vernez et al., 2014b). More information about teachers' initial training and CPD is provided in section (1.4.3)' (largely cited from Amin, 2015, p. 4).

'In relation to the schooling system in KRI, the school year runs from the middle of September for nine months (September-June) (Vernez et al., 2016). During each academic year, there are two main public holiday periods; a one-week holiday at the end of December and a two-week holiday starting in the middle of March. The school year is divided into two semesters (September-December and January-June). Students attend school six days a week (Saturday-Thursday) for five hours each day (8.00-13.00)' (Amin, 2015).

1.4.3. Teacher training in KRI

In KRI, whilst the MoE overlooks and funds pre-service and in-service training for teachers, it is the General Directorate of Institutes and Training (GDIT), under the MoE, that is responsible for teacher training provision. GDIT has two divisions, the Directorate of Institutes (DI) and Directorate of Teacher Training Centre (DTTC). The DI is responsible for teachers' pre-service training (initial education) and the DTTC focuses on teachers' CPD which are typically organised in one of the seven governorate-based training centres across the KRI. These training centres are located in Erbil, Sulaimanyah, Duhok, Garmyan, Koysinjaq, Amedia and, Shaqlawa (figure 1.3). The GDIT has also responsibility for maintaining relationship with external local and international organisations to provide training for teachers in KRI (e.g., Universities, United Nations Educational, Scientific and Cultural Organisation UNESCO; United Nations Children's Fund UNISEF; United Nations Development Programme UNDP; United States Agency for International Development USAID and, British Council).

Figure 1. 4 Organisational structure of the GDIT in KRI



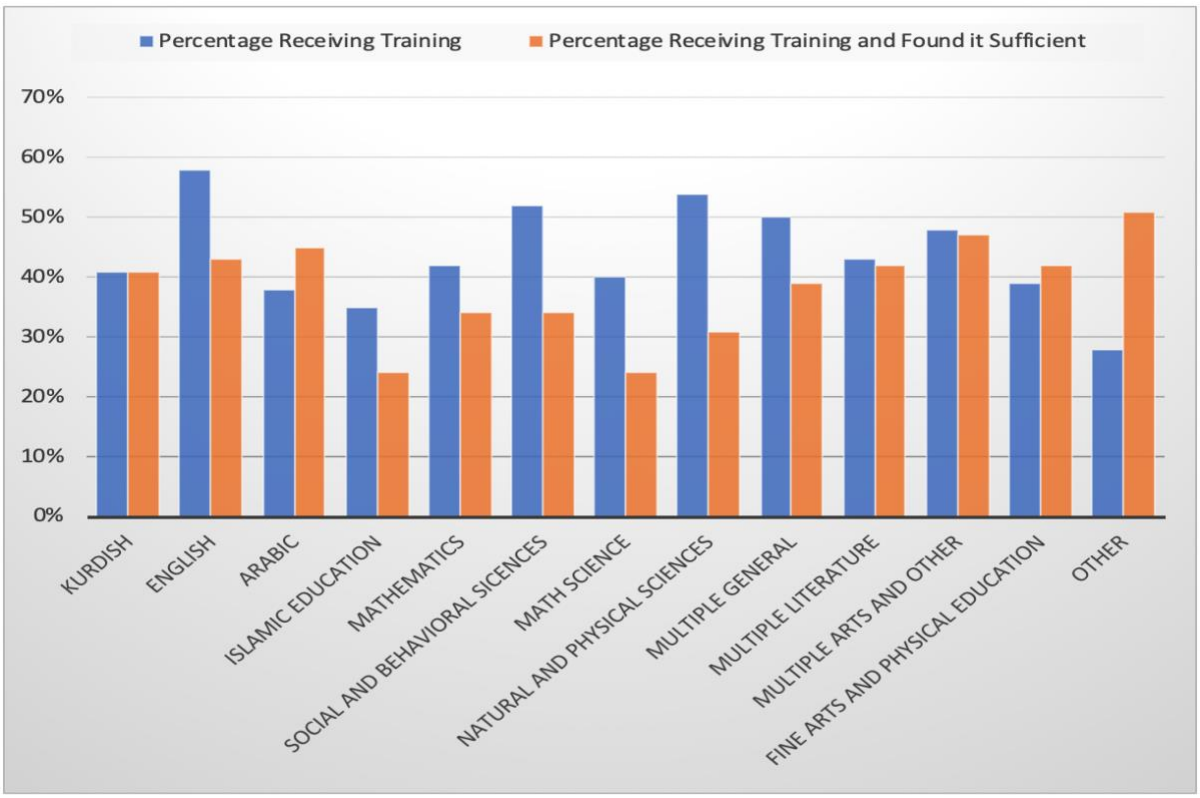
SOURCES: RAND *RR960-5.1*

'In recent years, one of the most important structured, government funded CPD opportunity, designed and delivered by the MoE and GDIT was a national training programme that developed to support the implementation of the 2008 curriculum reform, the programme run between 2008-2010 and consisted of 13 training sessions which sought to familiarize teachers with the new curriculum for each subject. PE teachers were invited to this training session. Figure 1.4 shows the percentage of teachers that received training on the new curriculum. Less than half of the total number of PE teachers employed in state schools appeared to have engaged in this programme. To address this, and to maximise the reach and impact of the programme, the MoE employed the 'train-the-trainer' method (Vernez et al., 2014b). This approach sought to train the supervisors[1] in KRI about the new curriculum. The expectation was then that they would subsequently educate and inform their allocated PE teachers in their schools. This school-based approach was preferred for two reasons: firstly,

[1] Supervisors are responsible to provide in-service training for teachers in school-based through three annual visits.

teachers would have first-hand opportunities to discuss the application of the new curriculum in their own contexts; and secondly, there was an expectation that this approach would ensure that a large number of teachers would engage with the CPD material to develop an understanding of the expectations of the new curriculum' (largely cited from Amin, 2015, p. 10).

Figure 1. 5 Percentage of teachers who reported having received some training in the last two years and the proportion of teachers receiving training who found it sufficient, by subject



SOURCES: 2010 RAND and MoE survey of teachers.

Supervisors in KRI is therefore understood to provide school-based, professional development to teachers. One way to do this is through the annual visits (see section 3.3.1 and 3.3.2). The aim of the first visit, taking place at the beginning of each academic year (September), is for the supervisor to: (i) examine and review the existing curriculum and resources; (ii) provide guidance and support on instructional methods employed by their allocated teachers; and (iii) share information on relevant policies, rules and regulations (Vernez et al., 2014b). During the second visit, which is anticipated to take place towards the end of the first semester (January), the supervisors are expected to check teachers' progress in relation to the guidance offered in the first visit. At the end of the school year (May), the final visit involves a

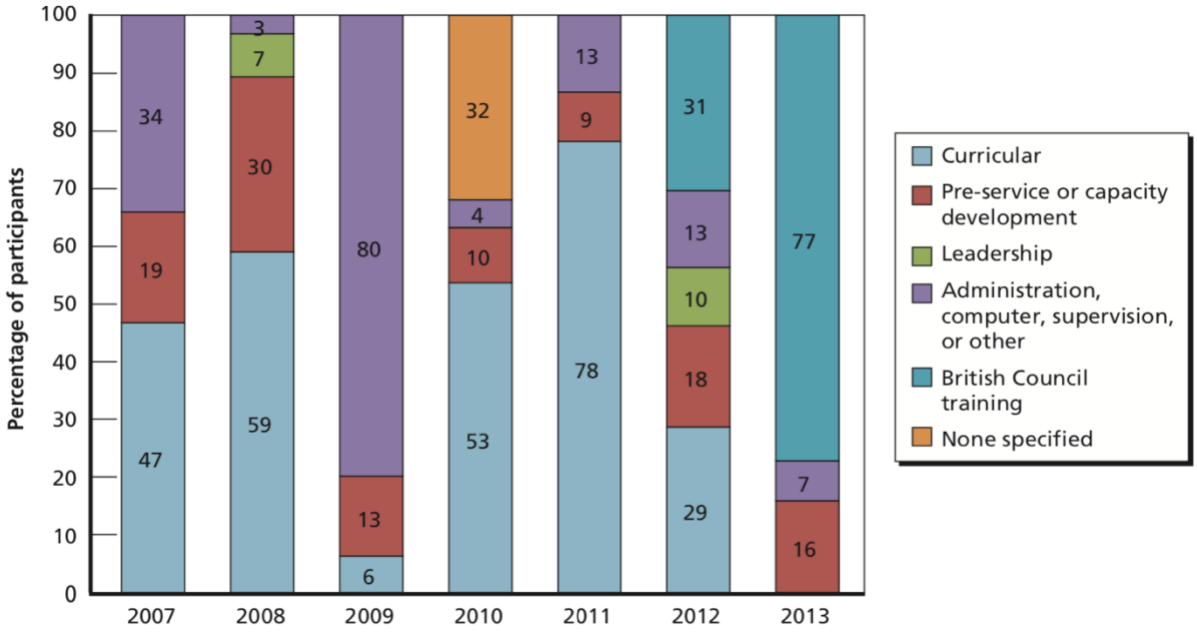
formal evaluation of the teachers' performance, involving the review of a set of criteria (Vernez et al., 2014b).

In KRI, other national and international organisations are involved in CPD provision. The CPD opportunities offered by international (external) organisations are significant but limited. Although these programmes are usually developed in other countries, they are adapted to suit the KRI educational landscape (Vernez et al., 2016). For example, in 2013, UNESCO provided a CPD programme on learning approaches, quality assurance and training strategies. This programme was funded by the government of Qatar and was intended for MoE staff, including supervisors, in KRI and Iraq (Vernez et al., 2016, p. 74). The 'train-the-trainer' approach was again employed but there is no evidence on how this programme was subsequently implemented with teachers (UNESCO, 2013, Vernez et al., 2016).

British council seems one of the external organisations who provided training directly to the teachers, school leaders and supervisors in KRI. According to ministry officials in the MoE, the training was delivered in 2013 through a one-time, large-scale training programme over five to six days. While the ministry standards were used in the past to train the teachers, the British Council provided training on self-assessment which linked to new standards (Vernez et al., 2016). According to (Vernez et al., 2016, p. 76), training programme domains were as follow: '(a) vision, strategic planning and, quality assurance; (b) management; (c) teaching and learning; (d) care and support for students; (e) engagement with society; and (f) results and outcomes'.

While universities are also indicated as one of the local organisations that provided training programmes for teachers (Vernez et al., 2016), details regarding the kind of the programmes they design and implement are not publicly available. Figure 1.5 illustrates the percentage of participants by type of training programme offered between 2007-2013. The geographical places of training provision were Erbil, Duhok and, Garmyan. However, no evidence is available to prove that teachers, school head and supervisors also participated in this training programme in Sulaimanyah city (geographical place of the data collection for the present study).

Figure 1. 6 Percentage of all participants, by type of training offered in Erbil, Duhok, and Garmyan, by year



SOURCES: General Directorate of Institutes and Training Administrative Data

RAND RR960-5.3

1.4.4. Physical education in KRI

Note: This section is largely from the 2015 report (Amin, 2015, p. 4-10).

To be qualified to teach PE in KRI, one needs to study in the University for four years. There are eight Universities offering undergraduate (UG) degrees on physical education and sport sciences (KRG MINISTRY OF HIGHER EDUCATION, 2019). The content and structure of each degree vary. If we take the College of Physical Education and Sports Sciences at the University of Sulaimani as an example (University of Sulaimani-College of Physical Education, 2019), UG students learn the theory/pedagogy that underpin effective practice. In the third year, UG students seek to apply some of the theoretical principles in practice. Alongside a module focusing on the theory of sport pedagogy, students conduct school visit where they spend 2 hours in the school, observing in-service teachers. In their final year (fourth year), students have further workplace placement where they have increasing responsibilities to teach. This gives student's invaluable knowledge and understanding of 'real' teaching in 'real' schools. On average, each student is in the school placement for 40 days and is allocated one supervisor whose responsibility includes visiting the university

students once a week to observe them and to identify strengths and areas for improvement. After graduation, UG students are qualified to teach.

Figure 1. 7 Multiple pathway to become a teacher of PE

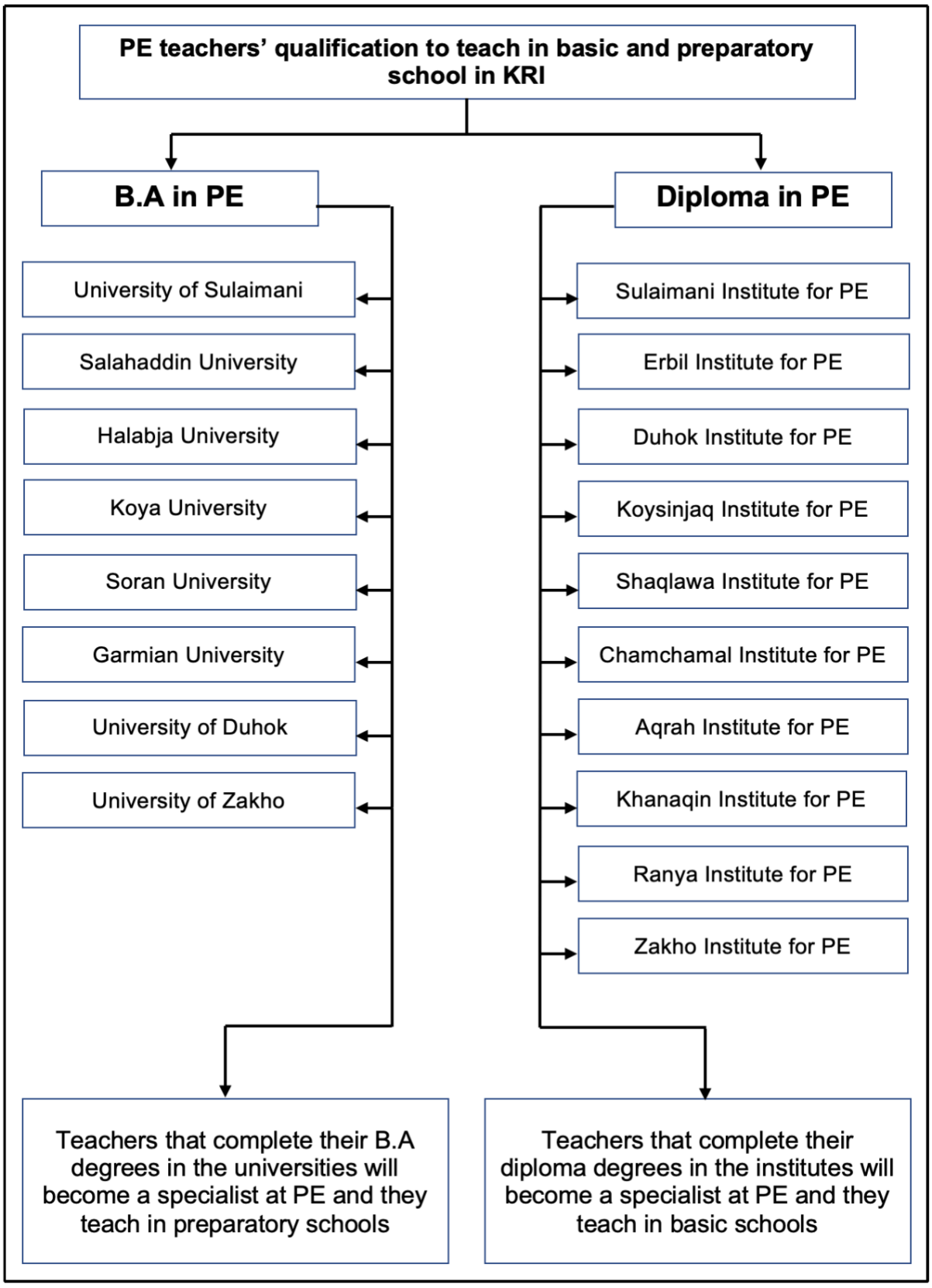
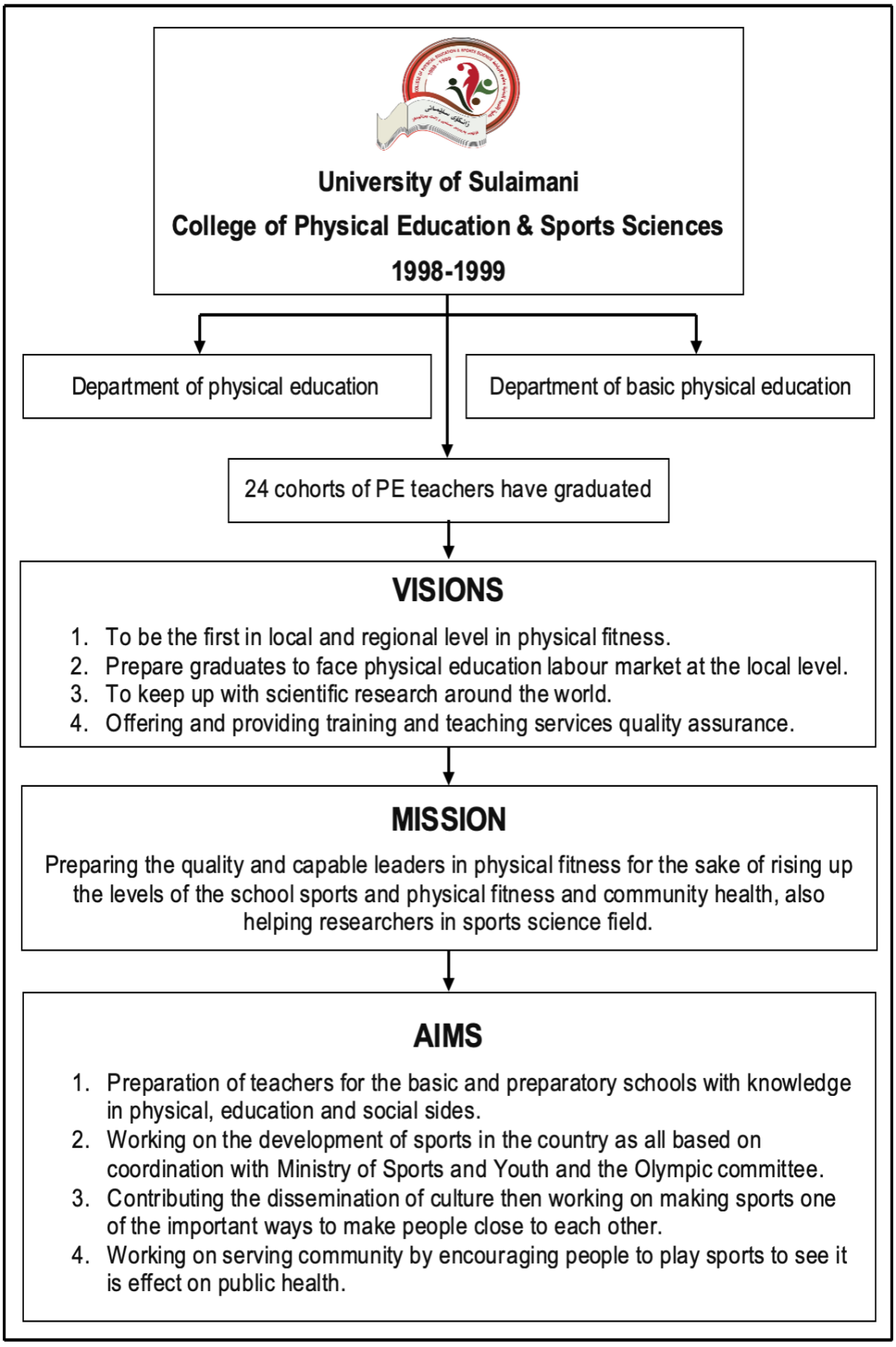


Figure 1. 8 College of Physical Education and Sports Sciences at University of Sulaimani



1.4.4.1 PE curriculum and aims

After the educational reform, one of the most important changes in the PE curriculum was the development of a PE textbook for all grades in education, including both compulsory (basic schools) and post-compulsory (preparatory schools) education. These PE textbooks are aimed at PE teachers and are designed to offer them support on how to teach skills and deliver activities. This is different to the previous support system in place available to PE teachers, which took the form of 'guides' and which focuses only on the type of activities rather than the specific skills young people should develop (and how they can be supported to develop these skills). It is important to note that PE guides areas are still applicable in other areas in Iraq. The new PE curriculum in KRI seeks to develop the students' performance in game skills (basic schools) and, understanding about the rules of the games (preparatory schools).

There are three main aims that underpin the new curriculum across all grades. The first aim focuses on the links between PE participation and potential health outcomes. It is clearly stated that engaging in PE lessons and physical activity can bring positive health outcomes, for example the reduction of obesity. Internationally, there is amble scientific evidence suggesting a clear link between physical activity and a number of health benefits (Bass, 2000, Powell and Bodur, 2019, Pasco et al., 2011, Wen and Wu, 2012). However, there is a lot of debate in the international literature about the role of PE in the health public agenda. Some academics believe that PE has an important role to play such as reducing the obesity by physical activity in childhood (Steinbeck, 2001, Pandita et al., 2016). Others highlight that because of the limited time students engage in PE, claims that children's health can be improved as a result of participation in PE lessons are impossible (Trost, 2004).

There is therefore an ongoing international debate about the role of PE in public health (Trost, 2004). The link between PE and health has been approached differently in different countries. For example, in the Western world, emphasis is placed on increasing participation and engagement in PE so that students develop the skills and competence they need to engage in sport/PA so that they can be active for life (Bailey et al., 2009). Enjoyment also plays a key part (O'Reilly et al., 2001, Domville et al., 2019). The revised PE curriculum in KRI, however, takes a different approach. There is a clear expectation that, despite the ellipsis of scientific research to ground such an

argument, PE has a role to play in improving the nation's health (e.g., reducing obesity, developing a strong healthy body to 'resist disease'). However, as noted by international scholars (Coe et al., 2006), it is debatable whether the time allocated in PE is sufficient for bringing health benefits. In KRI, each PE lesson last approximately 45 minutes and are delivered twice a week. There is also evidence to suggest that, in the US context for example, only half of the allocated PE time is spent in physical activity (Trost, 2004). Questions therefore could be raised about the expectations placed upon PE teachers to improve the nation's health instead of focusing on instilling a passion for lifelong participation to physical activity, as is the case in other countries.

Based on anecdotal evidence, another issue in KRI schools is that PE teachers are very keen for their school teams to do well in competitions. As a result, they focus a lot on their more 'able' students ignoring those who are viewed as not as very good at PE. There is no research in KRI to investigate robustly the extent to which or whether this happens, but this is an issue that is recognised internationally (Trost, 2004).

Another purpose of PE, as outlined in the relevant documents (Sutherland and Legge, 2016, Brookes, 2007, Cook, 2001, Boyes, 2000), focuses on students' social development, through opportunities to participate in group work. It is important to note that the development of students' social ability is particularly prominent in the curriculum and it is argued that this can be achieved through purposeful engagement in not only school-based cooperative PE activities but also through the opportunities to engage in outdoor activities. Cooperative learning, in particular, is promoted as an effective pedagogical / curriculum approach in the KRI curriculum. Mahmood and Ahmad (2010) argue that cooperative learning provides the opportunity for students to interact with their peers in meaningful ways and this way of engagement and interaction has the potential to support students to develop their ability to work effectively with others, not just in the school environment but also in the community. It is believed, therefore, that this engagement has the potential to engender positive social behaviours (Burt, 1998).

Social development is a concept that fits well with the broader curriculum aim of developing 'loyal' citizens who make a positive contribution to society. Learning to work effectively with others through participation in sport, physical activity and outdoor

activities can also support students develop their confidence (Priest, 1998) and leadership skills (Filiz, 2019).

The third objective of the KRI's PE curriculum is the development of physical skills and competence (physical development). Through the students' participation in both theoretical and practical PE lessons, the PE teachers seek to develop students' performance in skills and understanding about the rules of the games. The unique feature of the KRI curriculum, compared to other countries in the world, is that a theoretical component is embedded in lessons in all grades. The theoretical component of PE lessons consists of the teaching and analysis of skills, tactics or rules and it typically precedes the practical application.

The purpose of the theoretical sessions is to develop students' understanding before they have the opportunity to apply relevant skills in practice. The assumption is that without this understanding of what basic skills look like, the students will face difficulties in applying and developing more complex skills. In the early years, especially in grade 1-6, the PE curriculum focuses on the development of fundamental movement skills. The importance of developing a 'secure movement foundation' in order to be active for life is advocated internationally (Bailey et al., 2009), with researchers in Australia and elsewhere (e.g., Barnett et al., 2016, Kerpanova and Borodankova, 2013, Penuel et al., 2007). Similar to a recent study looking at PE in Europe (Kerpanova and Borodankova, 2013), the PE curriculum in KRI also has a dual focus on not only teaching student's skills but also supporting them understands the rules of games and athletic activities.

1.4.4.2 Physical education lesson in KRI

In basic school and from grade 1-6, PE is delivered by PE specialists (i.e. teachers who are trained to be PE teachers rather than generalist primary teachers) who seek to develop students' understanding of how different skills could/should be performed. This is achieved through the use of images / pictures available in the PE books and which are intended to support students to develop an idea about the skills to be taught on the assumption that students have no prior knowledge about these skills. Following the theoretical part of the lesson, where pictures are shown and discussed, students

have the opportunity to practice / perform these skills during the practical part of the lesson. PE teachers in basic schools have the freedom to determine the content of PE lessons and the type of activity they teach. In addition of the three key aims that explained earlier, PE curriculum seek to create an enjoyable environment for students as they engage in different game activities.

In grade 7-9 (Assi et al., 2013, Ali et al., 2014, Ahmed et al., 2014), the aim of the PE curriculum is to teach students the skills to perform 'popular' games (table 1.1). The use of video observation is promoted as an important teaching and learning tool and PE teachers are expected to make effective use of videos to show students the correct technique for different skills. Similar to grade 1-6, PE lessons contain both a theoretical and practical element.

Table 1. 1 The content of PE lesson for Basic schools

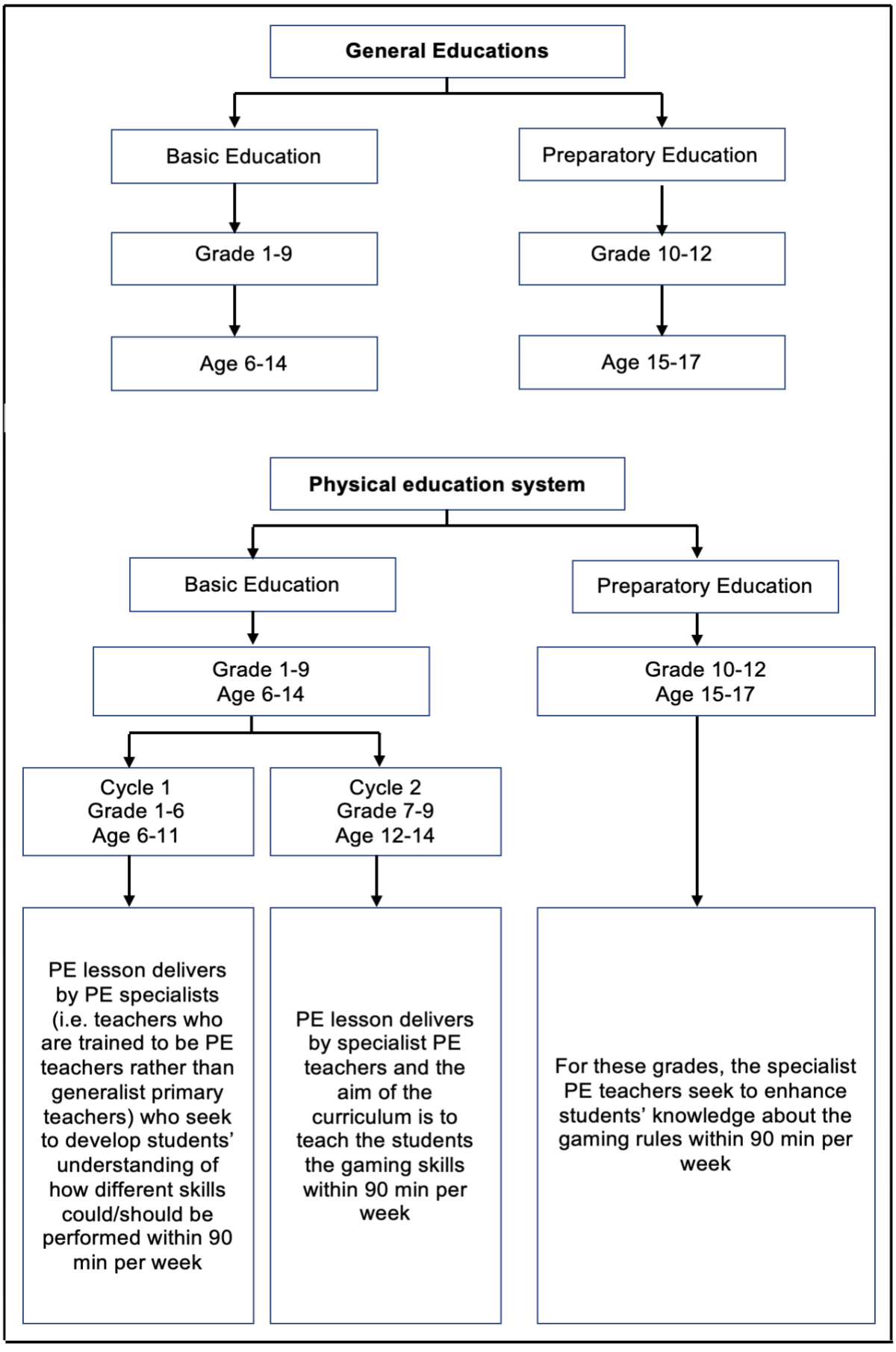
	Grade 7	Grade 8	Grade 9
Subjects	Volleyball	Volleyball	Volleyball
	Basketball	Basketball	Basketball
	Handball	Handball	Handball
	Track and Field	Track and Field	Track and Field
	Football	Football	Football

In grade 10-12 (MoE, 2013, Othman et al., 2011, Dlshad et al., 2011), PE teaches seek to enhance students' knowledge about the rules of the games (table 1.2). Similar to grade 7-9, PE lessons are divided into two parts: the theory part, when students gain information about the rules and the practical part when they have opportunities to engage in game activities to apply their understanding in practice.

Table 1. 2 The content of PE lesson for Preparatory schools

	Grade 10	Grade 11	Grade 12
Subjects	Volleyball	Handball	Football
	Basketball	Track and Field	Futsal

Figure 1. 9 KRI education system and PE system



Alongside participation in school PE, and similar to European PE curriculum (Kerpanova and Borodankova, 2013), extracurricular (out-of-school hours) physical activities opportunities are offered such as schools competitions. There are annual competitions between the schools in a range of activities, such as football, basketball, volleyball, handball, as well as annual Track and Field competition. The Sport Unit Activity (SUA) institution, under the MoE, has a responsibility to manage these sport activities during the year.

An interesting fact about class size in KRI is that, according to Vernez et al. (2014b), the variation in student population between urban and rural schools is significant, with urban schools being 'overcrowded' (i.e. with an average of 42 students per class) at the time where rural schools face a lot less pressure in terms of student numbers (i.e. the average class size is 13 students). It is important to note that 82% of students reside in urban areas. In relation to the available facilities, each school has one outdoor facility has been designed specifically to deliver physical activity to the students. The lack of indoor space, however, can be detrimental to student learning, especially during the winter months.

1.5. Thesis outline

This research has organised in six-chapters. Following chapter one, the thesis has been structured as follows:

- Chapter two: this chapter seeks to provide a methodological overview of the three studies and how they align with the overall research questions; the research design and data collection tools; research paradigms; mixed methods research; reflexivity and, ethical considerations.

- Chapter three: this chapter presents evidence from study one which sought to advance the line of inquiry by examining supervisors and teachers' perceptions on the nature, quality and perceived effectiveness of the existing supervisory arrangements in KRI.

- Chapter four: the aim of this chapter is to PE teachers' perceptions on the nature, quality and impact of existing formal CPD opportunities available in KRI.

- Chapter five: this chapter presents evidence from examining the perception of PE teachers in KRI on the nature, quality and impact of informal COD they engage in.

- Chapter six: this chapter includes a summary of key findings of the three studies, research implication for policy and practice and, limitations and future recommendations.

CHAPTER TWO: METHODOLOGY

In this chapter, the intention is to inform the reader about the overall research method and the chosen research paradigm in order to answer the main research questions. The chapter is organised as follows: 2.1 Introduction; 2.2 Research design; 2.3 Research paradigms; 2.4 Mixed method research; 2.5 Reflexivity; 2.6 Ethical considerations.

2.1. Introduction

> 'We all learn how to research by actually doing it, but a great deal of time can be wasted, and goodwill dissipated by inadequate preparation' (Bell, 2014, p. 1).

As this quote suggests, a lot is learned while conducting a research. It is however also essential to *prepare* adequately to ensure that the study is designed in an ethical and rigorous way. The first steps involve identifying the research area, articulating the research question/s and planning the implementation of the project carefully. These processes are methodological, and these are described in this chapter. The details on how the studies were designed and carried out can be found in the subsequent chapters. Clough and Nutbrown (2012) describe a methodology as a 'research diary' which presents the whole process of the research, including the ethical and practical considerations, as well difficulties and challenges encountered. This chapter is designed to analyse these important methodological issues.

Research can be defined broadly, as an 'an original investigation undertaken in order to gain knowledge and understanding' (Mortimore, 2000, p. 11). The Higher Education Funding Council of England (HEFCE) divides research into three categories: basic research, applied research and, experimental development (cited in Makopoulou (2009, p. 69):

- **Basic research** aims to acquire new knowledge of the phenomena under study without any particular application or use.
- **Applied research** refers to any original investigation undertaken to acquire new knowledge but directed primarily towards a specific practice aim or

objective.

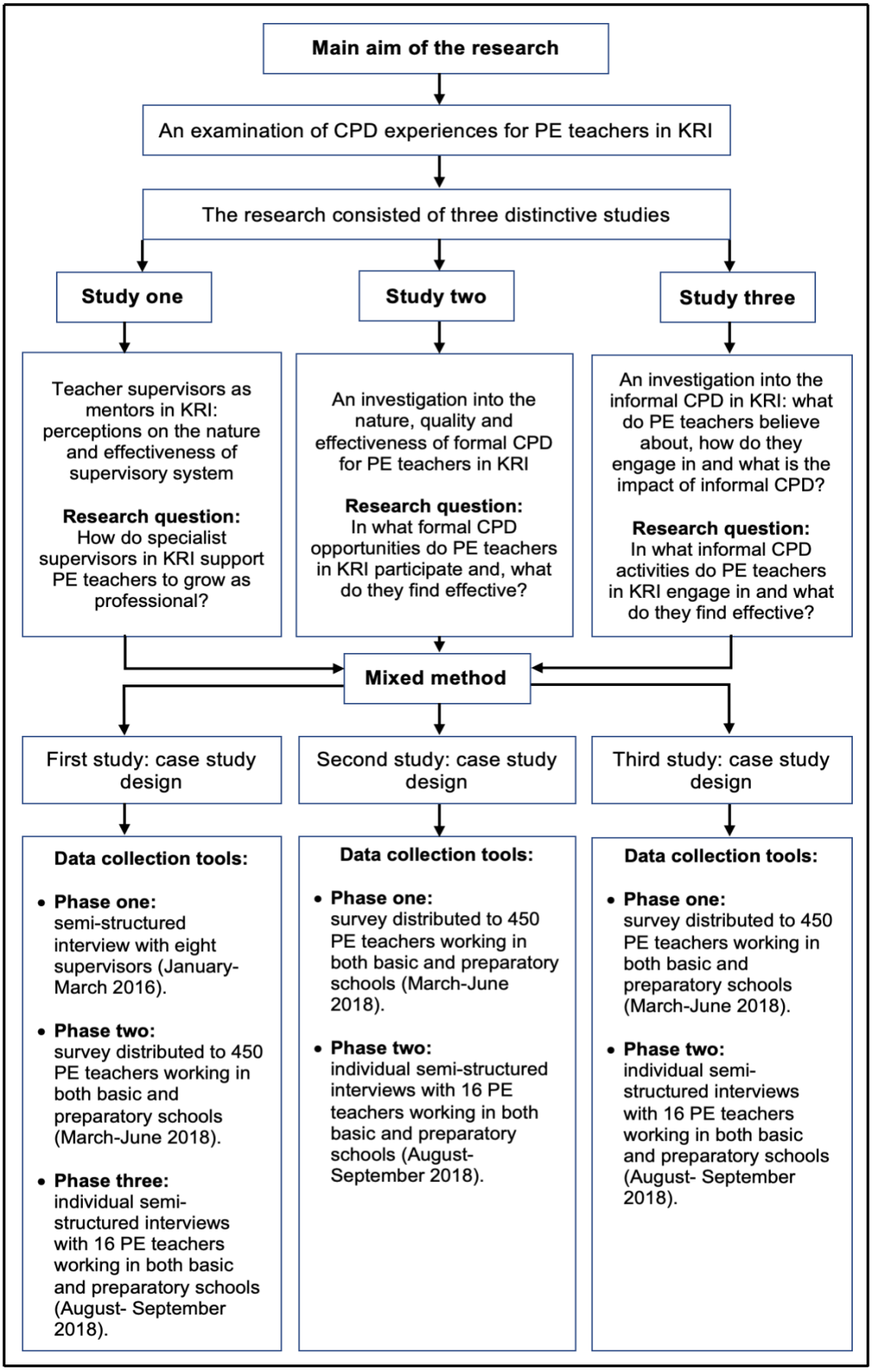
- **Experimental development** has the practical purpose of developing and testing new programmes/initiatives or products by drawing upon the existing research knowledge base.

The present study can be best characterised as an applied, educational research study. It lies within the realm of *educational* research because it seeks to understand an educational process; i.e. teachers' and supervisors' views and perceptions on the existing formal, informal CPD as well supervisory systems in KRI. It is also *applied* because it is intended to generate what is known as 'actionable knowledge' (Hargreaves, 2007); that is, 'the knowledge that can be used by practitioners to inform and enrich their practice' (Makopoulou, 2009, p. 70).

2.2. Research design and data collection tools

The overall purpose of the present study was to examine PE teachers' and supervisors' views and experiences about CPD provision – inclusion the supervisory system - in KRI. A mixed-methods approach was used in order to develop an in-depth understanding of both research participants' perceptions / experiences and the patterns and perceived impact of PE-CPD at a larger scale. Researchers have explained that in order to understand the complex and multidimensional nature of CPD and teacher learning, all elements or aspects of the CPD system must be examined and understood (Louws et al., 2017, Marsick and Watkins, 2015). In the context of KRI, there are three elements or aspects that relate teachers' CPD provision: the supervisory system (which has a role to play in CPD provision as explained earlier), formal CPD (which appears to be the most dominant form of CPD provision), and informal CPD (which is not legally acknowledge as a form of CPD but it is a potentially powerful form of learning, as acknowledged in the international literature). To understand these three elements, the present research consisted of three distinctive studies.

Figure 2. 1 The research design



The purpose of first study was to understand how specialist supervisors in KRI support PE teachers to grow as professionals (i.e., develop their knowledge and practice). As previously noted, supervisors have an important role to play in the CPD of their teachers. Yet, very little is known about the nature, quality and impact of their provision. To understand these important issues, it was crucial that both PE teachers and supervisors were involved in the research; so, the perspectives of these important stakeholders were taken into consideration. A mixed method approach was adopted, which included individual interviews with a selected number of PE teachers (n=16) and supervisors (n=8) as well as a teacher survey which was distributed to 450 teachers and returned by 302 (67% response rate).

The second study aimed at examining PE teachers' views and experiences of formal CPD opportunities in KRI participate, what they find effective / ineffective, what the impact of existing programmes is on their knowledge and practice, and what could be done to improve the system further. The focus of this study was to develop understandings about formal PE-CPD from the perspective of PE teachers themselves. The study also sought to identify patterns and frequency of participation in formal PE-CPD (in order to better understand the extent of PE teachers' engagement in current provision) and to understand the perceived effectiveness of these opportunities. A mixed methodology was employed.

While the formal CPD have received attention and appreciation from policymakers both nationally and internationally (Fraser, 2010, Jurasaite-Harbison, 2009), informal professional learning as it takes place in the workplace, is less well understood in the KRI context. In Europe, policies and research on lifelong learning (European Commission, 2001a, OECD, 2003) have shed light on some of the possibilities and challenges of such opportunities (Makopoulou and Armour, 2014). In KRI, however, there is no official recognition of the importance of informal CPD. In addition, there is no available research evidence on whether and the extent to which teachers and PE teachers engage in informal learning. The third study was designed to address this gap. Evidence from other countries with limited legislation around informal teacher learning suggests that PE teachers engage in this type of learning naturally (Hadjimatheou, 2017, Makopoulou, 2009, Al Maqbali, 2019). It was therefore important to examine this in KRI in order to advance understanding on whether and

how PE teachers engage in informal CPD, unpack the patterns and frequency of this engagement, as well as its impact on teachers' practices as perceived by the teachers themselves. Similar to study 2, a mixed methods approach was adopted.

To address the mentioned three aspects of teachers' PE-CPD in KRI, the data collection tools took place in three overlapping phases, as follows:

- Phase one: Individual semi-structured interviews with eight supervisors (January-March 2016). This is linked to study 1.
- Phase two: survey distributed to 450 PE teachers working in both basic and preparatory schools (March-June 2018). Evidence from this is included in all three studies.
- Phase three: individual semi-structured interviews with 16 PE teachers working in both basic and preparatory schools (August-September 2018). Evidence is reported in all studies.

All three phases of the data collection were linked together in order to answer the research questions. It is important to note that evidence obtained in phase 1 informed the development of the teacher survey (phase 2) and the interview protocol (phase 3). Specifically, evidence collected from the supervisory interviews informed our thinking in terms of what kind of formal and informal learning activities PE teachers are likely to participate and shaped the kind of questions that are important for the specific national context. This is further explained in the relevant chapters.

The next section provides an overview of the research paradigms and rationale that informed methodological decision.

2.3. Research paradigms

In education research, the term research 'paradigm' is often used to justify and inform decisions about the design of the study's methodology. Educational research is 'multifaceted and there are a number of different, yet equally legitimate paradigms' (Makopoulou, 2009, p. 71) that can be employed, each one which is important for different purposes in different contexts (Wellington, 2015, Whitty, 2006). Patton (2015) defines a paradigm as 'a world view, a way of thinking about and making sense of the

complexities of the real world' (p. 89). According to (Denzin and Lincoln, 2000), decisions on the right research paradigm are based on the researchers' ontology (i.e. beliefs about the nature of reality); epistemology (i.e. beliefs about the nature of knowledge and the relationship between the knower and the known) and methodology (i.e. how to collect evidence to address the research questions).

It has been argued that embarking on debates about which paradigm is best are not necessary. Instead, researchers need to locate themselves in the paradigm that best suits the purpose of their studies (Markula and Silk, 2011). Others also claim that deciding which research paradigm reflects or should underpin a study is can restrict researchers' choices and decisions (Bailey, 2007). The following section aims to discuss the meaning and relevance of four central paradigms in education research: positivism, post-positivism, critical theory and social constructivism. The section also provides a rational for the choice(s) made for this research.

2.3.1. Positivism

As previously noted, what distinguishes the different research paradigms for some researchers (e.g. Lincoln and Egon, 2000) is rooted fundamentally in the various assumption on how researches engage and understand the social world and reality. Researchers identifying as positivists is often believed that they see the world as being made up of tangible facts (Dash, 2005) and of one, universally acknowledged truth / reality (Hussain et al., 2013). Positivists, in this context, endeavour to evolve 'objective' knowledge of a single comprehensible reality that exists 'out there' ready to be discovered (Healy and Perry, 2000, May, 2002). However, one common criticism is that positivist researchers tend to detach themselves from the research process (Grix, 2010). Within educational research, there are ongoing debates about its suitability and relevance in seeking to identify and answer important educational matters. Philosophers and researchers question how it is possible to have mind- independent truth and value-free reality in a world in which each human being is unique (Aliyu et al., 2014). Some argued that in the field of education research, which involves humans and their real-life experiences, adopting a positivist view is not appropriate. The perceptions around the limitations of positivism have led to the emergence of post-positivism in many social sciences research.

2.3.2. Post-Positivism

Post-positivism has referred as 'a modified version of positivism' in that there are some differences between them regarding ontology, epistemology and methodology (Guba, 1990, p. 20). Whilst positivist and post-positivist believe in one external reality, the post-positivists believe that this reality can be apprehended differently by different individuals (Gatt, 2017). As a consequence, this reality can only be 'imperfectly apprehendable' because of humans' limited intellectual capacity (Guba and Lincoln, 1994, p. 110). The researcher's aim with post-positivism is to reach and understand the reality by explore individual perceptions, views and experiences (Healy and Perry, 2000). To the reason that 'realism relies on multiple perspectives in order to approach a single reality' (Makopoulou, 2009, p. 73), it was not appropriate for the current research that sought to interpret and explore the multiple realities for research participants.

2.3.3. Critical theory

The third paradigm, critical theory, aims to obtain a more in-depth insight into what is happening in a particular situation and also act on it. Within critical theory, the researchers are interactively linked to the research findings (Guba and Lincoln, 1994). Critical researchers acknowledge the whole context of the research and create an agenda for reform (Scotland, 2012). According to (Guba and Lincoln, 1994), The critical researcher has an influential emancipatory role to 'liberate and transform the research participants from their historical, cultural and social constraints, injustices or misunderstanding' by employing the research process when exploring individual perception and point of view (cited in Makopoulou (2009, p. 73). With the present study, the critical theory was inappropriate as a framework because this study aimed to better understand the existing realities regarding CPD provision, rather than change the current status quo.

2.3.4. Social constructivism

Social constructivism as described by (Makopoulou, 2009, p. 73) is 'a theoretical framework that assumes multiple socially constructed realities - i.e. that individuals and groups are deeply involved in constructing the social reality of which they are a

part'. There are multiple truths in the social constructivism instead of one single reality; these truths are located in specific contexts and particular belief systems (Healy and Perry, 2000). Within the social constructivism paradigm, the researcher' aim is to uncover the individuals and groups differences in realities and truth instead of 'establish the truth or to describe what really is happening' (Stringer, 1996, p.41). Thus, it could be argued within the context of the present study, the social constructivism was a most appropriate framework as it is relying upon the underlying assumption that people hold diverse and multiple understandings, interpretations, views, experiences, knowledge and interactions (Crotty, 1998). The researcher's aims in the present study was to inform the reader the current situation of PE-CPD in KRI by capturing, exploring and understanding these multiple assumptions. Thus, utilising of the mixed method research was appropriate to reach these aims.

2.4. Mixed methods research

Mixed-methods research is the combination of quantitative and qualitative research in one study (Bryman, 2016). A mixed methods approach can be adopted when the aim of the study is to develop insights into different phenomena of interest that may not be fully understood using only a quantitative or a qualitative method (Venkatesh et al., 2013). Different authors argue that the research questions serve as the driving force for any methodological choice, including decisions to draw upon both qualitative and quantitative methods to answer the set questions (Greene, 2007, Johnson et al., 2007, Tashakkori and Teddlie, 2010). Some scholars (Gorard and Makopoulou, 2012) argue that adopting a mixed methodological approach is the natural approach to research. This is because 'this natural synthesis of different kinds of data is what we all do in our everyday lives whenever we are faced with a task with an outcome that is important to us' (Gorard and Makopoulou, 2012, p. 107). Researchers can thus use whatever methods they need as long as they are carefully considered and justified, leading to enabling researchers to answer their research questions (Gorard and Makopoulou, 2012).

In the present study, the decision to adopt a mixed methodological approach was grounded in the belief that a holistic and comprehensive understanding of the phenomenon under investigation was needed in order to inform CPD policy and

practice. Specifically, relying on qualitative methods alone would have provided interesting and novel insights into how PE teachers and CPD providers perceive the existing CPD and supervisory system in KRI. Within the limited available resources, and because of the resource-intensive nature of qualitative research, only a small number of research participants could be consulted, however. Questions would thus remain about the extent to which their views and experiences reflected the wider PE workforce in KRI. To address this, and to capture PE teachers' nature and patterns of participation in CPD, as well as their views on its quality and impact at a wider scale, a quantitative approach (i.e. online CPD survey) was needed. Therefore, combining qualitative and quantitative methods enabled the researcher to develop a more holistic understanding of the current PE-CPD provision in KRI, as perceived by PE teachers and supervisors.

2.5. Reflexivity as a methodological tool

The researcher in the present study was heaving involved in developing the data collection tools, collecting evidence (and the researcher was often the research tool, e.g., interviewing), and analysing the evidence obtained. It was therefore crucial to engage in a process known as reflexivity (Hammersley and Atkinson, 1983).

Reflexivity is often portrayed as an inherent part of the research process. Some present the reflexivity as a 'methodological tool that enables researchers to shift inwards and engage in a critical elaboration of the various influences (personal, professional, biographical, social, cultural) they bring to the inquiry, drawing attention to how these affect the research process' (Makopoulou, 2009, p. 109). The process can also assist researchers to 'better represent, legitimise or call into question their data' (Pillow, 2003, p. 176). Reflexivity may have an impact on the overall research process. This includes important research milestones, including the process of refining the research focus and developing research questions, developing the most efficient and sensitive ways to collect data, and the most appropriate to analyse the data obtained (e.g., how data is treated in the analysis process). According to (Berger, 2015, p. 29), benefits and challenges to reflexivity are discussed and illustrated when: (i) researchers share experience of the study participants; '(ii) researchers move from

the position of outsider to insider while studying; and (iii) researchers have no personal familiarity or experience with what is being studied'.

2.5.1. Reflective account

In the context of the present study, choosing the topic of this research was the result of a personal interest in how PE teachers learn throughout their careers. Before embarking on this PhD journey, I was employed as an assistant lecturer working in Higher Education. It is important to underline that I have no teaching experience in schools. Yet, I was trained to be a teacher and because of my lecturing post, I have always felt that I had a very good understanding of what a teaching career involves. This is because, professionally, I was heavily involved in UG teaching in a course that produces the future PE teachers. Furthermore, personally, I am surrounded by teachers (e.g., one of my sisters is a teacher of economics). I was therefore aware of the amount of time teachers spend planning and marking.

Observing my sister, I had always felt that she is like a student more than a teacher. Naturally, I had a lot of questions about teachers as learners. For example, is initial teacher education doing enough to prepare teachers as learners? What kind of challenges do teachers face and is there adequate support to help them overcome these challenges? Is this passion my sister displays going to last? Will she always be a lifelong learner? Following conversations with family, friends and colleagues, I also developed acute questions about those who train and support teachers (e.g., supervisors). What kind of contribution do supervisors make, for example? Having friends who were PE teachers, it was also obvious that PE teachers face additional challenges in schools such as decreasing in the teaching time, PE curriculum restrictions, shortage in PE equipment and also the negative view of the teachers and students in the school as well as the guardians about PE.

Due to the socio-economic and political situation of Iraq and KRI since the 1990s, I was under the impression that the difficulties teachers face was a local issue. However, when I started my PhD and engaged within the relevant literature, it became obvious that the questions I had were not relevant only to the local area; they were rather, in one form or the other, global issues. I realised that CPD, as currently

experienced by teachers, was perceived an important tool to improve educational quality, standards and outcomes. But there were many issues that looked careful attention within the CPD provision internationally.

As an assistant lecturer working in Higher Education, I have recognised my integral role in the process of data collection by keeping a reflective diary. Also, I become familiar with my identity as a researcher. Additionally, since I was part of the social context I explored, I also acknowledged my theoretical stances and my own preconceptions which could have had an influence on the study. Due to my post and personal perceptions about the important role teachers play (and the limited support they currently had), I would best identify myself – as I engaged in the process of reflexivity – as belonging to the category of researchers who identify with or 'share the experience of study participants' (Berger, 2015, p. 219). This position, it became apparent, would give me a unique opportunity to better understand the participants' point of view. In qualitative research, however, researchers cannot separate themselves from the research process (Dwyer and Buckle, 2009), which also meant that researchers have a powerful position to exercise 'research bias'.

Research bias is perceived as a 'tendency of the researcher to impose prior theoretical framework or interpretations on the data, ignore or exclude the opposite or alternative perspectives to draw unjustifiable inferences or generalisations' (Makopoulou, 2009, p. 113). To minimise the bias in the present study, during data collection for example, I clarified that there are no expectations about the kind of responses participants provide during interviews. The purpose of the interview was to better understand their perspectives. I have tried to eliminate any intended or unintended reactions (verbal or body language) that would influence participants' responses. I have also led the conversation in ways to seek for further information from the participants and more justification for their thinking. It was essential to engage in an in-depth conversation with participants to give them the feeling that their opinions mattered.

2.6. Ethical considerations

Research ethics has considered as one of the important factors in social science research (Wolgemuth et al., 2015). The research ethics is not only about having

permission to conduct research; instead, it is the constant consideration by the researcher to respect the research participants. According to (BERA, 2018), when conducting educational research, the following ethical considerations should be taken into account:

- Consent: There is a need to inform the participants about the nature of their participation in the research and to seek their informed consent at the beginning of the study. It is also important to inform the participants about their right for withdrawal.
- Transparency: Researchers should be honest with participants, avoiding non-disclosure unless the research design requires it. What the researchers intend to do with the data during the study but also following completion of the study (e.g., reuse of data) should be disclosed.
- Withdrawal: Researchers should recognise the participants' right to withdraw from the research for any or no reason and at any time. The process of withdrawal should be clear and straightforward.
- Incentives: The use of incentives to recruit participants should be commensurate with good sense to avoid the impact of incentive on the free decision to participate.
- Privacy and data storage: Researchers should recognise the right of the participants to privacy, confidentiality and anonymity. Data storage is an important aspect. As stipulated in the UK by the Data Protection Act (1998) and March (2018), participants are entitled to know how and why their personal data is being stored and to what uses it is being put and to whom it may be made available.

In the present research, in the first phase of the data collection, permission was obtained by the head of the Supervisory Units in order to use their setting for interviewing the supervisors (please see Appendix A). Then, the supervisors' permission was obtained before any data collection took place (please see Appendix B). In phase two, the participant information sheets (please see Appendix D) were distributed to the research participants (i.e. PE teachers) before completing the survey and returned. In phase three, a similar process involving informing the teachers about the purpose of the study and seeking their informed consent was followed (please see

Appendix F). Details on the process can be found in the relevant appendices. Full ethical approval was obtained by the Ethics Committee of the University of Birmingham (ERN_15-0366R).

It is important to note that all participants were informed that their participation was voluntarily and that they were allowed to withdraw (please see Appendix B, D and F). Before distributing the survey, each survey has been sent with a number and participants been asked to remember the number when they wish to withdraw from the process. It is also participants' confidential was an important part of the ethical process. The participants have been informed that their personal information (e.g., their name) will not be mentioned in the studies. In this context, quotes and other references to data extracts are identified with individual numerical and gender codes given to each supervisor (e.g., MS3- Male Supervisor with the allocated code 3) or PE teachers (e.g., FT6- Female Teacher with the allocated code 6) and the number of years in the profession (MS3-26) or (FT6-8). Regarding the supervisors, their mentioned experience years is both teaching and supervising experiences years. Finally, individual numerical codes have been allocated to each participant teachers when quotes are drawn from the survey (e.g., TS121 - Teacher Survey with the allocated code 121).

2.7. Chapter summary

Chapter tow has presented an overview of the research design and data collection tools used for this research. It was really important to choose a method which gave the opportunity to research participants to provide their story, reflect on their experiences and tell their truth. It was also important to choose the appropriate methodological approach for the researcher to be able to engage with the research participants and explore and understand their perceptions of, and experiences from PE-CPD provision.

CHAPTER THREE: STUDY ONE

TEACHER SUPERVISORS AS MENTORS IN KURDISTAN REGION-IRAQ: PERCEPTIONS ON THE NATURE AND EFFECTIVENESS OF THE SUPERVISORY SYSTEM

3.1. Introduction

Continuing Professional Development CPD is widely recognised as an important tool to raise standards in schools (Grant, 2017, Hunuk, 2017, Powell and Bodur, 2019, Armour et al., 2017). Yet, CPD implementation varies in different national contexts as it depends on the available funding and the ways CPD is understood at the levels of educational policy and practice. In the context of Kurdistan Region-Iraq (KRI), there is a dire lack of evidence on teachers' CPD, despite calls to develop robust evidence upon which to base educational policies, including policies on teachers' CPD (Vernez et al., 2016). Formal CPD in KRI is limited, but the existence of teacher supervisors is a unique feature of the educational system (Vernez et al., 2014a). While there are no formal induction programmes in KRI to prepare newly appointed teachers, supervisors are frequently positioned as fulfilling an important role during induction and beyond, including the provision of CPD. In a way, supervisors are considered as the first line of teachers' training in KRI (Vernez et al., 2014a).

While the supervisory system uses in the KRI to provide support for in-service teachers in their workplace. However, internationally, one of the most powerful forms of CPD is when teachers are offered on-the-job support to improve or even transform their practices through mentoring (Beutel et al., 2017a, Aspfors and Fransson, 2015). While mentoring is a broad concept (Chambers et al., 2012), it is frequently defined with relation to styles and types of relationships that involved in mentoring (Patton et al., 2005). Mentoring is defined as a 'professional-building endeavour' (Chambers et al., 2012, p. 346) which mentors and mentee are 'co-learners on a voyage of discovery' (Patton et al., 2005, p. 305). Mentoring in general involves a person acting with the intention of guiding and advising less experienced professionals (Pennanen et al., 2016). However, contemporary understandings of mentoring vary (and are diverse),

transcending traditional perceptions that involve primarily top-down support from an experienced to a less experienced professional. New models or conceptualisations of mentoring have been proposed, which are grounded in socio-constructivist understandings/theories of learning and include a more mutual, interactive and equal approach to mentoring. Relevant terms include: 'co-mentoring, mutual mentoring, collaborative mentoring, peer collaboration, critical constructivist mentoring, dialogical mentoring, and reciprocal mentoring' (Tynjälä and Gijbels, 2012, p. 24).

Theoretically, mentors can provide tangible support to their mentees in order to grow and progress in their career. At the same time, mentors can be catalytic in supporting teachers emotionally. Such 'psychosocial functions' (Kram, 1983, p. 614) include role modelling, counselling, acceptance and confirmation and, friendship. While Kram's work was developed in the business setting more than three decades ago, evidence from research on teachers' education confirms that the framework is applicable to most aspects of mentoring in teacher education (Nguyen, 2017).

In teacher education, scholars have argued that mentors provide social and emotional support (Hew and Knapczyk, 2007) by developing mentee's confidence and job satisfaction (Beutel et al., 2017b, Wang and Odell, 2002). Mentors are also believed to provide support to mentees to overcome any problems and facilitate the process of self-reflection, a valuable process for teachers' continual professional growth (Nguyen, 2017, Saban, 2002, Wang, 2001). Mentors also offer tangible support to improve mentees' professional competency. Alongside supporting the process of self-reflection, they are believed to model effective teaching methods (Ensher et al., 2003, Hudson, 2004, Nguyen, 2017), provide coaching and direct feedback (Ensher et al., 2003, Hudson, 2010, Le and Vásquez, 2011), and to facilitate access to resources (Hew and Knapczyk, 2007, Nguyen, 2017).

It is important to discuss the available research evidence on the effects and effectiveness of mentoring. Evidence from research suggest that mentoring by experienced teachers can increase newly qualified/appointed teachers' well-being and job satisfaction (Strong, 2009). Also, a mentor is believed to help new teachers to adapt to the workplace norms and expectations (Wang and Odell, 2002). Mentoring also seem to have a positive an impact on the challenging issue of teacher retention (Ingersoll and Smith, 2004). Research also indicates that mentoring is able to be

effective to support teachers' professional learning (e.g., Marable and Raimondi, 2007). However, this is not always the case. Darling-Hammond (2005) argues that it cannot be supposed that mentors automatically own the communication and knowledge skills to support mentees' professional learning. There is evidence when there is a lack of appropriate support and training, mentoring schemes rarely work (Worthy, 2005). The literature on mentoring provides a useful framework to understand the kinds of interactions that can take place. Yet, this review of literature also explained that although there are similarities, there are also some significant differences between the role of mentors and the role of supervisors in KRI.

Mentoring has a number of elements that are similar to but also different from the supervision model in KRI. For example, supervisors are responsible for offering guidance and support to their allocated teachers in their own schools (in many cases). In the case of KRI, supervisors are not an integral member of the school community. They are rather expected to undertake a number of visits to schools to fulfil this role. Policy documents state that supervisors can support teachers in developing their subject knowledge as well as they pedagogical knowledge (Vernez et al., 2016). In this respect, it could be argued that supervisors have a mentoring capacity as they are expected to achieve clear outcomes in relation to teacher professional development; i.e. improving teachers' competency (Lai, 2010). However, it is important to state that the supervisors in KRI have an additional, perhaps contradictory role. Alongside their role in offering school-based CPD, they are also expected to formally evaluate teachers (Vernez et al., 2014a).

The role of the supervisors[2], in this context, is amalgamated with the process of teacher performance management. Scholars who examined the education system in the KRI have raised concerns about this matter, and call for a clear separation between the two processes (Vernez et al., 2014a). As previously noted, there is also a lack of research on the processes and impact of current CPD structured in place, including the role and impact of the supervisors. To the best of our knowledge, only one study has ever been conducted in this field of inquiry. Specifically, in 2010, the

[2] Etymology of the word 'supervisor' refer to the one who inspects and directs the work of others. From Medieval Latin *supervisor*, agent noun from supervidere "oversee, inspect".

Kurdistan Regional Government (KRG) funded the RAND[3] Corporation institution to assess the education system in KRI (Vernez et al., 2014a, Vernez et al., 2016). In relation to teachers CPD, results suggested that the existing CPD provision does not meet teachers' needs. Furthermore, supervisors appeared to lack relevant qualifications and training, and this prevented them from fulfilling their role effectively. Finally, questions were raised about the dual role of supervisors (e.g., mentors and evaluators/assessors) and this could 'play a dual role that can present a conflict of interest' (Vernez et al., 2014a, p. 77).

Figure 3. 1 The role of supervisor and mentor

In KRI, the supervisor is not a member of the school. Alternatively, they provide their support through three visits to the schools. According to (Vernez et al., 2014), the supervisor role can be outlined as following: • Examine and review the existing curriculum and resources in the first visit. • Provide guidance and support on instructional methods employed by their allocated teachers in the first visit. • Share information on relevant policies, rules and regulations in the first visit. • Check teachers progress in relation to the guidance offered in the second visit. • Formal evaluation of teacher's performance in the third visit.	In many cases, the mentor teacher is the member of the school. According to (Maphalala, 2013, p.127), the role of the mentor can be outlined as following: • Arranging opportunities to observe the mentees classroom. • Introducing the student teacher to the school community and explain his or her reason for being there. • Helping student teachers understand school activities and practices. • Providing student teachers with information about the school, policies, regulations and resources. • Demonstrating various teaching techniques and strategies. • Encouraging student teachers to evaluate his or her own progress using the reflective process.

[3] RAND Corporation is an American non-profit institution that helps improve policy and decision-making through research and analysis (Vernez et al., 2014a, Vernez et al., 2016).

The aforementioned study was carried out before the financial crises which started in KRI in 2014 and which had a strong impact on the education system in KRI. One of the powerful impacts was the reduction of the state employee wages which led to teachers' protest and non-teaching in the schools for 1-2 month in each academic year in 2015, 16 and 17. However, this protest was taking place in the Sulaimanyah city (geographical place of the data collection for the present research), not in the whole KRI. Also, investigators collected evidence from teachers and CPD providers (including supervisors) within the core subjects of math, science, social studies, and languages. PE teachers were involved and 40% of them reported having received some training. However, the collected evidence was approximately a decade ago. Therefore, it could be argued that new data is needed to understand such important processes as experienced today. Examining the system of supervising for physical education (PE) teachers is needed as there is dire lack of evidence on the nature and effectiveness of the current system to support PE teachers in their schools.

3.2. Study purpose

The present study sought to advance this line of inquiry by examining supervisors and teachers' perceptions on the nature, quality and perceived effectiveness of the existing supervisory arrangements in place. The overall question for the present study was: How do the specialist supervisors in Kurdistan Region-Iraq support PE teachers to grow as professionals (i.e., develop their knowledge and practice)? The following sub-questions were examined: (i) What are the supervisors' interpretations of their roles and responsibilities? (ii) In what ways do supervisors support teachers to learn and progress? (iii) What are the PE teachers' perceptions on the nature and impact of the existing supervisory provision? and (iv) What do PE teachers and supervisors believe needs to be done to improve the existing system?

A mixed methodological approach was adopted to address these questions. Both qualitative and quantitative data was collected via semi-structured interviews with supervisors (n=8), PE teachers (n=16) as well as a teacher survey developed and distributed to PE teachers in one local region in KRI (n=302). The study seeks to offer unique and in-depth insights into the existing supervisory provision in KRI from the perspective of both PE teachers and their supervisors. The collection of evidence from

both supervisors and PE teacher was important to develop a holistic understanding of the existing system as experienced by professionals with different roles and responsibilities. The design of the study was grounded in the best available national and international literature and was intended to inform thinking, policy and practice so that CPD is reconsidered and designed for maximum impact.

3.3. Literature review

3.3.1. Mentoring and supervising practice internationally and nationally

It has been illustrated in the literature that the notion of mentoring is in vogue; but it is an approach to teacher CPD that is subjected to national and local interpretation. Different countries understand and implement mentoring in different ways. For the purposes of illustration, the present study reviews the practices of mentoring in two different countries/regions (i.e. Finland, New South Wales in Australia) as well as the practice of supervising in KRI. We have chosen these two locales alongside with supervision system in KRI to illustrate how particular kinds of practices reflect distinctively different purposes, understanding and manifestations of mentoring.

In Finland, a nation-wide peer-group mentoring (PGM) model was launched in recent years; a model that has a clear intention of moving away from the traditional one-to-one, top-down mentoring approach evident in previous relevant policies in Finland (Pennanen et al., 2016). In the context of increasing concerns into the training and retention of high quality teachers in Europe and Finland (European Commission, 2013, Picard and Ria, 2011), the overhaul of the mentoring system was perceived an important step to address these concerns. The new PGM model is grounded in social constructivism perspectives on learning as it encourages groups of beginning and experienced teachers to *share* (and co-construct) knowledge through meaningful collegial dialogue (Heikkinen et al., 2012, Kemmis et al., 2014). The mentor is of course employed to carry out this role but teacher participation as mentees is on a voluntary basis.

The new PGM model is also based on the premise that both new (mentees) and experienced (mentors) teachers can benefit from this interaction, and that larger (rather than teacher dyads) groups – small communities of practice – can meet regularly to develop and improve their practices (Pennanen et al., 2016). The ideal size of the group is varying between four and eight participates. Within this context, it is the group's responsibility to plan, organise and, implement their own programme for CPD throughout the academic year (Heikkinen et al., 2012). The intention is to design a CPD programme that is characterised by a 'bottom-up' approach; CPD interactions and initiatives are offered on the basis of teachers' needs. This 'bottom-up' approach to professional learning in Finland is in contrast to the prevailing mentoring model in New South Wales (NSW) which can be described as a more traditional approach to mentoring

The formal mentoring system currently in place in NSW has 'arisen in response to national and state-wide educational initiative to improve teacher accountability through the establishment of standards for teachers and leaders' (Pennanen et al., 2016, p. 33). In contrast to Finland, a reduction in teachers' number in schools is a major issue in all states in Australia. Official figures suggest that after 10 years, 40% of Australian teachers leave their profession mainly because of a perceived lack of support, workplace condition and, career planning (Ewing and Manuel, 2005, Pennanen et al., 2016). In response to this, the formal mentoring model was designed to enable one-to-one mentoring as supervision and to tackle some of the barriers to career retention. There is however also the expectation that mentees, under the guidance of their mentors, will set and review personal performance indicators (Pennanen et al., 2016). Teachers in NSW are accredited provisionally in their initial employment. However, to continue their employment, they must meet certain standards at the level of the Proficient Teacher (New South Wales Government, 2013). Hence, formal mentoring has put in place in this context, to support new teachers - especially those who struggle to reach the Perficient Teacher level (Pennanen et al., 2016).

It could be argued that the mentoring system in NSW has a number of common features to the supervisory system in KRI. It is important to underline that official texts and documentation in relation to the supervisory system in KRI are not readily and widely available. Some broad – and arguably limited - information on the role of

supervisors and what this role looks like in practice can only be found in two publications (Vernez et al., 2014b, Vernez et al., 2016). According to (Vernez et al., 2014b), there are 830 supervisors in KRI that supervise 70,000 teachers across the region. The number of teachers supervised by a single supervisor varies by academic subject, with some subjects (e.g., science) allocating approximately 60 teachers per supervisor but other reporting double this number (e.g., 124 English teachers per supervisor). Supervisors are typically experienced teachers with a specialisation in the particular subject area (Vernez et al., 2014b). There is little evidence about the training supervisors engage in to undertake this role. They are expected to support teachers in their school-based through three annual visits which set by MoE.

The aim of the first visit, taking place at the beginning of each academic year (September), is to: (i) examine and review the existing curriculum and resources; (ii) provide guidance and support on instructional methods employed by their allocated teachers; and (iii) share information on relevant policies, rules and regulations (Vernez et al., 2014b). During the second visit, which is anticipated to take place towards the end of the first semester (January), the supervisors are expected to check teachers' progress in relation to the guidance offered in the first visit. At the end of the school year (May), the final visit involves a formal evaluation of teachers' performance. The criteria to be used for this evaluation take the form of a six-point scale that is agreed such as '(i) preparing and planning lesson; (ii) instructional methods; (ii) use of teaching materials; (iv) personal attributes; (v) commitment to instructions and fulfilling duties; (vi) evaluations and, effects on the students' (Vernez et al., 2016, p. 53).

According to (Vernez et al., 2016), the formal evaluation carried out by the supervisors has no effect on teachers' promotions, as these happen automatically based on predetermined thresholds related to teachers' years in the profession and seniority. Teachers who perform poorly in the formal evaluation are however anticipated to attend a specifically designed CPD training provided by relevant institutions (e.g., Training Unit). Teachers failing to pass the formal evaluation on two consecutive years face dismissal according to official policy documents. Thus, the evaluation process supervisors undertake is linked, as previously noted, to 'performance management'[4].

[4] Performance refers to the teachers teaching skills that observes by the supervisor in the lesson.

Previous research into the implementation of the supervisory system in KRI showed that rarely was the case that poorly performing teachers were offered CPD (and the support they need) or dismissed (Vernez et al., 2014b, Vernez et al., 2016). It was also suggested that supervisors appeared to have limited understanding of the criteria used to 'judge' teachers. Concerns were also raised about the time supervisors spent in schools and their capacity to 'judge' the performance of schools and teachers (Vernez et al., 2014b, Vernez et al., 2016).

Offering teachers appropriate CPD support is an issue of enduring concern of the education community internationally (Huizing, 2012, Kane and Francis, 2013). In KRI, fundamental questions remain about the nature and impact of the existing supervisory system; and this is also the case internationally about the role of the mentors and CPD providers (Crasborn et al., 2011, Beutel et al., 2017b, Chambers et al., 2012). In this context, it is important to review what is already known about effective mentoring.

3.3.2. The features of effective mentoring

While what makes effective mentoring (i.e. by effective, it is often meant to have an impact on teachers and pupils) might vary depending on the context it takes place and those involved in the mentoring process (both mentors and mentees), there are two broad factors that appear highly relevant, and which will be further discussed in this section: (i) the selection process (i.e. how mentors / supervisors are selected); and (ii) the preparation and professional development of mentors / supervisors.

It has been argued that mentors need to be effective practitioners as well as able to model good professional practice (Foster, 1999, Roehrig et al., 2008). From this preceptive, one of the fundamental factors in effective mentoring is mentor selection on the basis of suitability, not availability (Chambers et al., 2012). Mentor suitability, according to (Chambers, 2008), is also partly specified by mentors expertise and disposition; i.e., they need to be willing and able to act as mentors. One way to determine mentors' expertise is by the professional life phase (Sikes, 1992). More specifically, it has been suggested that it is essential to choose mentors at the 'experimentation/activism' phase of the professional life cycle (Chambers et al., 2012, p. 346). In this phase of professional life, mentors' experience range from 7-18 years

and it is during this phase that teachers are seeking to bring institutional change and to experiment with different materials (Chambers, 2008).

In the context of KRI, teachers who put themselves forward to become supervisors need to have at least 15 years of teaching experience and are selected on the basis of annual assessment. However, there are concerns about the process. According to (Vernez et al., 2014a), the process currently is neither rigorous nor standardised. These concerns are also noted by MoE officials who have called for a more robust system to be put in place; a system that would enable a transparent evaluation of the suitability of supervisor candidates on the basis of their academic qualification, career progress and experience, their leadership qualities and certain personality traits (Vernez et al., 2014a).

Alongside the recognition of the importance of a robust selection system, scholars have also drawn our attention to the quality of the professional development of mentors / supervisors (Hobson et al., 2009). Specifically, there is evidence to suggest that mentors are more likely to provide effective mentoring when they are given opportunities to participate in appropriate, effective preparation programmes (Crasborn et al., 2008, Valenčič and Vogrinc, 2007, Williams and Prestage, 2002). Yet, there is recognition that although the design and implementation of high quality preparatory programmes are vital, the demands to prepare mentors have to go beyond the traditional training, by including planned strategies to assist individuals to develop their identities as mentors (Bullough Jr, 2005). Furthermore, it has been suggested that setting up 'affinity groups' (i.e. communities of practice for mentors) is an important step forward to overcome the reported isolation some mentors seem to experience (Bullough Jr, 2005). In this context, mentors can develop a shared discourse for mentoring, and can have opportunities to enhance their skills though conversations about mentoring practice and pedagogy (Carroll, 2005, Orland, 2001).

Rather surprisingly, even countries with well-established mentoring system do not appear to have systematic, high quality mentoring education. For example, in New Zealand, there is a long tradition of mentoring, but there is no mandatory education for mentors (Aspfors and Fransson, 2015). Also, with having mandatory education for mentor such as Japan, most of the mentors are not trained (Asada, 2012). In the country at the heart of this study, KRI, evidence from research has emphases that

supervisors are not supported adequately and lack the formal qualifications to train and support teachers (Vernez et al., 2014a). Overall, however, further research is needed to understand how different teachers in different areas, teaching various subjects, experience the current system. It is also important to examine the supervisory system from the perspective of supervisors' themselves. While there is a lack of evidence (if any) that examined supervisors' view, the present study seeks to make a significant contribution to the literature by examining both teachers and supervisors' experiences on the nature, quality and perceived effectiveness of the existing supervisory arrangements in place.

3.4. Methods

A mixed-method approach was employed in order to provide a thorough understanding of nature, quality and perceived effectiveness of the existing supervisory arrangements in KRI. Evidence was collected in three distinct albeit interlinked phases: (i) Phase one: explore supervisors' perception about their roles and the ways they supported PE teachers to learn (research question 1 and 2) through a semi-structured interview with supervisors. The evidence obtained in phase 1, contributed to developing the survey and, interview protocol with teachers in phase 2 and 3, especially in relation to the topics to be included. Phase two: explore PE teachers' perceptions on the nature, quality and impact of the existing system through a PE-CPD survey; and (iii) Phase three: examine PE teachers' perception in further depth via semi-structured interviews.

3.4.1. Research design

The case study design was appropriate in the context of this study, as the primary goal was to develop an in-depth understanding of supervisors and PE teachers' perception on the nature, quality and perceived effectiveness of the existing supervisory arrangements in KRI.

Case study is widely known as 'an empirical inquiry that investigates a contemporary phenomenon within its real life context' (Yin, 2014, p. 18). There is a consensus that a case study design has a number of features, particularly when the aim of the

research is to develop in-depth and holistic insights about the phenomenon investigated (Thomas, 2015). Yin (2009, p.19-20) pointed out that case study design has the capability to 'explain, describe, illustrate and, enlighten'. Numerous authors like (De Vaus, 2001, Thomas, 2015) believe that a case can literally be anything, a person, a group of people, an organisation, a programme. In the context of the present study, the case was identified at the level of individual supervisors in KRI.

While a review of the case study literature can be confusing as different authors have classified case studies in different ways, according to (Yin, 1994), there are three types of case studies. These are known as exploratory, descriptive or explanatory:

> An exploratory case study … is aimed at defining the questions and hypotheses of a subsequent (not necessarily case) … A descriptive case study presents a complete description of a phenomenon within its context. An explanatory case study present data bearing on cause-effect relationships-explaining which causes produced which effects (p. 5).

In relation to this study, adopting elements of both descriptive and exploratory case study was deemed appropriate as the aim was to capture and understand the views and experiences of both supervisors and PE teachers about the existing supervisory system in KRI. In other words, the primary objective was to describe and explore the phenomenon under investigation with the aim to develop a deeper insight into both supervisors and PE teachers' perceptions on the nature, quality and perceived effectiveness of the existing supervisory arrangements in KRI. Multiple case studies (i.e. supervisors) were initially selected to be study participants and subsequently supported the researcher to select PE teachers under their jurisdiction. The sampling process is explained in further detail below.

3.4.2. Sampling and participants

Research participants recruited to take part in the research included the following: eight supervisors and 302 PE teachers. Different sampling methods were used to select different participants for the different phases of the research.

3.4.2.1 Sampling and participants of phase one

For phase one, there were 24 supervisors working in six geographical areas in Sulaimanyah city. These supervisors were supervising PE teachers in both basic and preparatory schools. A combination of purposive and convenience sampling was employed to select eight supervisors (33%). Specifically, there was a clear intention to select supervisors with different demographic characteristics (e.g., both male and female supervisors, with different years of experience and supervising teachers working in both basic and preparatory schools). Once the criteria were set, the researcher approached a number of supervisors with who had prior working relationships and asked them to participate in the study. All agreed to participate in the research. Table 3.1 reports some biographical characteristics of participated supervisors.

Table 3. 1 Characteristics of supervisors' participants

Numerical code for supervisors	Gender		School type		Year of experiences
	M	F	BS	PS	
MS1-24	√		√		24
MS2-30	√		√		30
MS3-26	√			√	26
FS4-34		√		√	34
MS5-24	√		√		24
MS6-22	√		√		22
MS7-22	√			√	22
MS817	√		√		17

3.4.2.2 Sampling and participants phase two

To recruit PE teachers to participate in phase two, purposive sampling was chosen again. To increase the response rate, supervisors were asked to support the researcher to distribute the survey to all PE teachers under their jurisdiction. As a result, supervisors advised the PE teachers to respond to the survey. When PE teachers replied their agreement to the supervisors, the researcher sent a total of 450 hard copy surveys. 302 of these PE teachers returned the completed survey (67%

response rate). Table 3.2 illustrates some demographic characteristics of the survey respondents.

Table 3. 2 Characteristics of PE teachers' participants

PE Teachers	Total	Gender		School type		Age		Teaching Experiences				
		M	F	BS	PS	Min	Max	4th T	3rd T	2nd T	1st T	ST
Survey	302	227	75	199	103	25	61	32	80	88	73	29

3.4.2.3 Sampling and participants phase three

To collect evidence for phase three, purposive sampling was also employed. With the intention of reach as diverse teachers as possible, in terms of their demographic characteristics, the supervisors were asked to make recommendations about potential teachers who would match the criteria. The decision to involve the supervisor in the process was important in order to get access to teachers with diverse experiences within the available limited timeframe. To further diversify the sample of teachers who would be engaged in this phase, it was decided that two PE teachers per supervisor (i.e., 16 PE teachers in total) would be recruited. After the supervisors' recommendation, the researcher contacted the PE teachers personally who all agreed to participate in the research. Table 3.2 illustrates some demographic characteristics of the PE teachers who participated in the study.

Table 3. 3 Characteristics of PE teachers' participants

PE Teachers	Total	Gender		School type		Age		Teaching Experiences				
		M	F	BS	PS	Min	Max	4th T	3rd T	2nd T	1st T	ST
Interviews	16	14	2	6	10	27	40	-	5	3	6	2

There are different models of career stages that can be found in the literature. In KRI, however, teachers are expected to go through five different stages: First, teachers with 1-4 year of teaching experience are considered as *Fourth Teachers*. Teachers between the 5th and 8th year of teaching are known as the *Third Teachers*. Teachers with 9-12 years in the profession are *Second teachers*. Once teachers enter their 13th

year in the profession, and until they complete their 16th year, they are considered as *First Teachers*. Finally, teachers with more than 17 years of experiences and until retirement, they are *Senior teachers*. The researcher has used this local model of teachers' career stages when data analysis for phase two and three.

3.4.3. Data collection tools

3.4.3.1 Phase One: Semi-structured interview with supervisors

The aim of this phase was to gather in-depth detailed data to answer the question about: (i) PE supervisors' interpretations of their roles and responsibilities; and (ii) the ways they supported PE teachers to learn and progress. To address these questions, semi-structured interviewing was employed.

Interviewing has been described as powerful and flexible research instrument that can be utilise it in order to capture how people can make meaning from their experiences and to access participants' perceptions, thoughts, values, and philosophy (Rabionet, 2011). In relation to which type of interview, a common typology distinguishes the different types on the basis of the degree of structure. So, interviews are typically classified into three types: structured, unstructured and, semi-structured (Robson and McCartan, 2016, Thomas, 2015). The structured interviews, at times, have been described as verbal questionnaires (Ribbins, 2007) as researchers present questions in the same order for all participants but only vary from questionnaires due to the presence of the interviewer to clarify any doubts related to the questions discussed (Cachia and Millward, 2011, Rowley, 2012). The unstructured interview, on the other end, is informal, with very little structure (Cohen et al., 2011b).

In the context of the present study, a semi-structured approach was adopted as this would enable a necessary degree of flexibility in the interviewing process, to enable teachers and supervisors with diverse experiences and working in different contexts to share their unique experiences. In other words, the interview process should not be rigidly structured and uniformed in recognition of the research participants' diverse contexts and experiences. Equally, unstructured interviews were not appropriate as it would make it very difficult for the researcher to compare, look for patterns and

integrate data across the evidence collected from different supervisors (Cachia and Millward, 2011, Rowley, 2012).

Adopting a semi-structured approach in interview necessitates the development of an appropriate, relevant and detailed interview protocol for the purpose of maximising the prospect of collecting rich and reliable data (Ribbins, 2007). According to (Jacob and Furgerson, 2012), a significant step in this process is to review the international literature. In this way, the questions would be grounded in the literature. Due to the similarities in the concept of supervising and mentoring, the focus was on the field of mentoring and the work of Chambers (2008) was informative in the process. However, it was also important to include questions in a way that reflected and were appropriate to the local educational context. While the researcher had prior knowledge regarding the supervising system in KRI, and clear views about its effects and effectiveness (please see section 2.5), it was important the questions were not leading the research participants to predetermined answers. To address all these matters, an initial interview protocol was piloted with two independent supervisors. They were asked to comment on the process and to make any recommendations on questions that could be added in the protocol. One supervisor suggested adding more probing on the evaluation process as he thought it is one of their fundamental part of their role.

The final interview protocol in this study consisted of 11 questions (please see Appendix C). The primary aim was to develop a clear understanding of what the supervisors' role entails from the perspective of the supervisors and what the aims/goals of the supervisory system are. Furthermore, it was important to examine the supervisors' interpretation of the relevant policies and how they seemed to implement such policies in their own contexts.

The individual face-to-face interviews were carried out between January and March 2016, in locations supervisors identified (e.g., office). The duration of the interviews with each supervisor ranged from 50 to 80 minutes. All interviews were audio-recorded and then transcribed in Kurdish language, giving an average of 5-6 pages per supervisor. Thereafter, the Kurdish transcribe were translated into English in order to prepare for data analysis. Once the initial data analysis started, it became evident that further clarification on some important matters was needed. For instance, further data was needed to understand the diverse ways supervisors supported PE teachers to

learn. Some of the initial responses were very generic, lacking specifically. To address these identified gaps and need for further data, all supervisors were subsequently asked to participate in telephone follow-up interview. Face to face meetings were not possible at this stage as the researcher had returned to the UK.

3.4.3.2 Phase Two: PE-CPD survey

A self-report survey was used for this phase. The survey is a broadly used research tool that aims to obtain information for description and analysis of 'previous, current or future behaviours, attitudes and opinions of a specified population' (Armour and MacDonald, 2012 , p. 174). The survey can be either open-ended or closed-ended (Thomas et al., 2015). With reference to the purpose of the study, it was decided that it could be best to design the survey with aim of collecting a mixture of quantitative and qualitative data (e.g., Likert scale and open-ended questions). According to (Cannell, 2004), Linkert scale is important to rate the respondents' feelings or attitudes against a prepared scale while the inclusion of open-ended questions was intended to gain respondents' explanations related to their responses. From this perspective, using Linkert scale was considered to be appropriate, as it gave the respondents the chance to rate their satisfaction on the effectiveness of supervisory support. Two open-ended questions were also included to give participants the opportunity to expand on their thoughts / responses and, an opportunity to explain their recommendations on how it [the supervisory system] can be improved.

The survey was designed in four parts (please see Appendix E). Part one collected demographic information for the PE teachers involved, including information on their age, gender, type of school and, years of teaching experience. Part two sought to collect evidence on PE teachers' participation and views of formal CPD, while part three focused on informal CPD. Part four was relevant to the present study as it sought to collect evidence on PE teachers' views about the supervisory system in KRI.

In Part four, more specifically, four questions were included. In the first question, PE teachers were asked to identify the number of visits of their supervisors between 2012-2017. Teachers were asked to recall how many visits occurred annually in during this time period. There was an interest in collecting this evidence over the five-year period as this included 2014, when the financial crisis in KRI was at its peak, and it was

interesting to examine its impact on the supervisory system (i.e. number of visits). In the second question, PE teachers' satisfaction with the existing supervisory system in KRI was explored with the following question: 'To what extent are you satisfied with the effectiveness of the supervisory support you have experienced over the last year?' There were five possible responses: 1- Not satisfied at all; 2- Not very satisfied; 3- Somewhat satisfied; 4- Very satisfied; 5- Extremely satisfied. An open-ended space was provided, encouraging teachers to explain and justify their response to the above item/question (question 3). The fourth and final question was also open-ended, seeking to collect PE teachers' ideas and suggestions on how the existing supervisory system in KRI could be improved.

While this study involved Kurdish speaking teachers in KRI, the survey was needed to be translated carefully into Kurdish without any changing in the questions and meaning. To ensure that the items of the survey were clear, it was piloted with four Kurdish PE teachers who have not participated in the research. These PE teachers were asked to make comment on the meaning of the questions, as well as layout, wording and length of the survey. The PE teachers suggested including a brief explanation for each section to avoid any confusion, especially between formal and informal CPD. They also requested the addition of examples especially in the case of the open-ended questions for further clarification. Following this pilot phase, the recommended improvements were addressed.

While it was acknowledged that surveys with the open-ended questions produce poor response rates (Ary et al., 2014, Robson and McCartan, 2016), the decision to invite teachers who were attached to the supervisors involved in the study provided a very good context to secure a high response rate. Specially, the initial strategy involved the researcher distributing the survey online (using Lime Survey) was unsuccessful with only around 50 completed and returned (but with many items missing). Consequently, the supervisors were approached to support the distribution of the survey which included all of their teachers. The supervisors advised that hard copies of the survey would be easier to distribute. Following this advice, the researcher sent hard copies of the survey to all identified PE teachers. Between March and June 2018, a total of 450 hard copy surveys sent to the PE teachers and 302 survey responses returned.

3.4.3.3 Phase Three: PE teachers interview

In order to collect qualitative, in-depth data from the PE teachers, semi-structured interviews were conducted with 16 PE teachers. The purpose of the interviews was to understand PE teachers' perception of the nature and impact of the existing supervisory provision; as well as their views and suggestions to improve the existing supervisory system.

With the same reasoning and following a similar process to that described in section 3.4.3.1 above (phase one), a detailed interview protocol was developed. It is important to clarify that the interviews conducted with the supervisors in phase one, and the data / evidence obtained, informed the development of the interview protocol with the teachers in phase 3, especially in relation to decisions on the topics to be included in the protocol. For example, one area investigated in phase one was the content and quality of the supervisory visits. Results from phase one shaped the extent to which the interviews with the teachers in phase three focused on the nature and justification of these formal interactions. It was also evident that attention should be given on teachers' perceptions on the lesson observations and post-lesson feedback.

The semi-structured approach was adopted to allow the interviewed teachers to explain the issues that were essential to them, even those issues that not mentioned in the interview protocol, but it was linked to the topic under inquiry. The researcher piloted the interview with two colleagues from Sulaimani university to guarantee that the proposed questions were clear and relevant. This pilot also served as the practice ground with a focus on exerting some type of control to the process of the interview to ensure that the conversations did not stir to irrelevant matters (Flower, 2001).

The interview protocol was divided into three parts (please see Appendix G), with the third part being relevant to the present study. This part consisted of nine questions. The first three questions were more general regarding the participants' opinion on the supervisory system, their satisfaction with the existing system and, the number of visits their supervisors carried out in the last year. These questions were important to capture the overall opinion of the participants and, also to prepare them for the following specific and more in-depth questions.

With the following question four, the attention shifted to the nature and quality of interactions between the interviewed PE teachers and their supervisors – as perceived by the PE teachers involved in the study. Specifically, the teachers were asked to comment: (Over the last year, can you please explain the way you interacted with your supervisor?). A range of probing questions was in place to focus on eliciting more information on the type of interactions experienced depending on participants' responses. Example probing questions include the following:

- When supervisors visited your school, what kind of activities were carried out? In what ways did you interact with the supervisors?
- Did you find each one of them useful or not? why?
- You said that you have been observed, what was the focus of the observation?
- What happened during the observation?
- What did the post-observation discussion entail?
- What are your thoughts on the discussion that followed the observation? Did you find the discussion useful or not? Why?

The following four questions were designed to elicit information on PE teachers' perceptions on the quality and impact of the supervisory support. It was important to understand, from the teachers' perspective, how their supervisors supported them. Did they 'transmit' information to them, or did they adopt a collaborative, constructivist perspective? Finally, the PE teachers were encouraged to share their thoughts on how the supervisory system could be improved.

All participants were invited to participate in individual interviews at a time convenient to them. Due to the geographical differences between the researcher and the participants, the interviews were carried out via telephone calls. Interviewing teachers in this way provided a cost-effective means to obtain evidence on teachers' perspectives which would have been impossible otherwise. Whilst an initial concern was that a telephone interview would restrict the researcher's capacity to develop a better understanding of teachers' perspectives – given the lack of visual interaction and non-verbal language which conveys subtle layers of meaning, in retrospect, it was evident that both teachers and the researchers were at ease communicating in this

manner. Therefore, it was concluded that the initial concerns about relevant and loss of meaning were somewhat exaggerated or unfounded (Irvine, 2010).

To overcome any potential technical issues which could result in loss of data, the researcher made sure that all devices used were technically checked and were in good condition. The interviews were recorded via Voice Memos application in iPhone mobile. The interviews were carried out between August and September 2018 and the duration of each interview ranged from 60 to 80 minutes. All interviews were audio-recorded and then transcribed in the Kurdish language, producing a total of 6 to 8 for each participant of transcribed raw data. Thereafter, the interviews translated into English in order to prepare for the data analysis.

3.4.4. Trustworthiness and generalisability of qualitative data

The trustworthiness of the qualitative data was established by 'participant validation' which involved the research participants 'assessing the trustworthiness of research in terms of validating the credibility of qualitative data' (Smith and McGannon, 2018 , p. 3). In the present study, the participants involved in the interviews were encouraged during the interviews to clarify and verify their views. They were also asked to expand on their views when answers were ambiguous. This participant validation makes the researcher able to collect rich, detailed and accurate data. Moreover, at the end of each interview, the researcher summarised key points from the interview to the participants who were asked to verify if the researcher's initial interpretation reflected the views they shared during the interview. During this process, the researcher also encouraged participants to add any other points they wanted to make in relation to issues under investigation and which they had not raised before. None of the participants added any further data as a result of this process.

With the high rate of survey responses, the researcher is confident that results can be generalised to the specific context (Sulaimanyah city in which the participants were based). Regarding the generalisability of qualitative data, it can be argued that the findings reported in this research have the possibility to be generalised in two ways. First, results allow the readers who have various positions within PE and the educational system in KRI (such as PE supervisors, PE teachers, policymakers etc.)

to reflect on what is relevant or not to their own professional realities. This process of reflection can enable them to think critically about their own perceptions and practices. In this way, results are generalisable not in the traditional sense but rather in relation to what (Smith, 2018) calls as a naturalistic generalisation or representational generalisation (Lewis, 2014). To allow both naturalistic generalisation and transferability, it was imperative to provide the readers with sufficient detailed 'evidence' (e.g., interview quotations).

3.4.5. Data analysis

Qualitative data consisted of eight interview transcripts conducted with supervisors, 16 interview transcripts conducted with PE teachers and 483 open-ended responses from the survey. Quantitative data consisted of 549 closed responses.

3.4.5.1 Qualitative data analysis

The researcher acknowledges that the process of qualitative data analysis is a basic part of research but not without complexity. Cohen et al. (2011a) explained that 'qualitative data analysis involves organising, accounting for and explaining the data' and providing 'definitions of the situation, noting patterns, themes, categories and regularities' (p.537). In the context of this study, constructive approach to grounded theory was used in order to analyse the qualitative data (Charmaz, 2006) which encouraged researchers to explore the meanings, views, thoughts, feelings, values and experiences of individual research participants in order to illuminate issues under investigation. Alike the traditional approach, the key steps in data analysis from this perspective are: (i) initial coding such as word by word coding; line by line coding, incident to incident coding to start grappling what different data extract means to the research participants. (ii) focused coding which refers to the beginning of a more analytical process of analysis which researchers synthesise and explain larger segments of data. (iii) axial coding which matches to Strauss & Glaser's (1967) concept of development categories along with their properties and dimensions. (iv) memo writing. (v) theoretical sampling that seeks to bring together data to develop theory. (vi) development of theories. it is important to underline that the process of data analysis was ongoing and iterative (Weed, 2017) which helped the researcher to enable further data collection when required. Within the context of the present

research, only a few steps of this process were employed in the data analysis as follows:

Step One:

After each interview, conversations were transcribed immediately in Kurdish language in order to get a better sense of what the participants were saying. Afterward, the Kurdish transcripts were translated to English language in order to prepare it to be entering into the Nvivo software. Also, working with audiotapes and translation of transcripts were enable the researcher to sound and re-sound the research participants' experiences.

Step Two:

The second step involved multiple readings of the data in their raw to the aim of capture the most important and relevant information in relation to the study questions. Through coding, key points being made by the research participants were identified and name or label was attached to each one of them that captured the central meaning. Then, the process involved comparing the different codes from different participants to identify similarities or points of disagreements to begin making sense of the key issues (Cohen et al., 2011a). The process of coding was supported by memo writing. Memo writing was important in order to capture the researcher's initial thoughts on the respondents' comments for the reason of understanding and unpacking the meaning of their comments (Charmaz, 2014). It is also allowed making connections between data analysis and further collection of data.

Step Three:

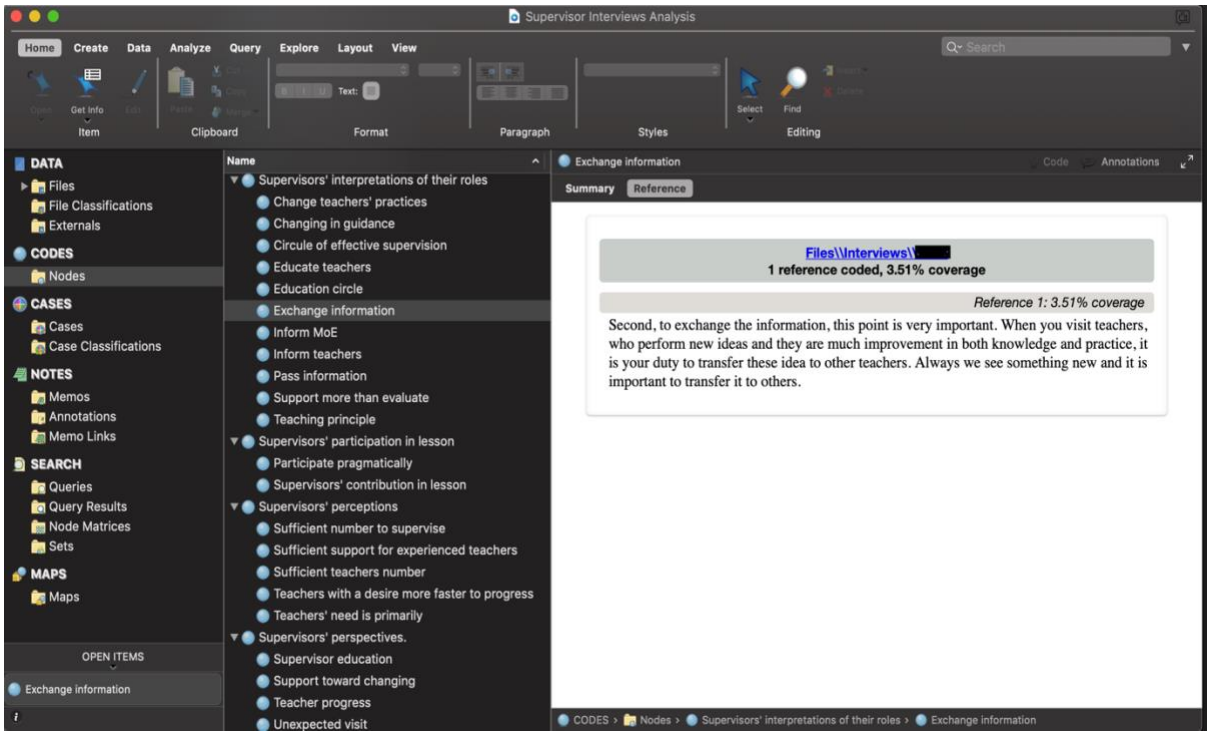
To develop the categories in the third step, there was a constant comparison of the different codes to decide which code belonged to another (please see figure 3.1). Categories involve clustering the open codes around specific points of intersection (Harry et al., 2005). Example of codes included 'educate teachers', inform teachers', change teachers' practice', pass information' were grouped under the category of 'supervisors' interpretations of their role' as these codes were understood as representing the range of supervisors' interpretations on what is their role consisted.

Step Four:

Similar to the step three, categories were subsequently compared together to identify themes in the step four. It was to cluster all these categories under the heading of the research question. This step represents what grounded theorists call development of themes. For example, the categories of (increase the number of supervisors, alternative evaluation criteria) are presented under the theme of 'Recommendations for improving the existing supervisory system'.

It is important to note that, the aim of conducting grounded theory was not to build a theory but to rather identify patterns between the categories and 'produce conceptual thematic descriptions rather than explanatory theories' (Starks and Brown Trinidad, 2007, p. 1377). NVivo software version 12 was used in order to manage the process of analysing the qualitative data and an illustrative example is provided in figure 3.1.

Figure 3. 2 Initial coding in Nvivo 12



3.4.5.2 Quantitative data analysis

Quantitative data obtained by the closed questions in the PE-CPD survey were entered to SPSS version 25 (IBM Statistics) for analysis. Descriptive statistics were run to describe and explore the mean scores of PE teachers' responses to the Linkert

scale questions. A separate file was conducted to identify the mean scores according to the PE teachers' gender, school type and, teaching experiences. The Independent-Samples t-test and One-Way ANOVA were run to identify the different groups of gender, school type and teacher experiences. Finally, frequency analysis was run in order to identify the frequencies participates responses to the particular question.

3.5. Results

Results are presented under four themes concerning the supervisors and PE teachers' perceptions about the nature, quality, and perceived effectiveness of the existing supervisory system (thereafter referred to as SS) in KRI. Results suggest that there was some variation in the ways supervisors interpreted not only their main role and responsibilities (theme 1) but also the practical ways they supported PE teachers to learn and progress (theme 2). Similarly, PE teachers held different perceptions on the effectiveness of the existing supervisory system (theme 3), but there was some consensus on the necessary changes to improve existing provision (theme 4).

3.5.1. Theme 1: Supervisors' perception of their role

All supervisors agreed that their role, as recognised in the relevant policy documents, consisted of three important dimensions: guiding, monitoring and evaluating teachers in their local contexts. Specifically, all supervisors interviewed made reference to a guiding visit taking place in the first trimester of the academic year (mid- September to mid-January). They explained that this included visiting teachers in their schools, observing them delivering theoretical and/or practical PE lessons, and providing feedback. Monitoring was described as an accumulative process aimed at looking at how teachers improve over the course of one or more academic years. Specifically, for teachers new to the profession, the MoE has guided supervisors to monitor progress over one year. In the case of more experienced practitioners, supervisors were expected to monitor (and comment on) teachers' progress over a number of years. The third significant aspect of their work, as all supervisors acknowledged, was evaluating teachers.

Following the initial guiding visit, all supervisors agreed that one of the biggest impacts of the 2014 financial crisis was the reduction in the number of supervisors' visits by

the MoE. In this context, the second visit (monitoring) was merged with the third visit (evaluating). Despite this, they were still required to monitor and evaluate the teachers in one single visit and to write a formal evaluation letter for each teacher, summarising their views on the performance of the teachers they had observed.

All tutors acknowledged that it was through the processes of guidance, monitoring and evaluation that they could make an impact on teachers. Given that the supervisors had no access to any formal, detailed guidance on what these three processes should entail and include, or on what aspects of teachers' performance supervisors should focus upon, they felt they had the freedom to carry out these activities in any way they felt was appropriate for the individual teachers.

Another interesting finding was that different supervisors perceived the nature of their input and role, as far as the three processes of guiding, monitoring and evaluating teachers, in different ways. Although they all agreed that the evaluation process was the most rigid aspect, the ways they interacted with teachers and the ways they perceived their contribution during the two visits, varied. For example, one supervisor (MS7-22) explicitly stated that he did not perceive himself as an 'expert' but rather found many opportunities to learn by observing what experienced teachers were doing and subsequently using this knowledge to support new teachers:

> As I am not the person who knows everything, when I observe new things (e.g., unique teaching style) as a useful way to increase students' learning, I try to transfer it to other teachers under my remit. This is benefitting newly appointed teachers, I believe, by transferring new ideas from experienced teachers (MS7-22).

In some cases, as one of the supervisors (MS1-24) explained, by observing a variety of approaches applied in diverse contexts in different ways by different teachers offered rich learning opportunities for them; an experience that contributed to the growth of their own knowledge and understanding:

> While observing different teachers with different competencies, I have to admit that sometimes, I learn new things from them which leads to the expansion of my own knowledge. This is, of course, good for all my other teachers because I can share this wider expertise and what other teachers do in different schools (MS1-24).

Two supervisors (MS8-17 and MS2-30) believed that their role also involved the fundamental process of ‘re-educating’ newly appointed teachers. According to one of the supervisors (MS8-17), many of the new teachers appeared to lack competency in terms of teaching PE in the context of schools with real pupils. The importance of this ‘on-the-job’ re-education was grounded in a belief that undergraduate degrees focused more on developing teachers’ theoretical knowledge and the execution of sport skills rather than supporting prospective teachers developing a broad understanding of the complexity of teaching and learning in the real context of the school environment:

> The university programme is relying mostly on performing sports skills rather than teaching skills. It is also our duty to educate them again to improve their way of teaching (MS8-17).

3.5.2. Theme 2: Details and rationale on the ways that supervisors supported teachers to learn and progress

All supervisors confirmed at the policy level that they arranged school visits twice a year. They pointed out that the number of visits organised has been reduced since 2014-2015 as they used to visit each school three times a year. This reduction was attributed to the financial crisis primarily. Most PE teachers interviewed also confirmed that their supervisors visited them on average twice a year (as reported in theme 3). This section presents the practical way that supervisors support the PE teachers in their local context in order to learn and progress.

3.5.2.1 Guidance visit

All supervisors referred to the initial visit as entailing providing guidance to teachers in their local context. The visit consisted of three parts: (i) Review process, (ii) Lesson observation and, (iii) Feedback/discussion.

1. **Review process**

There was an acknowledgement that the review process is a routine aspect of the supervisors’ job. Although there were some common elements in all tutors’ elaboration on what information they intended to ‘review’ in the initial meeting, there was variation in whether – or the extent to which - tutors actually reviewed aspects central to

teachers' instructional practice. In this context, all supervisors explained that they looked at, discussed, and reviewed wider PE related matters. These included the PE attire as it has come to the attention of most supervisors that PE teachers themselves did not always wear an appropriate 'sports attire'. They thus believed that this could shape students' thinking about the importance of the subject and even reduce participation. The supervisors thus enforced strict rules about this matter during the initial meeting.

For some supervisors (n=5) the process of reviewing also entailed looking at the available equipment. According to these supervisors, this was an essential aspect of the review process because guidance on the content of the curriculum, and what activities should be offered throughout the year, could only be offered if the supervisors knew what equipment and other resources were available in each school. Some supervisors explained that this led to some schools with limited equipment to teach a smaller range of activities more intensely. This was a necessary step to ensure that PE was still a valuable subject, delivered with the right equipment, despite a clear resource crisis in some schools. Checking the teachers' annual plan were also involved in the review process. This is was consisted of checking the teachers' plan for the PE curriculum and extra-curricular.

2. Lesson observation

Most supervisors (n=6) argued that the initial meeting offered an ideal opportunity also to surveillance[5] teachers in action to assess their teaching performance in theoretical and/or practical lessons. According to six supervisors, observing both theoretical and practical lessons was vital to ensure that teachers displayed good teaching in both situations. Particular emphasis was placed on observing the quality of the teaching in relation to the technical aspects of the various sports delivered. Some supervisors (n=5) explained that during their observations of theoretical lessons, they would evaluate the competence of the teachers in relation to the ways that information was presented (including teachers' clarity) and the extent to which teachers were taking the students' age into consideration when doing so. As one tutor said, depending on

[5] Visual monitoring while teachers performing their normal lesson.

the age of the students, teachers are expected to 'provide an easy [appropriate] way when explaining it' (MS2-30).

A consistent message from all supervisors was that their observations also focused on the extent to which all pupils participated in PE lessons and received meaningful feedback and support from their teachers. Supervisors talked about the importance of seeing teachers focusing on each student individually by giving feedback and correcting any potential mistake. Moreover, it seems that all supervisors wanted to see certain things included in the first, theoretical part of the lesson.

> If we take the technique of shooting in basketball as an example, the teacher first needs to explain the performance of the skill in a theoretical way in the classroom, how to hold the ball, the angles between the joints in the arm. Using a projector is essential at this stage to show them some real example from known players. Then, in the practical lesson, the teacher needs to transfer this information to practice. …. The students should have opportunities to practice the skill, and the teacher has to observe each student individually and correct any happening mistake (MS8-17).

Regarding the practical lesson, all supervisors explained that their main focus was on the way the lessons were structured so sufficient time was allocated to practising the skills. As one supervisor (MS3-26) explained, it was crucial that teachers divided lesson time efficiently:

> The lesson plan is essential in the practical lesson. As it is too short (45 min), the teacher needs to divide it very effectively. For example, more time needs to go to the main part (20 min) as this part is practising on the skills (MS3-26).

Moreover, one of the supervisors (MS7-22) argued that there was an expectation to see the teachers performing for the purposes of demonstration the skills taught, as a way of reminding the students about the key technical aspects of the skills presented in the previous theoretical or practical lesson.

> I am expecting to see the teacher perform the skills in front of the students. I think this is a way that can remind the students what they took in the theoretical lesson (MS7-22).

Following individual skill development drills, all supervisors argued that they were also expecting PE teachers to implement small-sided games so that students had

opportunities to apply the taught skill/s in a more complex and demanding situation (e.g., game).

> The small-sided games are essential at the end of the lesson. It is enjoyable for the students in one hand. On the other hand, important for implementing the taught skill(s) in game circumstances (MS2-30).

There was also an expectation of observing teachers using some form of technology (e.g., use of projectors to illustrate a real example of known players performing the skill). Most supervisors were in agreement that this was important for two reasons: firstly, to ensure that all students could see what was presented (due to the size of the classroom); and secondly, to engage and motivate the students by having them watch their idols (e.g., Messi and Ronaldo for football) performing the taught skill. It is interesting to note that one supervisor expected to see students encouraged to engage in discussions with their teachers about the taught skill in order to explore to what extent the students have understood the taught skill as well as to answer any questions from them (MS5-24). No other supervisor appeared to focus on the nature of students' engagement in the learning process.

3. Feedback/discussion

Most supervisors (n=6) explained that following the lesson observation, they would summarise the key points and present these to the teacher in the feedback session. This process was perceived as a crucial aspect of their initial school visit as it enabled teachers to review their teaching performance and to engage in discussions on how to improve their lesson:

> After the observation, giving feedback is very important. Through the feedback, the teacher knows how his/her teaching performance was. Also, we discuss about how to improve his/her weakness. For example, if I notice that the students have lost their attention in the lesson, I advise the teacher to ask questions sometimes in order to bring the students' attention to the lesson (MS5-24).

Different supervisors offered this feedback in different ways. Most supervisors (n=6) believed that providing feedback is a private, confidential matter. To ensure that this was the case, they explained how they kept detailed notes during the lesson followed by a private conversation at the end. Two supervisors, however, explained how when

observing teachers, they believed it was important to intervene to lead the lesson during the last few minutes. This was, in their view, an important CPD opportunity for the teachers:

> Sometimes, when I teach in the last few minutes of the lesson, I try to show to the teacher the solutions for the areas of improvements practically. For example, when the teacher provides information rashly to the student, and students get confused, when I teach, I try to be slow and sometimes ask the students if they understand what I am saying. However, we also discuss about this point when I give the feedback to the teacher (MS8-17).

3.5.2.2 Monitor/evaluate visit

As previously noted, there was a consensus among the supervisors that the process of monitoring and evaluation the teachers were another aspect of the SS. All supervisors confirmed that the procedure of the second visit was similar to the first, as explained in the previous section. They looked at the same issues during the observation, but this visit did not incorporate a post-observation feedback session. So, one could argue that this second visit was more formal as supervisors had to draw conclusions about the progress of the teachers, the extent to which they have addressed the issues discussed in the first visit, and to explore the extent of improvement compared to the first visit.

All supervisors also explained that it was important to use the formal evaluation form created by the MoE in order to determine the improvement of the teachers. However, some supervisors found aspects of this form 'unhelpful' as they were not tailored to teaching PE. They argued that the aspects mentioned in the evaluation form is not focused on the any PE teachers' extra-curricular or any event that teachers are organised in or outside the school for their students.

3.5.2.3 Supervision challenges

The supervisors acknowledged that there were a number of challenges that had to be encountered in their daily job in order to be more effective. In line with teachers' non-satisfaction regarding the quality of support, the supervisors attribute the ineffectiveness of the SS to a large number of teachers under their jurisdiction. Most of them (n=7) explained that the sheer volume of PE teachers under their jurisdiction

'overloaded' their role and hindered them to offer support that was more sustained. The supervisors involved in the present study had to supervise (50-80) PE teachers located in different schools. Only one supervisor has to supervise (17) teachers as he provides his role in the rural area. This supervisor was satisfied with the number of teachers, and he pointed out that he visits them more than three times per year.

3.5.3. Theme3: Teachers' perception on the effectiveness of the existing supervisory provision

The previous section has presented the supervisors' views on what their support and monitoring entails. This section summarises the teachers' perceptions on the extent of their satisfaction and effectiveness of the SS through the evidence that collected in both teacher interviews and the CPD survey.

Descriptive statistics are reported in Table 3.3. Results suggest that teachers were somewhat satisfied with the effectiveness of the existing supervisory provision as the mean score is just above the mid-point (M=2.82, SD= 1.26). The difference in the mean score between male (M) and female (F) teachers was small and not statistically significant (p=.40,>.05). Similarly, there was no significant difference between the groups in relation to the teachers' experiences (p=.17,>.05). However, teachers working in the preparatory schools (PS) was more satisfied compared to those who working in basic schools (BS) as there was a significant difference in the mean score (p=.01, <.05).

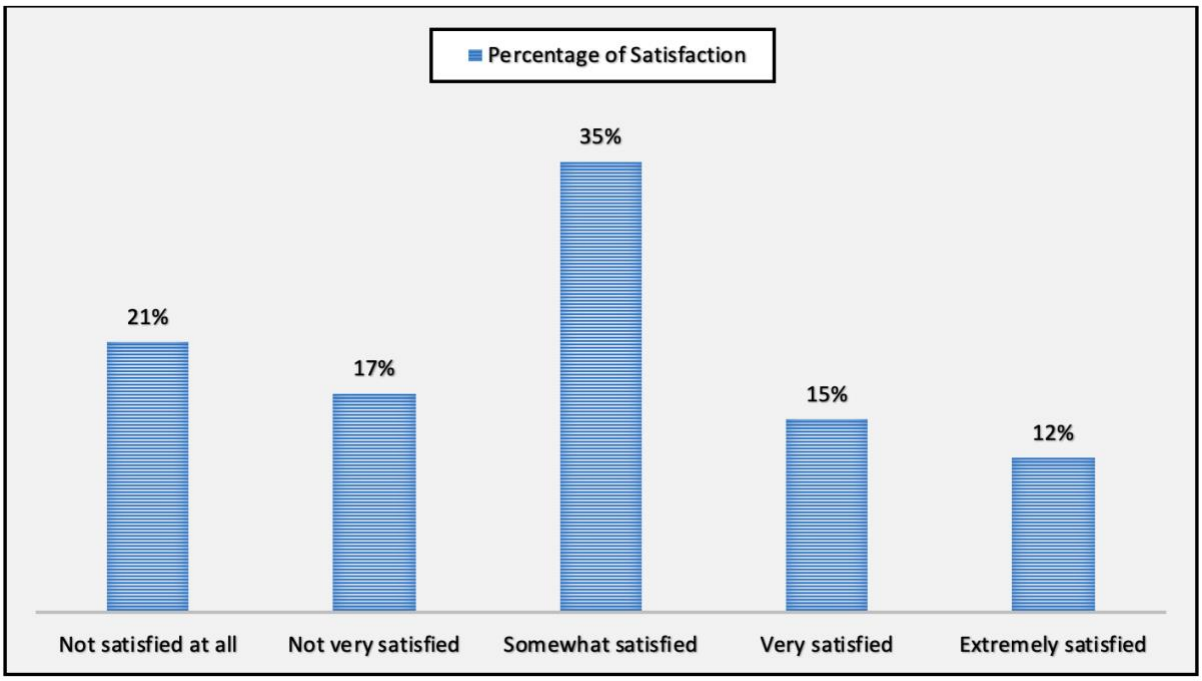
Table 3. 4 Satisfaction with the existing supervisory provision over the last five years

Satisfaction	Total	Gender		School type		Teaching Experiences				
		M	F	BS	PS	4th T	3rd T	2nd T	1st	ST
Number	274	203	71	182	92	27	72	78	68	29
Mean	2.82	2.85	2.71	2.68	3.08	3.14	2.79	2.56	2.92	3.03
S-Deviation	1.26	1.29	1.18	1.22	1.32	1.23	1.12	1.32	1.38	1.14
Note: the mean score is out of 5										

Importantly, figure 3.2 illustrates that more than a third of the teachers completing the survey were either 'not satisfied at all' (n=57, 21%) or 'not very satisfied' (n=46, 17%) with the existing SS. To the other end of the scale, a total of forty-three respondents

(15%) reported 'very satisfied' or extremely satisfied (n=33, 12%). With a third of the respondents reported somewhat satisfied, the middle of the scale (n=95, 35%), it is safe to argue that the survey results indicate a divide in teachers' satisfaction regarding the SS.

Figure 3. 3 PE teachers' satisfaction with the effectiveness of the supervisory support



Thus, to further unpack the teachers' reasoning, it is important to analyse the open-ended questionnaire responses and teachers' views during the interview (phase three). The first three subheadings below refer to the positive aspects of the SS that teachers pointed out and this is followed by seven issues or concerned raised by teachers.

3.5.3.1 Feeling satisfied with the professional support

Alongside the 30% of the survey respondents reporting satisfied or very satisfied with the existing SS system, more than half of the teachers interviewed (n=10) had at least one positive experience to share. Specifically, five teachers praised the support they got from their supervisor when they were first appointed in a school. As one of the teachers explained below, although the supervisor has had a positive impact on his knowledge during the first challenging years in the profession, the level of support was not sustained over the years. This is an issue that will be further explored later on:

> As the teachers do not have many experiences at the beginning of their career, in this stage, supervisors' guide and support are very important. Thereafter, their support becomes more repetitive. However, teachers can rely on your own experience (MT7-11).

Furthermore, some teachers also felt that these one-to-one interactions with their supervisor were important as it was possible to get personalised support during the school visits. Although they were overall satisfied, there was room for improvement, as illustrated in the extract below:

> To my understanding, discussion with someone experienced is an opportunity to gain knowledge. However, it is important to increase the number of visits per year to increase the opportunities for this to happen (MT16-15).

Although there was no explicit reference on the ways that teachers became better in their job, one of the teachers described how his supervisor was his role model who motivated him to teach better.

> Sometimes my supervisor leads my lesson when he visits me. As he has extensive experience in teaching, his way of teaching is so effective. Always I am trying to repeat how he is teaching (MT9-11).

3.5.3.2 Feeling satisfied with the motivational support

Some survey respondents (n=5) and two teachers interviewed explained that the existing SS was effective in 'motivating' PE teachers in sustaining and improving their practices. In other words, SS is not only about providing professional support to the teachers, but it serves an important motivational role:

> It is known that the core of the education process is teachers. I think …. the supervisors' engagement is essential to motivate teachers to work hard and improve their learning (MT4-14).

Moreover, a few teachers (n=4) interviewed explained that in the context of PE being perceived as a less important subject compared to others, these visits had a vital role to play in supporting them emotionally. As this teacher explained, these visits created a feeling that their job is appreciated and that resources are in place to support them to grow:

> I think the supervisors' support is very important emotionally, perhaps more than professionally. It makes me feel that my job is important to someone as my head of school looks to the PE as less important (MT11-6).

3.5.3.3 Feeling satisfied with the support for extra curriculum activities

Some of the teachers (n=3) reported satisfied with the existing system as they felt it had a positive effect on the range of activities they offered after school. For example, one PE teacher explained how the supervisors' offered interesting and tangible ideas on how to make a school event much more engaging for students:

> My supervisor has helped me to organise school day activities for students. Besides his participation in organising the activities, he suggested delivering these activities in the international day of sport to the reason that students' feel they are also part of the world (MT6-8).

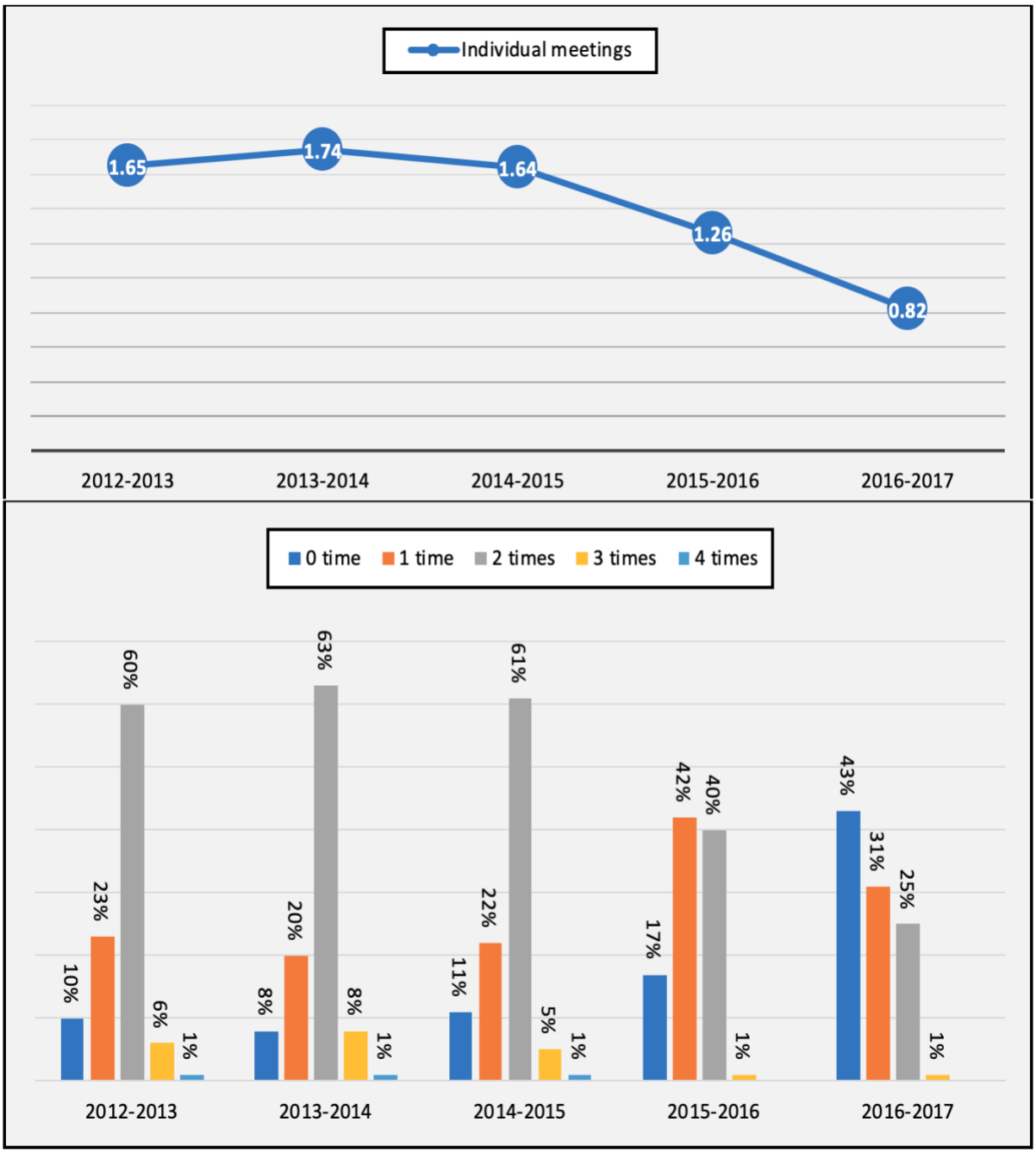
Echoing with the above extract, another teacher (MT5-10) in the case study has also emphasised that his supervisor offered useful, practical and real support making it possible to organise and deliver a mountain climbing session/event.

3.5.3.4 The number of visits is insufficient

While all supervisors confirmed that they meet their teachers twice per academic year as a new instruction by MoE, evidence from the teacher survey, however, suggests otherwise. Specifically, as shown in figure 3.3, there is a clear downward trend in the number of visits recalled by the PE teachers over the last five years. The average of meeting with teachers was (M=1.65, SD=0.78) in the 2012-2013 academic year. However, the meeting has declined to (M=0.82, SD=0.83) in the 2016-2017 academic year.

A breakdown of teachers' responses (frequencies of responses) also revealed only 66 PE teachers (25%) reported meeting with their supervisor twice in 2016-2017 compared to (40%) in 2015-2016. Furthermore, 43% of the PE teachers had not any meeting with their supervisors in 2016-2017 while 17% reported no meeting in 2015-2016. It is important to highlight that 25 teachers (8%) could not recall any visit being conducted by their allocated supervisors over the last five years (2012- 2017).

Figure 3. 4 Meetings provided by supervisors and percentage of PE teachers' respondents to meetings quantity they experienced



3.5.3.5 Guidance is repetitive

Supervisory provision or guidance offered by the supervisors were perceived to be repetitive by 13% of teachers (n=40) as captured in the open-ended responses in the survey. Specifically, some of the teachers acknowledged that the SS failed to reflect a meaningful on-the-job CPD support incorporating new directions, but rather reflected a 'business as usual' approach reinforced by the repetitive nature of supervisors'

‘guidance’ during scheduled school visits. Interestingly, one PE teacher had very strong views about the ineffectiveness of the supervisory system in its current format:

> When my supervisor cannot give me new sports equipment, cannot update me with new instructional [methods or approaches], and cannot give me [any] new ideas. [Instead, my supervisor] give me the same guidance that I heard many times before. What is the point of the supervisory system? I think their role should be made redundant (ST134).

Only a small number of teachers interviewed in phase three (n=3) identified this as an issue when asked to reflect on the strengths and limitations of the existing SS provision. The following extract illustrates this point:

> In general, supervisors do not have [offer] a new and useful programme. When they come to the school, they repeat the same guidance they provided in the previous years (MT1-14).

Poor or inefficiency quality of support provided by the supervisors was the second most frequent explanation offered by the teachers in the survey. Specifically, some teachers (n=23, 7%) wrote about the inefficiency of their supervisors to provide them with new knowledge. They referred to ‘poor knowledge’ or ‘no new ideas’ when described the supervisors’ competency. Furthermore, some interviewed teachers (n=6) also described their interactions with their supervisors as entailing ‘mostly criticism’ that was at time ‘destructive’ with no meaningful input to what and how they taught. Criticism was disruptive and not effective because supervisors, as one teacher explained, failed to offer alternative ‘viable solutions’ to improve their practices.

A related issue raised by some teachers in the survey (n=11, 4%) was that supervisors were rarely listening to them; and are rarely engaging in meaningful discussion on how to improve their practices. Clear concerns were thus raised about the quality of the interactions experienced during the supervisory school visits.

3.5.3.6 Lack of freedom

Another issue raised by teachers revolved around the ways their supervisors were expecting teachers to deliver PE lessons in certain ways; in way, more specifically, that matched the supervisors’ delivery style. Some of the survey respondents (n=10, 4%) pointed out that they are not allowed to implement what they find effective for their

students. In this context, one of the interviewees also stated that supervisors are not the ones dealing with students on a daily basis. In this context, the teacher continued, they might be not in the position to understand what students need. In his eyes, teachers need to be guided to find their own way to increase the achievement of the students rather than to be told how to do so:

> My supervisor insists on implementing what he sees it right or precisely how we learnt from the initial education. Sometimes I need to use my own way to increase achievement as I am the only one who deals with students every day (MT14-10).

3.5.3.7 No true evaluation

A few teachers interviewed had lost faith in the existing SS because, as they put it, there were very few (if any) consequences to those teachers who did not adhere to the expected standards (the teachers who were 'inactive'). They felt that 'no serious action' was taken against teachers who failed in the evaluation processes; and that, equally, no reward was given to those who were highly effective – the active teachers. They emphasised that supervisors need to implement the evaluation in a serious way, including the consequences expected if a teacher underperforms, if the system is to be implemented effectively. The teachers also acknowledge that for this change to happen, it needs to be led and pushed by the MoE, so that inactive PE teachers are identified and adequately supported:

> Having supervisors is important. However, in my opinion, they need to separate active and inactive teachers by insisting on the evaluation results. They need to push MoE to have any reaction regards this matter. Unfortunately, we have not seen this until now (MT6-8).

3.5.3.8 Lack of authority

There was also real criticism regarding the lack of authority the supervisors displayed as far as supporting teachers were concerned. Some teachers (n=13, 5%) in the survey in line with teachers (n=7) in the interviews acknowledged that one of the reasons behind the ineffectiveness of the SS is that supervisors have not much authority in their role. In other words, the teachers expected that their supervisors advocate for them to liaise with the relevant bodies to provide more PE-CPD and right

equipment and resources. However, these teachers felt that the supervisors were not effective advocates for the PE profession.

3.5.3.9 Questions about the selection of 'suitable' supervisors

Some PE teachers in both the survey (n=31,13%) and interviews (n=7) raised questions about transparency in appointment of supervisors and protocol recruitment. They believed that the criteria used were not always transparent or adequately explained and as a result, supervisor who were potentially not ready for this post, or who lacked the necessary knowledge and skills, were wrongly appointed. In some cases, there was a perception that the actual competency of the people nominated to become supervisors was not formally looked at or evaluated. Consequently, it was felt that this might have an impact on the quality of support they attempt to provide through on-the-job support visits:

> To my understanding, some kind of political background is taken to account when MoE selects the supervisors. That is mean, these supervisors are less competent, but they been chosen due to their political background (MT8-8).

3.5.4. Theme 4: Recommendations for improving the existing supervisory provision

Drawing upon the three phases of the data collection, it is evident that both supervisors and PE teachers had many ideas on how to improve the existing SS. In the section that follows, supervisors and teachers' recommendations are presented under four headings.

3.5.4.1 More supervisors are needed

The first obvious recommendation provided by some survey teachers (n=49, 21%) and all supervisors (n=8) was to increase the number of school visits. To do so, the supervisor-teacher should be improved by recruiting more supervisors, as summarised by the supervisor below:

> The Ministry of Education needs to provide more specialist PE supervisor reduce the number of teachers that each supervisor has to supervise which ultimately leads to an increase in the number of school visits (FS4-34).

3.5.4.2 New criteria for evaluation

Most supervisors (n=7) were keen to see a change in the evaluation criteria used in the relevant MoE form. Alongside with evaluating teachers' curricular activities, they believed that new evaluation criteria also need to evaluate all extra-curricular activities. There were also calls to act on the outcomes of the evaluation process (as explained in section 3.5.3.7).

3.5.4.3 A collaborative between MoHE and MoE

One of the supervisors (M5-22) suggested the establishment of more meaningful and sustained 'collaboration' between the Ministry of Education and Ministry of Higher Education. While the Ministry of Higher education is responsible for PE school curriculum, he suggested that more pre-service teaching implementation in real context is needed in collaboration with MoE in order to enhance teachers' initial education.

3.5.4.4 Transparency and training

While teachers in both survey and interviews expressed their concern on the quality of supervision, some of them believed that this is due to the process of selecting supervisors. Thus, they asked for more transparency in the process of selection. Also, some of them believed that appointed supervisors need training to provide sustained and effective supervision to the teachers.

3.6. Discussion

The present study was set out to examine supervisors and PE teachers' perceptions on the nature and quality of the existing supervisory arrangements in KRI. One of the key findings related to concerns over the inadequate selection and preparation of supervisors in order to fulfil their role effectively. The supervisors interviewed argued that there was a persistent lack of meaningful professional development opportunities for them which restricted the development of their knowledge. They also critiqued the unavailability of relevant policy documents. This meant that they could only interpret – i.e. develop their own personal interpretation of - what they expected to do. Hoffman et al. (2015) reviewed forty-six studies that examined the professional learning interactions between cooperating teachers (i.e., mentors) and preservice teachers

internationally. Results resonate with the comments made by the KRI supervisors, namely that cooperating teachers rarely had a clear understanding of their role. They also had limited professional learning support to fulfil their role. They rather appeared to rely on their previous professional experiences to inform how to support pre-service teachers to learn. It appears that this was also the case for KRI supervisors.

In KRI, the most recent investigation regarding the quality of education was published in 2016. This government-funded study was designed to investigate all aspects of education provision following the 2008 reform (see section 1.4.2), including the nature and quality of the supervisory system in KRI (Vernez et al., 2016). It is important to note that PE and fine arts teachers were investigated together. The main findings from this study can be summarised as follows. Firstly, there was acknowledgement that supervisors did not have opportunities to participate in relevant training to assume their role in schools. Secondly, supervisors appeared to lack a common understanding of criteria for judging teachers. These findings from (Vernez et al., 2016) investigation was also evident in the present study. It could be therefore concluded that the process of SS in KRI has not moved forward over the last few years. It could be argued that since Vernez et al.'s (2016) investigation, the system experienced further pressure due to the financial crisis with a reduction in the number of school visits conducted. Important issues around the quality of provision also remained.

More frequent and of better-quality visits were the two prominent requests by the PE teachers involved in this study. Most teachers acknowledged that the guidance offered by the supervisors was repetitive. In this context, there was consensus that there was a clear need for ongoing, and progressive on-the-job support, no matter what the PE teachers' level experience was. The teachers felt that their supervisors should be in a position to offer them new ideas, new ways of teaching to expand their teaching repertoire. Yet, it was crucial their professional independence and judgement to be respected.

Some supervisors were also perceived to be prescriptive (i.e. this is how you should be doing it) but their ideas and suggestions were not always applicable in the real context, according to the teachers. From this perspective, the approach some of these supervisors appeared to adopt, as explained by the PE teachers, reflected a transmission approach to professional learning and it was top-down. While the

transmission approach suggests that knowledge should be transmitted from the experts to the learners (i.e. teachers in this study) and that the learners are empty vessels (Bereiter, 2002), contemporary theories of learning challenge this transmission orientation to professional learning as an oversimplification of the complex professional learning process. Specifically, the assumption that teachers can gain, 'acquire' and subsequently reapply knowledge is most of the times impossible. Rather, teachers need to have opportunities to be actively engaged in the learning process, so they interpret, understand, construct, or generate new ideas and concepts (Harris, 2000, Imants, 2002, Newmann, 1994). A useful parallel to the mentoring literature can be made here.

Contemporary understandings of mentoring appear to transcend traditional perceptions that involve the mentor providing top-down and one-directional support. New conceptualisations of mentoring grounded in socio-constructivist understanding/theories of learning posit that for mentoring to be effective and sustained, a more mutual, interactive and equal approach needs to be adopted (Tynjälä and Gijbels, 2012). Thus, scholars suggest that mentors and other CPD providers (supervisors in this case) need to create opportunities for discussion (Patton et al., 2012), enabling teachers to explore the possibilities of alternative modes of teaching (Kennedy, 2016) in a meaningful context (Hunuk, 2017). To be effective facilitators or mentors (i.e., supervisor in this case), Makopoulou (2018, p. 262) suggests that it is imperative practitioners to 'examine their own practice and assumptions about effective facilitation; consider' their understanding of what active construction of knowledge and sharing of expertise means and involves; and to evaluate the 'extent to which they provided high quality of theoretical and practical experiences'.

The question that remains is 'what is need to be done to improve the existing supervisory provision?' To address this question, evidence from the present study suggest that a change is required but this can happen step-by-step. Due to the restricted funding, a pragmatic approach is needed; an approach that does not require significant investment which would be impossible at this stage. Based on teachers' request to improve the quality of interactions with the supervisors, it is suggested that

emphasis should be placed on the development of the supervisors by utilising the existing workforce working in universities and other relevant institutions.

To maximise the impact of the present study, one of the first (personal) actions is to set up a PE advisory group and to organise and run a workshop (inviting policy makers, teachers and supervisors) to discuss the key findings from the present study. The aim of the workshop will be to reflect on these findings, discuss theory and research from the national and international literature, share good practice and to develop a position statement about the role and importance of the supervisors in improving the quality of PE provision in schools. The professional responsibilities of the supervisors, as envisioned by the PE teachers who participated in the study and the PE advisory group and in line with the available official documents, will be clearly articulated. The position statement will also draw attention to the importance of developing supervisors' skillset in facilitating professional learning.

Following from this position statement, evidence-informed guidelines on 'Effective Practice for Teacher Supervisors' will be produced and following a meaningful consultation review process, these will be widely disseminated (both nationally and internationally). A second set of guidelines would target PE teachers (e.g., what to expect from the supervisors and how to maximise their engagement within the available support and resources). A third set of guidelines will target policy makers and other key stakeholders within the KRI education system.

3.7. Conclusion

It is now widely accepted that the nature of teachers' work is far from stable and predictable (Rayes et al., 2016). Teachers work in an ever-changing and increasingly challenging educational landscape, expected to successfully implement ongoing curriculum reforms, innovate in their pedagogy, and to teach an increasingly diverse student population (Jones and Dexter, 2014).

'Internationally, there is a growing trend to move towards a system of school-based teacher education' (Young and MacPhail, 2015, p. 1). In order to support PE teachers in their school context of the KRI educational system, results from this study suggest

that supervisors need to be adequately prepared in order to support the teachers in an effective way. It is also crucial, key educational stakeholders to clarify and clearly articulate the role and responsibilities of the supervisors. More and better support (i.e. quality of supervisory provision) is needed as most of the teachers who participated in the study felt that what was at the time of the research available was repetitive and a sort of outdated system of supervising. There were clear calls for a system (SS) renewal. It is proposed that to address these important matters, there is a need for a PE advisory group to be set up to move things forward, by developing a position statement and a series of evidence-informed guidelines to take more ownership of the professional development of PE teachers with a clear focus on improving the quality of provision. Further research is also needed with utilising the *'systematic observation tool'* which allows the researchers to develop a realistic and contextual understanding of how *supervisors' role and responsibilities* (which explored in this study) are evidenced in practice (Makopoulou, 2018, p. 252).

CHAPTER FOUR: STUDY TWO

AN INVESTIGATION INTO THE NATURE, QUALITY AND EFFECTIVENESS OF FORMAL CPD FOR PHYSICAL EDUCATION TEACHERS IN KURDISTAN REGION-IRAQ

4.1. Introduction

'The meaning and importance of Continuing Professional Development (CPD) for teachers have evolved in recent years. Internationally, CPD is increasingly connected to school improvement efforts (Borko et al., 2010a). In this context, CPD is understood broadly, as an ongoing process of professional, lifelong learning that teachers engage in with the aim to develop their knowledge and skills in order to sustain, improve or transform their practices (Collin et al., 2012). The necessity of CPD is widely recognised (Caena, 2011, Darling-Hammond and McLaughlin, 2011, OECD, 2012), as teachers face significant challenges in their work. In this context, teachers need to ensure that they learn in order to respond to these challenges effectively. Such challenges include curriculum reforms, the use of new technology as a pedagogical tool, and an ever increasingly diverse student population, including learners who are disengaged or a motivated (Easton, 2008, Barro and Lee, 2015)' (cited from Amin, 2016, p. 2).

In the context of KRI, in response to concerns about the quality of the education system (as students appeared to graduate from schools with very limited knowledge and skills), in 2008, the Ministry of Education MoE announced a major educational reform which included developing a new curriculum (Vernez et al., 2014b). Physical education (PE) was also included in the education reform, with the new curriculum finalised and implemented in 2012. To support teachers to implement the new curriculum, a national CPD programme was designed and implemented (Vernez et al., 2016). This reflects an international recognition of the importance of CPD as an important tool to support curriculum reform (Desimone, 2009). In other words, without meaningful participation in high quality CPD, there is a belief that teachers will be deprived of opportunities to improve their practices with consequences on the quality

of learning pupils experience (Mizell, 2010a).

What CPD means and involves vary in the literature. One of the most detailed definition was provided by Day et al. (2004), 'who defined teachers' CPD as encompassing all planned (conscious) and unplanned (informal, unconscious 'natural') professional learning activities teachers engage in with the aim to improve the quality of their practices' (Amin, 2016, p. 3). **'**Planned CPD opportunities activities are also usually referred to as 'formal' (Amin, 2016, p. 4).

'Formal learning activities, such as initial teacher training, workshops and staff training courses, are structured in that they rely on a specified, predetermined content (i.e. what teachers are expected to learn from the experience) and have specific learning outcomes for participating teachers. Beyond initial teacher education or other university-related opportunities (e.g., Masters), formal CPD is usually associated with a traditional approach to CPD delivery, which involves knowledge transmission from the experts (the CPD providers who runs the programmes) to the teachers (Armour and Yelling, 2007, Borko, 2004, Casey, 2013, Wei et al., 2010, Armour and Makopoulou, 2012). Formal opportunities are also typically of short duration (Garet et al., 2001, Hildebrandt and Eom, 2011, Armour and Makopoulou, 2012), at least in the context of PE-CPD (Armour and Yelling, 2007, Makopoulou and Armour, 2011b, Makopoulou et al., 2019). In terms of the location of learning, formal CPD is also taking place away from the classroom' (largely cited from Amin, 2016, p. 4).

'In recent years, CPD researchers have heavily criticised formal CPD opportunities, especially when they are of short duration (Armour and Yelling, 2007, Borko, 2004, Casey, 2013, Wei et al., 2010, Armour and Makopoulou, 2012). Concerns have been raised, more particularly, when such opportunities are offered as one-off experiences as they arguably fail to engage teachers in deep, transformative learning (Garet et al., 2001, Knight, 2002, Pritchard and Marshall, 2002)' (cited from Amin, 2016, p. 4). In the context of KRI, similar concerns have raised within (Vernez et al., 2016) investigation. A particular concern in KRI is that CPD is often organised on the basis of what is possible to be offered (based on the expertise of the CPD providers) as opposed to what teachers really need to improve their practices (Vernez et al., 2016). However, this investigation was not much relevant to the PE lesson. Besides, the vast majority of the published research on formal PE-CPD originates in Western societies

and little is known about the perception of PE teachers in relation to the formal CPD in different national contexts that have different policies and face unique challenges. Thus, further research is needed to better understand PE teachers' CPD experiences.

4.2. Study purpose

The present study sought to advance this line of inquiry by examining PE teachers' perceptions on the nature, quality and impact of existing formal CPD opportunities available in KRI. The overall question of the present study was: In what formal CPD opportunities do PE teachers participate and what do they find effective? The following sub-questions have been examined: (i) What are PE teachers' perceptions about the importance of formal CPD provision and why? (ii) What are the patterns and frequency of participation in formal CPD? (iii) To what extent are PE teachers satisfied with the effectiveness of formal CPD provision? and (iv) What can be done to improve the quality and effectiveness of the available formal CPD provision?

A mixed methodological approach was adapted to address the study questions. Both qualitative and quantitative data was collected via semi-structured interviews with PE teachers (n=16) as well as a teacher survey developed and distributed to PE teachers in one local region in KRI (n=302). The design of the study was grounded in the best available national and international literature and was intended to inform thinking, policy and practice so that CPD is reconsidered and designed for maximum impact.

4.3. Literature Review

4.3.1. Debates on CPD forms

Most research on teachers' CPD is published in English speaking journals and originates in specific national contexts (e.g., US, UK, AUS). In this body of literature, a frequent critique of CPD relates to the selected type or form that appears to dominate provision; namely, the traditional, one-shot 'workshop' or 'course' (Garet et al., 2001, Roesken-Winter et al., 2015, Campbell et al., 2016, Darling-Hammond, 2016, Nelson et al., 2006). In formal CPD, such as teacher training, in-service or planned staff development, there are concerns about the way information is pre-packaged and

supplied to the teachers to be consumed (Boud and Hager, 2012). Furthermore, measuring the impact of formal CPD is problematic. For instance, at the end of many CPD opportunities, attendance certification is offered simply which refers to only physical attendance not whether learning has happened (Friedman and Phillips, 2004, Hunzicker, 2011). Evidence in qualitative research has often shown that formal CPD programme of short duration are ineffective because teachers face difficulties when they try to transfer the knowledge gained from the formal CPD event to their more informal dynamic of the workplace (Billett and Choy, 2011).

'CPD scholars have argued that to improve students learning, CPD must be 'effective' – in other words, it must have an impact on teacher and pupil learning by reflecting a number of key 'design features' (Desimone, 2009). Yoon et al. (2007) pointed out that one of the most critical elements of 'formal' effective CPD is that it is delivered directly to the teachers by an external expert and not through the train-the-trainer approach (cascading)' (Amin, 2016, p. 8). In this context, CPD providers (also referred as tutors or facilitators) are expected to play an important role in designing and implementing CPD opportunities (Patton et al., 2012). Research suggests that one of the important aspects of effective CPD provision is the opportunity of helping teachers by tutors to take new ideas to challenge or transform their existing practices (Patton et al., 2012). In the context of PE-CPD, experienced facilitators argue that it is paramount to listen to teachers' voice and to make them feel valued as teachers and as learners (Patton et al., 2012). It was also concluded that to support meaningful and impactful professional learning, tutors' practices need to be examined in order to develop a nuanced understanding of important elements of their delivery (Makopoulou, 2018).

The content of the CPD programmes and opportunities is also considered as one of the fundamental features of effective CPD (Desimone, 2009, Kennedy, 2016). Results seem to point to some important considerations regarding what makes CPD effective. These include making sure that CPD seeks to enhance teachers' subject knowledge, pedagogical content knowledge, as well as their knowledge of how student learn the subject (Garet et al., 2001, Penuel et al., 2007). Results from TALIS (2013) indicate that teachers value equally CPD opportunities that focus on the actual subject they teach and also how this subject can be delivered to students.

Despite this consensus, there is still considerable debate on what the focus of CPD should be. A related issue is the importance on ensuring that the content is coherent and tailored to teachers' professional learning needs. As far as coherent provision is concerned, the argument is that CPD needs to be aligned to school, district, national priorities and curriculum expectations (Bechtel and O'Sullivan, 2007). In relation to the issue of tailoring provision, CPD needs to connect teachers' existing with new understandings and to be grounded in their daily responsibilities (Hunzicker, 2010). In other words, CPD providers need to take teachers' existing knowledge, beliefs and practices under consideration and then present CPD content that challenges their existing way of thinking while productively constructing new knowledge (Pedder and Opfer, 2013).

To learn effectively, CPD must provide a dynamic and clear extension of what teachers already know (Armour and Makopoulou, 2012). This also means that when planning CPD, teachers' diverse starting points should be accounted for. In addition, a 'one-size-fits-all' approach should be avoided as presenting the same content is impossible to meet teachers' diverse needs (Stoll et al., 2012a).

'The duration of CPD programmes has been highlighted as another key element of effective CPD (Garet et al., 2001, Darling-Hammond and McLaughlin, 2011, Cordingley, 2015, Kennedy, 2016). Ongoing and extended CPD opportunities appear to be more effective than activities with short duration (Lipowsky and Rzejak, 2015, Kennedy, 2016, Sachs, 2016). Duration is vital in two ways. Research suggests that more extended engagement in CPD fosters teachers to engage in in-depth discussions and interactions, with the aim to develop new understanding as well as to receive meaningful feedback on their teaching (Garet et al., 2001). A systematic review conducted by Yoon et al. (2007) concluded that CPD opportunities need to engage teachers for more than 14 hours in order to increase the possibility of positive impact on student achievement. Almost 50 hours was perceived as the average time needed for CPD to have a significant effect on student achievement. However, questions remain about how these hours should be organized (Makopoulou, 2013) as more time does not guarantee impact. With new evidence indicating that even CPD of short duration can have a lasting impact on teachers and pupils (Cordingley et al., 2015), there are important considerations on how the available CPD time is organised.

CPD in other words needs to be ‘carefully structured, purposefully directed, and focused on content or pedagogy or both’ (Guskey and Yoon, 2009, p. 499)’ (largely cited from Amin, 2016, p.10).

Teacher collaboration is perceived an important design features (Garet et al., 2001, Desimone, 2009, McMillan et al., 2016, Olivier and Huffman, 2016) and it has a strong theoretical basis (Lave and Wenger, 1991). Studies have shown that when meaningful, teachers collaboration can have a positive impact on both teacher and pupil outcomes (Ronfeldt et al., 2015, Spencer, 2016, Campbell et al., 2016). Thus, it is essential to give space to teachers during their work to share teaching practices, interact with their peers, prepare their lesson plans together, discuss / evaluate students’ work (Wenger, 1998, Opfer and Pedder, 2011).

Research evidence on the effectiveness of social, collaborative learning is accumulating. However, regardless of its potential, there is evidence to suggest that teachers do not always have the opportunities to interact and learn from each other in meaningful ways (Makopoulou and Armour, 2014). In an evaluation study in England, researchers reported that ‘whilst CPD providers understood effective professional learning as social and collaborative, they needed more training in order to challenge teachers to involve in critically reflective dialogue and to learn effectively from it’ (Makopoulou, 2009, p. 241). Therefore, teacher collaboration is not a panacea. Further research is needed to understand how it can be incorporated in formal and informal CPD contexts effectively.

Effective CPD appears to have a number of features, discussed in this section. Before discussing details on the research methods employed to answer the research question about the nature, quality and impact of formal CPD in KRI, it is important to orientate the reader to the national context in which the study was undertaken.

4.3.2. The study context: Teacher training in KRI

In KRI, the General Directorate of Institutes and Training (GDIT) under the jurisdiction of the MoE overlooks the design and implementation of training programmes to school staff. GDIT has two sections, the Directorate of Institutes (DI) and Directorate of Teacher Training Centre (DTTC). The DI is responsible for teachers’ pre-service

training (initial education) whilst the DTTC focuses on CPD and overlooks seven governorate-based training centres across the KRI. These centres are the grounds of delivering in-service training for teachers. They organise training programme in two directions, one for basic schools and another for preparatory schools. However, there are no training staff with full-time working for these centres, rather, draw their training staff from the pool of ministry staff. GDIT is also collaborating with external local and international organisations with the aim to provide training for teachers in KRI (e.g., Universities, UNISEF, UNDP, British Council and, USAID).

According to (Vernez et al., 2016), training programmes in KRI are typically divided in those targeting specific subject areas (with the aim to enhance teachers' subject and pedagogical content knowledge); programmes designed to address wider educational priorities and which are relevant to teachers of all subjects (e.g. curriculum reform, technology); and programmes aimed at schools leaders / managers as well as supervisors. There are also CPD provided by external organisations (e.g., British Council, in 2012 and 2013). Finally, CPD can be organised in response to a national crisis (e.g., disaster relief training or emergency management following the massive influx of Syrian refugees from neighbouring Syria).

In terms of how CPD is organised and delivered, much of CPD takes place over the summer months. The duration of CPD programmes range from 2 days to 40 days (with an average of four hours per day). It is important to note; these training programmes are mostly provided after the MoE's education reform since 2008. A training of trainer (TOT) model is usually employed. Trainers are chosen from eligible staff (e.g., school leaders, supervisors and in some cases experienced teachers with a minimum of five years of experience) and are invited to attend training on the CPD content. Their responsibility is then to return to their schools (or local areas) and organise workshops/courses for the local teachers. CPD programmes are funded by the government or mostly international organisations (e.g., UNESCO, UNICEF, America-Mideast Education and Training Services, British Council, the U.S Agency for International Development, the UK Department for International Development). When international organisations are involved, they work closely with the DTTC to make decisions about the reach of the programme (dependent on the available resources) in terms of how many TOT trainers to engage. When the number of trainees is

identified, the DTTC with advice from the training providers, recruit the candidate trainers among school leaders, the supervisor as well as experienced teachers in some cases through a formal announcement.

In the last decade, the involvement of international organisations in teachers CPD in KRI has increased significantly. These organisations either provide training directly or contract private sector national organisation to deliver the programmes. The training programmes offered by these organisations are typically adapted to the KRI context. One such example was a programme funded by UNESCO and the government of Qatar[6] on learning, quality assurance and training strategies (UNESCO, 2013, Vernez et al., 2016).

4.4. Methods

To answer questions about the nature, quality and impact of the formal CPD provision in KRI, as experienced by PE teachers, a mixed-method approach was employed. Evidence was collected in two distinct albeit interlinked phases: (i) Phase one: PE-CPD survey to explore PE teachers' perception on the nature, quality and impact of existing formal CPD in the large scale; (ii) Phase two: examine PE teachers' perception in further depth via semi-structured interviews.

4.4.1. Sampling and participants

Research participants recruited to take part in the present study included a total of 302 PE teachers. Different sampling methods were used to select different participants for the different phases of the study.

To recruit PE teachers to participate in phase one (i.e. examine the teachers' perception on formal PE-CPD at the larger scale), and to increase the response rate, supervisors who participated in study one was asked to support the researcher in distributing and promoting the survey to all PE teachers under their jurisdiction. A total of 450 hard copy surveys were distributed by the researcher whilst the supervisor supported the process (as explained in section 3.4.2). 302 responses returned the

[6] Under the initiative known as 'Teacher Training Programme for Basic and Secondary Education'.

completed survey (67%). Table 4.1 illustrates some demographic characteristics of participants in this phase.

To collect evidence for phase two (i.e. develop an in-depth understanding of teachers' perception on formal PE-CPD), purposive sampling was employed. With the intention of reaching as a diverse teacher population as possible, in terms of teachers' demographic characteristics, the supervisors who participated in study one was asked to make recommendations about potential teachers who would match the criteria. Specifically, within the available resources, it was decided that two PE teachers per supervisor (i.e., 16 PE teachers in total) would be recruited. It was also important to access both male and female teachers, who worked in different school types and years in the profession. After the supervisors' recommendation, the researcher contacted the PE teachers personally who all agreed to participate in the research. Table 4.1 illustrates some demographic characteristics of the PE teachers who participated in the study.

Table 4. 1 Characteristics of PE teachers' participants

PE Teachers	Total	Gender		School type		Age		Teaching Experiences				
		M	F	BS	PS	Min	Max	4th T	3rd T	2nd T	1st T	ST
Survey	302	227	75	199	103	25	61	32	80	88	73	29
Interviews	16	14	2	6	10	27	40	-	5	3	6	2

4.4.2. Data collection tools

4.4.2.1 Phase One: PE-CPD survey

To collect evidence on PE teachers' perceptions on the nature, quality and impact of formal CPD, a CPD survey was designed and consisted of four parts (please see Appendix E). The second part was relevant to the present study as it sought to collect evidence on PE teachers' perception on the formal CPD provision in KRI. This part was consisted of seven questions. In the first question, PE teachers' perceptions regarding the importance of formal CPD were examined. This question was included in order to understand how PE teachers in KRI are thinking about the essence of participation in formal CPD. There were five possible responses (1- Not important at

all; 2- Not as important; 3- Somewhat important; 4- Very important; 5- Extremely important). An open-ended box was provided, encouraging teachers to explain and justify their response to the above item/question (question 1).

In the second question**,** PE teachers were asked to recall the number of formal CPD they participated between 2012-2017 (e.g., training courses, workshops, conferences, and seminars). The third question sought to ask participants to provide details on nature of formal CPD opportunities they participated over the last five years (e.g., title of the opportunity, held time, duration, form and, the opportunity provider). Building upon previous research (e.g., Makopoulou, 2009), both questions two and three were intended to capture PE teachers' patterns and extend of participation in formal CPD, and how this has changed over the last few years.

In the fourth question, PE teachers' satisfaction with formal CPD provision was explored with the following question: 'How satisfied are you with the available formal CPD opportunities offered by different providers?' There were five possible responses: 1- Not satisfied at all; 2- Not very satisfied' 3- Somewhat satisfied; 4- Very satisfied; and 5- Extremely satisfied). There was (N/A) option in the scale to those teachers who might not participated to any formal CPD between 2012-2017. Linking between the questions in the survey was planned in order to produce an integrated data collection (Boynton and Greenhalgh, 2004). Thus, PE teachers have been asked in question five to express their opinion on the impact of CPD they provided in question three on their practice. In question six, PE teachers were asked to describe/outline barriers that hindered their participation in formal CPD opportunities. This was an open-ended question. Finally, teachers were asked to provide their ideas and recommendations on how CPD provision could be improved.

While this study involved Kurdish speaking teachers in KRI, the survey was needed to be translated carefully into Kurdish without any changing in the questions and meaning. To ensure that the items of the survey were clear, it was piloted with four Kurdish PE teachers who have not participated in the research. These PE teachers were asked to make comment on the meaning of the questions, as well as layout, wording and length of the survey. The PE teachers suggested including a brief explanation of each section, including examples when possible, to avoid any confusion, especially between formal and informal CPD. They also requested the

addition of examples especially in the case of the open-ended questions for further clarification. Following this pilot phase, the recommended improvements were addressed.

With the same reasoning discussed in section 3.4.3.2 (study 1), similar process undertaken to develop, pilot and distribute the survey. Between March and June 2018, a total of 450 hard copy surveys sent to the PE teachers and 302 responses returned (67%).

4.4.2.2 Phase Two: PE teachers interview

In order to collect qualitative, in-depth data from the PE teachers, semi-structured interviews were conducted with 16 PE teachers. The purpose of the interviews was to understand PE teachers' perceptions of the nature and impact of the existing of formal CPD provision; as well as their views and suggestions to improve the existing formal CPD provision.

As explained in section 3.4.3.1 (study 1), a detailed interview protocol was developed. The interview protocol was divided into three parts (please see Appendix G), with the first part being relevant to the present study. This part was consisted of seven questions. At the beginning of the interviews, a definition to clarify the nature of formal CPD for the participants was discussed. The first and second questions sought to encourage participants to recall effective/ineffective formal CPD they had previously attended. The purpose was to get in-depth, detailed insights into how these specific formal CPDs met their need with a concrete example. This is also was the case with ineffective example of formal CPD. Probing questions were included to collect further detailed data. Probing questions included the following:

- Can you please give me information about the content, duration, form and nature of engagement of the formal CPD?
- What have you learned by attending that formal CPD? In what ways you changed your practice? Can you please give me an example?
- In what way your pupils benefitted as a result? Can you please give me an example?

- Why was this effective, i.e. helped you to learn / change your practice? Can you please explain why it was effective (or ineffective)?

It was also important, through question three, to understand teachers' thoughts when they have not attended any formal CPD. This question was crucial to explore whether teachers are able to teach differently or provide the same quality of teaching without CPD attendance. In the fourth question, it was necessary to listen to their suggestions on the way that formal CPD can be improved with the following question 'Do you have concrete suggestions on how formal CPD can be improved in the future?'. The last question was to explore the impact of the socio-economic and political circumstance and whether had has any impact on the number of formal CPD provision.

All participants were invited to participate in individual interviews at a time convenient to them. Due to the geographical differences between the researcher and the participants, the interviews were carried out via telephone calls. Interviewing teachers in this way provided a cost-effective means to obtain evidence on teachers' perspectives which would have been impossible otherwise. Whilst an initial concern was that a telephone interview would restrict the researcher's capacity to develop a better understanding of teachers' perspectives – given the lack of visual interaction and non-verbal language which conveys subtle layers of meaning, in retrospect, it was evident that both teachers and the researchers were at ease communicating in this manner. Therefore, it was concluded that the initial concerns about relevant and loss of meaning were somewhat exaggerated or unfounded (Irvine, 2010).

To overcome any potential technical issues which could result in loss of data, the researcher made sure that all devices used were technically checked and were in good condition. The interviews were recorded via Voice Memos application in iPhone mobile. The interviews were carried out between August and September 2018 and the duration of each interview ranged from 60 to 80 minutes. All interviews were audio-recorded and then transcribed in the Kurdish language, producing a total of 6 to 8 for each participant of transcribed raw data. Thereafter, the interviews translated into English in order to prepare for the data analysis.

4.4.3. Trustworthiness and generalisability of qualitative data

The trustworthiness of the qualitative data was established by 'participant validation' which involved the research participants 'assessing the trustworthiness of research in terms of validating the credibility of qualitative data' (Smith and McGannon, 2018 , p. 3). In the present study, the participants involved in the interviews were encouraged during the interviews to clarify and verify their views. They were also asked to expand on their views when answers were ambiguous. This participant validation makes the researcher able to collect rich, detailed and accurate data. Moreover, at the end of each interview, the researcher summarised key points from the interview to the participants who were asked to verify if the researcher's initial interpretation reflected the views they shared during the interview. During this process, the researcher also encouraged participants to add any other points they wanted to make in relation to issues under investigation and which they had not raised before. None of the participants added any further data as a result of this process.

With the high rate of survey responses, the researcher is confident that results can be generalised to the specific context (Sulaimanyah city in which the participants were based). Regarding the generalisability of qualitative data, it can be argued that the findings reported in this research have the possibility to be generalised in two ways. First, results allow the readers who have various positions within PE and the educational system in KRI (such as PE supervisors, PE teachers, policymakers etc.) to reflect on what is relevant or not to their own professional realities. This process of reflection can enable them to think critically about their own perceptions and practices. In this way, results are generalisable not in the traditional sense but rather in relation to what (Smith, 2018) calls as a naturalistic generalisation or representational generalisation (Lewis, 2014). To allow both naturalistic generalisation and transferability, it was imperative to provide the readers with sufficient detailed 'evidence' (e.g., interview quotations).

4.4.4. Data analysis

Qualitative data consisted of 16 interview transcripts conducted with PE teachers and 887 open-ended responses from the survey. Quantitative data consisted of 1068 closed responses.

4.4.4.1 Qualitative data analysis

The researcher acknowledges that the process of qualitative data analysis is a basic part of research but not without complexity. Cohen et al. (2011a) explained that ‘qualitative data analysis involves organising, accounting for and explaining the data' and providing ‘definitions of the situation, noting patterns, themes, categories and regularities' (p.537). In the context of this study, constructive approach to grounded theory was used in order to analyse the qualitative data (Charmaz, 2006) which encouraged researchers to explore the meanings, views, thoughts, feelings, values and experiences of individual research participants in order to illuminate issues under investigation. Alike the traditional approach, the key steps in data analysis from this perspective are: (i) initial coding such as word by word coding; line by line coding, incident to incident coding to start grappling what different data extract means to the research participants. (ii) focused coding which refers to the beginning of a more analytical process of analysis which researchers synthesise and explain larger segments of data. (iii) axial coding which matches to Strauss & Glaser’s (1967) concept of development categories along with their properties and dimensions. (iv) memo writing. (v) theoretical sampling that seeks to bring together data to develop theory. (vi) development of theories. it is important to underline that the process of data analysis was ongoing and iterative (Weed, 2017) which helped the researcher to enable further data collection when required. Within the context of the present research, only a few steps of this process were employed in the data analysis as follows:

Step One:

After each interview, conversations were transcribed immediately in Kurdish language in order to get a better sense of what the participants were saying. Afterward, the Kurdish transcripts were translated to English language in order to prepare it to be entering into the Nvivo software. Also, working with audiotapes and translation of transcripts were enable the researcher to sound and re-sound the research participants’ experiences.

Step Two:

The second step involved multiple readings of the data in their raw to the aim of capture the most important and relevant information in relation to the study questions.

Through coding, key points being made by the research participants were identified and name or label was attached to each one of them that captured the central meaning. Then, the process involved comparing the different codes from different participants to identify similarities or points of disagreements to begin making sense of the key issues (Cohen et al., 2011a). The process of coding was supported by memo writing. Memo writing was important in order to capture the researcher's initial thoughts on the respondents' comments for the reason of understanding and unpacking the meaning of their comments (Charmaz, 2014). It is also allowed making connections between data analysis and further collection of data.

Step Three:

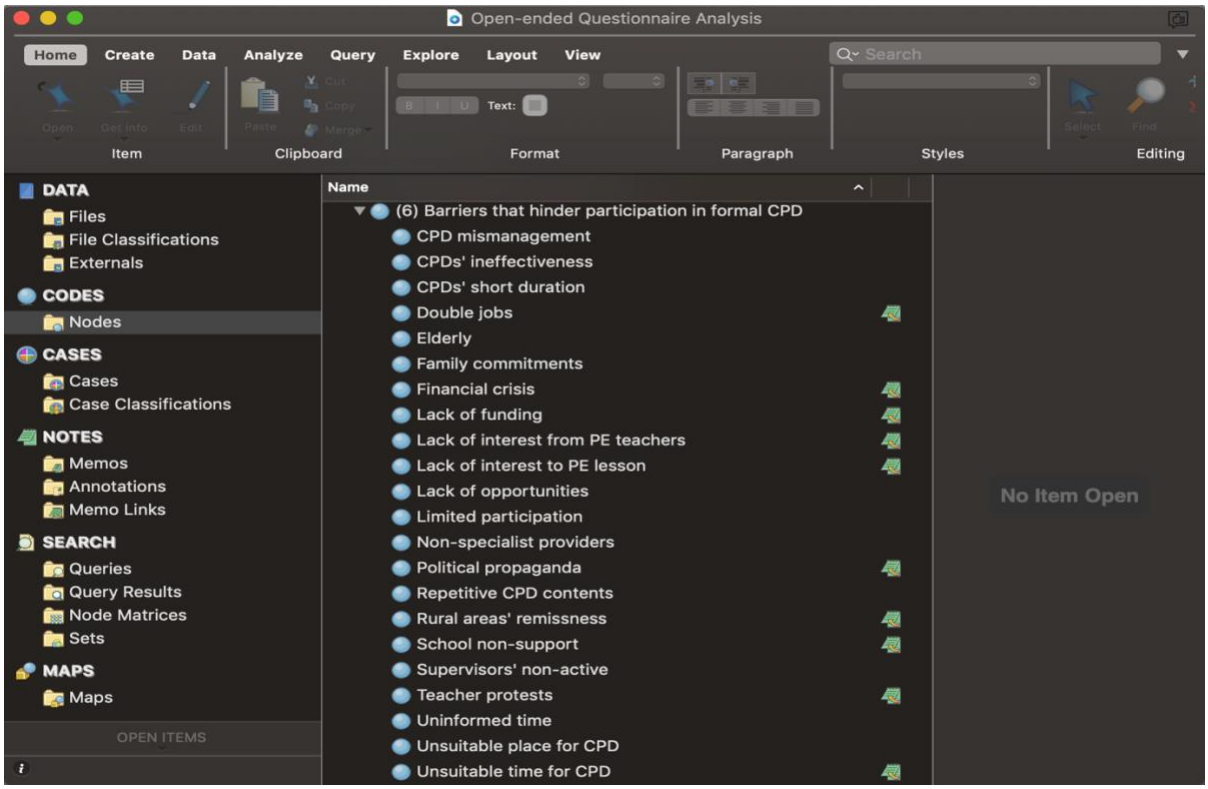
To develop the categories in the second step, there was a constant comparison of the different codes to decide which code belonged to another. Categories involve clustering the open codes around specific points of intersection (Harry et al., 2005). For example, the codes such as (increase funding, more funding, most important is funding) grouped under the category of ‘financial support’ as all these participants mentioned ‘funding’ as one of their suggestion to increase the effectiveness of formal CPD provision.

Step Four:

Similar to step three, categories were subsequently compared together to identify themes in the step four. It was to cluster all these categories under the heading of the research question. This step represents what grounded theorists call development of themes. For example, categories like (short duration, non-specialist providers, repetitive CPD contents) gathered under the theme of ‘barriers that hinder participation in formal CPD’ because they refer to the formal CPD shortcomings that hinder teachers to not attend (please see figure 4.1).

It is important to note that, the aim of conducting grounded theory was not to build a theory but to rather identify patterns between the categories and ‘produce conceptual thematic descriptions rather than explanatory theories’ (Starks and Brown Trinidad, 2007, p. 1377). NVivo software version 12 was used in order to manage the process of analysing the qualitative data and an illustrative example is provided in figure 4.1.

Figure 4. 1 Initial coding in Nvivo 12



4.4.4.2 Quantitative data analysis

Quantitative data obtained by the closed questions in the PE-CPD survey were entered to SPSS version 25 (IBM Statistics) for analysis. Descriptive statistics were run to describe and explore the mean scores of PE teachers' responses to the Linkert scale questions. A separate file was conducted to identify the mean scores according to the PE teachers' gender, school type and, teaching experiences. The Independent-Samples t-test and One-Way ANOVA were run to identify the different groups of gender, school type and teacher experiences. Finally, frequency analysis was run in order to identify the frequencies participates responses to the particular question.

4.5. Results

The results of the present study are reported under five themes. Firstly, PE teachers' perceptions regarding the importance of formal CPD are reported (theme 1); the patterns and the frequency of their engagement in formal CPD is analysed (theme 2). The third theme focuses on teachers' perceptions on the effectiveness of the formal

CPD provision, as they experience it, while the barriers to their CPD participation are unpacked in theme 4. The final theme (theme 5) reports teachers' views on how formal CPD can be improved.

4.5.1. Theme 1: Perceptions on the importance of formal CPD

This section summarises the PE teachers' perceptions of the importance of formal CPD, as captured in their responses in the PE-CPD survey. Descriptive statistics are reported in Table 4.2. Results suggest that overall teachers valued participation in formal CPD (M=3.90, SD=0.80 and n=300). To examine whether teachers' perceptions differed based on their demographic characteristics, independent-Sample t-test (for gender) and one-Way ANOVA (for school type, teacher experiences) were run. Results suggest that teachers' gender (p=.74, >.05), and school type in which they worked (p=.11, >.05) did not influence their perceptions on the importance of formal CPD. In other words, these factors cannot be considered as important as far as teachers' perceptions on the importance of formal CPD is concerned. However, a significant difference (p=.00, <.05) was identified between teachers with different years of experience. More specifically, the third teaches (with 5-8 years of experiences) had more positive perceptions on the importance of formal CPD compared to other groups of teachers with different years in the profession.

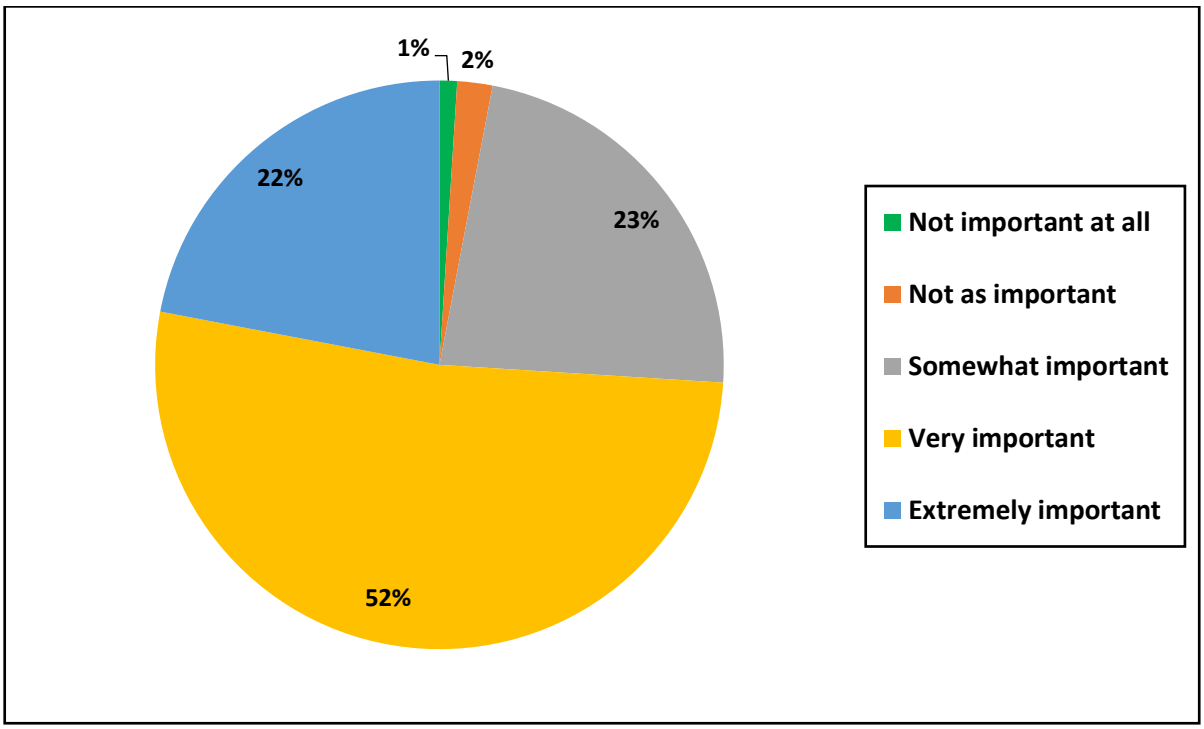
Table 4. 2 PE teachers' perception on the importance of formal CPD

Importance of formal CPD	Total	Gender		School type		Years of experience				
		M	F	BS	PS	4th T	3rd T	2nd T	1st T	ST
Number	300	226	74	197	103	32	80	86	73	29
Mean	3.90	3.91	3.87	3.85	4.00	3.62	4.17	3.89	3.73	3.93
S-Deviation	.80	.77	.90	.79	.83	.87	.70	.89	.74	.70
Note: the mean score is out of 5										

Figure 4.2 illustrates that while a very small number of teachers reported that CPD was 'not important at all' (n=4, 1%) or 'not as important' (n=7, 2%), to the other end of the scale, approximately three quarters of the teachers thought that formal CPD was 'very important' (n=155, 52%) or 'extremely important' (n=66, 22%). With almost a

quarter of the respondents reporting that formal CPD was ‘somewhat important’ (n=68, 23%), it is safe to argue in overall, teachers had positive perceptions about the importance of formal CPD.

Figure 4. 2 PE teachers’ perception of the importance of formal CPD



Teachers’ responses to the open-ended questions that followed this item can offer some further insights into why teachers believed that CPD participation is important. As perhaps anticipated, different teachers identified different reasons to explain why they believed formal CPD was or was not important. Out of the 299 of teachers who completed the relevant open-ended question, 31 teachers (10%) focused on negative aspects regarding formal CPD. Most of these teachers (n=18, 6%) explained that formal CPD was not, in their view, important because it had ‘repetitive content'.

The remaining teachers (n=13, 4%) provided a host of reasons as a form of justification for their response. These reflected their concerns about specific design features (e.g., ‘short duration’), the quality of implementation (e.g., ‘non-specialist providers’) or little support following CPD participation (e.g., ‘lack of follow-up support’). It is interesting to note that 11 of these teachers (3%) were also those who opted for the ‘not important at all' or ‘not as important' response in the closed question that preceded; while the

rest of 20 teachers (7%) was from those who reported ‘somewhat important' regarding the importance of formal CPD.

The remaining 268 teachers (90%)[7] who provided responses were largely positive about CPD. Responses again varied, however. The vast majority of teachers (n=150, 49%) mentioned that participating in formal CPD was important as it provided opportunities to enhance their knowledge and to improve their practice. For example, one of the teachers wrote:

> ‘Formal CPD is important whether provided in theory or practice; both of them [theoretical or practical CPD opportunities] lead to the development of teachers’ knowledge. This [improvement in knowledge] can lead to [better] student achievement’ (TQ16).

In most cases, teachers made explicit reference to the development of content knowledge (i.e. better knowledge of the ‘sport’ they teach). They also reported that formal CPD is vital to improve their teaching through performing the game skills and game rules by themselves.

The second highest number of teachers (n=78, 26%) believed that formal CPD was important because of the opportunity it provided to interact with other teachers-colleagues as well as experts; and this interaction was meaningful as they exchanged new ideas in both teaching skills and sports information. 52 teachers (17%) drew attention to the affective and emotional dimension of CPD participation, as they believed that participation in CPD could either reduce their stress (because of their improved knowledge) or increase their confidence in teaching through learning new ideas. Some of the teachers (n=30, 10%) also believed that participation in formal CPD was important because it enabled them to learn new teaching methods with a positive impact on student achievement.

It seems that a small number of the teachers (n=17, 6%) believed in CPD as the avenue to support them become more critical and independent learners. They pointed

[7] It is important to note that some of the teachers had provided with more than one reason when they provided their opinion on the importance of formal CPD. For example, some of the teachers who reported that formal CPD is important to enhance knowledge and practice; they reported that it is also important for student achievement. This point explains the differences between the number of provided reasons (118%), which is more than (100%).

out that participation in formal CPD made it more likely for them to engage in self-assessment. This was also linked to an increased ability to be more critical about their teaching performance.

4.5.2. Theme 2: Patterns and frequency of participation in formal CPD

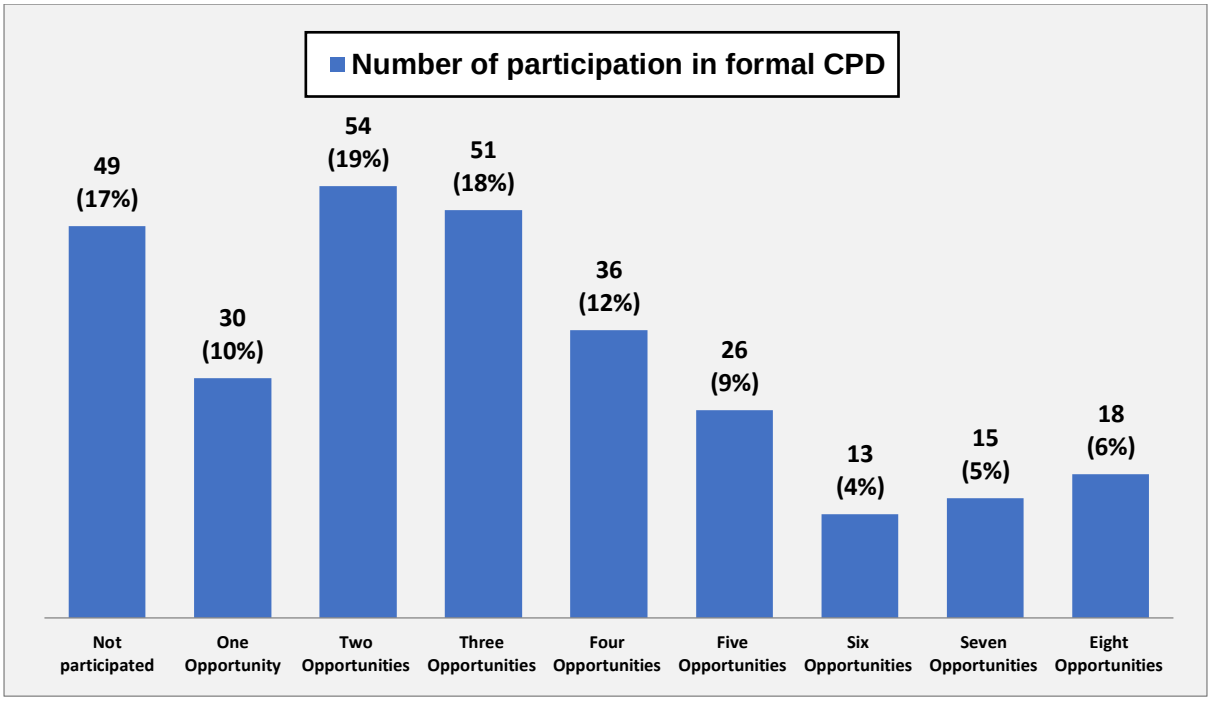
Descriptive statistics on PE teachers' frequency of participation in formal CPD are reported in table 4.3. Results suggest that, overall, these teachers reported attending three formal CPD opportunities between 2012-2017 (M=3.05, SD=2.3 and n=292). No significant difference (p=.20, >.05) in the number of formal CPD pursued by male and female PE teachers was identified. This was also the case for teachers with different years of experience (p=06, >.05). A significant difference (p=.00, <.05) was however identified between teachers working in different schools, with more participation for teachers who working in PS. In other words, teachers who working in the preparatory school (PS) have participated in more formal CPD compared to teachers in the basic schools (BS) between 2012 and 2017.

Table 4. 3 Number of participations in formal CPD between 2012-2017

Number of participations	Total	Gender		School type		Teaching Experiences				
		M	F	BS	PS	4th T	3rd T	2nd T	1st T	ST
Number	292	219	73	191	101	28	80	84	73	27
Mean	3.05	3.15	2.75	2.67	3.78	2.35	3.16	3.08	2.79	4.07
S-Deviation	2.31	2.31	2.30	2.20	2.35	2.28	2.52	2.42	1.76	2.46
Note: the minimum and maximum of participation were between (0) and (8)										

Figure 4.3 reports frequencies on the teachers attending CPD opportunities between 2012-2017. It can be seen that (n=54, 18%) of the respondents appeared to have attended two formal CPD opportunities. Whilst 25% of the respondents (n=72) reported attending between 5 and 8 CPD between 2012-2017, almost 17% (n=49) did not appear to have participated in any formal CPD.

Figure 4. 3 Number and percentages of PE teachers' participation in formal CPD between 2012-2017



Approximately one third (n=107, 35%) of the teachers who answered the closed question about frequency of participation in formal CPD provided detailed information on the types or forms of CPD they pursued during the same period of time. Results show that these 107 PE teachers participated in 216 formal CPD opportunities. An analysis of CPD participation per year suggests that these teachers pursued a total of 141 CPD opportunities between 2012 and 2014 (n=141, 65%). However, between 2015 to 2017, the total number of CPD attended was reduced to 75 (35%).

The content of all CPD opportunities, as captured by the respondents, are reported under different categories in table 4.4 (column 1), where it is evident that CPD on 'games skills training' (n=61, 28%) appear to have dominated teachers' experiences. Courses such as 'Sports for children' were less popular (n=8, 4%). In relation to the CPD form, information is presented in (column 4) of table 4.4. Many teachers reported participating in practical CPD (n=91, 42%). At the other end of the continuum, only eight teachers attended CPD that were described as 'seminars' (n=8, 4%). Universities were most frequently mentioned as providers of CPD, as almost (n=63, 29%) of the respondents reported attending CPD designed and delivered by the University. Only a small number of teachers (n=20, 9%) said that they had attended CPD organised by the local supervisors.

In relation to the duration of the CPD pursued, the CPD programmes reported ranged in duration from one hour to a CPD programme of 30 hours, as illustrated in table 4.4. It is important to underline that most of the CPD programmes (n=108, 50%) were short duration, programmes that lasted between one and six hours. Only four teachers reported having the opportunity to attend the 30 hours CPD (n=4, 2%). All remaining CPD ranged from one day to one week. Most of them were provided in one day (n=79, 37%), and the lowest number was one-week formal CPD (n=4, 2%).

Table 4. 4 Type and frequency of formal CPD provision between 2012-2017

CONTENTS		TIMING		DURATION				TYPE		PROVIDERS	
Content	Percent	2012-2014	2015-2017	Hours	Percent	Days	Percent	Type	Percent	Providers	Percent
Game skills training	28%	65%	35%	1-6	50%	1	37%	Practical courses	42%	Universities	29%
Camping and mountain climbing	23%			8-9	15%	2	24%	Workshops	41%	Sport Activity Unit	22%
Games rule and refereeing training	21%			12	17%	3	26%	Standard lesson	9%	Training Unit	20%
Teaching methods and class management	11%			15-16	6%	4	7%	Conferences	4%	Different sport institution	20%
Observing standard PE lesson	9%			18	5%	5	3%	Seminars	4%	Experts invited by supervisors	9%
Physical training	4%			20	5%	6	1%				
Sport for children	4%			30	2%	7	2%				

4.5.3. Theme 3: Satisfaction on the formal CPD provision

This section presents PE teachers' satisfaction regarding the formal CPD they experienced and its impact on their teaching practices between 2012-2017. Table 4.5 illustrates that PE teachers are *somewhat satisfied* with the provided formal CPD opportunities as the mean score was just above the mid-point (M=3.00, SD=.96, n=233). Similarly, PE teachers found the formal CPD they had attended had some impact on their practice, as the mean score was slightly above the mid-point (M=3.03, SD=.93, n=243).

To examine whether teachers' satisfaction differed based on their demographic characteristics, result suggested that teachers' gender (p=.59, >.05) did not influence their satisfaction on formal CPD provision. However, significant difference was identified within teachers who working in different schools (p=.00, <.05) and between teachers with different years of experience (p=.00, <.05). Specifically, teachers who were in stage three (5-8) and first stage (13-16) in year experiences were less satisfied compared to the other groups.

Regarding the impact of the formal CPD provision on practice, no significant difference has been found within teachers' gender (p=.87, >.05), teachers place of work (p=.057, >.050) and teachers with different years of experience (p=.15, >.05). It can be concluded that the impact of formal CPD is not related to teachers' demographic characteristics.

Table 4. 5[8] PE teachers' satisfaction with the formal CPD provision and its impact on teaching practice between 2012-2017

		Total	Gender		School type		Teaching Experiences				
			M	F	BS	PS	4th T	3rd T	2nd T	1st T	ST
Satisfaction	N	233	180	53	168	65	21	64	61	63	24
	Mean	3.00	3.02	2.94	2.88	3.30	3.33	2.73	3.11	2.82	3.62
	SD	.96	.97	.94	.96	.91	.79	1.18	.89	.68	.92
Impact on practice	N	243	186	57	153	90	24	65	66	65	23
	Mean	3.03	3.03	3.01	2.94	3.17	3.00	3.03	3.03	2.89	3.47
	SD	.93	.97	.83	.97	.85	.72	1.22	.91	.75	.66
Note: the mean score is out of 5											

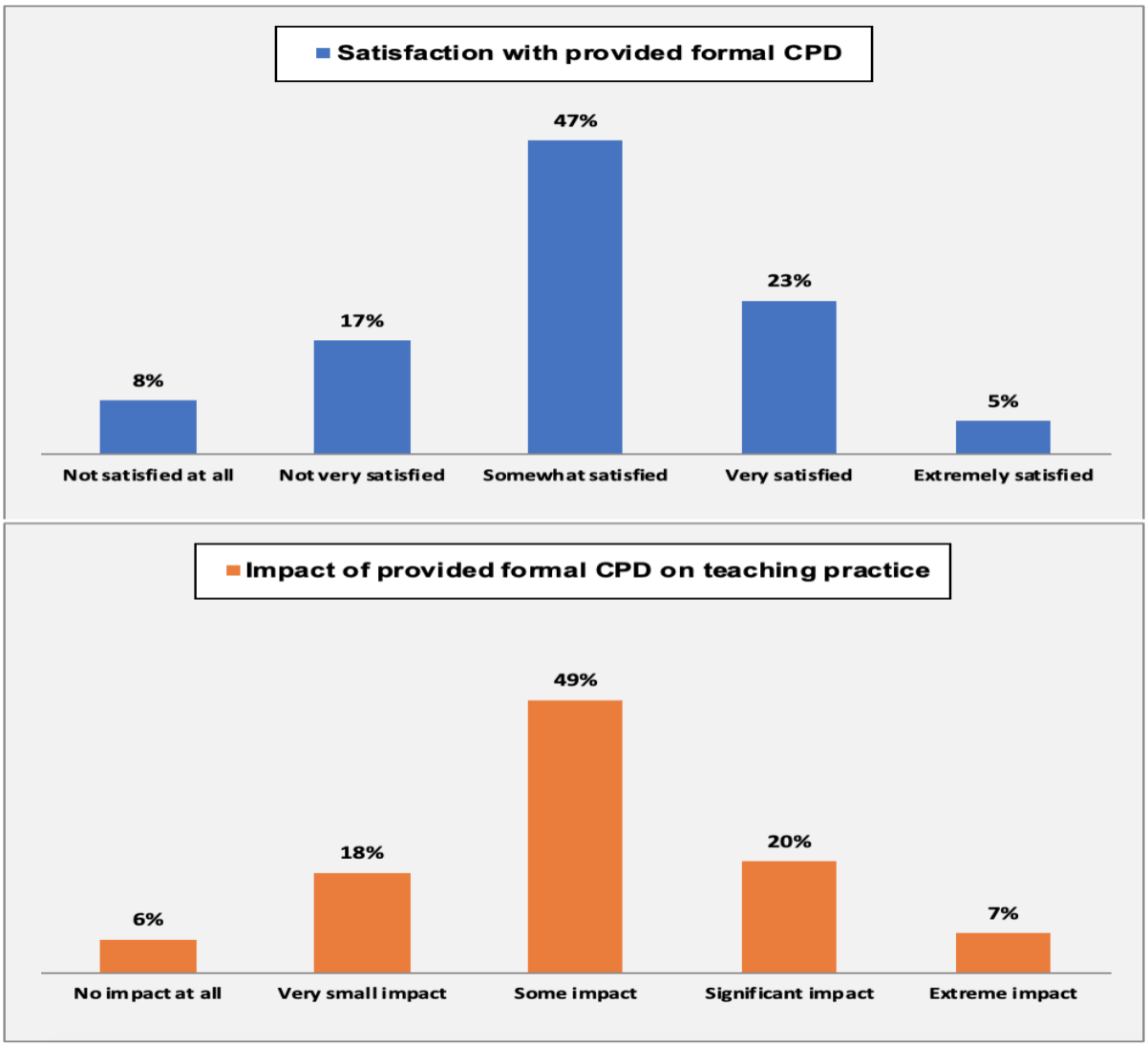
Figure 4.4 reports the frequencies of teachers' responses. As shown, approximately half of the respondents (n=109, 47%) reported 'somewhat satisfied' with the provided formal CPD. Overall, teachers' responses were spread, with a quarter of them

[8] In the survey, 47 teachers (17%) have reported that they have not participated in any formal CPD opportunities between 2012-2017, and they are not included in Table 4.5

reporting ‘not satisfied at all’ (n=19, 8%) or ‘not very satisfied’ (n=39, 17%) and just over a quarter having an opposite view; i.e. ‘very satisfied’ (n=54, 23%) or ‘extremely satisfied’ (n=12, 5%).

Similar to the teachers’ satisfaction, a quarter of the respondents (n=59, 24%) reported that their attendance to formal CPD had ‘no impact at all’ (n=14, 6%) or ‘very small impact’ (n=45, 18%) on their teaching practice. Almost the same number of teachers had the exact opposite viewpoint as they believed that the available CPD had ‘significant impact’ (n=49, 20%) or ‘extreme impact’ (n=16, 7%) on their teaching practice. The majority of the teachers, almost half of the total sample population (n=120, 49%) were somewhere in the middle, reporting that participating in formal CPD had ‘some impact’ on their teaching practice.

Figure 4. 4 PE teachers’ satisfaction with the formal CPD provision and its impact on teaching practice between 2012-2017



Evidence on teachers' perceptions on the nature and quality of the available formal CPD provision was also collected through individual, semi-structured interviews with 16 teachers. Most of the teachers (n=12, 75%) had participated in formal CPD and found it overall a useful experience. Only one teacher was clearly dissatisfied with the quality of the existing provision and believed that overall CPD has no impact on his teaching practice. Three teachers pointed out that they had not participated in any formal CPD over their teaching career.

The teachers who talked positively about formal CPD participation, had varied experiences in terms of the content (e.g., camping / outdoor ed training, CPD on games), duration (the effective CPD experiences these teachers talked about ranged from one day course to one year) and provider (i.e. some PE teachers talked about 'effective' programmes provided by the KRI Sport Activity Unit, whilst others referred to CPD provided by external (e.g., universities) or international organisations (e.g., British Council). This means that from the evidence collected by the PE teachers' interviews, there was no clear patterns in terms of the duration or content of CPD.

In relation to the CPD on camping / outdoor ed, the PE teachers who participated in this programme and who found it effective (n=4) explained that the purpose of the programme was to (i) develop PE teachers' knowledge on how to organise outdoor activities (including small-sided games, orienteering activities) and (ii) give PE teachers space to interact and collaborate.

The basic premise of the programme was that if teachers experience such activities first-hand, they will be able to organise similar experiences for their pupils. It was the first-hand, experiential approach adopted in this programme that was perceived very effective by these PE teachers:

> I think the orientation was the most important part of the activities. Through improving our skills in camping, we will be able to transfer the skills to our students (MT13-6).

Another CPD that was identified as effective by some of the teachers (n=6) referred to courses on team game skills and rules training. Teachers particularly valued learning more about the tactics, techniques and rules of different sports which they need to teach in schools. One teacher explained that he found attending such a course

particularly effective because of the 'impressive' knowledge the course leader displayed:

> In my 8-years in teaching, I have participated in one CPD, and it was about rule changes in different games. The CPD was effective because the CPD providers [were effective in explaining] the information. That is why I think participating in CPD is essential: because I learn / get new information and I observe experts, how they present the information (MT6-8).

Another teacher found a CPD programmes delivered by the British council particularly effective because PE teachers were encouraged to think creatively about teaching PE within the available, limited resources. The programme, in this context, was inspiring and offered a realistic proposition in terms of delivering high quality PE lessons within the available resources:

> We learnt in this CPD that the equipment is not important, the ways students participate is. It is possible to have one football ball and make all students participate in the lesson and enjoy it. …. The point is to focus on getting the students moving and enjoying it (MT5-10).

Finally, a female PE teacher talked extensively about a one-year programme she attended, and which was provided by USAID in 2009 (FT9-13). This programme covered a range of important educational matters, such as lesson planning, inclusion of all learners in PE lesson, be creative within the available equipment and improve her overall practice:

> The CPD was for one year. We spent most of the time in the CPD with returning sometime to the schools. We learnt how to put a PE lesson plan, the importance of participating all students, deal with students with special needs, benefit from school's less equipment and adapt with what we have (FT9-13).

As previously noted, one PE teacher explicitly claimed that his former CPD participation was largely ineffective. It is important to underline that this PE teacher had only one CPD participation to recall. This was a two-day programme (4 hours duration) workshop on volleyball rules. The following extract captures why this teacher found this experience largely ineffective:

> I am teaching PE for eight years. I have participated in one CPD. I think my participation was a waste of my time because there was nothing new

> to learn. The duration was too short, and the experts had not enough information (MT8-8).

Three other teachers had no engagement with formal CPD during the last few years. As one teacher explained, this non-participation was detrimental to their ongoing development:

> Without a doubt, participating in CPD means learning new things, developing our knowledge base. Equally, non-participation means that you have to rely on your existing knowledge almost entirely. As I am not an expert in teaching, and I do not have much experience, I think if I participated in some CPD, maybe I would able to teach differently and perhaps I would be able to teach' more effectively (MT2-7).

4.5.4. Theme 4: Barriers that hinder participation in the formal CPD

Almost all participants (n=299, 99%) in the survey provided some explanation on the factors that hinder them to attend formal CPD opportunities. The highest percent of the teachers (n=182, 61%) identified a lack of funding due to the financial crisis as one of the influential factors. On the one hand, they believed that lack of available CPD government funding affects both the quantity and quality of the available formal CPD opportunities. On the other hand, they mentioned that their personal financial condition was also a factor that prevented them from attending formal CPD activities. Family commitments was also one of the factors (n=39, 13%). Due to the financial crisis, some of the teachers explained, they had to have a second job, and this prevented them to participate in formal CPD. The remaining factors that some teachers identified included avoiding CPD participation because of the lack of specialism of those delivering them (e.g., 'providers are not specialist', n=27, 9%), geographical constraints (e.g., 'lack of CPD in rural areas', n=21, 7%), and lack of relevance (n=9, 3%).

All interviewed teachers (n=16) also believed that the financial crisis has had a significant impact on the education system in KRI and the provision of the CPD. Some argued that they had no opportunity for formal CPD since 2014. Some of the teachers interviewed (n=4) also believed that the MoE has failed to set a long-term plan for the provision of CPD opportunities:

> The MoE needs to set a plan for CPD provision. Teachers need to know about the time and content of potential CPD provision. I think MoE has failed to set a systematic plan (MT7-11).

Some of the teachers (n=5) also explained that teachers themselves might boycott CPD participation in protest to salary reductions.

4.5.5. Theme 5: The future of formal CPD

Most teachers participating in both phases of the study (survey respondents and teachers interviewed), provided some interesting insights on how CPD could be improved.

The common message in most responses in the survey was that there was an urgent need for more formal CPD. Most survey respondents (n=147, 49%) made an explicit link between increasing the number of CPD available to teachers and CPD effectiveness (i.e. if CPD is to have an impact, it needs to be offered frequently). The second common recommendation by teachers (36%) in the survey was financial support. On the one hand, approximately half of them (19%) argued that it is imperative the government to increase the available funding with an emphasis on improving the quality of provision. On the other hand, (17%) believed that allowances and accommodation need to be included in future CPD to eliminate some of the financial barriers teachers who work in remote areas experience.

Some teachers directed their responses to the issue of CPD content. Specifically, some teachers (n=49, 16%) suggested that CPD content must be varied as well as linked to teachers' need (i.e., experiential). Other teachers believed that the organisation and advertisement of CPD programmes needs to be timelier (n=40, 13%). A small number of teachers believed that CPD can be improved if it is grounded in existing effective approaches and research evidence (n=14, 5%). CPD that is more sustained and of longer duration was an important step forward for 12 teachers (4%), while five teachers (2%) proposed that CPD should be mandatory.

Interviewed teachers (n=16) have also expressed their opinion regarding the future of formal CPD. All interviewed teachers believed that PE-CPD must be designed to reflect teachers' needs:

> While I am satisfied with the existing CPD to some extent, I think there is a greater need to take to account what teachers need. There is no input from the teachers regarding the content of the CPD. The decision has been made by MoE or supervisor regarding the content of the CPD (MT1-14).

One teacher argued that CPD content needs to be linked to the PE curriculum, and provide 'realistic' support to PE teachers to improve their practices; i.e. training teachers to design PE lessons that were interesting and engaging within the available limited resources in schools:

> I think I need to attend the CPD on the areas provide in the PE curriculum. Also, it is essential to provide information to the teachers about how to teach effectively with school's less equipment (MT10-9).

It also seemed that most of the teachers (n=15) believed that participating in CPD that was long-term, sustained would be more beneficial to what they currently experience. Only one teacher argued that the organisation of PE conferences is as (or even more) crucial than attending short-term or long-term CPD opportunities.

> I think providing conferences in the area of PE lesson is more important. We need experts' voice regarding the improvement of PE lesson. We need new evidence from recent research about what makes a good PE lesson. We also need foreign experts to analyse our work and compare our level to other countries development (MT6-8).

4.6. Discussion

Results identified three major issues that need further explanation and analysis. These include: 4.6.1 The overall positive perceptions of these PE teachers on the importance of formal CPD; 4.6.2 The discrepancy between teachers' satisfaction and their actual attendance in available formal CPD; 4.6.2 The link between available formal CPD and national / international strategies of effective CPD design.

4.6.1. Positive perceptions on CPD importance

Evidence from the present study indicated that PE teachers in KRI demonstrated relatively positive perceptions regarding the importance of formal CPD (M=3.90, on the 1-5 scale). From this perspective, it is possible to argue that PE teachers perceived

their formal CPD as an essential element for improving the quality of their teaching. It has been argued that knowing the importance of any activity comes from a person's passion toward that activity (Ames, 1992) and it determines, accordingly, the desire to engage in that activity or not (Barak et al., 2016). Thus, it is fair to conclude that PE teachers in KRI have a passion and desire to participate in CPD. This study also made space to justify their perceptions.

The primary reason provided for why CPD was important resonates with findings from international research on the value of CPD as a tool to enhance teachers' knowledge and practice (O'Sullivan et al., 2011). This finding indicates that, as (Vangrieken et al., 2017) suggests, CPD programmes need to support teachers to engage in a process of critical review and transformation of the quality of their teaching, with the view on introducing innovative approaches to teaching and learning. Teachers also believed that CPD was important because it offered them access to other teachers and experts. This is not a surprising finding as it reflects an accumulative body of research which suggests one of the elements of good CPD programme is when provided by experts in their field (e.g., McMillan et al., 2016, Olivier and Huffman, 2016). Furthermore, with some PE teachers talking about using CPD to improve the learning and participation of their students, it was evident that similar to the existing body of knowledge (e.g., Ronfeldt et al., 2015, Campbell et al., 2016, Spencer, 2016), these PE teachers were keen to use CPD as a tool to offer a better quality educational experience to their students.

CPD has been defined as an ongoing process that 'encourages a commitment to professional and personal growth; increases resilience, *self-confidence*, job satisfaction and enthusiasm for working with children and colleagues' (Bubb and Earley, 2007, p. 5). Similarly, some PE teachers in the present study have also recognised that formal CPD can play an important role in reducing teachers' anxiety and in increasing self-confidence.

Learning from experts was mentioned by some PE teachers as another reason that made CPD important and effective. Patton et al. (2012) have written about the role of CPD providers in the CPD process. In other research, (Makopoulou, 2018) identified effective CPD practices and argued for the need to ensure that CPD providers are supported adequately to design and implement CPD effectively. In KRI, recent

research suggested that CPD providers serve on a part-time rotational basis which possibly prevents them to develop and maintain the required training skills (Vernez et al., 2016). To maximise professional learning in CPD and given the value PE teachers placed on the quality of interactions with CPD providers, further attention needs to be paid on how CPD providers in KRI are trained to undertake this important role. This recommendation aligns with one key recommendation from Vernez et al. (2016); namely that the MoE needs to maintain full time CPD providers who are committed to this job and undergo intensive training. In this way, it will be more likely that they provide high-quality professional learning to teachers.

A small number of PE teachers thought that CPD was important because it had the potential to foster them engage in self-evaluation. Internationally, it is argued that effective CPD is not only about providing knowledge and skills to teachers (following a transmission model), but it should rather encourage teachers to construct knowledge and develop into independent learners, with the right guidance (Patton et al., 2012). A significant aspect of the educational reform KRI was to support students to think critically and analytically (Vernez et al., 2014b). If this is an important educational vision for students, it could be argued that teachers themselves need to be supported to be independent, critical thinkers; and one way to achieve this is through CPD that fosters these skills. As suggested by (Vernez et al., 2016), in order to achieve such ambitious educational reform goals, it is imperative to train the teachers to implement these aspect in a meaningful way.

4.6.2. The discrepancy between teachers' satisfaction and their actual attendance in available formal CPD

Evidence from the current study suggests that PE teachers had positive perceptions about the importance of CPD. They also appeared to be somewhat satisfied with available formal CPD. Yet, their actual attendance was not as sustained, with an average of less than one formal CPD participation per year. This discrepancy needs further explanation.

The first and second barriers to CPD participation discussed by PE teachers were directly related to the KRI financial crisis that started in 2014. These barriers consisted

of a lack of funding and a subsequent limited provision of formal CPD. The teachers also believed that the financial crisis has had a powerful impact on the financial condition of state employees. Some of the PE teachers stated that they had a second job that prevented them from CPD participation. Evidence from the survey also suggested that the number of formal CPD pursued by PE teachers after 2014 was probably halved compared to the immediate period before the crisis. A similar trend was identified by the PE teachers interviewed.

Although survey data did not permit us to understand whether this reduction was the result of the limited availability of CPD programmes organised and funded by the government or other teacher-related factors, the PE teachers interviewed indicated that they were not aware of any formal CPD available to them over the last few years. From their perspective, it was not a case of diminished interest for CPD but rather the lack of CPD organised by the state. Given the level of public funding required for CPD, this is not a surprising funding. Similar to KRI, the financial crisis in Cyprus also had a powerful impact on its education system and professional learning of teachers, many changes affected PE-CPD opportunities as well as the teachers' incentives for professional learning (Hadjimatheou, 2017).

Within the context of limited government funded CPD, concerns over CPD quality could also provide another plausible explanation for low CPD attendance. It has been argued that teachers often avoid any CPD opportunities that have not an impact directly on their knowledge and practice, or that fail to meet their needs (van den Bergh et al., 2015). In the context of KRI, some PE teachers in the survey argued that they did not have a desire to pursue any formal CPD due to their concerns over the quality of delivery and its impact. In the survey, explicit criticism was directed towards the quality of delivery on behalf of the CPD providers. A small number of PE teachers interviewed also justified their non-participated as a result of previous CPD experiences who appeared to offer relevant and applicable/feasible ideas to improve their practices.

While little research has been conducted to better understand the features of effective CPD provision – especially in relation to what CPD providers need to do to maximise the possibility of impact (Makopoulou, 2018), it is widely accepted that CPD providers play an important role in the process (Patton et al., 2012). Makopoulou (2018, p. 263)

concluded that ‘effective tutoring is a dynamic, complex and multi-dimensional process’. To carry out this important role effectively, CPD providers themselves need access to ‘meaningful and sustained support to develop a nuanced and critical understanding of the relevant literature and their practices’ (Makopoulou, 2018, p. 263). This finding provides a clear direction on how future CPD can be improved in KRI. In relation to this, a number of studies have underlined the issue of CPD that is relevant as one of the important features of any successful CPD programme (de Paor and Murphy, 2018, Kyriakides et al., 2017). As previously noted, PE teachers in this study have also raised this matter. This finding thus provides a clear call to look closely at the content and relevant of PE-CPD in KRI to ensure that public funds are used wisely and CPD is relevant to teachers’ needs.

Evidence from the present study suggests that PE teachers’ satisfaction on the available formal CPD was mixed, with some PE teachers reporting feeling highly satisfied but with also a significant proportion of them feeling highly or somewhat dissatisfied. Similar results were identified in terms of PE teachers’ perceptions on the impact of current CPD. This evidence suggests that there is a domain to improve what is already available to PE teachers and it is aligned with previous PE-CPD research (e.g., Al Maqbali, 2019, Gatt, 2017, Hadjimatheou, 2017). Qualitative evidence shows a clear direction on how this could be improved, to ensure that all PE teachers see value in CPD, and public funds are used wisely.

4.6.3. Patterns of formal PE-CPD participation

In section 3.5.2, patterns of the available formal CPD were reported by PE teachers. The programmes appeared to vary in terms of content, duration and providers. Specifically, approximately half of the PE-CPD provided to PE teachers was relevant to curriculum content. As discussed in section 1.4.4.2, the curriculum for basic schools consists of games skill performance while preparatory schools focus on games rule. These contents were in line with the MoE strategy to establish CPD that is relevant to teachers’ subject-specific (Vernez et al., 2016). This is a promising finding as it has been argued that CPD is more likely to be effective when it focuses on subject matter (Garet et al., 2001., TALIS., 2013, Penuel et al., 2007). In TALIS (2013), 73% of teachers found CPD effective when it focussed on subject content. However, there

were only 11% of the available PE-CPD in KRI were related to teachers' pedagogical knowledge. This area needs to be improved in the future of PE-CPD as it is one of the characteristics of effective CPD (Parker and Patton, 2017).

The duration of the PE-CPD also varied. Half of the CPD programmes PE teachers could recall were provided within 1-6 hours, and the one-day programme was prevalent at 37% of the responses. This resonates with existing research. Evidence from (Vernez et al., 2016) suggests that some of the CPD in KRI is short as two or three days and others as long as 30 or 40 days. However, seven days was the longest duration in this study reported by 2% of the survey respondents. This finding is not surprising and it is in line with findings from other studies (e.g., Hadjimatheou, 2017), and also such as TALIS (2013) which suggest that the patterns of CPD participation of the vast majority teachers participating in this European study (89%) was dominated by one-day courses, workshops or conferences. This might indicate a lack of systematic approach to CPD with CPD understood as consisting of unsustained, incoherent opportunities that offer 'knowledge-bites' to participants (Armour et al., 2017). This is at a time when leading scholars have consistently pointed out that one-day activities can be unproductive and ineffective for teachers (Armour and Yelling, 2007, Avalos, 2011, DiPaola and Wagner, 2018, Garet et al., 2001), it seems that the short duration courses is still prevalent in KRI and systematic, robust research is needed to examine its effects and effectiveness.

Evidence from the present study also suggests that the majority of the available formal PE-CPD are delivered in a practical, applied way. This is a promising finding. CPD that is practical, active and collaborative in nature is widely believed to be effective (Lunenberg et al., 2017). In a recent study, Makopoulou et al. (2019) found that there is a link between the practical engagement in CPD and a positive increase in self-efficacy over time. In other words, participants in practical CPD have a higher self-efficacy in the long-term which enable them to develop working as well as remember and apply what they have learned in their lesson. However, with regards to the CPD providers, Makopoulou et al. (2019) found that not all CPD providers who offered knowledge-construction to participants were able to facilitate that learning. This is mean that providing active learning without support is ineffective CPD approach by default. Thus, within the KRI context, it is important to support the CPD providers in a

meaningful and sustainable way to develop the conceptual and practical tools to facilitate professional learning effectively.

The question that remains is ‘what is need to be done to maximise the effectiveness of the formal PE-CPD provision in KRI?’ PE teachers in the present study had the opportunity (as reported in section 3.5.5) to share their thoughts regarding the future of formal PE-CPD. They suggested that future CPD needs to be more frequent, financially supported, be long-term and relevant, grounded from research evidence and, be mandatory attendance. To address these points, and the aforementioned issues around CPD relevant and effective forms of implementation, one significant shift in the way CPD is conceptualised and designed in KRI is required. According to (Vernez et al., 2016), what teachers learn and how they are supported to learn is dependent on what is readily available rather than on what is needed. In this context, MoE should develop a long-term training CPD strategy, ensure that CPD providers are adequately trained, and the content and form of CPD provision is grounded in teachers’ needs. It is also highly important that CPD is innovative and provides PE teachers with new ideas and approaches to teaching PE. Besides, it is also important to harmonise the role of the external organisations with the MoE objectives as they are involving in CPD provision in KRI.

4.7. Conclusion

The primary aim of the present study was to examine the PE teachers’ perspectives on the nature, quality and impact of the existing formal CPD opportunities in KRI. The key finding was PE teachers in KRI highly valued CPD participation. Yet, opportunities to participate in formal CPD was severely restricted by the current financial crisis. Concerns over the quality of provision were also raised with the aim issues revolving around the training of CPD providers, the relevance and feasibility of formal CPD. In the last current years, attention has been raised toward improving the quality of education in KRI (Vernez et al., 2014b, Vernez et al., 2016). In this context, it is paramount that the quality and availability of formal CPD is also improved to ensure that PE teachers have the right support to achieve curriculum ideals. More research is needed to in the field of PE-CPD in KRI especially should seek robust evidence of the impact of specific PE-CPD initiatives on the student outcomes. Also, a systematic,

robust research is needed to examine the effects and effectiveness of the short duration courses in KRI as it still prevalent.

CHAPTER FIVE: STUDY THREE

AN INVESTIGATION INTO INFORMAL PROFESSIONAL DEVELOPMENT IN KURDISTAN REGION-IRAQ: WHAT DO PE TEACHERS BELIEVE ABOUT, HOW DO THEY ENGAGE IN AND, WHAT IS THE IMPACT OF INFORMAL CPD?

5.1. Introduction

Knowledge is becoming quickly outdated within the current rapidly evolving society. Teachers also confront high pressure and increasing demands to reform and to be innovative in their practices (Grosemans et al., 2015). In order to adapt to the current situation, teachers' need to develop themselves professionally in the continues way (Armour and Yelling, 2007, Cameron et al., 2013). 'In this context, the importance of Continuing Professional Development (CPD) has been heightened in recent years and is now perceived as a key factor in school improvement (Makopoulou and Armour, 2011b). CPD is frequently defined as involving all conscious, planned but also unplanned and natural activities that teachers engage in to continue to learn about new methods, techniques and new strategies, and to review and develop their practices (Cheetham and Chivers, 2001, Fullan, 2007, Rose and Reynolds, 2007). Thus, it is now acknowledged that CPD includes not only formal but informal forms of learning' (cited from Amin, 2016, p. 6).

'Informal learning has been defined and discussed in the literature as encompassing all unplanned or natural activities that occur as teachers engage in daily life activities such as work (e.g., reflection-in-action), family or leisure (Eshach, 2007). Such informal opportunities involve 'learning' when there is a clear albeit unintended outcome in terms of enhanced knowledge or skills (Armour and Yelling, 2007). Informal professional learning activities do not follow a specified curriculum and are not structured in terms of learning objectives, learning time or learning support (Commission, 2001b, Richter et al., 2011). In other words, informal learning is neither structured in a way to achieve a specific target, nor 'restrained' to specific timescales as it occurs as part of teachers' everyday lives. Informal learning can take various

forms, such as classroom observations, collaborative activities, study groups, reading a book in the library, watching television or engaging with social media (Richter et al., 2011, Smith, 2002). As these opportunities are non-intentional (because these activities occur naturally without the intention of learning), the range and depth of learning depend on the willingness of the teachers to engage in the process (Desurmont et al., 2008). Teachers' willingness or motivation have been highlighted such as key elements that play an essential role in learning (Coleman et al., 2007, Pintrich, 2004). Motivation, specifically, is a psychological factor which generates a motive force that arouses, incites or stimulates of learners to communicate of learning (Alizadeh, 2016). However, like formal CPD, informal learning is also not flawless' (largely cited from Amin, 2016, p. 3).

'Over the last decade, in both policy and research, informal CPD has been recognised as an invaluable aspect of teachers' work (Mizell, 2010b). Although challenging to monitor and accredit and certainly not a panacea, research shows that, when certain conditions are in place, informal learning is valued by teachers (Armour and Yelling, 2007, Garet et al., 2001, Knight, 2002, Pritchard and Marshall, 2002). However, research pointed out that there is no guarantee that all informal activities are positive or impactful (Armour and MacDonald, 2012, Armour and Yelling, 2007, Makopoulou and Armour, 2014). According to (Gatt, 2017), when teachers look for information on their own, sometimes incorrect information from unreliable sources is accessed or shared which can affect the quality of learning and its impact. Like other countries, teachers in Kurdistan Region-Iraq (KRI) are also engaging in dialogues, observing their colleagues and reflecting upon their practice. However, to the researcher's knowledge, no research has been conducted to inquire about teachers' informal learning, especially for the physical education (PE) lesson. No evidence is available to illustrate the forms of informal learning they engage in and, what do they find effective. From this perspective, and investigation into PE teachers' informal learning is needed as there is a dire lack of evidence on this form of learning. This study organised into seven section: 4.1 Introduction; 4.2 Study purpose; 4.3 literature review; 4.4 Methods; 4.5 Results; 4.6 Discussion and, 4.7 Conclusion' (largely cited from Amin, 2016, p. 3).

5.2. Study purpose

The purpose of the present study was to examine the perception of PE teachers in KRI on the nature, quality and impact of informal CPD they engage in. The overall question of the present study was: In what informal CPD opportunities do PE teachers in KRI engage and, what do they find effective? The following sub-questions were also examined: (i) What are PE teachers' perceptions regarding the importance of informal CPD and why? (ii) What are the patterns and frequency of participation in informal CPD? (iii) To what extent engagement in informal CPD has an impact on PE teachers' knowledge and practice? (iv) What are more effective ways to support PE teachers to engage in effective informal CPD?

A mixed methodological approach was adopted to address the study questions. Both qualitative and quantitative data was collected via semi-structured interviews with PE teachers (n=16) as well as a teacher survey developed and distributed to PE teachers in one local region in KRI (n=302). The design of the study was grounded in the best available national and international literature and was intended to inform thinking, policy and practice so that CPD is reconsidered and designed for maximum impact.

5.3. Teachers' informal learning activities

'There is an international trend that teachers are viewed as lifelong, independent learners (Demirel and Akkoyunlu, 2017). 'There is also an agreement that teachers are active constructors of knowledge, and they engage in ongoing professional learning in multiple contexts such as formal, informal and non-formal CPD' (Amin, 2016, p.12). However, there are concerns and criticisms that the content of formal CPD provision are at times described as being divorced from actual workplace practice (Boud and Hager, 2012). 'Also, research evidence suggests that the traditional CPD approach, such as one-day courses is not sufficient to support teachers to learn in a way that can make substantial changes into their practices (Garet et al., 2001, Knight, 2002, Pritchard and Marshall, 2002, Sandholtz, 2002)' (cited from Amin, 2016, p.12). This perspective regarding the effectiveness of formal CPD activities has led to increased importance being given to learning which takes place at the workplace itself such as informal and non-formal learning.

Research suggests that professional learning in work environments is commonly linked to teachers' informal and non-formal learning (Boud and Hager, 2012). The difference between informal and non-formal learning is in the teachers' intention to learn. Informal learning, is unplanned or non-intentional activities that are not organised or provided by an educational institution, the learning occurs from the experiences that learners have acquired either at work, home or their free time (Smith and Clayton, 2009). 'Whereas non-formal learning is initiated by individual teachers who have the clear intention of engaging in professional learning in order to enhance their knowledge or improve their skills (Kyndt et al., 2009). Non-formal learning involves face to face tutoring services, community groups, group interactions and collaboration, peer teaching or peer observation, group meeting (Ainsworth and Eaton, 2010, Kyndt et al., 2009, Livingstone, 2001). Moreover, non-formal CPD activities consist of all opportunities that although taking place intentionally, do not lead to accreditation or qualification (Commission, 2001a). They are not, in other words, provided and accredited by an educational institution' (cited from Amin, 2016, p. 5). In the present study, both informal and non-formal activities been involved and the term 'informal learning' or 'informal CPD' will be used to refer to both of these types of learning.

Throughout the literature, some forms of informal learning activities are featured. Based on the ways of gaining knowledge, informal learning can be divided to three categories such as individual learning, social learning and learning through reflection. Individual learning can be considered as a personal endeavour to keep up to date. A broader interpretation of individual learning has given by (Meirink et al., 2007) which define it as '*learning from others without interaction'* (p.148). This category of learning mostly involves reading literature and/or observing colleagues. It has been argued that teachers' learning is not only enhanced when they read texts written by others, but also enhance when they actually listening to them (Grosemans et al., 2015). In this context, teachers able to observe what their peer do and learn from it even without engage in interactions with each other (Meirink et al., 2007). It seems that teachers value their individual learning as the results from most recent TALIS (2013) publication suggest that (78%) of teachers engaging in reading professional literature to improve their learning. Also, a recent study from Cyprus on PE teachers indicated that observing colleagues been identified as one of the most three powerful sources for PE

teachers' learning and teaching style (Hadjimatheou, 2017). Besides, observing others might be lead to find out some solutions for the issues that face them in their own classroom (Garet et al., 2001).

Social learning consists of all teacher activities based on collaborating and interacting with colleagues. Meirink et al. (2007) define this category as '*learning from others in interaction'* (p.148). Within social learning, there are many different forms such as peer observations, study groups and learning communities. This means that teachers are working together, sharing ideas and requesting or giving advice (Grosemans et al., 2015). 'The most common type of social learning is professional learning communities (PLCs). Studies indicated PLCs as an effective activity in social learning because it can make a difference in teacher's knowledge, practice and pupil's outcomes (Vescio et al., 2008). It has been suggested that offering teachers the opportunity to participate and collaborate in PLCs is a powerful professional development opportunity because it might create opportunities for teachers to find out the answer to some issues that face them in their daily profession (Borko et al., 2010b). It is crucial that human learning is situated in social practice because the natural life of people is participating in the social world (Lave and Wenger, 1991). (PLCs) can exist within and between schools, which can create an environment for teachers that supports innovation and experimentation (Stoll et al., 2012b). However, although the importance of (PLCs) has been highlighted as an effective factor to improve the learning process, still much work to be done to improve and validate measures of the effectiveness of collaborative CPD opportunities on teacher and pupil learning outcomes (Makopoulou, 2013)' (largely cited from Amin, 2016, p. 14).

The third category is learning through reflection. This type of informal learning derives from teachers' own experiences. More specific, teachers become aware of what happened in a specific situation and can gain from it (Grosemans et al., 2015). Learning through reflection been described as a process that one's makes logical decisions when (s)he is recalling its own perceptions, experiences and beliefs (CampbellJones and CampbellJones, 2002, Dervent, 2015, Taggart and Wilson, 2005). In the context of school-based teacher education, it has been stressed on the importance of promoting reflection as it helps the teachers' prevention from settling on the traditional education patterns that existed in schools (Korthagen et al., 2001)

through ongoing inquiry, in which teachers continuously revise their practices via a cyclical process toward high-quality standards of teaching (Dervent, 2015, p. 261). Theoretically, there are two forms of reflection: a reflection on action and reflection in action. The reflection on action means teachers reviewing what they have done to discover how action might have contribution to the outcome. While the reflection in action occurs when action is yet in progress and making it feasible to modify what teachers are doing while doing it (Schon, 1974, Van den Bossche and Beausaert, 2012).

As mentioned in the previous section, there is a dire lack of evidence regarding the teachers' informal learning in KRI. There is no recognition in the policy level and also research in this type of teachers' activities. Even the two publications that conducted by RAND Corporation Institution to assess the education system in KRI has paid attention to teachers' supervision and formal training. No evidence provided and no inquiry has been conducted regarding teachers' informal learning and PE teachers in particular. From this preceptive, the present study sought to advance the line of inquiry to investigate into the PE teachers informal learning in KRI. the next section reports the methodological approach conducted in this study.

5.4. Methods

To answer questions about the nature, quality and impact of the informal CPD provision in KRI, as engaged by PE teachers, a mixed-method approach was employed. Evidence was collected in two distinct albeit interlinked phases: (i) Phase one: PE-CPD survey to explore PE teachers' perception on the nature, quality and impact of informal CPD in the large scale; (ii) Phase two: examine PE teachers' perception in further depth via semi-structured interviews.

5.4.1. Sampling and participants

Research participants recruited to take part in the present study included 302 PE teachers. Different sampling methods were used to select different participants for the different phases of the study.

To recruit PE teachers to participate in phase one, and to increase the response rate, supervisors who participated in study one was asked to support the researcher in distributing and promoting the survey to all PE teachers under their jurisdiction. A total of 450 hard copy surveys were sent to the participants and 302 responses returned the completed survey (67%). Table 5.1 illustrates some biographical characteristics of participants in this phase.

To collect evidence for phase three, purposive sampling was also employed. With the intention of reaching as a diverse teacher population as possible, in terms of teachers' demographic characteristics, the supervisors who participated in study one was asked to make recommendations about potential teachers who would match the criteria. Specifically, it was decided that two PE teachers per supervisor (i.e., 16 PE teachers in total) would be recruited. It was also important to access both male and female teachers, different school types and years in the profession. After the supervisors' recommendation, the researcher contacted the PE teachers personally who all agreed to participate in the research. Table 5.1 illustrates some demographic characteristics of the PE teachers who participated in the study.

Table 5. 1 Characteristics of PE teacher participants

PE Teachers	Total	Gender		School type		Age		Teaching Experiences				
		M	F	BS	PS	Min	Max	4th T	3rd T	2nd T	1st T	ST
Survey	302	227	75	199	103	25	61	32	80	88	73	29
Interviews	16	14	2	6	10	27	40	-	5	3	6	2

5.4.2. Data collection tools

5.4.2.1 Phase One: PE-CPD survey

A self-report survey was used to collect evidence on PE teachers' perception on the nature, quality and impact of the informal CPD activities in KRI. A CPD survey was designed and consisted of four parts (please see Appendix E). The third part was relevant to the present study as it sought to collect evidence on PE teachers' perception on their informal CPD activities. This part was consisted of five questions. In the first question, PE teachers' perceptions regarding the importance of informal

CPD were examined. This question was included in order to understand how PE teachers in KRI are thinking about the essence of engage in informal CPD. There were five possible responses (1- Not important at all; 2- Not as important; 3- Somewhat important; 4- Very important; 5- Extremely important). An open-ended box was provided, encouraging teachers to explain and justify their response in the above item/question (question 1).

In the second question, PE teachers were asked to choose the frequency of engagement in a range of informal CPD activities. The activities included in the survey were the following:

- professional dialogue;
- collegial observations;
- joint teaching;
- mentoring (whether they were mentor or mentees);
- reading literature to improve own knowledge; and
- reflection upon your own practice to improve teaching and learning.

Linking between the questions in the survey was planned in order to produce an integrated data collection (Boynton and Greenhalgh, 2004). Thus, the third question was to investigate the impact of the aforementioned six informal CPD activities on PE teachers' practice. There were five possible responses (1- No impact at all; 2- Very small impact; 3- Some impact; 4- Significant impact; 5- Extreme impact). The aim of this question was to summarise and compare teachers' view on the given informal CPD activities. In question four, PE teachers were asked to describe/outline barriers that hindered their engagement in informal CPD activities through an open-ended question. Finally, last question was to putting forward suggestions and listening to what PE teachers need to engage in more informal CPD activities.

While this study involved Kurdish speaking teachers in KRI, the survey was needed to be translated carefully into Kurdish without any changing in the questions and meaning. To ensure that the items of the survey were clear, it was piloted with four Kurdish PE teachers who have not participated in the research. These PE teachers were asked to make comment on the meaning of the questions, as well as layout, wording and length of the survey. The PE teachers suggested including a brief

explanation of each section, including examples when possible, to avoid any confusion, especially between formal and informal CPD. They also requested the addition of examples especially in the case of the open-ended questions for further clarification. Following this pilot phase, the recommended improvements were addressed.

With the same reasoning discussed in section 3.4.3.2 (study 1), similar process undertaken to develop, pilot and distribute the survey. Between March and June 2018, a total of 450 hard copy surveys sent to the PE teachers and 302 responses returned (67%).

5.4.2.2 Phase Two: PE teachers interview

In order to collect qualitative, in-depth data from the PE teachers, semi-structured interviews were conducted with 16 PE teachers. The purpose of the interviews was to understand PE teachers' perceptions of the nature, quality and impact of informal CPD activities they engage in KRI, as well as their views and suggestions on the kind of support they need to engage in more informal CPD activities.

As explained in section 3.4.3.1 (study 1), a detailed interview protocol was developed. The interview protocol was divided into three parts (please see Appendix G), with second part being relevant to the present study. The first question was to ask the PE teachers to identify five different informal CPD activities they believed the learned from. This question was important to explore the patterns of CPD activities that PE teachers engage in over their life learning. However, to understand in-depth which informal CPD activity was most effective, the PE teachers were asked in the second question to identify one activity from the previous five activities. Also, probing was important to explore the ways PE teachers had benefit from the specific activity and whether it was on knowledge and/or practice and also what was the benefit for pupils. The conversation shifted to investigate the interactions with colleagues in the third question. The PE teachers were asked to recall a specific interaction with a colleague which they found it inefficient. This question was to capture the factors that hinder them to gain from interactions with colleagues. In the last question, it was important to investigate the socio-economic and political and its impact on PE teachers' informal activities. This question was important to compare their learning circumstances before and after 2014.

All participants were invited to participate in individual interviews at a time convenient to them. Due to the geographical differences between the researcher and the participants, the interviews were carried out via telephone calls. Interviewing teachers in this way provided a cost-effective means to obtain evidence on teachers' perspectives which would have been impossible otherwise. Whilst an initial concern was that a telephone interview would restrict the researcher's capacity to develop a better understanding of teachers' perspectives – given the lack of visual interaction and non-verbal language which conveys subtle layers of meaning, in retrospect, it was evident that both teachers and the researchers were at ease communicating in this manner. Therefore, it was concluded that the initial concerns about relevant and loss of meaning were somewhat exaggerated or unfounded (Irvine, 2010).

To overcome any potential technical issues which could result in loss of data, the researcher made sure that all devices used were technically checked and were in good condition. The interviews were recorded via Voice Memos application in iPhone mobile. The interviews were carried out between August and September 2018 and the duration of each interview ranged from 60 to 80 minutes. All interviews were audio-recorded and then transcribed in the Kurdish language, producing a total of 6 to 8 for each participant of transcribed raw data. Thereafter, the interviews translated into English in order to prepare for the data analysis.

5.4.3. Trustworthiness and generalisability of qualitative data

The trustworthiness of the qualitative data was established by 'participant validation' which involved the research participants 'assessing the trustworthiness of research in terms of validating the credibility of qualitative data' (Smith and McGannon, 2018 , p. 3). In the present study, the participants involved in the interviews were encouraged during the interviews to clarify and verify their views. They were also asked to expand on their views when answers were ambiguous. This participant validation makes the researcher able to collect rich, detailed and accurate data. Moreover, at the end of each interview, the researcher summarised key points from the interview to the participants who were asked to verify if the researcher's initial interpretation reflected the views they shared during the interview. During this process, the researcher also encouraged participants to add any other points they wanted to make in relation to

issues under investigation and which they had not raised before. None of the participants added any further data as a result of this process.

With the high rate of survey responses, the researcher is confident that results can be generalised to the specific context (Sulaimanyah city in which the participants were based). Regarding the generalisability of qualitative data, it can be argued that the findings reported in this research have the possibility to be generalised in two ways. First, results allow the readers who have various positions within PE and the educational system in KRI (such as PE supervisors, PE teachers, policymakers etc.) to reflect on what is relevant or not to their own professional realities. This process of reflection can enable them to think critically about their own perceptions and practices. In this way, results are generalisable not in the traditional sense but rather in relation to what (Smith, 2018) calls as a naturalistic generalisation or representational generalisation (Lewis, 2014). To allow both naturalistic generalisation and transferability, it was imperative to provide the readers with sufficient detailed 'evidence' (e.g., interview quotations).

5.4.4. Data analysis

Qualitative data consisted of 16 interview transcripts conducted with PE teachers and 792 open-ended responses from the survey. Quantitative data consisted of 1973 closed responses.

5.4.4.1 Qualitative data analysis

The researcher acknowledges that the process of qualitative data analysis is a basic part of research but not without complexity. Cohen et al. (2011a) explained that 'qualitative data analysis involves organising, accounting for and explaining the data' and providing 'definitions of the situation, noting patterns, themes, categories and regularities' (p.537). In the context of this study, constructive approach to grounded theory was used in order to analyse the qualitative data (Charmaz, 2006) which encouraged researchers to explore the meanings, views, thoughts, feelings, values and experiences of individual research participants in order to illuminate issues under investigation. Alike the traditional approach, the key steps in data analysis from this

perspective are: (i) initial coding such as word by word coding; line by line coding, incident to incident coding to start grappling what different data extract means to the research participants. (ii) focused coding which refers to the beginning of a more analytical process of analysis which researchers synthesise and explain larger segments of data. (iii) axial coding which matches to Strauss & Glaser's (1967) concept of development categories along with their properties and dimensions. (iv) memo writing. (v) theoretical sampling that seeks to bring together data to develop theory. (vi) development of theories. it is important to underline that the process of data analysis was ongoing and iterative (Weed, 2017) which helped the researcher to enable further data collection when required. Within the context of the present research, only a few steps of this process were employed in the data analysis as follows:

Step One:

After each interview, conversations were transcribed immediately in Kurdish language in order to get a better sense of what the participants were saying. Afterward, the Kurdish transcripts were translated to English language in order to prepare it to be entering into the Nvivo software. Also, working with audiotapes and translation of transcripts were enable the researcher to sound and re-sound the research participants' experiences.

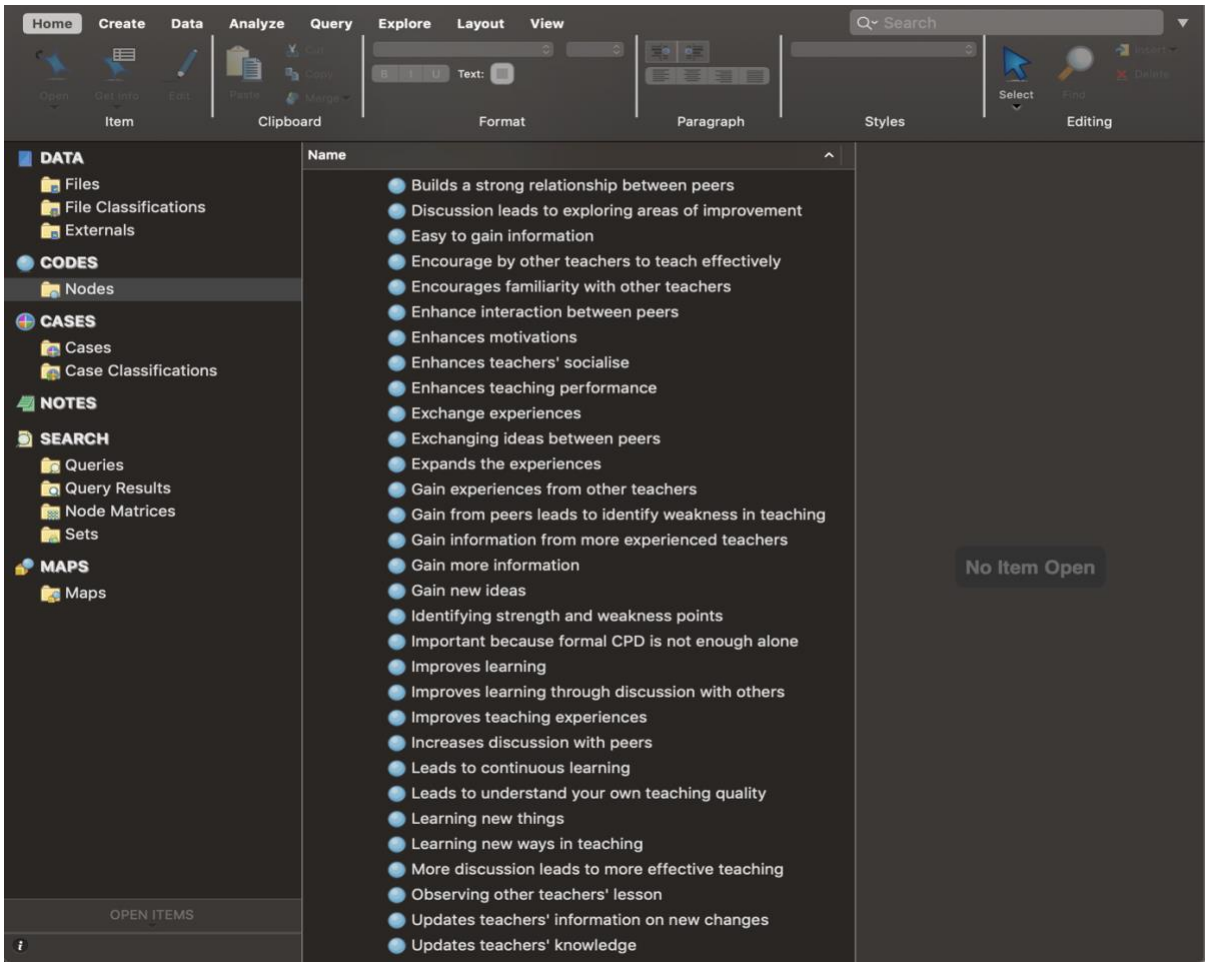
Step Two:

The second step involved multiple readings of the data in their raw to the aim of capture the most important and relevant information in relation to the study questions. Through coding, key points being made by the research participants were identified and name or label was attached to each one of them that captured the central meaning. Then, the process involved comparing the different codes from different participants to identify similarities or points of disagreements to begin making sense of the key issues (Cohen et al., 2011a). The process of coding was supported by memo writing. Memo writing was important in order to capture the researcher's initial thoughts on the respondents' comments for the reason of understanding and unpacking the meaning of their comments (Charmaz, 2014). It is also allowed making connections between data analysis and further collection of data.

Step Three and Four:

To develop the categories in the third step, there was a constant comparison of the different codes to decide which code belonged to another. Categories involve clustering the open codes around specific points of intersection (Harry et al., 2005). In a similar process, categories were subsequently compared together to identify themes in the step four. It was to cluster all these categories under the heading of the research question. This step represents what grounded theorists call development of themes (please see figure 5.1). It is important to note that, the aim of conducting grounded theory was not to build a theory but to rather identify patterns between the categories and 'produce conceptual thematic descriptions rather than explanatory theories' (Starks and Brown Trinidad, 2007, p. 1377). NVivo software version 12 was used in order to manage the process of analysing the qualitative data and an illustrative example is provided in figure 5.1.

Figure 5. 1 Initial coding in Nvivo 12



5.4.4.2 Quantitative data analysis

Quantitative data obtained by the closed questions in the PE-CPD survey were entered to SPSS version 25 (IBM Statistics) for analysis. Descriptive statistics were run to describe and explore the mean scores of PE teachers' responses to the Linkert scale questions. A separate file was conducted to identify the mean scores according to the PE teachers' gender, school type and, teaching experiences. The Independent-Samples t-test and One-Way ANOVA were run to identify the different groups of gender, school type and teacher experiences. Finally, frequency analysis was run in order to identify the frequencies participates responses to the particular question.

5.5. Results

The results of the present study are reported under five themes. Firstly, PE teachers' perception regarding the importance of the informal CPD (theme 1), followed by their self-report patterns and frequency of engagement in informal CPD (theme 2), and then their perceptions on the impact of the informal CPD on practice (theme 3) are reported. In theme 4, the barriers that hinder PE teachers to engage in the informal CPD are discussed followed by recommendations on effective and feasible ways to support PE teachers to engage in informal CPD (theme 5).

5.5.1. Theme 1: Perceptions on the importance of the informal CPD

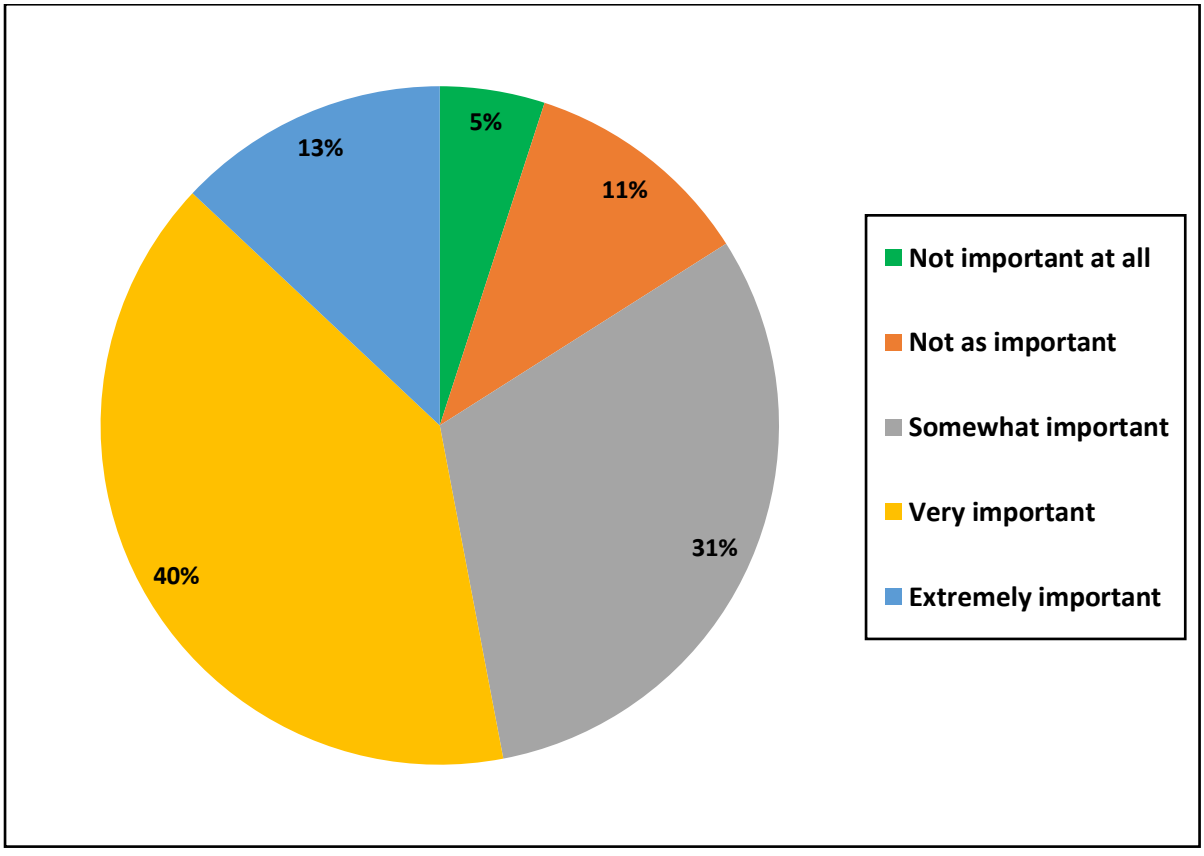
This section summarises the PE teachers' perception of the importance of informal CPD. Descriptive statistics are reported in Table 5.2. Results suggest that the mean score for teachers' perceptions on the importance of informal CPD was just above the mid-point in the 1-5 Linkert scale (M=3.46, SD=1.01 and n=302). To examine whether teachers' perceptions on the importance of effective CPD differed based on their demographic characteristics, independent-Sample t-test (for gender) and one-Way ANOVA (for school type, teacher experiences) were run. Result suggest that the difference in the mean score between teachers' gender (p=.28, >.05), place of work (p=.43, >.05), and different years of experience (p=.87, >.05) was small and not statistically significant. In other words, teachers' demographic characteristics cannot be considered as important as far as teachers' perceptions on the importance of informal CPD is concerned.

Table 5. 2 PE teachers' perception on the importance of informal CPD

Importance of informal CPD	Total	Gender		School type		Teaching Experiences				
		M	F	BS	PS	4th T	3rd T	2nd T	1st T	ST
Number	302	227	75	199	103	32	80	88	73	29
Mean	3.46	3.42	3.57	3.43	3.52	3.50	3.55	3.45	3.36	3.44
S-Deviation	1.01	1.00	1.02	1.05	.93	1.07	1.00	1.12	.93	.82
Note: the mean score is out of 5										

The large standard deviation suggests that there was variation in teachers' responses. Indeed, as shown in Figure 5.2, 16% of the respondents who were completing the survey believed that informal CPD was either 'not important at all' (n= 15, 5%) or 'not as important' (n=32, 11%). Approximately a third of the PE teachers thought that informal CPD was 'somewhat important' (n=93, 31) (neutral point of 3 in the scale). On the other end of the scale, 162 PE teachers (53%) reported valuing informal CPD as they believe that it was either 'very important' (n=122, 40%) or 'extremely important' (n=40, 13%).

Figure 5. 2 PE teachers' perception on the importance of informal CPD



To understand teachers' justification toward the importance of informal CPD, an open-ended question was included in the survey. In this context, 256 teachers responded to the question about informal CPD, and their answers were divided between negative (n=41, 16%) and positive (n= 215, 84%) aspects which explains their feeling regarding the importance of informal CPD.

Regarding the negative aspects of informal CPD, most of the respondents (n=30, 12%) argued that knowledge obtained via informal CPD is not entirely accurate. For example, some of them believed that discussion with and observing other teachers did not provide them with *reliable information* as teachers are in the same circle of knowledge. Also, some of them believed that information from peers is not always new. One of the teachers stated that *'knowledge and ideas from colleagues are repetitive because we are in the same level of knowledge. That is why I think learning from experts is more effective'* (TQ 77). It is also clear that some of these teachers (n=7, 3%) described the knowledge of specialists (i.e., experts) as more 'effective' compared to the knowledge exchanges with colleagues. They believed that training from experts has clear objectives. Finally, a small number of respondents (n=4, 1%) reported that teachers are not familiar with this form of learning engagement, and consequently, informal learning is not as beneficial to them.

In relation to the positive aspects of informal CPD, teachers' opinion varied. Experiences involving collegial *discussion* and peer *observation* were frequently included in teachers' respondents. 38 teachers (15%) thought that informal CPD was important because it gives teachers opportunities to discuss and observe each other. There was no further elaboration from these teachers why these forms of informal CPD are essential and what contributions it makes. However, 37 teachers (14%) reported that informal CPD is important because through discussion and/or observation teachers can gain new ideas. A small number of teachers (n=10, 4%) provided further multiple benefits by engaging in such activities, such as enhancing teaching practice; gaining new ideas / updating knowledge; exploring new ways in teaching; and engaging in self-reflection to identify strengths and limitations in ones' practices.

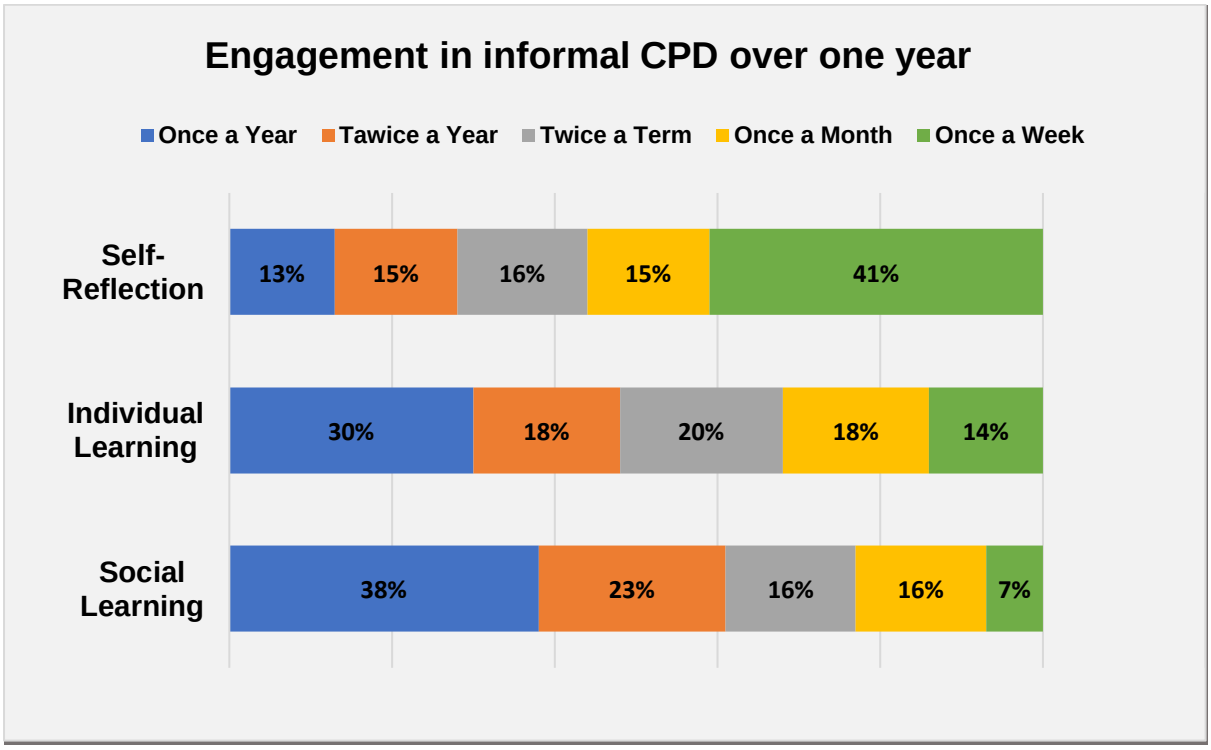
Teachers also appeared to value other forms of informal CPD. 18 teachers (7%) pointed out that they read the literature, or they search on the internet when they

encounter any issues in daily teachings such as student behaviours or class management. 30 teachers (12%) argued that this personal search for answers is important in the absence of formal CPD. These teachers pointed out that when formal CPD is rarely provided, informal learning is important to improve their learning. Moreover, 14 teachers (6%) believed that informal CPD opportunities are valuable because they are easy to engage in (no resources are required).

5.5.2. Theme 2: Patterns and frequency of engagement in informal CPD

Teachers were asked in the survey to identify the approximate number of informal CPD they engaged over one year (2016-2017). Results, as reported in figure 5.3, suggest that teachers valued their autonomy. Specifically, 116 teachers (41%) reported engaging in self-reflection once a week. 40 teachers (14%) also reported relying upon their individual learning (i.e., reading literature and observing) once a week. Interesting, a much smaller percentage of teachers (21 teachers, 7%) believed that they engaged in social learning (i.e., professional dialogues, joint teaching and, mentoring) once a week.

Figure 5. 3 Percentage of teachers' engagement in social learning, individual learning and, self-reflection over one year



5.5.3. Theme 3: Impact of the informal CPD on practice

The previous section presented the teachers' patterns of participation in informal CPD. This section examines the perceived impact of this engagement on teachers' practices. Table 5.3 illustrates the extent impact of self-reflection, individual learning and, social learning on teachers' practice. the findings suggest that the mean for self-reflection were (M=3.61, SD=1.15 and n=283) which is slightly higher than individual learning (M=3.16, SD=1.01 and n=287) and social learning (M=2.90, SD=.99 and n=285).

In order to examine if these differences in the mean score were statistically significant, independent-Sample t-test were run. The result indicated that there was a significant difference in teachers' perceptions about the impact of individual and social learning (p=.02<.05), as well as the impact of reflection and social learning (p=.00<.05). There was also a significant difference (p=.00<.05) in learning between teachers' individual learning and self-reflection.

In relation to other factors that may influence perceptions on impact, there was no significant differences in teachers' gender, and place of works in all learning activities (social, individual, and self-reflection). It can be concluded that teachers' demographic characteristics does not influence teachers' perceptions on the impact of the different learning activities on their practices. However, with regards to the teachers' different years of experiences, significant difference has been found in social learning (p=.00, <.05), individual learning (p=.03, <.05) and, teachers' self-reflection (p=.01, <.05). This means that the career stage is an important factor when considering teachers' perceptions on the impact of informal learning.

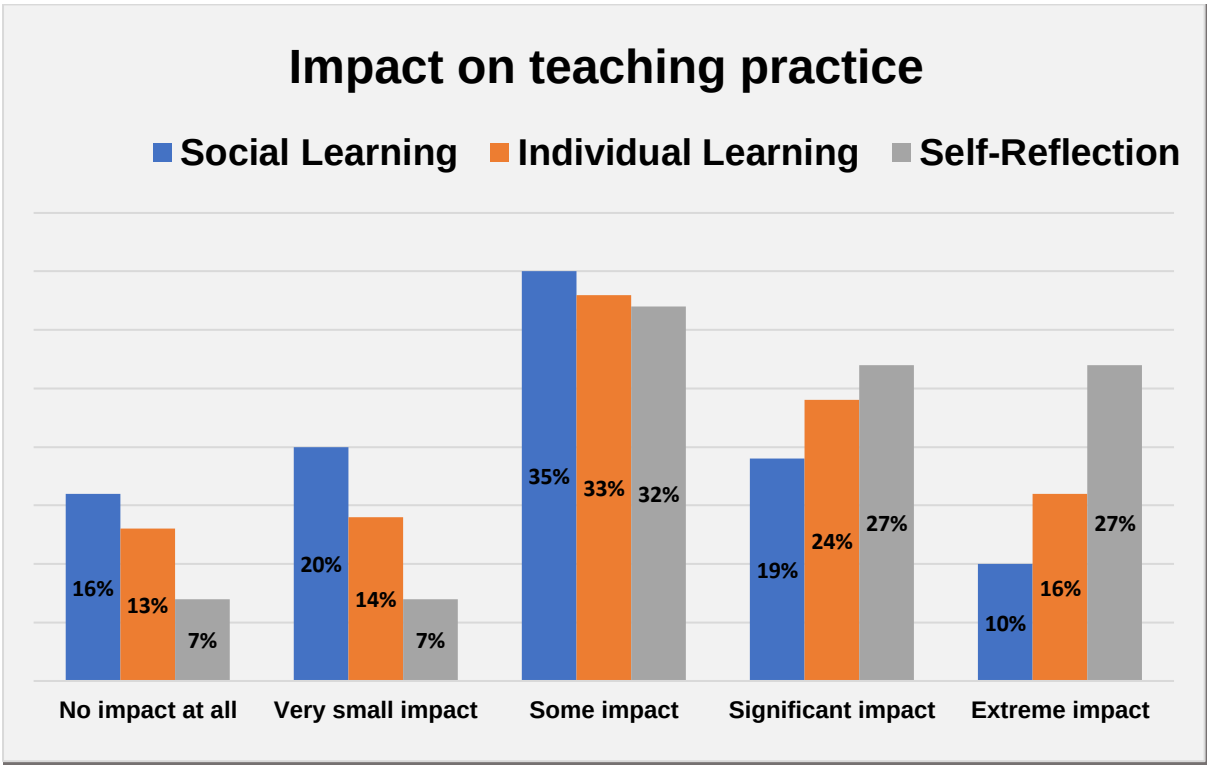
Table 5. 3 Impact of the experienced informal CPD on teaching practice

		Total	Gender		School type		Teaching Experiences				
			M	F	BS	PS	4th T	3rd T	2nd T	1st T	ST
Social Learning	N	285	214	71	184	101	32	80	80	66	27
	Mean	2.90	2.86	3.01	2.90	2.88	3.34	2.88	3.08	2.64	2.50
	SD	.99	.97	1.05	.99	.99	.68	1.07	1.08	.83	.85
Individual Learning	N	287	216	71	186	101	32	78	84	66	27
	Mean	3.16	3.12	3.28	3.16	3.15	3.25	3.29	3.29	2.96	2.74
	SD	1.01	1.02	.97	1.02	.99	.84	1.12	1.07	.84	.92
Self-Reflectio	N	283	213	70	184	99	30	78	82	66	27
	Mean	3.61	3.56	3.75	3.54	3.73	3.93	3.74	3.74	3.30	3.22
	SD	1.15	1.19	1.01	1.14	1.15	.86	1.15	1.18	1.10	1.25
Note: the mean score is out of 5											

Figure 5.4 reports frequencies. As illustrated, 98 teachers (36%) have reported 'no impact at all' and 'very small impact' to the effectiveness of the social learning on their teaching practice. Similarly, 77 teachers (27%) have pointed out that individual learning had 'no impact at all' and 'very small impact'. Yet a small number of teachers (n=39, 14%) reported 'no impact at all' and 'very small impact' in the question on the effectiveness of self-reflection.

On the other end of the continuum, 154 teachers (54%) believed that self-reflection had 'significant impact' and 'extreme impact' on their teaching practice. A smaller number of teachers (n=112, 40%) stated that engagement in individual learning had 'significant impact' and 'extreme impact' on teaching practice; and only 82 teachers (29%) reported that social learning had 'significant impact' and 'extreme impact' on their teaching practice. A substantial number of respondents appear to be in the middle; as (n=97, 35%) for social learning, 92 teachers (33%) for individual learning and, 90 teachers (32%) have reported 'some impact' upon their practice.

Figure 5. 4 Impact of the experienced informal CPD on teaching practice



Evidence has also been collected from 16 interviewed teachers regarding the informal CPD opportunities that they engaged, and they found it effective through individual, semi-structured interviews. In this context, most of the teachers (n=4, 25%) found that their engagement in reading literature was useful to expand their understandings and improve their knowledge. One of the teachers (MT7-11) compared the importance of reading and observing. He stated that observing another teacher's lesson is essential because it offers him some tangible and feasible ideas to improve his lessons. The focus of the observations is on picking up ideas with the aim to improve teaching performance. He argued, however, that reading literature, although more abstract at time, it offered him the conceptual tools to understand complex aspect of teaching practice in greater depth; and to cover other issues that were not directly linked to practice itself but were essential in understanding effective practice more broadly.

Technology and in particular the internet were granted the second highest of favoured informal CPD that used by interviewed teachers. Four teachers (25%) have pointed out that searching on the internet is an easily accessible way to gain information in the areas of teaching PE. The following extract explains the point:

> I was searching to find information about how to make all students participate in PE activities. So, I found that the best way to encourage them is by giving a title of (most active student of the week) and plus a good score as a reward for his/her more participation in the PE activities. I found this action encouraged my students to fight to this title. I know it is a simple action but works with me (MT1-14).

Some of the interviewed teachers (n=3, 19%) referred to discussions with other teachers as another important source of learning as they could exchange new ideas. One of the interviewed teachers (MT13-6) provided an example to illustrate this point:

> I was thinking about small-sided games, which is not a difficult idea to implement and I also think it is a very enjoyable approach. I found discussing with more experienced PE teachers very valuable in understanding how to do it, as they have faced this kind of questions in their careers, and they know best what works with students (MT13-6).

Reflection upon practice was also one of the informal CPD activities that were favoured by some of the teachers (n=2, 13%). These teachers pointed out that learning by doing is one of the effective ways to expand teaching:

> I found that relying upon myself is essential to expand my teaching experiences. For example, when I am planning to organise any school activity, before, I need to think what I did the previous year (on this activity), what did not work as well, what worked….What I mean is that learning from my mistake is important (MT2-7).

Observing other PE teachers' lessons was another informal CPD that also favoured by some of the interviewed teachers (n=2, 13%) because, as they said, it is an activity that can allow natural comparisons between teachers with different competencies, and can lead to enhanced understanding on how to improve ones' practice, as the quote below illustrates:

> When I am observing another PE teacher's lesson, …. I compare his/her teaching performance to mine. Through this [comparison], I will be able to understand what it is I need to improve in my own teaching (MT16-13).

5.5.4. Theme 4: Barriers that hinder PE teachers from engaging in informal CPD

Respondents to the factors that prevent teachers to engage in informal CPD activities was 289. The factors can be classified into two categories: (i) Teachers' personal factors; (ii) The external factors which are beyond teachers' capability.

5.5.4.1 Personal factors

Teachers who responded to the survey provided some personal barriers which prevented them from engaging in informal CPD activities more regularly. Most of them (n=51, 18%) reported family commitments as a primary factor. Also, a lack of desire / motivation to progress was identified as a second factor (n=21, 7%) as one of the PE teachers argued that '*due to the system of promotion, teachers are not interested in progressing themselves as salaries promotion depends on the years of teaching rather than teachers' competent*' (TQ65). The lack of interrelationships between teachers was another factor mentioned by some of the PE teachers (n=19, 7%). Finally, lack of self-confidence was the barrier least frequently mentioned (n=5, 2%). One teacher, for example, admitted that *'sometimes, I am shy to ask questions to avoid other teachers' thinking about my incompetence'* (TQ73).

5.5.4.2 External factors

External factors also varied. The vast majority of PE teachers (n=135, 47%) reported a lack of teachers in the same school as one of the main factors that prevented interactions and forms of social learning to take place. In other words, with only one PE teacher in their school, opportunities for social learning were minimal. The second barrier identified by some PE teachers (n=53, 18%) was the lack sports activities that existed. These teachers believed that sports activities (e.g., school sport competitions, sports events) was an opportunity to interact and socialise with other teachers.

Some of the PE teachers (n=33, 11%) believed that the low status of PE and a sense of being neglected, with no meaningful external support, de-motivated them in terms of engaging in professional learning to improve their teaching. A number of these teachers also mentioned that their school administration had not supported them to conduct activities and invite teachers from other schools. When it comes to learning, they also felt that many resources were in English (or other non-Kurdish languages)

which they could not all access due to their poor language skills (n=20, 7%). It is important to note, only one teacher out of 289 mentioned the absence of professional learning communities (PLCs) as one of the factors that hinder progression. This teacher stated *'I believe that having a group-work in school is important. However, if there is no more than one teacher in the school, having a group outside the school is essential in the field of PE to discuss everything about PE. We lack these groups'* (TQ86).

5.5.5. Theme 5: effective ways to support PE teachers to engage in more informal CPD

The majority of the teachers' suggestions on how to improve existing structures and opportunities for (and engagement in) informal CPD activities were related to the barriers that mentioned in the section above. In other words, most of them provided solutions that were the opposite of the barriers they experienced. In particular, their suggestions revolved around having 'more teachers in the same school'; 'more sport activities to interact with others'; 'create a PLCs'; 'Kurdish sports references'.

Some of the teachers (n=39, 15%) believed that engaging in informal CPD is matter related to the teachers themselves. These teachers thought that it is the teachers' responsibility to take responsibility of their own learning and engage in in informal CPD. One of the teachers stated *'Mainly, it is our responsibility to progress ourselves. We need to take advantages of every opportunity like reading, technology, participate in any sports events. The more you engage and discuss with others, the more knowledgeable you become'* (TQ131). There appeared to be a general perception in these responses that there is a number of teachers who are not interested in learning and improvement. They rather consistently blame other factors - e.g., government – for their lack of engagement in professional learning.

5.6. Discussion

The results from the present study identified two major issues that need further explanation and analysis. These included: (i) plausible explanations on the teachers'

mixed perceptions on the importance of informal CPD; and (ii) teachers' preferences in relation to the different CPD activities and potential explanations behind their views.

5.6.1. Is informal learning important?

Evidence from the present study indicated that PE teachers in KRI in overall were positive regarding the importance of informal CPD. However, analysis also showed that there was great variation in teachers' perceptions. Almost one fifth of the responders did not believe engaging in informal learning is important. Yet, just over half of them were highly positive. With a clear gap in policy legislation about teachers' CPD and informal professional learning, the fact that some PE teachers found little value in this form of learning is not surprising. It is also worth looking at their reasoning for these negative perceptions, which included a focus on the potential shortcoming of informal learning, including sharing 'unreliable information' as one of the primary shortcomings of informal learning. Besides, teachers have seen the non-input of experts into their informal learning directly is another negative aspect of informal learning.

For decades, scholars have written about some of these potential limitations of informal professional learning (Hargreaves, 1999, Lieberman and Miller, 2008, Makopoulou and Armour, 2014). There is however also compelling evidence on its value (Armour and Yelling, 2007, Dervent, 2015, Shoshani and Eldor, 2016). The PE teachers in this study acknowledged this and have written positively about the experiences they have had and their impact. They talked about the value of being able to communicate with others, sharing ideas. One of the most frequently mentioned outcomes of informal CPD was gaining *new information*. Previous theoretical and empirical studies have indicated that there is potential for teachers to develop new ideas and knowledge about the subject they teach from informal learning activities (Henze et al., 2009, Fraser, 2010, Verberg et al., 2013).

Informal learning was perceived as beneficial to the PE teachers' pedagogical knowledge such as *enhancing teaching practice, exploring a new way of teaching and, understanding their mistakes by analysing their own and other teachers' work*. Previous studies have also reported that, through various informal learning activities,

teachers have developed their teaching skills (Shapiro, 2003, Flores, 2005, Kang and Cheng, 2014) and learned about new teaching methods (Henze et al., 2009, Hoekstra et al., 2009, Kang and Cheng, 2014). Some of the teachers also indicated that through informal learning, necessary pedagogical skills were acquired, such as classroom management strategies (Henze et al., 2009). While teachers in one of these studies (Henze et al., 2009) stated that informal learning was important because it addresses gaps in subject knowledge after formal education, in this study, teachers did not elaborate on the importance of informal in relation to formal CPD.

A clear implication from this study is that there is a clear need to further enhance PE teachers' engagement in informal professional learning, and to maximise the benefits (and minimise the potential limitations) of this way of learning. To achieve this, clear legislation and evidence-informed guidelines are needed that are grounded in the national and international research and which are intended to support teachers in their endeavours to learn and improve their practices. It is interesting to note that the term 'expert' has reverberated in teachers' voices (when seeking to justify their responses on the importance of informal learning). There seemed to be a wider perception that that information from experts was more reliable than their colleagues. With evidence that some these teachers preferred formal CPD compared to informal, there is a need to help them reconceptualise the nature, purpose and impact of informal learning.

Armour and Yelling (2007) argue that 'PE teachers working with their professional colleagues should be encouraged and supported to set the CPD agenda, based on their collaborative assessment of their pupils' learning needs' (p. 193). In the context of KRI, PE teachers need more support to understand the benefit of collaborative work, get support to build strong partnerships with their peers and others within the PE profession, and to understand the benefits of meaningful interactions to resolve the problems they face in their daily work. As in the case of research reported in WestEd (2000), 'substantial progress is made only when teacher learning becomes embedded in the school day and the regular life of the school' (p. 11). It is also worthwhile to illuminate what supervisors or other external experts can make in PE teachers' informal learning in KRI. Armour and Yelling (2007) illustrate the importance of external advisers and experts to capitalise from formal 'CPD structures to support the professional learning that is already occurring within informal teacher networks' (p.

195). From this viewpoint, supervisors in KRI can provide expert input, helping PE teachers to work together. More importantly, they can encourage and advise PE teachers from different schools to create and participate in PLCs to break the PE teachers' isolation.

5.6.2. Individual and social learning

Concerning the nature of informal CPD activities undertaken by these PE teachers in KRI, evidence from the present study has identified that these teachers appeared to have a preference (overall) for individual compared to social learning. Reflection on one's practice was a popular activity compared to social interactions. It is important to not, while teachers' responses to the importance of informal learning were more in relation to the social aspect of informal learning (e.g., interaction with colleagues), the actual informal activities that undertaken by these teachers were more in the individual level. Specifically, teachers believed that reflection was more influential compared to other individual and social forms of learning.

One of the possible explanations about this finding, i.e., teachers' patterns of participation in informal CPD and its perceived impact on their practices, was the reality that only one PE teacher is employed in each school. This issue has been raised by most of the teachers as one of the barriers that minimises the possibility of interaction with colleagues. This finding is in line with (Desimone et al., 2014, Lohman, 2000, Lohman and Woolf, 2001) as they suggested that a lack of proximity to colleagues (especially in the same subject) inhibits informal learning. On a practical level, this means that teachers have fewer informal encounters (e.g., talks, discussions, opportunities for sharing, and collaborations between colleagues). From this perspective, it can be concluded that PE teachers in KRI can only interact with their school peers teaching other subjects. Indeed, teachers can benefit pedagogically from colleagues from other subjects, as they can discuss wider pedagogical issues / strategies. In a recent systematic review, it was argued that informal interactions are more likely to be pedagogical in nature compared to having a focus on the subject knowledge (Kyndt et al., 2016). This means that, following the recommendation presented in the previous section, there is value in considering educating teachers within KRIs schools to collaborate and form PLCs, irrespective of the subject they

teach. Further research is required to understand the value and impact of such an initiative, however.

Given the relative light teaching workload of teachers in KRI, creating cross-subject and within-subject but cross school PLCs is a realistic proposition. We know from international research that workload is normally a significant barrier in setting up such initiatives (Jurasaite-Harbison and Rex, 2010, Nawab, 2011, Christensen, 2013, Winchester et al., 2013). In overall, teachers in KRI teach for an average of 2 hours per day, and around 10-11 hours per week. This means that there is the time and the space to engage in informal professional learning. As previously noted, however, teachers need to be educated about the value of informal learning and to understand how to maximise such individual and social learning endeavours in ways that benefits their students.

5.7. Conclusion

The main objective of the present study was to understand PE teachers' perceptions and engagement in informal learning; i.e. in what informal activities they engage and what they find effective. The key findings were that PE teachers valued the idea of informal learning. Moreover, it appears that they rely on self-reflection compared to other forms of individual and social learning. They also believe that the most impactful informal professional learning activity is reflection on practice. Due to the informal professional learning importance for teachers to continue to learn about new methods, techniques and new strategies, and to review and develop their practice (Cheetham and Chivers, 2001, Fullan, 2007, Rose and Reynolds, 2007), the present study made the recommendations below for further benefit of PE teachers' informal professional learning within the context of KRI:

- There is a clear need to further enhance PE teachers' engagement in informal professional learning through legislation and evidence-informed guidelines that grounded in the national and international research which intended to support teachers in their endeavours to learn and improve their practices.

- PE teachers in KRI need more support to understand the benefit of collaborative work, get support to build strong partnerships with their peers and

others within the PE profession and to understand the benefits of meaningful interactions to resolve the problems they face in their daily work.

- It is also worthwhile to illuminate what supervisors or other external experts can make in PE teachers' informal learning in KRI. Supervisors can provide expert input, helping PE teachers to work together. More importantly, they can encourage and advise PE teachers from different schools to create and participate in PLCs to break the PE teachers' isolation.

- At the school level, PE teachers can also benefit pedagogically from colleagues of other subjects, as they can discuss wider pedagogical issues/strategies as long as there is a space to engage in informal professional learning in the school.

- There is value in considering educating teachers within KRIs schools to collaborate and from PLCs, irrespective of the subject they teach. Further research is required to understand the value and impact of such an initiative.

CHAPTER SIX: GENERAL DISCUSSION

It is now widely accepted that the nature of teachers' work is far from stable and predictable (Rayes et al., 2016). In some contexts, teachers work in an ever-changing and increasingly challenging educational landscape, expected to successfully implement curriculum reforms, innovate in their pedagogy, and to teach an increasingly diverse student population (Jones and Dexter, 2014). In order to improve, extend and renew the practice as well as raise student achievement, teachers need to engage in different forms of Continuing Professional Development (formal, non-formal and informal) (De Vries et al., 2014, King, 2014).

The purpose of the present research was to examine the PE teachers' CPD experiences in KRI. The research sought to answer the following research questions:

1. How do specialist supervisors in KRI support PE teachers to grow as professionals (i.e., develop their knowledge and practice)?
2. In what formal CPD opportunities do PE teachers in KRI participate and what do they find effective?
3. In what informal CPD activities do PE teachers in KRI engage and what do they find effective?

A mixed method was employed in order to address the research questions. Data were collected through three overlapping data collections phases, which consisted of: semi-structured interviews with eight supervisors; 450 surveys distributed to PE teachers in both basic and preparatory schools (302 returned the survey which gave a 67% return rate; and semi-structured interviews with 16 PE teachers who were working in both basic and preparatory schools. The purpose, methods and results were presented in three separate studies, each study focusing on one research question (study 1 focused on research question 1 etc.). In the following section, the key findings of all studies are summarised, the implications of the present study are discussed and considerations on future research are reported.

6.1. Summary of key findings

The first study sought to advance the line of inquiry by examining supervisors and teachers' perceptions on the nature, quality and perceived effectiveness of the existing supervisory arrangements in place. The overall question for the present study was: How do the specialist supervisors in Kurdistan Region-Iraq support PE teachers to grow as professionals (i.e., develop their knowledge and practice)? The following sub-questions were examined: (i) What are the supervisors' interpretations of their roles and responsibilities? (ii) In what ways do supervisors support teachers to learn and progress? (iii) What are the PE teachers' perceptions on the nature and impact of the existing supervisory provision? and (iv) What do PE teachers and supervisors believe needs to be done to improve the existing system? Findings from examining supervisors and PE teachers' perceptions on the nature and quality of the existing supervisory system in KRI pointed towards a number of challenges currently encountered and important pedagogical matters as far as effective supervision is concerned.

One of the key findings was that supervisors are not adequately prepared to supervise PE teachers under their remit. It appears that there is very little guidance on what their role and entails (at a policy level) and how best to undertake it (lack of training). Despite some deficiencies identified in the current system, most PE teachers involved in the study either as survey respondents or case studies appeared to value the potential of meaningful supervisory support and demanded more and better support from their supervisors. PE teachers' years in the profession (level of experience) did not appear to be a factor shaping their views. There was consensus from both male and female PE teachers across different stages in their career that supervisors can play an important role. They however acknowledged that supervisors need to be in a position to offer them new ideas, new ways of teaching to expand their teaching repertoire. They believed that more support of the same (i.e. what is already available) is not adequate and better-quality support was vital.

The second study sought to examine the nature, quality and impact of existing formal CPD provision in KRI from the perception of PE teachers. The overall question of the present study was: In what formal CPD opportunities do PE teachers participate and

what do they find effective? The following sub-questions have been examined: (i) What are PE teachers' perceptions about the importance of formal CPD provision and why? (ii) What are the patterns and frequency of participation in formal CPD? (iii) To what extent are PE teachers satisfied with the effectiveness of formal CPD provision? and (iv) What can be done to improve the quality and effectiveness of the available formal CPD provision?

Results suggested that PE teachers are overall positive about the purpose and importance of formal CPD, despite a clear decline in the number of formal CPD pursued in recent years. Their actual participation in formal CPD was, on average, less than one formal CPD per year. Lack of funding was a concern discussed. Especially after the financial crisis which has had a powerful impact on the limited provision of formal CPD as well as the quality of CPD provision. The role of the CPD providers was also discussed as concern have been raised by PE teachers in relation to the content and relevance of PE-CPD in KRI to ensure that public funds are used wisely and CPD is relevant to teachers' need.

Findings regarding the patterns of the available formal CPD suggested that training programmes appeared to vary in terms of content, duration and providers. especially, half of the PE-CPD provided to PE teachers was relevant to curriculum content. However, only one-tenth of them were related to teachers' pedagogical knowledge. Duration of the available PE-CPD was also varied. Half of the CPD programmes which PE teachers could recall were short duration within 1-6 hours, and the one-day programme was prevalent at 37%. However, the majority of the available formal PE-CPD were delivered in a practical, applied way and universities have delivered most of the CPD programmes.

The third and final study was designed with the aim to investigate PE teachers' informal CPD activities. The overall question of the present study was: In what informal CPD opportunities do PE teachers in KRI engage and, what do they find effective? The following sub-questions were also examined: (i) What are PE teachers' perceptions regarding the importance of informal CPD and why? (ii) What are the patterns and frequency of participation in informal CPD? (iii) To what extent engagement in informal CPD has an impact on PE teachers' knowledge and practice? (iv) What are more effective ways to support PE teachers to engage in effective

informal CPD?

Findings from the study three indicated that PE teachers in KRI in overall were positive about the purpose and importance of informal CPD. However, the analysis also showed that there was great variation in teachers' perceptions. Almost one fifth on the teachers did not believe engaging in informal learning was important as this type of learning might involve sharing unreliable information. The lack of expert input was also perceived to be problematic. However, overall, informal learning was perceived as beneficial to the PE teachers' pedagogical knowledge such as enhancing teaching practice, exploring a new way of teaching and, understanding their mistakes by analysing their own and other teachers' work.

Concerning the nature of informal CPD undertaken by PE teacher in KRI, evidence form study three identified that teachers appeared to have a preference (overall) for the individual compared to social learning. While teachers' responses to the purpose and importance of informal learning were more related to the social aspect (e.g., interaction with colleagues), the actual informal activities that undertaken by these teachers were more in the individual level. Specifically, teachers believed that reflection was more influential compared to other individual and social forms of learning.

6.2. Implications for policy and practice

Based on the findings from all studies reported in this thesis, there are a number of implications for the supervisory system and CPD provision (both formal and informal policy and practice) in order to improve the availability of PE teachers' CPD in KRI.

Regarding the supervision in KRI, supervisors need to be adequately prepared in order to support the teachers in an effective way. It is also crucial that key educational stakeholders clarify and clearly articulate the role and responsibilities of the supervisors. More and better support (i.e. quality of supervisory provision) is needed as most of the teachers who participated in the study felt that the nature of supervisory support was repetitive and a sort of outdated. There were clear calls for a system (SS) renewal.

It is proposed that to address these important matters, there is a need for a PE advisory group to be set up to move things forward, by developing a position statement and a series of evidence-informed guidelines to take more ownership of the professional development of PE teachers with a clear focus on improving the quality of provision. With supervisors being responsible for supporting, educating and evaluating teachers, which creates a potential conflict of interest at time, it would be worth reviewing what the primary goal of a supervisor is (support or evaluate). Once this is clarified, official documents need to capture this with clarity so that both supervisors and PE teachers have clear expectations in terms of what to expect from this collaboration.

Attention must also be placed on how much funding is allocated to this so that supervisors have sufficient CPD in order to offer high quality support to the PE teachers under their jurisdiction. The role of the supervisor can also be expanded to include forging links between schools so that PE teachers are not isolated in their own environment. This could involve setting up and supporting the sustainability of Professional Learning Communities (PLCs) across schools so that teachers and supervisors meet regularly to improve matters around teaching and learning. There is a wealth of support about the value of and potential challenges embedded in such PLCs, so such an initiative needs to be grounded in the available knowledge and evaluated through a robust evaluation research in the context of implementation in KRI.

In regard to the teachers' formal CPD in KRI, to maximise professional learning in CPD and given the value PE teachers placed on the quality of interactions with CPD providers, further attention needs to be paid on how CPD providers in KRI are trained to undertake this important role. In this context, the MoE needs to maintain full time CPD providers who are committed to this job and undergo intensive training. Similar to recommendations in similar studies (Makopoulou, 2018), CPD providers need meaningful and sustainable support to develop the conceptual and practical tools to facilitate professional learning effectively. In this way, it will be more likely that they provide high-quality professional learning to teachers.

It was explained that a significant aspect of the educational reform in KRI was to support students to think critically and analytically. It could be argued that teachers

themselves need to be supported to be independent, critical thinkers; and one way to achieve this is through CPD that fosters these skills. MoE should develop a long-term training CPD strategy, ensure that CPD providers are adequately trained, and the content and form of CPD provision is grounded in teachers' needs. It is also highly important that CPD is innovative and provides PE teachers with new ideas and approaches to teaching PE; but also, with the skills to develop professional learning power (Claxton, 2017).

To improve PE teachers' informal professional learning in KRI, there is a clear need to further enhance PE teachers' engagement in informal professional learning through legislation and evidence-informed guidelines that are grounded in the national and international research. Also, PE teachers in KRI need more support to understand the benefit of collaborative work, get support to build strong partnerships with their peers and others within the PE profession and to understand the benefits of meaningful interactions to resolve the problems they face in their daily work.

It is also worthwhile to illuminate what supervisors or other external experts can make in PE teachers' informal learning in KRI. Supervisors can provide expert input, helping PE teachers to work together. More importantly, they can encourage and advise PE teachers from different schools to create and participate in PLCs to break the PE teachers' isolation. At the school level, PE teachers can also benefit pedagogically from colleagues of other subjects, as they can discuss wider pedagogical issues/strategies as long as there is a space to engage in informal professional learning in the school.

6.3. Limitations and future recommendations

Within the present research, there are some important limitations that need careful consideration. Firstly, the primary purpose of this research was to capture the perceptions of both PE teachers and supervisors on the current supervisory system, formal and informal CPD in KRI. Perhaps, examining more closely the processes of policy making and enactment, but including policymakers in the research and examining in more depth how PE teachers 'enact' policy in practice would add further insights into the underlying principles and processes of current structures and

processes in place. However, this was not possible within the available resources. Thus, future research could involve policymakers to provide greater insights on the policy and practice gap.

The second limitation of this research is that it focused on examining research participants' perception, experiences, viewpoints rather than robustly evaluate CPD impact teacher and pupil learning outcomes. This is a limitation widely acknowledged within the CPD literature and it is not confined in this study only. This is mean that important questions remain which need to be answered about the true effects of the existing PE-CPD provision in KRI. There is a need for robust evaluation research which examines how students benefit as a result of teachers' CPD in various forms in the short and long term. This type of research should rely on a range of methods, including systematic observations which allows the researchers to develop a realistic and contextual understanding of how and why CPD provider / supervisors support teachers to learn and change/improve their practices.

In order to improve the quality of PE lesson in the KRI schools as well as enhance PE teachers' multiple forms of learning, the present research made the recommendations below:

- In order to renewal the supervisory system in KRI, there is a need for a PE advisory group to be set up to move things forward, by developing a position statement and a series of evidence-informed guidelines to take more ownership of the professional development of PE teachers with a clear focus on improving the quality of provision.

- Further research is also needed with utilising the *'systematic observation tool'* which allows the researchers to develop a realistic and contextual understanding of how *supervisors' role and responsibilities* (which explored in this study) are evidenced in practice (Makopoulou, 2018, p. 252).

- More research is needed to in the field of PE-CPD in KRI especially should seek robust evidence of the impact of specific PE-CPD initiatives on the student outcomes. Also, a systematic, robust research is needed to examine the effects and effectiveness of the short duration courses in KRI as it still prevalent.

- There is a clear need to further enhance PE teachers' engagement in informal professional learning through legislation and evidence-informed guidelines that grounded in the national and international research which intended to support

teachers in their endeavours to learn and improve their practices. Thus, it is also worthwhile to illuminate what supervisors or other external experts can make in PE teachers' informal learning in KRI. Supervisors can provide expert input, helping PE teachers to work together. More importantly, they can encourage and advise PE teachers from different schools to create and participate in PLCs to break the PE teachers' isolation.

United Nations Educational, Scientific, and Cultural Organization UNESCO states in 1978 that 'every human being has a fundamental right of access to physical education and sport, which are essential for the full development of his personality. The freedom to develop physical, intellectual and moral powers through physical education and sport must be guaranteed both within the educational system and in other aspects of social life' (United Nations Educational and Organization., 2015, p.10). within the context of KRI, there is a need for setting up a National Strategies for Physical Education and to be illuminated in the MoE's aims to promote the students' personal and social lifers, mentally and physically. Drawing upon (United Nations Educational and Organization., 2015, p.47) vision toward High-Quality Physical Education, it is important to the KRI's policy makers to consider that the National strategies for physical education should:

- Address the significant gaps between policy and actual implementation to ensure that physical education being applied consistently;

- Recommend curriculum time allocation, and those who responsible for QPE provision must be held accountable for ensuring recommended physical education curriculum time allocations is implemented;

- Ensure that head teachers, parents and other related stakeholders are aware of the benefits of physical education, and curriculum requirements should demand sufficient curriculum time for delivery in order to achieve these aims;
- According budget, promote school-community co-ordination and linked pathways to participation in physical activities and address current communication problems between different agencies;

- The relevance and quality of the physical education curriculum should be reviewed, especially where there is a sustained pre-disposition towards sports competition and performance-related activities. Developed in consultation with young people, provision should be personally meaningful, socially relevant, and accord with out-of-school lifestyles;

- Systems and mechanisms for monitoring and quality assurance should be developed to promote good practice and accountability within QPE policymaking and implementation.

APPENDICES

APPENDIX A

Letter to the head of the Supervision Unit

An examination of CPD experiences for PE teachers in Kurdistan Region-Iraq

Supervisor
D. Kyriaki Makopoulou
Lecturer in Physical Education and Sport Pedagogy
School of Sport, Exercise and Rehabilitation Sciences
University of Birmingham
B15 2TT, Birmingham

Researcher
Choman Kamil Amin
PG researcher in Sport Pedagogy
School of Sport, Exercise and Rehabilitation Sciences
University of Birmingham
B15 2TT, Birmingham

Dear Mr/Mrs/Miss/Dr,

A researcher based in the University of Birmingham is investigating in CPD experiences for PE teachers in Kurdistan Region-Iraq. Many thanks for agreeing provisionally to use your setting as a research site.

Research activities
During this visit, the researcher would like to carry out the following research activities:

- In-depth, semi-structured, individual interviews with supervisors in the supervision unit (approximate duration 60 minutes).

Ethics
All procedures have been approved by the University of Birmingham Ethical Review Committee. All information provided will be treated in strict confidence and any records kept will be anonymous (i.e. codes will be allocated to all research participants and the setting in which they work). If at any time, before, during or after the start of the data collection, you wish your setting to withdraw from the study, please just contact the main investigator. You can withdraw for any reason by July 2016 and you will not be asked to explain your reasons for withdrawing. Please **contact Choman if you no longer wish your supervision unit to be part of the study**. In this way, we will ensure that the information provided is not included in the PhD thesis or any future publications.

I hope you will give permission to use your setting as a research site by filling in the form attached to this latter. If you have any queries concerning the information presented here please do not hesitate to contact Choman on or via email

Yours sincerely,
Choman Kamil Amin

PERMISSION FORM

An examination of CPD experiences for PE teachers in Kurdistan Region-Iraq

The purpose and details of this study have been explained to me. I understand that this study is designed to further scientific knowledge and that all procedures have been approved by the University of Birmingham Ethical Review Committee.

I have read and understood the participant information sheets, the letter directed to myself, and this consent form. I have had an opportunity to ask questions about the participants' involvement in the study. I understand that the supervisors are under no obligation to take part in the study and that they have the right to withdraw from this study (individually or collectively) for any reason without being required to explain their reasons for withdrawing. In order to withdraw, they need to contact the main investigator. I understand that all the information provided will be treated in strict confidence and will be kept anonymous and confidential.

I give permission to the researchers to use the supervision unit as a research site.

Signature of investigator:

Supervision Unit name _____

Your name _____

Your signature _____

Date _____

APPENDIX B

Participant Information Sheet (phase one)

An examination of CPD experiences for PE teachers in Kurdistan Region-Iraq

Supervisor

D. Kyriaki Makopoulou

Lecturer in Physical Education and Sport Pedagogy

School of Sport, Exercise and Rehabilitation Sciences

University of Birmingham

B15 2TT, Birmingham

Researcher

Choman Kamil Amin

PG researcher in Sport Pedagogy

School of Sport, Exercise and Rehabilitation Sciences

University of Birmingham

B15 2TT, Birmingham

What is the purpose of the study?

The study will seek to (i) to examine/measure the impact/effectiveness of a school-based system in place (e.g., teacher supervisors) that seek to offer in-service teachers ongoing support to develop and progress in their learning; and (ii) explore how physical education teachers develop their professional knowledge and practices over their career.

What will I be asked to do?

Your setting has been selected to be a case study. The Principal Investigator (Choman Kamil Amin) from the University of Birmingham will visit you. During these visits, you will be asked to participate in (in-depth, semi-structured, individual interviews).

Once I take part, can I change my mind?

Yes. If you wish to withdraw from the study, please contact Choman so your responses are located and removed. You can withdraw for any reason by July 2016 and you will not be asked to explain your reasons for withdrawing.

Will my taking part in this study be kept confidential?

Yes. All procedures have been approved by the University of Birmingham Ethical Review Committee. All information provided will be treated in strict confidence. During the interviews, you will not be asked to disclose your name and any other identifiable information. If any such information is disclosed, the transcription of the interview will be carried out by Choman All hard copies of the questionnaires will be kept securely in a locked office. According to university regulations, all data will be preserved and accessible for ten years. All identifying information will be changed and your confidentiality is assured, as pseudonyms are to be used and linked to participant data (complying with the University's Data Protection Policy and the University's Records Management Policy). Research data related to future publications might be available for discussion with other researchers, but any identifiable information will not be disclosed at any given point.

What will happen to the results of the study?

Results will be published in Choman's PhD thesis and academic journals.

What do I get for participating?

A summary of the findings of the project can be provided upon request.

I have some more questions who should I contact?

You are free to contact me at any stage of the project by email or phone

Participant Consent form

An examination of CPD experiences for PE teachers in Kurdistan Region-Iraq

The purpose and details of this study have been explained to me. I understand that this study is designed to further scientific knowledge and that all procedures have been approved by the University of Birmingham Ethical Review Committee.

I have read and understood the information sheet and this consent form.

I have had an opportunity to ask questions about my participation in the study.

I understand that I am under no obligation to take part in the study – my participation is voluntary.

I understand that I have the right to withdraw from this study by informing the principal investigator. I can withdraw for any reason by July 2016. I will not be required to explain my reasons for withdrawing.

I understand that all the information I provide will be treated in strict confidence and will be kept anonymous and confidential.

I agree to participate in this study.

Your name ……..

Your signature ……

Name of investigator …….

Signature of investigator……

Date ……

APPENDIX C

Interview agendas for case study PE teacher's supervisors

The purpose will be to:

- Develop a clear understanding of what this role entails and what the aims/goals of the supervisory system are.
- Examine the supervisors' interpretation of the policies on the supervisory system and develop an understanding of how these policies are implemented by different supervisors.

Key question and prompts

1. What are your main roles and responsibilities as a teacher supervisor? How is your role described in the relevant policies?
2. What challenges do you have face as a supervisor?
3. What is the most rewarding aspect of this role and why?
4. How many teachers do you supervise per year?

- What are your thoughts on the number of teachers you supervise?
- Are there any issues re: your workload that might affect your effectiveness or do you believe that the number of teachers you supervise is adequate?

5. How many times do you visit your teachers each year?

- Do you think this number of visits is enough / sufficient? Why?
- Is there any guidance in terms of how many visits you should carry out over the year? Is the number of visits determined by the unit or is there flexibility for you to decide how many visits you need to carry out? [It is important to understand whether there is a minimum compulsory number of visits per year or not]

6. What do your school visits entail? What do you do when you visit a school?
7. You said before that as part of your role, you evaluate teachers. Can you please explain the purpose and focus of these evaluations? [Note: it is anticipated that this will be mentioned by the supervisors in response to question 1. If not, I will

make reference to the relevant policy documents to draw their attention to this aspect of their role and to explore their understanding of what teacher evaluations entail].

8. How many times do you evaluate the teachers in the study year?

- What is the main focus of the evaluations? [Do they assess teachers' knowledge? Are they examining their practices?]
- Are there any guiding criteria to support your evaluation? If yes, what are your views on these criteria?
- Which type of evaluation (method) do you use to evaluate teachers? What types of evidence do you collect in order to evaluate teachers?
- Why do you think this is the best / most effective method?
- Are there any shortcomings in this method/s?
- What will happen if one of the teachers fails the evaluation?

9. Which type of feedback do you usually use during those visits?

- What is the focus of the feedback?
- When do you give the feedback and why do you think this is the best timing to provide the feedback? Which time you see is the best time to give the feedback, before, during or after the PE lessons? Why?
- How do you provide the feedback and where?

10. What are your views on the kind of support different teachers, with different years in the profession, need?

- Do you think newly appointed teachers need more or less support than experienced teachers (or equal) and why?

11. In your role as a supervisor, you come across teachers who like the subject and some who do not perhaps like the subject (this is because of the entry system to the university). Do you think that teachers' relationships with the subject (the extent to which they like teaching PE or not) influence their progress as professionals and their practices? If yes /no, why is that?

APPENDIX D

Participant Information Sheet (Phase two)

An examination of CPD experiences for PE teachers in Kurdistan Region-Iraq

Supervisor
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What is the purpose of the study?

The study will seek to (i) explore how physical education teachers develop their professional knowledge and practices over their career; and (ii) to examine/measure the impact/effectiveness of a school-based system in place (e.g., teacher supervisors) that seek to offer in-service teachers ongoing support to develop and progress in their learning.

What will I be asked to do?

You will be asked to complete one hard-copy survey (you will need approximately 15 minutes to complete the survey). By completing this survey, you give your informed consent to participate in the study.

Once I take part, can I change my mind?

Yes. If you wish to withdraw from the study, please contact Choman providing the reference number (which will be provided to you once you complete the survey) so your responses are located and removed. You can withdraw for any reason by July 2018 and you will not be asked to explain your reasons for withdrawing.

Will my taking part in this study be kept confidential?

Yes. All procedures have been approved by the University of Birmingham Ethical Review Committee. All information provided will be treated in strict confidence and all hard copies of the questionnaires will be kept securely in a locked office. According to university regulations, all data will be preserved and accessible for ten years. All identifying information will be changed so that any records kept will be anonymous (complying with the University's Data Protection Policy and the University's Records Management Policy). Research data related to future publications might be available for discussion with other researchers, but any identifiable information will not be disclosed at any given point.

What will happen to the results of the study?

Results will be published in Choman's PhD thesis and academic journals.

What do I get for participating?

A summary of the findings of the project can be provided upon request.

I have some more questions who should I contact?

You are free to contact me at any stage of the project by email [redacted] or phone [redacted]

APPENDIX E

An examination of CPD experiences for PE teachers in Kurdistan Region-Iraq

A research team at the University of Birmingham (Choman Amin, Supervisor: Dr. Kyriaki Makopoulou) is investigating what opportunities PE teachers in Kurdistan Regional (Iraq) have to engage in Continual Professional Development (CPD). To this end, we have designed a short, survey to:

- Explore what CPD opportunities PE teachers engage in (both in and outside their schools) and understand the frequency of their participation;
- Understand the nature of CPD impact on their practices and as well as pupil learning (CPD effectiveness); and
- Explore what can be done to improve the quality and effectiveness of the available CPD provision.

Please fill in all the questions presented in this questionnaire. All procedures have been approved by the University of Birmingham Ethical Review Committee and all information provided will be treated in strict confidence. The questionnaire is anonymous; thus, your confidentiality is assured.

The study is being carried out by (Choman Amin) under the supervision of (Dr. Kyriaki Makopoulou) from the University of Birmingham. This study is part in fulfilment of PhD Research in Physical Education and Sport Pedagogy.

PART ONE: YOU AND YOUR SCHOOL

1. What is your age? _____

2. What is your gender? Male _____ Female _____

3. Please indicate the highest qualification you have obtained **(Please tick only one of the following)**

PhD _____

Master's degree _____

Bachelor's degree _____

Sports Diploma _____

Other

_____

4. How many years have you been teaching? _____

5. In which type of school are you currently teaching?

Basic School _____
Preparatory School _____
Vocational School _____
Independent School _____

6. What is the approximate number of hours you spend in contact with your students weekly? _____

7. What is approximately your school's population? _____

8. What is the average number of students on roll in each class? _____

PART TWO: VIEWS ON EXSTING FORMAL CPD

1. To what extent do you think participation in formal CPD is important?

Not important at all	Not as important	Somewhat important	Very important	Extremely important
1	2	3	4	5

Please explain why.

2. In how many formal CPD opportunities did you participate over last five years? **Please add the number in the box**.

3. Can you please provide information on the formal CPD activities you engaged in over the last five years and you can recall? Please note down the title/topic, duration, year you participated and provider, **as in the example provided.**

Title or Topic	When was it done	Duration (D) Span (S)	Type or Form	Provider
Use of different teaching method	2012	8 hours over 2 consecutive days	Workshop	University of Sulaymaniyah

4. How satisfied are you with the available formal CPD opportunities offered by different providers? **Please answer N/A if you have not participated in the named activities over the last five years.**

	Not satisfied at all	Not very satisfied	Somewhat satisfied	Very satisfied	Extremely satisfied	Not engaged
Workshops organised by the Universities	**1**	**2**	**3**	**4**	**5**	**N/A**
Workshops organised by the supervisors	**1**	**2**	**3**	**4**	**5**	**N/A**
Workshop organised by the Training Unit	**1**	**2**	**3**	**4**	**5**	**N/A**

Other (please specify)

_____

5. To what extent has participation in these formal CPD opportunities had an impact on your practise?

No impact at all	Very small impact	Some Impact	Significant Impact	Extreme impact
1	2	3	4	5

6. In your view, what are the barriers that hinder your participation in formal CPD activities? **(e.g., external barriers, such as lack of opportunities, lack of funding or personal barriers, such as family commitments)**

7. What needs to be done to improve future formal CPD provision?

PART THREE: VIEWS ON EXSTING INFORMAL CPD

1. To what extent do you think participation in informal CPD is important?

Not important at all	Not as important	Somewhat important	Very important	Extremely important
1	2	3	4	5

Please explain why.

2. Over the last year, how often did you engage in each of the following informal CPD activities?

	Once a year	Approximately twice a year	Twice a term	Once a month	Once a week
Informal dialogue with colleagues with the aim to improve teaching and learning	1	2	3	4	5
Observation of colleagues to improve teaching and learning	1	2	3	4	5
Joint teaching with the aim to improve teaching and learning	1	2	3	4	5

Received mentoring or mentored other teachers	**1**	**2**	**3**	**4**	**5**
Reading literature to improve own knowledge	**1**	**2**	**3**	**4**	**5**
Reflection upon my own practice to improve teaching and learning	**1**	**2**	**3**	**4**	**5**

3. To what extend do you think engagement in the following informal CPD activities have had an impact on your practice?

	No impact at all	**Very small impact**	**Some impact**	**Significant impact**	**Extreme impact**
Informal dialogue with colleagues with the aim to improve teaching and learning	**1**	**2**	**3**	**4**	**5**
Observation of colleagues to improve teaching and learning	**1**	**2**	**3**	**4**	**5**
Joint teaching with the aim to improve teaching and learning	**1**	**2**	**3**	**4**	**5**
Received mentoring or mentored other teachers	**1**	**2**	**3**	**4**	**5**
Reading literature to improve own knowledge	**1**	**2**	**3**	**4**	**5**
Reflection upon my own practice to improve teaching and learning	**1**	**2**	**3**	**4**	**5**

4. In your view, what are the barriers that might hinder further participation in informal CPD activities? **(e.g., external barriers such as lack of opportunities, lack of funding or personal barriers, such as family commitments)**

5. What can be done to support you to engage in more informal CPD in more effective ways?

PART FOUR: VIEWS ON EXSTING SUPERVISORY SYSTEM

1. Over the last five years, how often was your supervisor's annual support? **Please write the number under the academic year**.

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
Met with you individually to discuss instructional methods and approaches					
Observed your classroom instruction and provided feedback on using curriculum material					
Observed your classroom instruction and provided feedback on improving your teaching					
Gave you the opportunity to ask questions					
Met with the teachers as a group to discuss curriculum or instructional issues					

2. To what extent are you satisfied with the effectiveness of the supervisory support you have experienced over the last year?

Not satisfied at all	Not very satisfied	Somewhat satisfied	Very satisfied	Extremely satisfied
1	2	3	4	5

Please explain why.

4. In your view, what needs to be done to improve the supervisory system?

SPACE FOR COMMENTS

Thank you for spending time on this
Choman

An examination of CPD experiences for PE teachers in Kurdistan Region-Iraq

توێژینەوە لە چالاکیەکانی پەرەپێدانی پیشەیی بۆ مامۆستای وەرزش لە هەرێمی کوردستان

ئەم توێژینەوەیە لە لایەن تیمی زانکۆی بیرمینگهام (چۆمان کامل امین، کریاکی ماکۆپۆلۆ) بەڕێوە دەبرێت کە دەکۆڵێتەوە لەو چالاکیانەی (کۆرس، ۆرکشۆپ، گفتوگۆی زانستی لە نێوان هاوپیشەکان، هتد) کە مامۆستایانی وەرزش ساڵانە بەژداری تێدا دەکەن بە مەبەستی بەرزکردنەوەی ئاستی زانستیان لە هەرێمی کوردستان

ئامانجی ئەم توێژینەوەیە

- دەرخستنی جۆری ئەو چالاکیانەی کە مامۆستای وەرزش بەژداری تێدا دەکەن لە ناو یان لە دەرەوەی خوێندنگا
- تێگەیشتن لە سروشتی ئەو چالاکیانە و کاریگەریان لەسەر پێشخستنی ئاستی مامۆستایان و هەروەها بەرزکردنەوەی ئاستی فێرکردنی خوێندکاران
- ئەو رێکارانە چین کە پێویستە بکرێت لە پێناو بەرزکردنەوەی ئاست و کوالیتی ئەو چالاکیانەدا

داوا لە هەموو مامۆستایانی بەرێز دەکەین کە ئەم ستێرڤێ یە وەڵام بدەنەوە لەگەڵ پرکردنەوەی هەموو پرسیارەکان بە ئامانجی بەرزکردنەوەی ئاستی زانست. ئەم توێژینەوەیە رێگەپێدراوە لە لایەن)لیژنەی پێداچونەوەی زانستی (لە زانکۆی بیرمینگهام لە وڵاتی بریطانیا هەروەها مامەڵەکردن لەگەڵ زانیاریەکانی ئەم توێژینەوەیە بە شێوەیەکی نهێنی دەبێت

بەشی یەکەم

زانیاری لە بارەی خۆت و قوتابخانەکەت

1. تەمەنت چەندە :_____

٢. رەگەز :نێر ○ ، مێ ○

٣. بەرزترین بروانامە کە بەدەستت هێناوە

- دکتۆرا ○
- ماجستێر ○
- بکالۆریۆس ○
- پەیمانگای وەرزشی ○

دیکە _____

٤. ساڵی خزمەت وەک مامۆستا :_____

٥. جۆری ئەو قوتابخانەیەی کە وانەی تێدا دەڵێیتەوە

- بنەڕەتی ○
- ئامادەیی ○
- پیشەیی ○

دیکە _____

٦. ژمارەی کاتژمێرەکانی وانەوتنەوە لە یەک هەفتەدا :_____

٧. ژمارەی خوێندکاران لە قوتابخانەدا :_____

٨. ژمارەی خوێندکاران لە یەک پۆلدا :_____

بەشی دووەم

بیرو رای خۆت لەسەر چالاکیە فەرمیەکانی پەرەپێدانی پیشەیی

Formal CPD

مەبەست لە (چالاکیە فەرمیەکانی پەرەپێدانی پیشەیی) ئەو چالاکیانەیە کە پلان بۆ دارێژراون و بە شێوەیەکی فەرمی بەژداری تێدا دەکرێت وەك (وۆرکشۆپ، کۆرس، کۆنفرانس، هتد) کە هەمیشە پەیوەستە بە کاتەوە و لەلایە کەسانی تر‌ەوە یان دامەزراوەوە پێشکەش دەکرێت. تکایە بۆ زانیاریت لەم راپرسیەدا بە (چالاکیە فەرمیەکان) ناوی دەهێنرێت

1. بە بروای تۆ، هەتا چی ئاستێك بەشداری کردن لە چالاکیە فەرمیەکاندا گرنگە؟.

بە هیچ شێوەیەك گرنك نیە	گرنگیەکی کەمی هەیە	تا رادەیەك گرنگە	زۆر گرنگە	بە شێوەیەکی کاریگەر گرنگە
1	2	3	4	5

تکایە رونی بکەرەوە بۆچی؟

٢. لە ماوەی پێنج سالی رابردوودا، لە چەند چالاکی فەرمیدا بەژداریت کردوە؟ تکایە بە ژمارە لە چوارگۆشەکەی خوارەوەدا بینەسە

٣. لە ماوەی پێنج سالی رابردودا، لە چەند چالاکی فەرمیدا بەژداریت کردوە؟
تکایە ناوی چالاکیەکە، ماوەکەی، لەگەل سالی بەژداری کردنەکە بنوسە وەك ئەو نمونەیەی کە پێشکەش کراوە

ناوی چالاکیەکە	کاتی چالاکیەکە	ماوەی چالاکیەکە	جۆری چالاکیەکە	چی لایەنێك پێشکەشی کردوە
بەکار هینانی شێوازی وانە وتنەوەی جۆراوجۆر	2012	٨ سەعات لە ماوەی ٢ رۆژدا	وۆرکشۆپ	زانکۆی سلێمانی

٤. هەتا چی رادەیەك رازیت لەم چالاکیە فەرمیانەی کە پیشکەش کراون لە لایەنە جیاوازەکانەوە؟

	بە هیچ شیوەیەك رازی نیم	زۆر بە کەمی رازیم	تا رادەیەك رازیم	زۆر رازیم	تا رادەیەکی زۆر باش رازیم	بەژداریم نەکردوە
وۆرکشۆپ کە لە لایەن زانکۆوە پێشکەش کرابێت	1	2	3	4	5	ب ١ ن
کۆرس لە لایەن سەرپەرێشتیارەوە پێشکەش کرابێت	1	2	3	4	5	ب ١ ن
ورکشۆپ کە لە لایەن یەکەی راهێنانەوە پیشکەش کرابێت	1	2	3	4	5	ب ١ ن

بێجگە لەو چالاکیانەی سەرەوە، ئەگەر لە چالاکی تر بەژداریت کردوە تکایە بیانوسە و رای خۆت بڵی لەسەری

	بە هیچ شێوەیەك رازی نیم	زۆر بە کەمی رازیم	تا رادەیەك رازیم	زۆر رازیم	تا رادەیەکی زۆر باش رازیم	بەژداریم نەکردوە
	1	2	3	4	5	ب\ن
	1	2	3	4	5	ب\ن
	1	2	3	4	5	ب\ن

٥. بە بروای تۆ، هەتا چی رادەیەك ئەو چالاکیە فەرمیانەی کە لە سەرەوە نیشاندراون کاریگەریان لەسەر لایەنی پراکتیکیت (عملی)هەبووە؟

بە هیچ شێوەیەك کاریگەری نەبووە	زۆر بە کەمی کاریگەری هەبووە	تا رادەیەك کاریگەر بووە	زۆر کاریگەر بووە	بە شێوەیەکی زۆر زۆر کاریگەر بووە
1	2	3	4	5

٦. بە رای تۆ، رێگریەکان چین لەبەردەم بەژداریکردنی مامۆستایان لە چالاکیە فەرمیەکاندا؟
بۆ نمونە (رێگریە دەرەکیەکانی وەك کەمی چالاکی، یان کەمی پشتگیریە داراییەکان)هەروەها (رێگریە تایبەتیەکانی وەك پەیوەستی خێزانی)یان هتد

٧. بە بروای تۆ، پێویستە چی بکرێت لە داهاتودا بۆ بەرەوپێشبردنی چالاکیە فەرمیەکان؟

بەشی سێیەم

بیرو رای خۆت لەسەر چالاکیە نا فەرمیەکانی پەرەپێدانی پیشەیی

Informal CPD

مەبەست لە (چالاکیە نا فەرمیەکانی پەرەپێدانی پیشەیی) ئەو چالاکیانەیە کە هەمیشە بی پلان رودەدەن بە هیچ شێوەیەك پەیوەست نین بە کاتەوە وەك (گفتوگۆ کردن لە نێوان هاوپیشەکان، گۆرینەوەی زانیاری، چاودیری کردنی وانەوتنەوەی هاوپیشەکان بە مەبەستی فێربونی زیاتر، هتد). ئەم جۆرە چالاکیانە سەربەخۆ رۆدەدات. تکایە بۆ زانیاریت لەم راپرسیەدا بە (چالاکیە نا فەرمیەکان) ناوی دەهێنریت

1. بە بروای تۆ، هەتا چی ئاستێك تێکەڵ بونت لە چالاکیە نا فەرمیەکاندا گرنگە؟

بە هیچ شێوەیەك گرنك نیە	گرنگیەکی کەمی هەیە	تا رادەیەك گرنگە	زۆر گرنگە	بە شێوەیەکی زۆر زۆر گرنگە
1	2	3	4	5

تکایە رونی بکەرەوە بۆچی؟

٢. لەماوەی ساڵی رابردودا، تا چی رادەیەك تێكەڵ بویت لەم چالاكیە نا فەرمیانەدا؟

	یەك جار لە ساڵێكدا	دوو جار لە ساڵێكدا	یەك جار لە كۆرسێكدا	یەك جار لە مانگێكدا	یەك جار لە هەفتەیەكدا
گفتوگۆی زانستی لەگەڵ هاوپیشەكەت بە ئامانجی پێشخستنی ئاستی وانە وتنەوەت	1	2	3	4	5
بینین و سەیركردنی وانە وتنەوەی هاوپیشەكەت	1	2	3	4	5
بەژداری كردن لە وتنەوەی وانە لەگەڵ هاوپیشەكەت لە پێناو بەرزكردنەوەی ئاستی زانستیت	1	2	3	4	5
رێنمایی كراربیت لە لایەن هاوپیشەكەتەوە یان تۆ رێنمایییت بەخشیبێ	1	2	3	4	5
خوێندنەوەی سەرچاوە بۆ پێشخستنی ئاستی زانیاریم	1	2	3	4	5
پستبەستن بە خیبرەی خۆت بۆ بەرەوپێش بردنی وانەوتنەوە و فێربوون	1	2	3	4	5

٣. بە بروای تۆ، تا چ ئاستێك تێكەڵ بوونت لەم چالاكیە نا فەرمیانەی خوارەوەدا كاریگەریان لەسەر لایەنی پراكتیكیت (عملی) هەبووە؟

	بە هیچ شێوەیەك كاریگەری نەبووە	زۆر بە كەمی كاریگەری هەبووە	تا رادەیەك كاریگەری بووە	زۆر كاریگەر بووە	بە شێوەیەكی زۆر زۆ كاریگەر بووە
گفتوگۆی زانستی لەگەڵ هاوپیشەكەت بە ئامانجی پێشخستنی ئاستی وانە وتنەوەت	1	2	3	4	5
بینین و سەیركردنی وانە وتنەوەی هاوپیشەكەت	1	2	3	4	5
بەژداری كردن لە وتنەوەی وانە لەگەڵ هاوپیشەكەت لە پێناو بەرزكردنەوەی ئاستی زانستیت	1	2	3	4	5
رێنمایی كراربیت لە لایەن هاوپیشەكەتەوە یان تۆ رێنمایییت بەخشیبێ	1	2	3	4	5
خوێندنەوەی سەرچاوە بۆ پێشخستنی ئاستی زانیاریم	1	2	3	4	5
پستبەستن بە خیبرەی خۆت بۆ بەرەوپێش بردنی وانەوتنەوە و فێربوون	1	2	3	4	5

٤. بە رای تۆ، رێگریەکان چین لەبەردەم تێکەڵ بوونی مامۆستایان لە چالاکیە نا فەرمیەکاندا؟
بۆ نمونە (رێگریە دەرەکیەکانی وەك کەمی مامۆستای وەرزش لە یەك قوتابخانەدا بۆ ئەوەی دەرفەتی گفتوگۆی زانستی دروست ببێت)یان (رێگریە تایبەتیەکانی وەك پەیوەستی خێزانی)، ئەمانە نمونەن، تکایە ئەگەر رێگری زیاترت هەیە بیانوسە

٥. بە رای تۆ، چۆن پشتگیری بکرێت بۆ ئەوەی زیاتر تێکەڵ ببیت لە چالاکیە نا فەرمیەکاندا؟

بەشی چواردەم

بیرو رای خۆت لەسەر سەرپەرشتیار

1. لە ماوەی پێنج سالی رابردودا، تا چی رادەیەك سەرپەرشتیارەکەت پشتگیری کردووی لەم برگانەی خوارەوەدا؟ تکایە بە ژمارە لە ژێر سالی خوێندنەکەدا بینەسە

	2013-2012	2014-2013	2015-2014	2016-2015	2017-2016
چەند جار سەرپەرشتیارەکەت سەردانی کردووی بۆ تاووتوێ کردنی شێواز و رێگاکانی فێرکردن؟					
چەند جار سەرپەرشتیارەکەت سەیری وانە وتنەوەی کردوت و لە پاشاندا رێنمایی کردووی بە پشتبەستن بەو پرۆگرامەی کە هەیە بۆ وانەی وەرزش؟					
چەند جار سەرپەرشتیارەکەت سەیری وانە وتنەوەی کردویت و لە پاشاندا رێنمایی کردووی بۆ پێشخستنی شێوازی وانە وتنەوەکەت؟					
چەند جار بە شێوەی گروپ لەگەل سەرپرشتیارەکەتاندا کۆبونەوەتان کردووە بۆ تاووتوێ کردنی کێشەکانی مامۆستایان؟					
تا چ ئاستێك سەرپەرشتیارەکەت رێگات پێ دەدات پرسیار بکەیت لە بارەی بابەتە زانستیەکان ، بۆ نمونە کاتێك سەردانت دەکات لە قوتابخانە یان لە رێگای (تەلەفۆن یان سۆشیال میدیاوە)، تکایە وەلامەکەت هەلبژیرە	**بە هیچ شیوەیەك رێگام پی نادات 1**	**زۆر بە کەمی رێگام پی دەدات 2**	**تا رادەیەك رێگام پی دەدات 3**	**تا رادەیەکی زۆر رێگام پی دەدات 4**	**تا رادەیەکی زۆر باش رێگام پی دەدات 5**

٣. تا چی رادەیەك رازیت لە کاریگەری سەرپەرشتیارەکەت لە ماوەی سالی رابردوودا؟

بە هیچ شێوەیەك رازی نیم	زۆر بە کەمی زازیم	تا رادەیەك رازیم	زۆر رازیم	تا رادەیەکی زۆر باش رازیم
1	2	3	4	5

تکایە رونی بکەرەوە بۆچی؟

٤. بە رای تۆ، پێشنیارت چیە بۆ ئەوەی سەرپەرشتیار کاریگەر تر بێت؟

٥. بە بروای تۆ، ئەو بوارانە کامانەن کە پێویستە لە داهاتودا)ۆرکشۆپ، کۆرس، کۆنفرانس(ی زاتریان لەسەر بکرێت؟

تکایە ئەگەر کۆمێنتت هەیە لەم چوارگۆشەیەی خوارەوەدا بینوسە

سوپاس بۆ بەخشینی کاتت بۆ پرکردنەوەی ئەم راپرسیە

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APPENDIX F

Participant Information Sheet (phase one)

An examination of CPD experiences for PE teachers in Kurdistan Region-Iraq

Supervisor

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What is the purpose of the study?

The study will seek to (i) explore how physical education teachers develop their professional knowledge and practices over their career; and (ii) to examine/measure the impact/effectiveness of a school-based system in place (e.g., teacher supervisors) that seek to offer in-service teachers ongoing support to develop and progress in their learning.

What will I be asked to do?

Your setting has been selected to be a case study. The Principal Investigator (Choman Kamil Amin) from the University of Birmingham will visit you. During these visits, you will be asked to participate in (in-depth, semi-structured, individual interviews).

Once I take part, can I change my mind?

Yes. If you wish to withdraw from the study, please contact Choman so your responses are located and removed. You can withdraw for any reason by July 2018 and you will not be asked to explain your reasons for withdrawing.

Will my taking part in this study be kept confidential?

Yes. All procedures have been approved by the University of Birmingham Ethical Review Committee. All information provided will be treated in strict confidence. During the interviews, you will not be asked to disclose your name and any other identifiable information. If any such information is disclosed, the transcription of the interview will be carried out by Choman All hard copies of the questionnaires will be kept securely in a locked office. According to university regulations, all data will be preserved and accessible for ten years. All identifying information will be changed and your confidentiality is assured, as pseudonyms are to be used and linked to participant data (complying with the University's Data Protection Policy and the University's Records Management Policy). Research data related to future publications might be available for discussion with other researchers, but any identifiable information will not be disclosed at any given point.

What will happen to the results of the study?

Results will be published in Choman's PhD thesis and academic journals.

What do I get for participating?

A summary of the findings of the project can be provided upon request.

I have some more questions who should I contact?

You are free to contact me at any stage of the project by email [redacted] or phone [redacted]

Participant Consent form

An examination of CPD experiences for PE teachers in Kurdistan Region-Iraq

The purpose and details of this study have been explained to me. I understand that this study is designed to further scientific knowledge and that all procedures have been approved by the University of Birmingham Ethical Review Committee.

I have read and understood the information sheet and this consent form.

I have had an opportunity to ask questions about my participation in the study.

I understand that I am under no obligation to take part in the study – my participation is voluntary.

I understand that I have the right to withdraw from this study by informing the principal investigator. I can withdraw for any reason by July 2016. I will not be required to explain my reasons for withdrawing.

I understand that all the information I provide will be treated in strict confidence and will be kept anonymous and confidential.

I agree to participate in this study.

Your name ……..

Your signature ……

Name of investigator …….

Signature of investigator……

Date ……

APPENDIX G

Interview Agendas for PE teachers

1. Insight regarding the formal CPD opportunities

Formal CPD such as initial education, workshops and staff training course. It is planned opportunity that have the clear intention to learn and it is usually has a certificate.

1. Can you please recall a very effective formal CPD you had previously attended?

    - Please explain why it was effective, did this formal CPD opportunity had an impact on your knowledge and/or practice, and/or pupils?

    - Please can you illustrate information regarding the content, duration, form and nature of engagement of the formal CPD?

    - What have you learned by attending that formal CPD? In what ways you changed your practice? In what way your pupils benefitted?

2. If applicable, can you please recall an ineffective formal CPD you had previously attended?

    - Please explain why it was ineffective.
    - Can you illustrate an information regarding the content, duration, form and nature of engagement of the formal CPD?

3. If you have not attended formal CPD at all:

    - What are your overall thoughts on the fact that you have not attended any formal CPD?

    - What affect/impact has this lack of formal CPD engagement had on your knowledge and practice?

    - Do you believe that you would teach differently if you had formal CPD, what would be different and why?

    - Can you offer the same quality of teaching without formal CPD? Why?

4. Do you have concrete suggestions on how formal CPD can be improved in the future?

5. Please can you identify who decides what CPD is available to who?

6. What CPD opportunities would you really love to pursue this year? What would you like to learn? Why?

7. Due to the current socio-economic and political circumstances, in what ways is formal CPD different under these circumstances compared to before 2014?

2. Insight regarding the informal CPD activities

Informal CPD is no non-intentional learning but you feel you have learned. Such as discussion with your colleague on the specific matter.

1. Can you please identify five different informal activities you believe you learned from?

2. Which one of the five activities was most effective?

    - In which ways had this informal CPD had impact on your knowledge and/or practice, and/or your pupils?

    - Can you please illustrate information regarding the nature of these informal CPD? What happened and how you have learned?

3. Can you please recall an interaction you had with colleague that could be opportunity for you to learn but you did not find useful?

4. Due to the current socio-economic and political circumstances, in what way your engagement in informal CPD different under these circumstances compared to before 2014?

3. Insight regarding effective supervision

1. What is your opinion regarding the supervision system within KRG?

2. In overall, are you satisfied with the existing system or not and why?

3. Over the last year, can you please briefly explain how often your met with your supervisor?

- You said that your supervisor's visit is few, how do you deal with this challenge?

- Has the quantity of meeting changed over the years or not and why?

4. Over the last year, can you please explain the ways you interacted with your supervisor?

    - Which interaction activities di you engage?

    - Did you find each one of them useful or not? Why?

    - You said that you have been observed, what was the focus of the observation?

    - What happened during the observation?

    - What is post-observation discussion entail?

    - Did you find the discussion useful or not? Why?

5. Do you receive a high quality of feedback from your supervisor when he/she observe your lesson?

    - Which type of feedback that you provide from your supervisor; do you see these types are effective or not? Why?

    - Does your supervisor allow you to ask question?

6. What is the type of requirements that your supervisor expects you to do when he/she visit you?

    - Do you see these requirements are effective to provide high quality of PE?

7. When you face a challenge in your profession, how do you normally contact your supervisor? Are you wait until he/she visit you or there is another channel to contact hem/her?

8. What can be done to improve the current system?

9. Socio-political situation – how this has affected the system?

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