Student mentoring: To what extent does peer mentoring in a mixed-aged tutor group impact school engagement?

Jacob Byrne

A Research & Development Project

Submitted for the MSc Learning & Teaching 2020

DEPOSIT AND CONSULTATION OF THESIS

One copy of your dissertation will be deposited in the Department of Education Library via the WebLearn site where it is intended to be available for consultation by all Library users. In order to facilitate this, the following form should be completed which will be inserted in the library copy your dissertation.

Note that some graphs/tables may be removed in order to comply with copyright restrictions.

Surname	Byrne
First Name	Jacob
Faculty Board	Education
Title of Dissertation	Student mentoring: To what extent does peer mentoring in a mixed-age tutor group impact school engagement?

Declaration by the candidate as author of the dissertation

1. I understand that I am the owner of this dissertation and that the copyright rests with me unless I specifically transfer it to another person.

2. I understand that the Department requires that I shall deposit a copy of my dissertation in the Department of Education Library via the WebLearn site where it shall be available for consultation, and that reproductions of it may be made for other Libraries so that it can be available to those who to consult it elsewhere. I understand that the Library, before allowing my dissertation to be consulted either in the original or in reproduced form, will require each person wishing to consult it to sign a declaration that he or she recognises that the copyright of this thesis belongs to me. I permit limited copying of my dissertation by individuals (no more than 5% or one chapter) for personal research use. No quotation from it and no information derived from it may be published without my prior written consent and I undertake to supply a current address to the Library so this consent can be sought.

3. I agree that my dissertation shall be available for consultation in accordance with paragraph 2 above.

Contents

Contents 3

Introduction 5

- **Bronfenbrenner's bioecological model of human development** 9
  - **What is Bronfenbrenner's theory?** 9
  - **Development of Bronfenbrenner's theory** 12
  - **How can Bronfenbrenner's theory be applied to the study of peer mentoring engagement?** 15

Literature review 16

- **Definitions** 16
  - **Peer mentoring** 16
  - **Engagement** 18
- **International uses of peer mentoring** 21
  - **Peer mentoring in the USA** 22
  - **Peer mentoring in Australia** 24
  - **Peer mentoring in the UK** 27
- **Pastoral challenges addressed by peer mentoring** 29
  - **Effective support with year 6/7 transition** 29
  - **Student leadership and responsibility** 30
- **Conclusions** 33

Methodology 35

- **Research phases** 35
- **Participants and collaborators** 39
  - **Pupils** 39
    - **Pupils receiving mentoring** 39
    - **Pupils leading mentoring** 40
  - **Staff** 41
- **Ethical issues** 43
  - **Pupils as mentors** 43
  - **Power and position** 44
  - **Informed consent, confidentiality and anonymity** 45
    - **Informed consent** 45
    - **Confidentiality and anonymity** 47
- **Research instruments** 47
  - **Observations** 48
  - **Questionnaires** 48

Group interviews 49

Discussion of research questions 51

How could a peer mentoring programme be structured in order to better support pupils during tutor time? 51

What is the proposed peer mentoring programme? 51

Discussion 54

Regular training sessions 54

Choice of activities 55

Format of mentoring sessions 57

Summary 58

What impact could designing and leading a peer mentoring programme have on the engagement of year 10 pupils? 59

What forms of engagement exist within the proposed definition? 60

Emotional engagement 60

Cognitive engagement 60

Behavioural engagement 61

How can this model be used to explain levels of engagement seen within the peer mentoring programme? 62

Regular training sessions 62

Choice of activities and mentees 64

Compulsory participation model 64

Summary 65

What could year 10 pupils learn from building a working relationship with their mentee? 65

Practical skills 66

Psychological development 67

Bioecological model of human development 67

Peers as a microsystem or mesosystem 67

Summary 68

Conclusions and implications 69

References 73

1. Introduction

Developing pastoral care provision in school has been a key area of interest for several years and was sparked by developing a behaviour project to reduce low-level behaviour across the entire of Year 7 in School X. This led to researching disadvantaged pupils and their views of rewards and sanctions within school through an earlier project (Byrne, 2019). What emerged from this research was not at all what I expected: unstructured interviews very quickly moved from rewards and sanctions and refocused on the need for strong relationships within the school environment for learning to be successful, and for pupils to feel supported by both their peers and teaching staff. From this, it became very clear that there was a need to investigate the current pastoral provision at School X and the types of support available to pupils. Pastoral support is a strength of School X, however there was a lack of any structured programme to encourage greater peer-to-peer support. In light of a new pastoral system in September 2019 that introduced house groups and vertical tutoring consisting of a mixture of year 7-11 pupils in each group, this leant itself to making the most of this new structure where pupils of all year groups would be required to work together during tutor time periods daily. I wanted to develop a peer mentoring programme between different year groups within my house in the hope that manufacturing pairings between year groups would increase levels of engagement with the school community. The programme that I wanted to develop is specifically designed to offer greater leadership opportunities for year 10 pupils who will lead the programme on a daily basis and also be able to contribute to the design and continual improvement of the programme. This also offers Year 7 pupils the opportunity to be mentored by a much more experienced member

of the school community and develop much stronger links between year groups and hopefully alleviate some of the anxiety of starting a brand new school, thus aiding transition.

The need for pastoral support in schools is placing a great burden on teachers and senior leaders owing to budget cuts to schools and the reduction in services (Rees 2019). There is also a lack of mental health funding for many schools across the UK which means that there is increased pressure on existing pastoral teams to provide even more services in-house (Whittaker 2019). While there are a variety of different mentoring programmes that have been introduced since the 1960s, largely from the USA (Cartwright 2005, Houlston, Jessel and Smith 2009), there is little evidence of large-scale peer-to-peer mentoring programmes in UK schools. My project aimed to build on the plethora of mentoring programmes that already exist in the UK and abroad to propose a new programme that is specifically for vertical tutor systems. By proposing such a programme, I hope that greater peer-to-peer support can firstly relieve pressure on already stretched pastoral teams in schools who are in need of greater support. Secondly, it is hoped that by creating a support system and giving pupils greater agency to support each other that pupils will engage further in the school community. Finally, by allowing pupils to take on significant leadership and support roles while also actively contributing to the design and structure of the peer-mentoring programme, it is hoped that pupils will feel a greater sense of partnership between them and the teaching staff.

Due to the Covid-19 outbreak and the partial closure of schools across England on Friday 20th March 2020 (BBC News 2020), my project was interrupted indefinitely. Owing to the original structure of my project where I had intended to gather the majority of my data between March and July 2020, I was forced to change the focus of my dissertation. Therefore, my dissertation

will now focus on a *proposed* research and development project that critically evaluates existing literature surrounding my topic in order to make a number of hypotheses as to how a new peer-mentoring system within a vertical tutoring system might impact school engagement. It is therefore important to stress that any conclusions drawn from my research are based solely on existing literature and not upon any of my own data collection and analysis. However, this gives me an ideal opportunity to focus heavily on the proposed methodology and an in-depth consideration of literature as to my choices of participants, research instruments and the ethical considerations that are entailed in introducing a new peer-mentoring programme for a large secondary school.

Through my literature review, I firstly provide a greater understanding of what peer mentoring means and the many different contexts in which it has been and is currently used in order to contextualise my project. By extension, I also provide further explanation for the varying definitions of engagement and refine this to an agreed-upon usage for the duration of my dissertation. Furthermore, I demonstrate the origins and uses of peer mentoring in different forms and critically evaluate their effectiveness in order to provide a platform on which to build my own mentoring programme proposal.

In order to better understand my findings as a result of the literature, I have considered my work through the theoretical lens of Urie Bronfenbrenner's bioecological model of human development. Bronfenbrenner's theory places environmental factors at the centre of human development (Santrock, 2007) and suggests that those from different backgrounds will experience different environmental factors which influence their development. As an example, those from an inner-city family are more likely to face hardships such as crime or financial

struggles which someone from an affluent suburb is less likely to experience (Vander Zanden et al., 2007). Knowing this, I wanted to consider how a new environmental factor such as creating a peer mentoring partnership might influence the mesosystem of the mentor and mentee in order to have a positive effect on the development of both pupils.

2. Bronfenbrenner's bioecological model of human development

I have used Bronfenbrenner's model as a framework for helping to understand and explain some of the findings from my work into why pupils do or do not engage further in school as a result of introducing a peer mentoring scheme.

2.1.1. What is Bronfenbrenner's theory?

Urie Bronfenbrenner's bioecological model of human development provides a framework for evaluating the ways in which humans interact with their environment and the communities around them (Rosa and Tudge (2013). Figure 1 provides a basic representation of Bronfenbrenner's theory.



Figure 1: Urie Bronfenbrenner's bioecological model of human development

The framework assumes five separate environmental systems with which the person interacts: The individual, the microsystem, the mesosystem, the exosystem and the macrosystem. At the centre of the model is the individual, which accounts for someone's sex, age, health, etc. Outside and around the individual is the microsystem: the aspects of someone's life that have an immediate influence on the person's environment, such as their family, peers, school or possibly their church or religion. According to Rogoff (2003), the microsystem is the most influential of all the environmental systems and can have the greatest positive or negative

impact on a child's development. The relationships developed at this level between caregivers such as immediate family or teachers within a school can influence a healthy personality (Swick, 2004). The mesosystem forms the next layer within the environmental systems and is primarily the link between each of the elements of a person's microsystem (Berk, 2000). For example, this could be the link between the family and the child's school, or the child's peers and their family.

While the exosystem does not interact directly with the child's immediate development, unlike attending school or spending time with family, it can influence each of these factors significantly (Berk, 2000). For example, a parent's work schedule might prevent them from spending significant periods of time with their child, which could in turn have an impact on their microsystem.

The final system of the above model is the macrosystem, which concerns the wider cultural ideologies of the community in which a person is situated (Bronfenbrenner, 1989, 2005). This final system can have an effect on the interaction between all of the systems within the model (Swick, 2004).

What the above model does not account for is Bronfenbrenner's later addition of the chronosystem (Bronfenbrenner, 1989). The chronosystem is the acknowledgement of time within a person's development and how this can impact the way in which other systems respond. These influences can be external, such as the death of a family member, or internal, such as psychological changes to a child as they grow up (Bronfenbrenner 1989). Each of these changes can have an impact on a child's development and may have a greater or lesser impact over time. It is also possible that the point at which one of these internal or external

psychological changes occurs in a child's life can alter the impact compared to another child who experiences a similar event at an older or younger age.

2.1.2. Development of Bronfenbrenner's theory

Bronfenbrenner's bioecological model of human development is the third and most recent phase of his theory (Rosa and Tudge 2013) and focuses on 'proximal processes, and how personal characteristics, context, and historical time mutually influence those processes' (page 243). In simpler terms, Bronfenbrenner's theory suggests that human development is reliant upon the environment in which a person exists and how they react with it. It still incorporates all of the aspects of the model depicted in Figure 1 in the form of *Context*, but now incorporates *Process - Person - Context - Time (PPCT model)* to describe human development in greater depth.

There are two propositions outlined that define what is integral to the PPCT model:

> *'Proposition 1 states that, especially in its early phases, and to a great extent throughout the lifecourse, human development takes place through processes of progressively more complex reciprocal interaction between an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate environment. To be effective, the interaction must occur on a fairly regular basis over extended periods of time.*

> *'Proposition 2 [states that] the form, power, content, and direction of the proximal processes that affect development vary systematically as a joint function of the characteristics of the developing person and the environment (both immediate and more remote) in which the processes are taking place and the nature of the developmental outcomes under consideration'*
>
> *(Bronfenbrenner and Ceci 1993, page 317)*

Proximal Processes are now regarded as even more important than the environmental systems in which activities take place as these processes are the act of engaging in such activities (Tudge et al., 2011). Proximal processes are the development processes of systematic interaction between a person and the environment around them (Bergen, 2008). Examples of such processes could include a child learning through play or reading (Bronfenbrenner (1989). In practice, this could be regarded as the extent to which a person decides to engage with an activity such as a peer mentoring programme. This important distinction in the development of Bronfenbrenner's work places much more significant weight on the extent to which someone engages within their respective environments.

The model also relies heavily on the *person* as part of the PPCT extension of the original model. Bronfenbrenner (1994) acknowledges the relevance of biological and genetic aspects of a person through characteristics he calls demand, resource and force. He suggests that two people with similar resource characteristics (past experiences, skills and intelligence) may not necessarily have similar levels of engagement within an environment. He acknowledges the individual characteristics of a person that can change the context of an environment through

being either active or passive to one's surroundings. In relation to my study, this could mean that introducing a peer mentoring system to a group of pupils' microsystems will not have the same outcome for each pupil owing to their own individual levels of engagement and motivation to participate within the new environment and therefore I have explored the possibility of individual differences in the process of data collection to account for this.

The final aspect of Bronfenbrenner's new model is Time. As is the case with each of the other aspects of the model, Bronfenbrenner divides the element of *time* into subcategories of *micro-, meso- and macro-time.* These can be applied to the length of time an activity within the peer mentoring project takes, how long the entire programme takes and the impact that this can have on the level of engagement. Therefore, considering the importance that Bronfenbrenner places on time as a factor for the extent to which a person engages with their environment, it is necessary to consider this when analysing data of individual pupils throughout the duration of the project and whether this has an impact on certain pupils.

Until the year 2000, Bronfenbrenner suggested that human development under his model focused primarily on positive developmental outcomes (Rosa and Tudge 2013) when he published a paper which defined dysfunctionality in human development as 'the recurrent manifestation of difficulties in maintaining control and integration of behavior across situations and different domains of development' (Bronfenbrenner and Evans 2000, page 118). I aim to use his theory to better understand why pupils choose to engage or disengage with a peer mentoring programme with relation to the PPCT model.

2.1.3. How can Bronfenbrenner's theory be applied to the study of peer mentoring engagement?

Peer mentoring is 'regular dyadic meetings between an older student and younger student for the purpose of providing social support, guidance, and, when appropriate, academic assistance' (Roach 2014:211) which suggests two pupils working together in a shared environment. Rosa and Tudge (2013) specify:

> *'Bioecological theory in its current or mature form specifies that researchers should study the settings in which a developing individual spends time and the relations with others in the same settings, the personal characteristics of the individual (and those with whom he or she typically interacts), both development over time and the historical time in which these individuals live, and the mechanisms that drive development (proximal processes)' (Page 244)*

By pairing two pupils together in a school environment to provide mutual social support, guidance and academic assistance, a new setting is created. This setting can then be used as a way of understanding each person as an individual, and then their shared environment and how the two people influence the shared space. My aim was that the shared setting will evolve over time through the influence of the person, context and time. The process of choosing to engage in the research project will vary on each of the other factors within the model and it is anticipated that engagement will improve as the programme continues.

3. Literature review

3.1. Definitions

3.1.1. Peer mentoring

There is no single definition of peer mentoring that is agreed across various writers (O'Hara 2011, Parsons et al. 2008, Merriam 1983). Colley (2003:131) suggests that there are so many different definitions of mentoring that vary depending on context and purpose that it is difficult to find one single definition. 'The concept becomes increasingly hard to distinguish, yet [...] the effect is not to deepen our understanding of mentoring. It simply creates a sense of how wonderful it must be, since it produces so many positive effects'. Further to this, Merriam (1983) suggests that the term 'peer mentoring can mean something entirely different depending on what your role might be and how you use it in differing contexts. Piper and Piper (1999:129) described mentoring as a "ubiquitous and chameleon-like approach which is everywhere in name but nowhere in substance" Therefore, suggesting a single definition of peer mentoring for the purposes of this study in its own context may well not be supported by academics in other fields or job roles.

Roach (2014) suggests that 'peer mentoring involves regular dyadic meetings between an older student and younger student for the purpose of providing social support, guidance, and, when appropriate, academic assistance' (page 211). Similarly, Powell (2016) offers a similar definition that it is 'a one-to-one relationship, between an experienced student (mentor) and a less experienced student (mentee) in which the mentor voluntarily gives their time to support and encourage the mentee to learn and develop emotionally, socially and/or academically' (page 9).

Both of these definitions focus on a hierarchical relationship between an older or more experienced person and someone younger and less experienced. Powell's notion of developing social skills certainly correlates with what my peer mentoring programme hopes to achieve: however, the idea of providing voluntary support is slightly more problematic. I have created a programme where all pupils within the house take part and contribute to the design and delivery of the programme, which would remove the possibility of it being a voluntary activity. From a bioecological perspective of development, whether a person chooses to participate in the environment in which they find themself can dictate to what extent they benefit from the environment around them (Bronfenbrenner, 1989). However, from the same perspective, the element of time and how much is spent on individual activities (micro-time) and the project as a whole (macro-time) are also believed to impact the extent to which someone may engage with a programme. To use Powell's definition of peer mentoring therefore may not provide the correct nuance that matches the aims of the project.

Roberts (2000) suggests that peer mentoring is 'a formalized process whereby a more knowledgeable and experienced person actuates a supportive role of overseeing and encouraging reflection and learning within a less experienced and knowledgeable person, so as to facilitate that person's career and personal development' (Page 162). Here, Roberts (2000) discusses the impact a mentor can have on their mentee and how encouraging reflection and learning can provide a valuable gain in cultural capital. This definition encourages greater leadership skills in the mentor and aims to encourage metacognitive skills through peer mentoring.

Miller (2002) distinguishes between "natural mentoring" and "planned mentoring". "Natural mentoring" is an organic process whereby natural mentors will emerge in a group who aim to

support and nurture less-experienced people. “Planned mentoring” is described as ‘structured programmes with clear objectives, where mentors and mentees are matched using formal processes’ (Page 23). Colley (2003) categorises peer mentoring as “functions” and “relationships”. She describes “functions” as a multi-faceted description of being a mentor, teacher, supporter or similar and argues that there are an infinite number of “functions” peer mentoring can offer. However, she draws on work by Anderson and Lucasse Shannon (1995) who describe peer mentoring as being functions enhanced by an ‘on-going caring relationship’ (1995, page 29). Both of these views take into account a more structured approach to mentoring that makes use of a specific programme that mentors and mentees will follow for a duration of time.

For the purposes of my study, I define peer mentoring as ‘regular dyadic meetings between an older student and younger student for the purpose of providing social support, guidance, and, when appropriate, academic assistance’ following Roach (2014, page 211) which I believe fits the description of what I hope to achieve through this research. This definition does not make reference to the building of a friendship or working relationship as mentioned by Anderson and Lucasse Shannon (1995) which would also be a hoped for outcome of the programme, however it makes specific mention of support, guidance and academic support which are all intended outcomes of the pastoral provision within the school.

3.1.2. Engagement

The Organisation for Economic Co-operation Development (OECD) (2003) categorises engagement as either: Psychological and behavioural. It describes the psychological component as:

'The psychological component emphasises students' sense of belonging or attachment to school, which has to do with feelings of being accepted and valued by their peers, and by others at their school. Another aspect of the psychological component concerns whether or not students value school success' (Page 8)

It goes on to describe the behavioural component of engagement as 'factors such as school and class attendance, being prepared for class, completing homework, attending lessons, and being involved in extra-curricular sports or hobby clubs.' (Page 8). A criticism of this study is that it does not consider the question of whether behavioural engagement in aspects of school life such as completing homework and being prepared for school are genuinely acts of engagement or come more so from a sense of obligation or significant support or pressure from parents. Psychological engagement with an emphasis on a sense of belonging and purpose could be a much more concrete aspect to attempt to measure as this could perhaps be perceived as a more genuine measurement of being engaged. Dotterer and Lowe (2011) describe student engagement as 'students' feelings, behaviors, and thoughts about their school experiences and is an important construct given its links to academic outcomes such as achievement and high school completion' (Page 1651) which again points to a definition containing more than one component such as in the work of OECD (2003). However, this definition suggests a greater focus on collecting qualitative aspects of the relationship, rather than considering quantitative data such as attendance and homework completion frequency.

Jimerson, Campos & Greif (2003) define 'student engagement' as multi-faceted and including affective, behavioural and cognitive aspects. Affective engagement is the student's sense of

belonging to a school, or where the student places themselves in the school community. Behavioural engagement is defined as school performance measures such as the completion of homework, their grades, attendance and other similar indicators. Jimerson, Campos & Greif's (2003) definition of cognitive engagement is summarised by Dotterer and Lowe (2011) as a 'cognitive dimension [that] includes students' perceptions and beliefs related to self, school, teachers, and other students' (Page 1652). Arguably, the definitions of affective and cognitive engagement are equally important in understanding where a person places themself within a community.

Li and Lerner (2013) also propose a 'multidimensional' (page 21) definition of student engagement and acknowledge that while not every academic agrees on the exact wording of the three categories, they all have the same elements:

> *'School engagement should be conceptualized as a multidimensional construct such that students' behavioral, emotional, and cognitive experiences in school can be studied simultaneously rather than separately. While the field does not always agree upon the exact number and name of elements that make up school engagement, several recent reviews have endorsed a tripartite conceptualization' (Page 21)*

The 'behavioural', 'emotional' and 'cognitive' constructs proposed by Li and Lerner (2013) parallel the 'behavioural', 'affective' and 'cognitive' definitions by Jimerson, Campos & Greif (2003) are almost identical in both meaning and category name. Fredricks et al. (2004) also proposes 'emotional', 'cognitive' and 'behavioural' definitions, and describes 'engagement' as a 'meta-construct' (page 60). The term "meta-construct"

is ‘sometimes applied to engagement, which seeks to describe it as a distinct construct, but comprised of these three key dimensions’. (Wiseman et al. 2016: 667) However, the important part of what Fredricks et al. (2004) proposes is that these three constructs are ‘dynamically interrelated’ (page 61) and are not separate entities. Therefore, they propose that the three strands of engagement are interlinked and must be considered together, not as individual elements. The argument is that each one of these three categories directly impacts the next one. For example, how a pupil views themselves within an environment (affective) could be directly linked to their output in terms of assessment results (behavioural).

For the purposes of this dissertation, I use the definition of engagement from Fredricks et al. (2004) which suggests not only a multi-faceted definition of the word as agreed by much of the literature, but also states the importance of studying all of these facets in conjunction as they are ‘dynamically interrelated’ (page 61). I have chosen this definition as it allows for the greatest flexibility in attempting to categorise various forms of engagement at the point of data analysis.

3.2. International uses of peer mentoring

In this section, I have made the decision to split the content into sections ordered by the research’s country of origin as opposed to categorising each example of research thematically. I wanted to demonstrate the emergence of peer mentoring in its varying forms from different countries since the 1960s, largely in the USA, Australia and the UK. Furthermore, I have decided to present this section of my literature view in this structure to better demonstrate the absence of similar programmes to the one that I am proposing in the course of my dissertation, both in

UK schools and abroad. It helps to evaluate similar uses of peer mentoring and how these might be applied to a new model or programme, but also to stress that due to the Covid-19 outbreak and the resulting inability to formally evaluate a working model of the programme that my proposal is purely a theoretical model. Therefore any conclusions drawn in this paper are all based on theory.

3.2.1. Peer mentoring in the USA

Peer mentoring was first developed in the United States of America during the 1960s and 70s (Houlston, Jessel and Smith 2009, Cartwright 2005). According to Knowles and Parsons (2009), 'much of the existing research on mentoring of young people is from America and has focused upon the 'classic model' of mentoring; that of a one-to-one relationship between an adult and a young person' (page 206): this model is used widely across the USA and further afield in a number of different mentoring programmes. Peer mentoring developed rapidly in the 1970s into a number of different schemes such as the Big Brother Big Sister (BBBS) programme (Grossman and Tierney 1998) which aimed to tackle school attendance, violence and improved relationships with peers and family following a model that moved away from the traditional adult-to-child model that has been used extensively.

Grossman and Tierney (1998) found that the implementation of the Big Brother Big Sister (BBBS) programme in children aged 10-16 had a significant positive impact. Participants were less likely to be using drugs, drinking alcohol, exhibiting violent behaviours towards others or missing school following an 18 month period. They also found that participants in the study group had improved relationships with their family and peers as well as a better attitude to education. The

primary focus of my study, however, was to build a positive relationship between the mentor and mentee. Similarly, further research into at-risk youth has found similar results. Thompson and Kelly-Vance (2001) evaluated the impact of mentoring at-risk youth in relation to their academic achievement. Even after academic ability was accounted for, it was still found that the mentoring programme resulted in significant improvements in academic achievement amongst boys in the treatment group compared to the control groups. Interestingly, some studies have found that peer mentoring is not as effective when applied to non-disadvantaged pupils. DuBois et al. (2002) conducted a review of 55 evaluations of peer-mentoring programmes in the USA in order to evaluate the participant impact of taking part in a recognised programme. They found that there are only modest benefits to the average pupil taking part in a mentoring programme. However, the impact of mentoring is greatly increased with the most disadvantaged pupils and there are much more significant results showing greatly increased levels of academic achievement compared to their non-disadvantaged counterparts. Therefore, it is worth considering which pupils I choose to focus on during my intervention and how much impact may differ in different groups of pupils involved in the study.

It is notable that the quality of each programme had a strong influence on disadvantaged pupils and even had adverse effects on participants if the quality of delivery was not designed to meet the individual needs of the children involved and instead used a pre-prescribed programme with agreed activities and support. Karcher (2007) suggests that while peer mentoring can have a significant positive impact in a variety of settings, unstructured mentoring programmes that are under-researched risk undermining the impact on pupils. This comment is specifically aimed at the explosion of various mentoring programmes in the USA that have evolved faster than the academic research behind each one and suggests that care should be taken when developing a

programme for pupils to ensure it is robust and research-based. This is particularly important in light of the research by DuBois et al. (2002) that warns against poorly constructed programmes that can have damaging effects on pupils involved such as expaserating feelings of anxiety and self worth, but specifically disadvantaged pupils who are at greater risk of harmful programmes.

Concerning the structure of peer mentoring programmes, DuBois et al. (2002) conducted extensive research into 55 different peer mentoring programmes in the USA and found that there are various factors that were found across each of the studies that had a more positive impact on participants involved. While there is little evidence to suggest that the quality or quantity of pre-programme training for mentors on each programme had much effect on outcomes for participants, there is a wider argument that programmes including continuing training for mentors during the programme reported increased impact for those involved. Similarly, structured activities throughout the duration of the programme between the mentor and mentee were also found to have greater impact in comparison to programmes that did not contain specific tasks to complete or take part in. Therefore, there is an apparent need for structured programmes that allow for regular training and activities when considering intervention design.

3.2.2. Peer mentoring in Australia

There is also a body of research into peer mentoring in Australia, however it is worth noting that the focus of this section is on programmes taking part in Australian universities and not with school-aged pupils. I believe that the programmes discussed are still relevent to my argument

and provide a useful insight into the wide variety of programmes available. While there is evidence across Australia of both voluntary and embedded models of peer mentoring, 'voluntary models of peer mentoring are the most established and widely used programs in Australian universities' (Cooper 2018, Page 89). According to Cooper (2018) 'there is now a strong consensus that peer mentoring is effective in helping students' learning, sense of belonging, and general transition into the university environment' (Page 88) and there are growing movements across universities to try and incorporate peer mentoring programmes into their teaching. However, he continues to suggest that 'while there is a strong body of evidence to suggest that peer mentoring benefits students, engagement with such programs can often be low' (page 88).

Cooper (2018) evaluated both stand-alone and embedded models of peer mentoring in a university setting and states that while there are significant benefits from taking part in peer mentoring programmes there is a relatively small number of people actively choosing to engage with such programmes. Therefore, Cooper suggests that an embedded model of peer mentoring where participants are required to take part in have significantly more benefits in encouraging engagement. The notion of the word "required" in this context is explained by Cooper to mean developing a peer mentoring programme within the university curriculum and part of the modus operandi of the university structure as opposed to more questionable ethical conduct whereby students at the university are required to take part in a standalone programme that does not form part of the university course curriculum with no element of choice. Reading (2016) argues that embedding support into classes is 'the most effective strategy for reaching and supporting struggling students [and could do so without] stigmatising students experiencing difficulty' (Page 700). My proposed research project aimed at improving the current pastoral

provision within the school by enhancing the activities taking part during tutor time and would therefore considered as a programme that forms part of the school's overall curriculum structure. It is hoped that by using the structure suggested by Cooper that there will be greater levels of engagement, at least in the form of behavioural engagement (Fredricks et al. 2004) that consists of attendance and co-operation in school.

Chester et al. (2013) found that an embedded model of peer mentoring that forms part of an Australia university Psychology degree programme helped to support academic progress and the programme as a whole was endorsed by participants. The TiTo model (Transition in, Transition out) was developed in one university to support first and third year Psychology students with the academic demands of their course. The first years' programme focused on introducing students to the demands of the course and metacognitive teaching to reduce surface learning. The third years' programme was focused on finishing the course and preparing for employment. One of the significant drawbacks of the original study was that, although it was structured as an embedded programme for mentees, the selection process for the mentors in later years was restricted to high-performing students and there was therefore not a large enough group of mentors who fitted the criteria to provide mentoring to the number of students in the programme. Therefore, in the second version of the study, all third year students received training in order to support those in their first year of study on the course. The study by Chester et al. (2013) serves to demonstrate the difference in engagement when embedded models of peer mentoring are introduced into an institution compared to a non-compulsory model of support.

Much of the research from Australia has focused on university-level participants which has, in turn, led to a focus on international students coming to study in Australia. Outhred and Chester (2013) examined the experiences of international students in Australia, focusing specifically on study-work-life-balance (SWLB). They propose an embedded model of peer mentoring to ensure the smooth integration of international students into the university community and into the country's culture. Outhred and Chester (2013) cite Furnham and Bochner (1982) who believe that 'if sojourners are carefully introduced into a new society by close, sympathetic host-culture friends, the evidence indicates that they may encounter fewer problems than if they are left to fend for themselves' (Page 171). From this, they considered very carefully the type of participants in the embedded programme and how different cultural experiences from their own countries might impact their views of an effective SWLB. This was considered when designing their proposed model and ensures that this is taken into account when evaluating the impact of peer mentoring.

3.2.3. Peer mentoring in the UK

While it is widely agreed that peer mentoring programmes originated from the USA and Canada in the 1960s and 70s (Cartwright 2005, Houlston, Smith and Jessel 2009), a European movement of peer mentoring programmes began to emerge in the UK in the mid-1980s in a variety of educational settings (Cartwright, 2005).

Cartwright (2005) developed a co-counselling model of mentoring whereby both older and younger pupils were trained in support techniques and the relationship was reciprocal. Both staff and pupils followed a training course in order to be able to support the programme

effectively. Bronfenbrenner (1989) considers reciprocality as a form of human development and this is expressed through the mesosystem in his model that concerns the interaction between different groups within a child's environement; in this case, the child's school and peers are interacting in a reciprocal manner and therefore are contributing to the child's psychological develeopment. Similarly, this is supported by a feminist theoretical stance (Fontana and Frey 1994) who suggest that reciprocal relationships within a support structure such as peer mentoring assist greater emotional responses and openness of discourse. All of the schools in the study were able to continue their mentoring programmes after the initial launch, however Cartwright stresses that this is because of adequate funding (self-funding or from a local authority), continued momentum of the project through regular training, and time given to staff responsible for projects in the form of extra non-contact hours on their teaching timetables to complete the necessary admin for the project. The element of *time*, which forms part of Bronfenbrenner's (1989) PPCT model of human development suggests that the regular training opportunities are a way to increase engagement within the project to ensure its success. This research is particularly interesting as it stresses the importance of an extensive training programme to ensure that peer mentoring can be effective within a school environment and therefore will form part of my methodology for staff and pupil training.

Contrary to previous studies in the USA (DuBois et al. 2002, Karcher 2007) which suggested that mentoring only has marginal impact on the non-disadvantaged, Russell (2007) found that mentoring can be just as effective in high-achieving girls as it can be in disengaged pupils assuming that the programme in constructed in such a way that it can meet individual needs of pupils and be adapted to the pupils within the programme. Russell focused on girls who were considered to be "academically able" but still in need of support. The girls in the study were not

considered to exhibit overtly negative behavioural problems in the school, but instead showed a silent reluctance to participate in certain aspects of school life. What is important about this research is its focus on identifying the "silent" pupils in our classroom whose problems regularly go undetected owing to their unobtrusive behaviour as it ensures certain pupils are not forgotten about and receive the individual support that they require to succeed in school. Certain teachers in the study are quoted as saying the girls did not need mentoring because they weren't "bad" pupils and refused to allow the girls to leave their lessons to receive mentoring. The girls reported the benefits of having someone they could share their problems with and there were positive benefits to the girls' academic performance from participating. Russell also stresses the importance of ensuring all staff involved in the programme or impacted by it should be fully informed of the purpose of the study, to help overcome some of the resistance faced in attempting to construct a new mentoring programme. For this reason, careful consideration was given when designing a new peer mentoring programme as to the key priorities and intended outcomes and how these are communicated to staff in a robust manner to ensure that preconceived ideas of the purpose of mentoring can be allayed.

3.3. Pastoral challenges addressed by peer mentoring

3.3.1. Effective support with year 6/7 transition

Pupils transitioning from primary to secondary school may well face social, academic, personal and organisational problems or challenges and will require support (Chedzoy and Burden 2005). Field, Miguel and Sanders (2002) carried out a study into both parental and peer attachment

and concluded that strong peer attachments might have more of an impact on adolescent adjustment than parent attachment. Therefore, my research may well support the introduction of a new peer mentoring scheme for Year 7 pupils who are moving into secondary school in order to provide them with an older peer who can support their move and provide guidance through the programme. Nelson (2003) conducted a study that revealed an effective peer mentoring system improved communication skills in transitioning pupils, as well as improved confidence and aided with anxiety during the process. In a pilot study prior to commencing my dissertation project, similar results were seen with year 7 pupils who were able to form strong bonds with year 10 pupils within the tutor group in order to build confidence and reduce common anxieties experienced by year 7s such as getting lost, organising their homework etc. Peers, or students, are regarded by Philip and Spratt (2007) to have 'street knowledge' that may well not be possessed by teaching staff, and therefore pupils are sometimes better suited to help other peers in certain situations such as enculturation to the school environment. Therefore, there are a variety of arguments that support peer mentoring as being an effective tool for year 6/7 transition.

3.3.2. Student leadership and responsibility

There is limited research into the potential leadership opportunities and responsibility that peer mentoring can provide from a specifically school-based setting, however there are more extensive bodies of literature from other student-based studies such as in universities programmes for student nurses that can help offer an insight into the topic.

Sheridan et al. (2016) evaluated a Clinical Leadership Experiences (CLE) programme at a dental school aimed at supporting both second and fourth year students. The programme required fourth year dental students to support second years during faculty-supervised patient treatment and participants were asked to report their experiences via a questionnaire evaluating the effectiveness of the programme. From the responses, the overall value of the programme was mutually felt in both cohorts, however the second year students reported a higher level of value than that of the fourth year mentors. Both groups also agreed that the programme provided educational benefits as well as improved comfort in peer communication. Fourth year students in particular highlighted the increased levels of confidence and consolidation of skills gained through actively taking part in a leadership project. The project gave them management, leadership and work experience skills that were felt to be highly valuable to their own development. What was not discussed in the study was the way in which the benefits of taking part in a peer mentoring programme would help to improve metacognitive skills in fourth year students and no attempt is made to explain the benefit of this to the students prior to completing questionnaires assessing the impact of the programme. Therefore, while the study reports slightly less effectiveness amongst fourth year students, it should be noted that no specific training was given that highlighted these benefits to the participants and may have impacted on the results had these have been included. This is a consideration for designing a new programme and ensuring that year 10 mentors are informed of the possible benefits to be gained from participation in the programme.

In a similar study, Won and Choi (2017) found that participants in a nursing student peer mentoring scheme 'began to perceive an improvement in their confidence, sense of responsibility, and leadership, which they did not expect to gain from their mentoring activities'

(pages 12-13). Gafni Lachter and Ruland (2018) also evaluated experiences of 47 occupational therapy students involved in a peer mentoring scheme aimed at developing leadership experiences. The results found:

'qualitative data from feedback surveys indicated that an opportunity to help; forming relationships; and structure as enabler were perceived as important participation outcomes. Students expressed high satisfaction and perceived value from their peer-mentoring experience' (page 276).

The results of regular focus group interviews produced four primary themes: building relationships, coping with conflicts, taking pride, and guiding mentors. The inclusion of focus group interviews assisted the participants to reflect on the programme at regular intervals which proved to highlight the benefits of the programme. Therefore, an effective peer mentoring programme should include regular review points that provide opportunities for participants to reflect on their progress as mentors and what skills have been learnt during the process.

While there is a limited field of research at present, the existing studies presented here suggest that peer mentoring programmes have the potential to offer a variety of leadership skills and experiences to participants whilst also benefiting the mentees in the study.

3.4. Conclusions

In summary, a number of conclusions can be drawn from the literature review:

1. Peer mentoring has been described as 'regular dyadic meetings between an older student and younger student for the purpose of providing social support, guidance, and, when appropriate, academic assistance' (Roach 2014, page 211). The structure of these meetings and its effectiveness can differ substantially.

2. How we measure engagement varies, but what is clear is that academics agree the term 'engagement' is 'multidimensional' (Li and Lerner 2013). It is widely agreed that engagement includes 'emotional', 'cognitive' and 'behavioural' elements and these must be considered equally when attempting to evaluate engagement (Fredricks et al. 2004).

3. There are a variety of different mentoring models which offer different benefits. A compulsory, embedded format that requires engagement from all students within an establishment is regarded by Cooper (2018) to present particular advantages to ensure consistency. In a large setting such as my school, this is the most favourable approach.

4. Peer mentoring can have a variety of different impacts on the participants involved and evidence from the literature supports my aim to provide leadership skills for older pupils and greater support for younger pupils in year 7.

Taking into consideration the findings from the literature review, I posed the following questions to guide my intervention:

1. What impact does designing and leading a peer mentoring programme have on the engagement of year 10 pupils?
2. What can year 10 pupils learn from building a working relationship with their mentee?

4. Methodology

4.1. Research phases

The purpose of my proposed study was to evaluate the impact of a peer mentoring scheme on the engagement of pupils and how the various tasks incorporated into this scheme help their own development and that of their partner. It also aimed to evaluate the shared relationship that is created through instructing pupils to work together on a daily basis and how this might lead to a number of shared experiences through the programme. The mentoring system also intended to be a working model that can be altered and added to in order to best suit the needs of the school and the pupils involved in the programme, and therefore there was a need for both flexibility in its execution and regular self and group reflection. Being able to have a significant amount of flexibility within the programme is particularly important and I wanted to avoid being constrained by not being able to review the effectiveness of a particular model. I believe that the lack of space to reflect and change the programme may have an impact on the overall engagement of those involved in a way that is not the intended outcome of the research and would otherwise negatively impact results.

In response to the need of a flexible and reflective method of research design, I proposed to carry out an action research design that allows for regular review points. Kemis (2009) suggests that action research seeks to inform 'practitioners' practices, their understandings of their practices, and the conditions in which they practice' (p. 463) and Cain (2011) expands further on this and suggests 'action research moves beyond positivist, interpretive and critical research, being self-- reflexive, collaborative, political and suitable for dissemination, for example, to

other teachers' (Cain 2011, cited in Cohen et al. 2018:440). Cain's summary of action research is critical to my intended outcome of producing a mentoring system that can be reactive to the environment in which it is introduced and can also be used widely by other teachers in different settings in an adapted form.

Ferrance (2000) suggests that a strong justification for action research is that teachers:

- *Work best on problems that they have identified for themselves*
- *Become more effective when they are encouraged to examine and assess their own work and then consider ways of working differently*
- *Help each other by working collaboratively*
- *Help each other in their professional development by working together.*

(Ferrance 2000:1)

The design of my proposed study (figure 2) allowed for both collaboration with senior leaders who are responsible for the overall delivery of the pastoral programme within the school, but also tutors who are tasked with leading the day-to-day delivery of the programme with their pupils. The pupils involved in the study were also given an input on the design and evaluation of the programme in order to inform the overall research design and ways in which it could work differently. Piggot-Irvine et al. (2015) define action research as 'a collaborative transformative approach with joint focus on rigorous data collection, knowledge generation, reflection and distinctive action/change elements that pursue practical solutions' (p. 548) and this has helped inform the way in which the programme is structured to allow for not only reflection and

change, but for 'practical solutions' (page 548) that help meet pastoral priorities for the school. Kemmis and McTaggart (2000) prefer to use the term participatory action research as they suggest this better reflects the process of not just leading research within a group, but of actively incorporating participants in the research process and contributing to the overall development of a specific project. Kemmis and McTaggart (2005) make a distinction between action research and participatory action research, defining the latter as seeking to create 'conditions for people to work together collaboratively in the search for valid, authentic and morally correct and appropriate ways of understanding the world and participating in it' (2005:578). Creswell (2013) also defines participatory action research similarly as 'communitarian and social, seeking to bring about social change and improvement to the quality of people's lives' (2013:582). What is key in both of these ideas is the reference to both collaboration and community. Much of my research has relied on the participation of others within the school community in the form of students and staff through active engagement in the research and evaluation process which goes beyond being just a 'participant' in the study.

Cohen et al.(2018) further describe participatory action research as being 'deliberately practical, seeking to improve social practice and people by having them work on themselves. In doing this it requires authentic participation and is collaborative, establishing self-- critical, non-- hierarchical communities and partnerships' (page 444). While there is certainly an element of all participants working in partnership, there would always an element of hierarchy within a school environment because of the mode of delivery of the mentoring programme and owing to the tutor time setting. However, what Cohen et al. (2018) describe is equally applicable to the other elements of how the mentoring programme comes together.

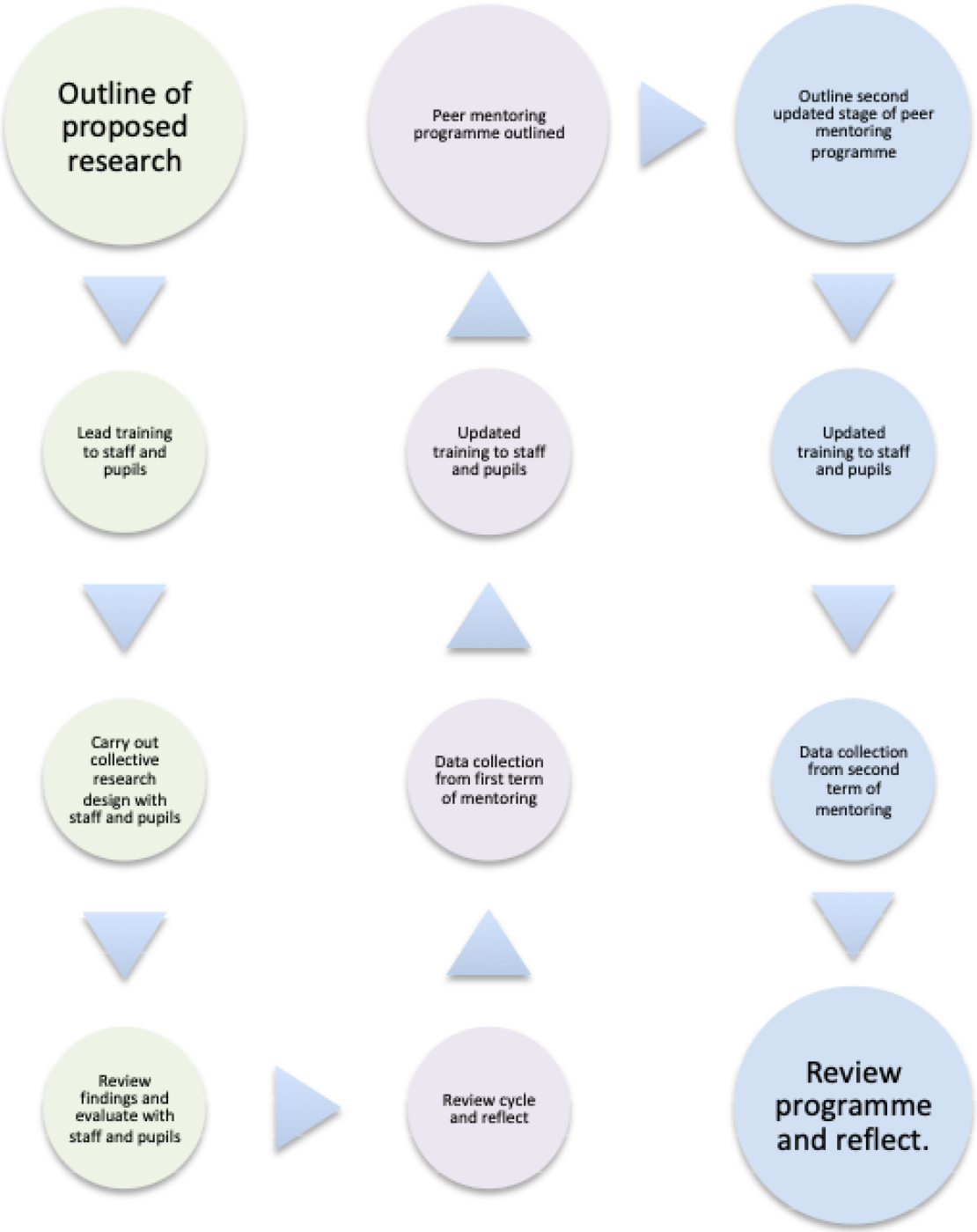


Figure 2: Proposed action research cycles

4.2. Participants and collaborators

All participants also collaborated and were involved in some aspect of the overall research design and helped inform aspects of each research cycle. Punch (2009) suggests that there is no separation between the *researcher* and the *researched* and therefore in my study treated all participants as having a colloborative role.

However, while I did not make a distinction between participants and collaborators within my research, I discussed the pupils involved in the mentoring programme and those leading the programme separately owing to the different ways in which they will participate and collaborate.

4.2.1. Pupils

4.2.1.1. Pupils receiving mentoring

Following the introduction of a new vertical tutor group system in my current school in which each group is made up of pupils from years 7 to 11, I decided to use this new structure when deciding on which years would take part in the research project. Year 7 pupils within my house were to receive mentoring from older pupils in the same house. In my literature review I discussed how Year 6/7 transition has been evaluated by a number of writers and there could be measurable impact from a peer mentoring scheme aimed at this group of pupils. As this is also a

whole-school priority at School X, the Senior Leadership Team supported the decision to mentor Year 7 pupils.

4.2.1.2. Pupils leading mentoring

Selecting the year group which would take on a mentoring role and lead each session posed more challenges. On a practical level, I have made the decision not to include year 11 in the consideration process as they are in their final year of school and preparing for GCSE examinations. Not only does this mean that they have an added layer of pressure in the lead up to May/June, but it also means that they may well be required to attend additional revision sessions during tutor time periods and will also not be attending school from mid-May onward unless attending an examination. This would potentially impact the quality of the programme and relationships between participants, but also would greatly impact the length of the programme if terms 5 and 6 of the academic year cannot form part of the overall plan.

I considered the following three options for who will lead the mentoring sessions:

Option 1: All year 7 pupils are organised into pairs of the same year group.
Option 2: All year 7 pupils are organised into pairs with another year group (for example, year 9).
Option 3: All year 7 pupils are organised into pairs with a mixture of other year groups.

Using Bronfenbrenner's bioecological model of human development to help guide my decision, I considered the environment being created by each option. 'Researchers should study the

settings in which a developing individual spends time and the relations with others in the same settings, the personal characteristics of the individual [...]' (Rosa and Tudge 2013:244). By assuming that age (or *time* in Bronfenbrenner's theory) has an impact on the environment of an individual, I also assumed that there is a greater difference in environment between year 7 pupils and the oldest pupils available to me, which are year 10 in this case. Therefore, by selecting option 2 and pairing pupils with differing environments in terms of age , this may have had a greater impact on the individual. Selecting option 2 also means that there is greater consistency in age than selecting option 3.

In the literature review, I highlighted research by Cooper (2018) who found that using an embedded model of mentoring where participation is compulsory for everyone within a cohort could improve engagement and participatory behaviours. I am using this research as justification to include all year 7 and 10 pupils within my house to ensure greater consistency in evaluating the mentoring programme and not allow a voluntary model for pupils to follow. This also ensures that school pastoral priorities are met by developing a programme that is accessible to all pupils within the house.

4.2.2. Staff

Staff involved in the intervention take on three different roles in the research project and had the opportunity to collaborate at each point. Their first role was to collaborate during the first action research cycle during initial training where the outline of the project is explained and there was the opportunity to contribute ideas and question the overall design of the project. As the staff were expected to lead the tutor time sessions where the peer mentoring will take

place, it is vital that they were involved in this early stage to ensure that their input could be gathered and considered when designing the initial programme. The second stage of staff involvement was once the programme has been fully formed based on feedback from staff and pupils, allowing for evaluation of the proposed programme and an opportunity to change any details before inception of the programme began. Finally, staff were also required at a third stage of the programme where they created a weekly observation diary of a selected mentor-mentee pairing in order to build a data set from each tutor group. Observation as a research method offers the opportunity to gain first hand experiences of 'naturally occurring situations' (Cohen et al. 2018, page 542) as opposed to reported data (Wellington 2015) or second-hand accounts (Creswell 2013). Furthermore, an advantage of observation is that 'what people do may differ from what they say they do, and observation provides a reality check' (Cohen et al., 2018, page 542) which provides two opportunities: firstly, it gives another layer of data to validate or disprove an argument, and secondly, it allows for closer comparison of responses between verbal interviews and systematic observations within the classroom. This is supported by the work of Argryis and Schon (1974) who discuss the difference between espoused theory and theory in use. Espoused theory is the world view and values people believe their actions are based on, which Is compared to theory in use which the world views and values implied by their behaviours. What Argryis and Schon (1974) suggest is that many people are unaware of the difference between the theory they believe they are exhibiting and the one that is actually exhibited. The use of observations as a research instrument, or indeed any form of mixed research instruments, will give the researcher greater understanding of what is happening in a situation.

4.3. Ethical issues

There are a number of ethical issues that will undoubtedly arise from working closely with pupils as participants, and while a significant proportion of my research falls under the modus operandi of the school and its structures, I was guided by British Educational Research Association (BERA) Guidelines for ethical issues. I gained CUREC approval from my university prior to beginning research with participants. There are a number of additional issues discussed below in relation to the ethics of this particular project. I acknowledge that ethical issues in educational research are never clear cut (Cohen et al., 2018) and that a great amount of consideration should be given to the individual pupils within the study when making decisions (Brooks et al., 2014). Further, ethics within educational research are contextually situated (Cohen et al., 2018) and there must be a degree of continual monitoring and consideration of any ethical problems at every stage of the project, which is particularly pertinent in a participatory action research project. Wax (1982) advises strongly against a 'one-shot, once-and-for-all' (page 42) approach to developing a set of ethical considerations for submission to a university ethics board to then be forgotten following the start of the project.

4.3.1. Pupils as mentors

The primary consideration in developing the peer mentoring programme was the use of year 10 pupils as mentors in a role that requires maturity and the ability to support another younger pupil within the group. This undoubtedly raised the issues both of how mentoring conversations

are monitored and properly safeguarded, but also what pupils should do in the event that their mentee discloses sensitive information and how both the mentor and mentee are supported as a result. In order to ensure the appropriate safeguarding of all pupils involved, there were two processes in place. Firstly, all pupils received in-depth training at regular intervals throughout the programme that is led in part by the Designated Safeguarding Lead (DSL) at the school to ensure that a clear message is transmitted regarding the role of the mentor and what to do in the event of a disclosure. Secondly, all mentoring took place within tutor time periods and are therefore overseen by the tutor who is present at all times to monitor the progress of the pupils and can intervene if needed. Staff also receive training to ensure that they are aware of proper safeguarding procedures during the programme.

4.3.2. Power and position

An important ethical consideration when conducting research is the role of power and position as a researcher, be this by 'status, position, knowledge, role or whatever' (Cohen et al., 2018, page 136). This is arguably an even greater factor in designing a research project when involving pupils in the research process owing to their age and the power relationship between teacher-researcher and pupil (Morrison 2013). One way in which this power relationship can be at least partly overcome is by ensuring pupils have a voice in the research process and are able to contribute to the design and implementation of the proposed project through regular consultation (Cohen and Manion 2018). However, this viewpoint only serves to improve the relationship between pupil and teacher-researcher from the perspective of the pupil and does

not tackle the issue of a member of staff asking pupils to give honest viewpoints about the school in which they work, thus potentially putting both parties in an uncomfortable situation, or altering the responses given that do not accurately reflect reality. Hammersley and Traianou (2012) note that the researcher may well have to be prepared to put themself in a position where they may not agree with the responses given by participants in order to achieve the most accurate data, which is a particular challenge in a school environment when attempting to evaluate current and proposed practice. Therefore, in order for the programme to be effective and produce accurate data that can be used to draw conclusions, an ability to remain neutral as a researcher is necessary as far as possible to ensure that open dialogue takes place.

4.3.3. Informed consent, confidentiality and anonymity

4.3.3.1. Informed consent

The decision whether to seek informed consent presents a number of questions concerning the involvement of pupils as participants in an action research project led by a member of school staff. Informed consent is the procedure of ensuring all participants are aware of project details before deciding whether or not they wish to participate (Diener and Crandall 1978). Diener and Crandall's (1978) definition of informed consent involves four elements: competence, voluntarism, full information, and comprehension. They suggest that if all four of these elements are met then participants are in an appropriate position to agree or decline to take part in the research. However, informed consent may not always be necessary argue Frankfort,

Nachmias and Nachmias (1992) but the greater the risk of the intended research, the greater the need for informed consent.

Following conversations with the Headteacher of School X, it was agreed that the scope of this research project falls within the modus operandi of the school and is aimed at the continual improvement of education provision for pupils with regards to pastoral care and therefore does not require the pupils to participate in anything that would not normally form part of the usual school day. It is for this reason that my project does not strictly meet the four elements of informed consent outlined by Diner and Candall (1978) as there was no formal option to opt out of changes to the pastoral provision within the school, thus removing the element of 'voluntarism'. Pupils are regularly involved in new projects and initiatives at the school and are also regularly observed in both formal and informal settings and therefore both of these activities fall within normal activity for pupils.

Where my approach for informed consent differs from the above is for pupils taking part in group interviews and questionnaires to evaluate the project and collect further data. Owing to this not being part of the usual school day and as it asked pupils to give up their own time in order to participate, a different approach is needed for this form of participation. Participation in these two forms of data collection are completely optional and written consent is sought from both the participant and the parent of the participant. Punch (2009) suggests that there has been a shift in the way some research into children has been construed and approached (page 46) which has led to an approach that not only seeks the child's perspective, but also 'acknowledges children as 'competent' human beings in their own right' (page 46) rather than as 'deficient' or 'unformed' adults (Hill, 2005 referenced in Punch 2009:46). While this is the

viewpoint that I also share , it is also important to remember that as an action researcher and part of a school community, consent from both the parents and the Headteacher is vitally important as they are 'gatekeepers' (Greig and Taylor 1999) of those taking part. Therefore, I decided to seek consent from parents as well as the pupils involved.

4.3.3.2. Confidentiality and anonymity

All participants would have been informed that any data collected will be treated confidentially from the point of collection and stored safely for the duration of the research project. Participants' trust in the researcher is important to ensure that the rights of the participant are respected, but also to ensure that a lack of trust does not adversely impact the data collected because participants are fearful of divulging information for fear of confidentiality breaches. Anonymity for participants and the school were assured.

4.4. Research instruments

My project used three primary data collection research instruments: observations, questionnaires and group interviews. Informally, group discussions with the pupils leading the mentoring programme are also considered when making decisions at each evaluation stage of the action research cycle.

4.4.1.1. Observations

I chose to use semi-structured observations as a research instrument to be completed by the tutor of each group within my house. To ensure ease of communicating weekly observations back to myself as the researcher, staff were able to simply email informal comments to my school email address instead of filling out a separate form that would have required further unneccessary preparation time for tutor time mentoring sessions. The use of semi-structured interviews is considered by Cohen et al. (2018) to focus less on proving a hypothesis through observation, but instead to generate a possible hypothesis as to why an event is occurring. Punch (2009) considers semi- and unstructured observations to be a way to focus on 'larger patterns of behaviour, holistically and more macroscopically' (page 155) which seems appropriate when attempting to measure 'engagement' as a general concept within a planned mentoring programme. However, Punch (2009) also suggests combining this form of data collection with other forms such as interview data in order to provide a richer understanding of the observation data.

4.4.1.2. Questionnaires

> *'Questionnaires offer benefits of standardized and open responses to a range of topics from a large sample or population. They can be cheap, reliable, valid, quick and easy to complete.'*
>
> *(Cohen et al. 2018, page 471)*

The purpose of including questionnaires at the start and end of the study was to enable the researcher to gain a snapshot summary of views from a large cohort of over 100 mentors and mentees within the house. The questionnaires are largely an opportunity to gather quantitative data in the form of numerical responses rating confidence in the programme or engagement in certain aspects of the project as a whole. Owing to the large number of participants in the project, the opportunity for extended responses has largely been avoided to enable easier data collection.

4.4.1.3. Group interviews

I intended to conduct group interviews at the start and end of the mentoring programme with a selection of the cohort (consisting of one mentoring pair per tutor group) in order to discuss their experiences of the programme and their engagement in it. Group interviews are a way of gaining people's perceptions of a situation and is a powerful tool for understanding others (Punch, 2009). I intended to use semi-structured interviews (Fielding 1996, Fontana and Frey 1994) that follow a set of general questions that allow for open conversation and follow up questions based on responses given by participants. Punch (2009) suggests that from a feminist perspective, creating an interview environment of mutual, non-hierarchichal research relationships can produce better results. He suggests that from a feminist perspective, traditional interviewing is viewed as hierarchical and devoid of sensitivity and expression of emotion, which are viewed to be more feminine attributes (page 148). Fontana and Frey (1994) suggest that a shared dialogue that includes self-disclosure will lead to the 'researcher and researched becom[ing] co-creators of data through the interview' (Haig, 1997 referenced by

Punch 2009, page 149). By taking a feminist perspective to semi-structured interviews and creating an environment of mutual discussion it may be possible to reduce the impact of power relationships between the researcher and the researched.

5. Discussion of research questions

5.1. How could a peer mentoring programme be structured in order to better support pupils during tutor time?

The primary concern of designing a peer mentoring programme for year 10 pupils to support year 7 pupils in the first year of their secondary education is to ensure that the programme can provide value for its participants. This value may not be entirely equal, or rather, will not necessarily provide the same outcomes for each year group, or indeed each participant within a year group. However, what is important is that every participant can come away from the programme having gained valuable experience and a more positive outlook on their school environment and a greater drive to engage with the school community on some level.

5.1.1. What is the proposed peer mentoring programme?

In School X, tutor groups are currently made up of approximately 30 pupils consisting of mixed pupils from years 7 to 11. Each tutor group belongs to one of six houses with a total of 8 tutor groups in the main school in each house. For the purpose of the proposed peer mentoring programme, the year-long programme will be centered around one of these six houses in the first instance to ensure that a practical and appropriate programme can be designed that offers each student a valuable outcome throughout the programme and beyond. While the programme focuses on activities shared between Year 10 and Year 7 pupils, all members of the

tutor group were to take part in the activities on an informal basis. This is firstly to ensure that no pupils miss out on the opportunity to benefit from the proposed project during tutor time periods. Other houses across the school were also able to access the programme informally to ensure that there is equal access to all resources and support. The second justification for ensuring that all pupils within the tutor group follow the same programme is to ensure that workload for staff is not increased owing to the need to essentially aid the delivery of the new peer mentoring programme alongside pre-existing tutor time activities that are designed centrally by the pastoral leaders and senior leadership team.

During the first action cycle, two training sessions with all year 10 mentors were organised to take place during lesson time in order to introduce the programme outline and expectations. The first session is specifically to ensure that all pupils are aware of their obligations and how to respond in the event that a pupil makes a disclosure during a session. While it is made very clear that safeguarding is not the responsibility of the pupil involved and that tutors will be present and circulating during all sessions as a precaution, it is still important to ensure that pupils are aware of how to respond in the event that such a situation arises. All safeguarding training was to be led by the school's Designated Safeguarding Lead to ensure that a consistent message is delivered in line with the school's policies. The session was also to focus on what can be gained from taking part in the programme in terms of building leadership skills that are transferable to other aspects of school life. During the second session, pupils were to be tasked with discussing what it means to be a mentor and recapping key ideas from the original meeting aimed at introducing programme aims. It was also to entail designing a number of suggested activities for their year 7 mentees that they believe will be both beneficial and interesting to their partner.

The key component of this activity is to ensure that pupils are able to have a significant input into the design and development of the programme.

Prior to commencing action cycle 2 of the programme, there was an opportunity for further discussion with year 10 mentors to gain further ideas for the development of the programme and complete initial group interviews with selected participants. The programme was intended to run on a daily basis during tutor time. Each Monday, a new task that has been jointly designed by myself and the year 10 pupils was to be released and be conducted on whichever day(s) best suit the tutor in charge of the group. As developed by the year 10 mentor leaders, the proposed programme featured a number of activities which are all aimed at developing social skills between both the mentor and mentee, as well as more specific academic and 'life skills' tasks such as being taught how to send emails to members of staff to request help with class or homework or how to use school IT services and apps on iPads. Alongside this, there is an expectation that the year 10 mentor would monitor their mentee's overall organisation and homework schedule as well as make an attempt to help them around the school and during social times over break and lunch.

After 1 term of leading the peer mentoring programme during tutor times, there is a further training session which offers the chance to evaluate the second action cycle and make changes to the programme where needed. It is also an opportunity to reiterate the programme's aims and intended outcomes to all pupils within the programme and meet with tutors within the house to receive updates on progress. The same opportunity is proposed at the end of the third action cycle in order to further evaluate the programme's outcomes and effectiveness.

5.1.2. Discussion

5.1.2.1. Regular training sessions

Regular training sessions at the start of each action cycle were incorporated for a number of reasons. In an Australian study conducted by Chester et al. (2013), it was found that there was a significant difference in the engagement of participants and the quality of the peer mentoring programme owing to the inclusion of regular training sessions for all involved in the study. This was also found in a study by Cartwright (2005) conducted in the UK who conducted an extended study of a peer mentoring programme in schools. It was concluded that the success of this study could be attributed largely to the extensive and continuous training that was offered to both the staff and pupils within the schools which maintained a level of engagement and momentum in the study and its objectives. However, another aspect of its success was owing to the inclusion of extra hours added to staff timetables in order to dedicate sufficient time to the study and any training required. Owing to the budgetary constraints of School X, additional time in the day for both myself as researcher and for the team of tutors supporting the project could not be allocated and therefore a possible limitation of the proposed study is the availability of sufficient time to train staff and allow for administrative tasks involved in the study's data collection.

The quality of training within a mentoring programme can significantly impact the quality and outcomes of any intended intervention (DuBois et al. 2002, Karcher 2007), and this can be felt particularly in disadvantaged pupils within any given programme. It is therefore for this reason that regular training has been included in the programme. This has been done firstly to ensure that the programme aims can be regularly revisited, but also to give regular opportunities to meet with pupils and assess the quality of provision and where improvements can be made.

Activity theorists consider mediation as a crucial part of human activity through the acquisition of tools within an activity or series of activities (Engeström 2015). From this perspective, regular training as part of a mentoring programme results in the accumulation and transmission of knowledge which is a powerful social tool that can influence a person's development during childhood. Similarly, Bronfenbrenner (1989) suggests that by taking part in activities and interactions within an environment help children to make sense of the world through proximal processes, contributing to a child's overall development. The concept of meso-time (the extent to which activities and interactions occur with some consistency in the developing person's environment) also impact the overall development of the person. Therefore, if both of these theories are applied to the regular training opportunities for pupils within the peer mentoring programme, it is suggested that regular and consistent episodes can impact development positively.

5.1.2.2. Choice of activities

It is proposed that year 10 mentors have the opportunity to both suggest and design their own activities for delivery during tutor time periods to their mentee. I will talk about engagement in greater depth in a later section, however there are a number of justifications for the inclusion of this aspect of the programme that are hoped to encourage higher levels of engagement than if activities were preset by staff within the school.

Bronfenbrenner's (1989) PPCT model, suggests that the *person* brings a number of personal characteristics to each social situation. Within this section of the model, he defines characteristics as either being demand, resource or force characteristics. The latter of these

three versions of characteristics is concerned with a person's temperament or motivation towards a certain social situation. He argues that within the exact same environment, a person's personal characteristics can change the context of that environment. I have interpreted this to mean how much a person gains from an environment depending on personal motivation to engage with a situation. From this, it could be suggested that only certain individuals with a stronger motivation or temperament to succeed in designing a variety of peer mentoring activities will actively engage in the creation of resources for use during tutor times. However, there is another branch to Bronfenbrenner's theory which concerns the context in which the social interaction, which in this case is designing mentoring activities, takes place. Within the microsystem of a child are both school and peers, both of which make up the environment in which the child develops. At this level of interaction, Bronfenbrenner is focused on an individual's engagement with either his or her school, or his or her peers. The mesosystem of this theory focuses on how each of these elements (school, peers, teachers, family) interact with each other in tandem. On a practical level, this could be a member of staff supervising a training session in which the mentoring activities are being designed. From this viewpoint, the member of staff is able to use their own professional judgement to support those with less motivation to engage, at least on a passive level of engagement whereby they contribute out of necessity. Through acknowledging the different levels of environment in Bronfenbrenner's theory of human development, there is an emerging practical solution for supporting greater engagement and the need for pupil choice over which activities form part of the programme.

Social development theorists would suggest that social interaction with other pupils, all of whom come with differing levels of knowledge and expertise, is a fundamental part of cognitive development (Vygotsky 1978, 1980). Some pupils who may have stronger levels of motivation,

different sociocultural experiences or prior historical knowledge of such tasks (or More Knowledgeable Other, or MKO) integrate with other pupils within the group and share their experiences. As a result, this reciprocal form of collaboration allows pupils to transfer experiences into their Zone of Proximal Development (Vygotsky 1978). In practice, this means that organising a forum in which pupils can share peer mentoring ideas allows for greater collaboration within the project.

Each of these theoretical viewpoints suggest the potentially positive effects of allowing for open dialogue between pupils and the facilitator. In practice, all suggested activities would be collected in and checked for overall suitability inline with existing pastoral priorities and some activities may not be of suitable quality for use within the classroom.

5.1.2.3. Format of mentoring sessions

Roach (2014) defines peer mentoring as 'regular dyadic meetings between an older student and younger student for the purpose of providing social support, guidance, and, when appropriate, academic assistance' (Page 211) and stresses the point of regular meetings as being an element of effective peer mentoring. Within the proposed study, formal mentoring sessions should take place at least once a week centered around a weekly activity, but there should also be a daily form of contact between the mentor and mentee to provide mutual support and guidance. Vygotsky suggested that learning takes place twice: once on the social, or interpersonal level, and again on the intrapersonal level. (Vygotsky, 1978). Therefore, theorists would argue that regular meetings are the most appropriate way to engineer an environment of development. A criticism of this theory is suggested by Maslow's (1943) hierarchy of needs theory. From this

perspective, regular peer mentoring sessions and interaction with peers in the classroom would be classed as 'belongingness and love needs' which are third within Maslow's proposed model. He suggests that in order to move between each of the five proposed sets of needs to achieve 'self-actualisation', each need must be fully met in chronological order before moving onto the next. Within the proposed study, there will be pupils who are disadvantaged and come from homes where they experience trauma and neglect and therefore may not meet some of Maslow's basic needs such as safety, food and rest. Therefore, from this perspective there is an argument that peer mentoring would be largely ineffective for pupils who are experiencing difficulties and lack basic support at home. However, more recent revisions of Maslow's theory suggest that each aspect of Maslow's proposed model do not have to interact in a chronological order and can instead regularly overlap meaning that any individual level can take precedence at any given time (Deckers 2018). A limitation of my proposed study is that data collection methods such as interviews and questionnaires do not provide sufficient data related to each participant's background and only seeks to evaluate how each pupil found the programme. Each of these theoretical stances suggest that in order to evaluate a pupil's motivation or engagement, an understanding of their background would greatly improve the effective analysis of data collected.

5.1.3. Summary

Based on the findings which have been guided by the literature review and accompanying theoretical stances, I am suggesting that in order to best structure a peer mentoring programme to better support pupils during tutor time, there are three primary elements that should be included to achieve a successfully designed programme. Regular training sessions on a weekly and daily basis are required in order to ensure that the programme becomes a daily aspect of a

child's environment (Bronfenbrenner 1989) in order to encourage greater engagement within the programme. Allowing a choice of activities which are designed by the pupils within the programme helps to facilitate a reciprocal environment (Fontana and Frey 1994) that consists of activities relevant to the needs of those involved, thus aiming to encourage greater engagement within the programme. Finally, the format of mentoring sessions should encourage dyadic support that meets the needs of the pupils involved (Maslow 1943). If each of these three elements are present within a peer mentoring programme, I am suggesting that success may well be achieved.

5.2. What impact could designing and leading a peer mentoring programme have on the engagement of year 10 pupils?

Within the literature review, I decided that I was going to use Fredricks et al.'s (2004) definition of engagement which suggests a multi-faceted definition of the word as agreed by much of the literature. I chose this definition as it allows for the greatest flexibility in attempting to categorise various forms of engagement at the point of data analysis. Within this definition, Fredricks et al. (2004) proposes 'emotional', 'cognitive' and 'behavioural' definitions, and describes engagement as a 'meta-construct' (page 60). However, the important part of what Fredricks et al. (2004) proposes is that these three constructs are 'dynamically interrelated' (page 61) and are not separate entities. Therefore, they propose that the three strands of engagement are interlinked and must be considered together, not as individual elements.

In order to analyse possible engagement as a result of leadership within the proposed mentoring programme from the perspective of Fredricks et al. (2004), it is first necessary to describe what is meant by emotional, cognitive and behavioural engagement from their perspective before using this model to explain my findings.

5.2.1.1. What forms of engagement exist within the proposed definition?

5.2.1.1.1. Emotional engagement

Emotional engagement is defined as reactions taking place within the classroom such as boredom, happiness, or sadness (Fredricks et al. (2004). Emotional engagement is centered largely around how much pupils like school, the work within the classroom, and their relationships between peers and staff. They suggest that in order to assess emotional engagement, it is important to evaluate the source of the reaction as one person may be feeling happy owing to the school community whereas another might be feeling happy owing to school processes (Page 67) and therefore any questionnaires and interviews needed to be designed to attempt to understand the source of a pupil's emotional engagement.

5.2.1.1.2. Cognitive engagement

Cognitive engagement focuses largely on a person's psychological investment in the learning process and their desire to go beyond the requirements of a task (Fredricks et al 2004, Connell and Wellborn 1991) which goes beyond behavioural engagement of participation in isolation. It

is suggested that some researchers use the terms 'cognitive engagement' and 'self-regulation' interchangeably (page 67).

> *'Cognitive engagement literature can be strengthened by drawing on the broader motivational literature on goals and intrinsic motivation, which includes survey items that might be indicators of psychological investment. Currently, investment and strategy use are measured separately or, in some cases, are not measured at all. To fully assess psychological investment in academic tasks, a more inclusive measure is needed that combines measures that target preferences for hard work and challenge with measures that target precisely how students think. In addition, researchers should consider including survey items from the self-regulation literature or observational techniques that assess the quality of engagement'.*
>
> (Fredricks et al. 2004, pages 68-69)

In summary, to properly measure cognitive engagement, questionnaires should aim to question preferences for hard work and challenge. It is also suggested that asking observers to make note of an particular attributes exhibited by pupils within the study related to preference of hard work and challenge would help support any findings.

5.2.1.1.3. Behavioural engagement

Behavioural engagement is the acceptance of rules within an establishment such as school, regular attendance and the avoidance of being sanctioned due to negative behaviours (Fredricks et al. 2004). This overlaps significantly with both cognitive and emotional engagement whereby a person can engage with something at different levels and invest significantly more or less in

comparison to another person. Therefore, an implication fo my study was to question pupils on why they may invest more significantly in certain aspects of school.

5.2.1.2. How can this model be used to explain levels of engagement seen within the peer mentoring programme?

The structure of the proposed peer mentoring programme includes regular training sessions that are aimed at providing constant support for year 10 leaders and to ensure that proactive changes to the programme can be made swiftly to better suit the needs of the pupils. The programme also gives year 10 leaders the opportunity to design their own activities to deliver during the programme that they feel best suit the purpose and hopeful outcomes of the mentoring. The year 10 to year 7 pairings of mentor and mentee are at the discretion of the tutor in charge of the group and can be negotiated between pupil and teacher prior to starting the project. Finally, the programme assumes a model of compulsory participation for all year 10 pupils within the house.

5.2.1.2.1. Regular training sessions

Studies by Won and Choi (2017) and Gafni Lachter and Ruland (2018) both found that participants perceived peer mentoring programmes to be of a higher value as a result of regular training sessions which offered them the opportunity to build a variety of different skills such as leadership and confidence. The ability to perceive value in a programme demonstrates a level of cognitive engagement if participants can see a purpose in their participation and the ability to gain something greater than the task being presented (Fredricks et al., 2004). What this suggests

is that pupils who are intrinsically motivated are more likely to demonstrate cognitive engagement in the programme owing to their own personal motivation to succeed. Behavioural engagement is also likely to be present by participants who are attending owing to the compulsory model of participation within the school structure. The purpose of the peer mentoring programme is not to evaluate engagement, but to attempt to improve it.

From the perspective of social development theorists such as Vygotsky (1978), development is preceded by social interactions seen firstly on a social level before then being revisited at a personal level. Vygostsky also makes the assumption that learning is guided by a More Knowledgeable Other (MKO) such as a teacher or a student who helps facilitate learning in a reciprocal fashion. Using this theory to try and understand engagement in a peer mentoring programme, I am suggesting that by putting pupils together in a compulsory training session amongst strongly intrinsically motivated pupils to openly discuss the purpose and hoped outcomes of the programme helps to create shared social interactions that can impact the engagement of those who were initially less inclined to participate in the programme beyond the sense of behavioural engagement via attendance.

From a feminist theory perspective, recipricality of support and training during each session can help break down barriers of traditional behaviourist style transfer of knowledge from a knowledgeable to less knowledgable person (Fontana and Frey 1994). Attempting to remove perceived threats to pupils such as a hierarchical structure of training can improve motivation in pupils (Fredricks et al. 2004) and therefore this theory supports a hypothesis that regular training sessions in this fashion can improve engagement in the programme.

From a bioecological perspective of development theorised by Bronfenbrenner (1989), the presence of an instructor such as a teacher who is tasked with facilitating discussion between peers during training systems acts as an environment *mesosystem* that helps form links within a child's *microsystems* of peers and school. This theory would also explain the regularity of training sessions as *meso-time* which is the amount of time spent within an environment. This is supported by the perspective of activity theorists who would suggest that the length of time spent taking part in regular training sessions facilitates the accumulation of *tools* available to the child in order to develop (Engeström 2015).

5.2.1.2.2. Choice of activities and mentees

The proposed peer mentoring programme allowed year 10 pupils to design their own set of activities to be delivered during tutor times as well as the ability to choose their mentee. The element of choice and the ability to design the programme in a way that will be welcomed by participants is an example of emotional engagement. Displaying forms of emotion such as happiness are measures of engagement (Fredricks et al. 2004) and therefore it is hoped that the element of choice may improve engagement in participants over time.

5.2.1.2.3. Compulsory participation model

Based on a model of peer mentoring by Cooper (2018), the peer mentoring programme is a compulsory participation model. As the programme is intended to follow the modus operandi of School X, there is an argument that there would be little to no improvement in engagement for those pupils who already have low levels of any form of engagement in other compulsory activities within the school. Therefore, I intend to conduct an initial questionnaire that can

collect data to better understand the emotional, cognitive and behavioural development of all participants prior to the programme commencing so that comparisons can be drawn with the same questionnaire at the end of the programme. By doing this, I believe it is possible to explain changes in engagement as a result of programme participation.

5.2.2. Summary

Based on the findings which have been guided by the literature review and accompanying theoretical stances, I am suggesting that engagement can be improved in participants based on a number of assumptions. Through the inclusion of regular training sessions along with a choice of activities and mentee, I believe that greater cognitive engagement can be achieved through an improved sense of purpose which is scaffolded via the mentoring programme.

5.3. What could year 10 pupils learn from building a working relationship with their mentee?

As a result of participating in the proposed peer mentoring system, year 10 mentors were to lead a number of activities that they have designed during training sessions in order to support their mentee to develop. It was hoped that this would encourage pupils to gain practical skills in leadership and confidence that can be transferred to other areas of school life. However, through creating a working relationship between a year 10 mentor and a year 7 mentee, it was also hoped that this would support their psychological development through the creation of a mentoring environment. Through the lens of a bioecological model of human development, I

will attempt to explain possible developmental implications as a result of the proposed model of peer mentoring.

5.3.1.1. Practical skills

From the literature review, a study by Sheridan et al. (2016) evaluated a Clinical Leadership Experiences (CLE) programme at a dental school aimed at supporting both second and fourth year students. Fourth year students in particular highlighted the increased levels of confidence and consolidation of skills gained through actively taking part in a leadership project. The project gave them management, leadership and work experience skills that were felt to be highly valuable to their own development. It is hoped that through the process of training sessions and delivering peer mentoring, each of the year 10 participants will gain the experience of management, leadership and transferable work skills to prepare them for later life.

However, what is not clear is whether pupils recognise the value of the skills being gained through participation and whether they are aware that they are gaining them. The perceived value of taking part may not be seen from the perspective of participants if they lack metacognitive skills. Metacognitive skills may only be present in the bioecological environment of certain pupils based on their *resource characteristics*, as suggested by Bronfenbrenner's (1989) PPCT model. Past experiences, skills and intelligence all contribute to a person's development and each person possesses different attributes that make up their environment. Therefore, it is possible that not all pupils will have the ability to recognise skills being gained, or be able to verbalise their recognition of skills, even passively. It is for this reason that any data

analysis of the impact of the peer mentoring programme should be considered alongside prior knowledge of each participant and their perceived knowledge of skills gained.

5.3.1.2. Psychological development

5.3.1.2.1. Bioecological model of human development

The proposed peer mentoring model provides a further setting for social interaction for year 10 and year 7 pupils, thus creating a new environment. From the perspective of Bronfenbrenner (1989), he suggests that by creating ways in which a child can participate within an environment and be supported in that, that this supports human development. Each individual will have an entirely different set of experiences from their own individual environment which will in turn be shared with the partner through the mentoring programme and this exposes the pair to a number of new experiences gained through new interactions. Conducting group interviews with a small selected group of pupils allows the researcher to share in these experiences and gain a better understanding of how each person has gained something new as a result of forming a working relationship with their partner.

5.3.1.2.2. Peers as a microsystem or mesosystem

Within the mentoring programme, peers take on a dual role within Bronfenbrenner's (1989) theory, both as elements of the microsystem which concerns the immediate environment of a child, and also elements of the mesosystem which concerns the relationships and facilitation of different groups within the microsystem.

5.3.2. Summary

In conclusion, there is evidence to suggest that pupils could develop a number of practical skills such as leadership and management as a result of leading the project in a mentoring capacity. There is also evidence to suggest that new social situations being created through the mentoring programme create new experiences within the school environment that contribute to a child's development. Owing to the great number of different individual environments of each participant, there are a number of possibilities for new experiences to be had and the need for evaluating the effectiveness of the programme by means of group interviews would hopefully provide further data to support this hypothesis.

6. Conclusions and implications

Owing to the outbreak of Covid-19 and the consequent partial closure of UK schools in March 2020, the majority of my originally planned intervention was unable to be carried out in school. Due to the nature of the project and the reliance on pupils being in the classroom together, it was not possible to adapt my work to be conducted online or through distance learning. As such, the decision was made to present my work as a proposed research project and I have therefore made conclusions based on an assessment of how far I think the intervention would have been successful with the pupils I planned to involve in the study. My conclusion also discusses the data I might have expected to see with significant reliance on existing literature as outlined earlier in my work. Finally, I discuss any possible implications for future practice in light of my findings and how the peer mentoring programme might be further adapted and conducted in a real-life setting.

My overarching research question sought to consider levels of engagement in school as a result of implementing a peer mentoring system for both Year 10 and Year 7 pupils during tutor time. In order to explore this idea, I first considered the meaning of 'engagement' and used ideas by Fredricks et al. (2004) who describe engagement as a 'meta-construct' (page 60) which consists of 'emotional', 'cognitive', and 'behaviourial' forms of engagement. The term "meta-construct" is 'sometimes applied to engagement, which seeks to describe it as a distinct construct, but comprised of these three key dimensions'. (Wiseman et al. 2016: 667) However, the important part of what Fredricks et al. (2004) proposes is that these three constructs are 'dynamically interrelated' (page 61) and are not separate entities. Therefore, they propose that the three strands of engagement are interlinked and must be considered together, not as individual

elements. The argument is that each one of these three categories directly impacts the next one.

I considered each constructs of engagement (Fredricks et al. 2004) through the theoretical lense of Bronfenbrenner's bioecological model of human development (Bronfenbrenner 1989). Bronfenbrenner's model suggests that the extent to which a human participates in proximal processes, which are, in this instance, the act of participating in a peer mentoring programme, will vary significantly owing to individual motivation. In order to draw conclusions, I am suggesting that all pupils in the study will engage with the peer mentoring programme on some level, be this attending the daily programme which is considered to be 'behavioural' engagement, or going beyond the basic requirement of participating and becoming an integral part in the development of the programme and support of younger students, which would be considered by Fredricks et al. (2004) to be 'cognitive' engagement. If this is the case, I would expect a number of participants to report an understanding of the purpose of mentoring in their questionnaire results showing understanding of *why* there is educational benefit to be gained from participating in the programme.

From the perspective of Bronfenbrenner (1989), time is regarded as an integral part of his theoretical model and he suggests that the length of time a human participates in an activity will effect the extent to which this becomes part of their environment. Therefore, it is possible that some participants who initially show little engagement in the peer mentoring programme other than behavioural attendance may exhibit evidence of increased engagement at later data collection points within the study. Argryis and Schon (1974) discuss the difference between espoused theory and theory in use. Espoused theory is the world view and values people believe their actions are based on, which Is compared to theory in use which the world views and values

implied by their behaviours. What Argryis and Schon (1974) suggest is that many people are unaware of the difference between the theory they believe they are exhibiting and the one that is actually exhibited. I would predict that some pupils may show signs of lack of engagement and negative comments in initial group interviews that may not correlate with their observed actions during the programme, as recorded by tutor staff. This could be for two reasons: Firstly, owing to the theory suggested by Argryis and Schon (1974) whereby few people can see the difference between the two theories they exhibit. Secondly, this could be owing to the environment in which a group interview is conducted alongside other peers, meaning the participants may not wish to verbalise their thoughts in front of other people, or in front of a member of staff.

Bronfenbrenner (1994) acknowledges the relevance of biological and genetic aspects of a person through characteristics he calls demand, resource and force. He suggests that two people with similar resource characteristics (past experiences, skills and intelligence) may not necessarily have similar levels of engagement within an environment. He acknowledges the individual characteristics of a person that can change the context of an environment through being either active or passive to one's surroundings. In relation to my study, this could mean that introducing a peer mentoring system to a group of pupils' microsystems will not have the same outcome for each pupil owing to their own individual levels of engagement and motivation to participate within the new environment. Therefore, I would have expected to see data that suggests both active and passive engagement to the programme.

Secondly, I considered how the skills that could potentially be gained from participating in a peer mentoring programme might impact the enagement of Year 10 participants. Gafni Lachter and Ruland (2018) evaluated experiences of occupational therapy students involved in a peer

mentoring scheme and found that participants were able to form strong relationships with their mentees and expressed high satisfaction with the value gained by taking part in the programme. This study demonstrated that perceived value of a programme was a factor in improving elements of engagement in participants, and therefore I am suggesting that participants in my study would have displayed an element of awareness as to the skills gained through the programme.

The model of peer mentoring that I have proposed is based upon a number of different models that aims to use some of the most successful elements from each in order to create a new model. However, it is worth noting that aspects such as any possible improvement to leadership skills is underresearched in school settings and comes largely from the field of medical research. Similarly, the compulsory participation model that I use, based on the work by Cooper (2018) in Australian universities was used with undergraduate students and has not been formally tested with school-age pupils and therefore caution should be used when making hypothetical conclusions about the effectiveness of such models and any impact this may have on younger children. However, I believe that there is certainly a need for further research into peer mentoring in school-age pupils with a specific focus on varying participatory models and any potential gain in leadership skills within mentors. I also would hope to see further research into peer mentoring programmes that allow an element of participant collaboration with regards to the programme design and content to ensure that it is tailored to the specific needs of the pupils in their own school setting.

7. References

Anderson, E.M., Lucasse Shannon, A. (1995) 'Toward a conceptualisation of mentoring', in T. Kerry and A.S. Shelton Mayes (eds) *Issues in Mentoring,* London: Routledge.

Argyris, C., & Schon, D. (1974) *Theory in practice: Increasing professional effectiveness.* San Francisco: Jossey Bass.

BBC News (2020), Coronavirus: UK schools, colleges and nurseries to close from Friday. Retrieved from: https://www.bbc.co.uk/news/uk-51952314

Bergen, D. (2008). *Human development: traditional and contemporary theories.* Upper Saddle River, NJ: Prentice Hall. p. 220

Berk, L.E. (2000). *Child Development (5th ed.).* Boston: Allyn and Bacon.

Bronfenbrenner, Urie (1989). "Ecological systems theory". In Vasta, Ross (ed.). *Annals of Child Development: Vol. 6.* London, UK: Jessica Kingsley Publishers. pp. 187–249.

Bronfenbrenner, Urie (1994). *International Encyclopedia of Education Vol 3, 2nd Ed.* Oxford: Elsevier.

Bronfenbrenner, U., & Ceci, S. J. (1993). Heredity,environment, and the question ‘‘how?’’ A first approximation. In R. Plomin & G. G. McClern (Eds.), *Nature, nurture, and psychology (pp.313–323).* Washington, DC: American Psychological Association.

Bronfenbrenner, U., & Evans, G. W. (2000).Developmental science in the 21st century: Emerging theoretical models, research designs,and empirical findings. *Social Development,9,115–125.*

Bronfenbrenner, Urie (2005). *Making human beings human: Bioecological perspectives on human development.* Thousand Oaks, CA: Sage Publications.

Brooks, R., te Riele, K. and Maguire, M. (2014) *Ethics and Education Research* . London: Sage.

Byrne, J. (2019) *How do regularly excluded pupils in an English West Country secondary school view rewards and sanctions?* (Unpublished masters thesis), The University of Oxford, Oxford

Cartwright, N. (2005). Setting up and Sustaining Peer Support Systems in a Range of Schools over 20 Years. *Pastoral Care in Education, 23(2), 45-50.*

Chedzoy, S., & Burden, R. (2005). Making the move: Assessing student attitudes to primary-secondary school transfer. *Research in Education, 74, 22-35.*

Chester, A., Burton, L., Xenos, S., Elgar, K., & Denny, B.. (2013). Transition in, Transition out: A sustainable model to engage first year students in learning. A Practice Report. *International Journal of the First Year in Higher Education, 4(2), 125-130.*

Connell, J. P., & Wellborn, J. G. (1991). Competence, autonomy, and relatedness: A motivational analysis of self-system processes. In M. Gunnar & L. A. Sroufe (Eds.),*Minnesota Symposium on Child Psychology (Vol. 23).* Chicago: University of Chicago Press.

Cohen, L., Manion, L., & Morrison, K. (2018). *Research Methods in Education.*

Colley, H. (2003). *Mentoring for social inclusion: A critical approach to nurturing mentor relationships.* London: RoutledgeFalmer

Cooper, R. (2018). Connecting embedded and stand-alone peer mentoring models to enhance student engagement. *Student Success, 9(2), 87-93.*

Creswell, J. W. (2013) *Research Design: Qualitative, Quantitative and Mixed Methods Approaches (fourth edition).* Thousand Oaks, CA: Sage.

Deckers, L. (2018). *Motivation : Biological, psychological, and environmental (Fifth ed.).* London: Routledge.

Diener, E. and Crandall, R. (1978) *Ethics in Social and Behavioral Research .* Chicago, IL: University of Chicago Press.

Dotterer, A., & Lowe, M. (2011). Classroom Context, School Engagement, and Academic Achievement in Early Adolescence. *Journal of Youth and Adolescence, 40(12), 1649-1660.*

DuBois, D., Holloway, B., Valentine, J., & Cooper, H. (2002). Effectiveness of Mentoring Programs for Youth: A Meta-Analytic Review. *American Journal of Community Psychology, 30(2), 157-197.*

Engeström, Y. (2015). *Learning by expanding : An activity-theoretical approach to developmental research (Second ed.).* Cambridge.

Ferrance, E. (2000). *Themes in education: Action research.* Brown University: Educational Alliance, 1-34.

Field, T., Miguel, D., & Sanders, C. (2002). Adolescents' parent and peer relationships. *Adolescence, 37(145), 121-30.*

Fielding, N., (1996) Qualitative interviewing, in N. Gilbert (ed.), *Researching Social Life.* London:Sage, pages 135-53

Fontana. A., Frey, J. H., (1994). Interviewing: the art of science, in N.K. Denzin and Y.S. Lincoln (eds), *Handbook of Qualitative Research.* Thousand Oaks, CA: Sage. Pages 361-76

Frankfort-- Nachmias, C. and Nachmias, D. (1992) *Research Methods in the Social Sciences .* London: Edward Arnold.

Fredricks, J., Blumenfeld, P., & Paris, A. (2004). School Engagement: Potential of the Concept, State of the Evidence. *Review of Educational Research, 74(1), 59-109.*

Furnham, A., & Bochner, S. (1982). *Social difficulty in a foreign culture: An empirical analysis of culture shock.* In S. Bochner (Ed.), *Cultures in contact: Studies in cross-cultural interaction* (pp. 161–198). New York, NY: Pergamon Press

Gafni Lachter, L., & Ruland, J. (2018). Enhancing leadership and relationships by implementing a peer mentoring program. *Australian Occupational Therapy Journal, 65(4), 276-284.*

Greig, A. D. and Taylor, J. (1999) *Doing Research with Children* . London: Sage.

Grossman, J., & Tierney, J. (1998). Does Mentoring Work?: An Impact Study of the Big Brothers Big Sisters Program. *Evaluation Review, 22(3), 403-426.*

Haig, B. D., (1997) Feminist research methodology, in J. P. Keeves (ed.), *Educational Research, Methodology and Measurement: An international Handbook. 2nd edition.* Oxford: Elsevier, pages 180-5

Hammersley, M. and Traianou, A. (2012) *Ethics in Qualitative Research: Controversies and Contexts.* London: Sage.

Hill, M. (2005) Ethical considerations in researching children's experiences, in S. Greene and D. Hogan (eds), *Researching Children's Experience: Approaches and Methods.* London:Sage, 253-72

Houlston, C., Smith, P., & Jessel, J. (2009). Investigating the extent and use of peer support initiatives in English schools. *Educational Psychology, 29(3)*, 325-344.

Jimerson, S., Campos, R., & Greif, E. (2003). Toward an Understanding of Definitions and Measures of School Engagement and Related Terms. *The California School Psychologist, 8(1), 7-27.*

Karcher, M. J. (2007). Cross-age peer mentoring. *Youth Mentoring: Research in Action, 1, 3–17.*

Kemmis, S. (2009) Action research as a practice-- based practice. *Educational Action Research , 17 (3), pp. 463– 74.*

Kemmis, S., and McTaggart, R. (2000), 'Participatory action research' in N.K. Denzin and Y.S. Lincoln (eds), *Handbook of Qualitative Research. 2nd edn,* Thousand Oaks, CA: Sage. 567-605

Kemmis, S. and McTaggart, R. (2005) Participatory action research: communicative action research and the public sphere. In N. Denzin and Y. Lincoln (eds) *The Sage Handbook of Qualitative Research (third edition).* Thousand Oaks, CA: Sage, pp. 651– 79.

Knowles, C., & Parsons, C. (2009). Evaluating a formalised peer mentoring programme: Student voice and impact audit. *Pastoral Care in Education, 27(3), 205-218.*

Li, Y., & Lerner, R. (2013). Interrelations of Behavioral, Emotional, and Cognitive School Engagement in High School Students. *Journal of Youth and Adolescence, 42(1), 20-32.*

Maslow, A.H. (1943). "A theory of human motivation". *Psychological Review. 50 (4): 370–96.*

Measures of School Engagement and Related Terms. *The California School Psychologist, 8(1), 7-27.*

Merriam, S. (1983) Mentors and protégés: a critical review of the literature*, Adult Education Quarterly, 33, 3: 161– 173.*

Miller, A. (2002). *Mentoring students and young people: A handbook of effective practice.* London: Kogan Page

Morrison, K. R. B. (2013a) Interviewing children in uncomfortable settings: ten lessons for effective practice. *Educational Studies , 39 (3), pp. 320– 37.*

Nelson, A. (2003). Peer Mentoring: A Citizenship Entitlement at Tanfield School. *Pastoral Care in Education, 21(4), 34-41.*

O'Hara, D. (2011). The impact of peer mentoring on pupils' emotional literacy competencies. *Educational Psychology in Practice, 27(3), 271-291*

Organisation for Economic Co-operation Development. (2003). Student Engagement at School [electronic Resource]: A Sense of Belonging and Participation: Results from PISA 2000.

Outhred, T., & Chester, A. (2013). Improving the International Student Experience in Australia Through Embedded Peer Mentoring. *Mentoring & Tutoring: Partnership in Learning, 21(3), 312-332.*

Parsons, C., Maras, P., Knowles, C., Bradshaw, V., Hollingworth, K., & Monteiro, H. (2008). *Formalised peer mentoring evaluation.* London: Department for Children, Schools and Families (DCSF).

Philip K. & Spratt, J. (2007) *A synthesis of published research on mentoring and befriending for The Mentoring and Befriending Foundation*, the Rowan Group, University of Aberdeen.

Piggot-- Irvine, E., Rowe, W. and Ferkins, L. (2015) Conceptualizing indicator-- domains for evaluating action research . *Educational Action Research , 23 (4), pp. 545– 66.*

Piper, Heather, & Piper, John. (1999). 'Disaffected' Young People: Problems for mentoring. *Mentoring & Tutoring: Partnership in Learning, 7(2), 121-130.*

Powell, J. E. (2016) *What Works? A Grounded Theory of Effective Peer Mentoring in Secondary Schools.* Thesis, University of Essex & Tavistock and Portman NHS Trust

Punch, K. (2009). *Introduction to Research Methods in Education*, London: Sage

Reading, J. (2016). Providing Enhanced Information Skills Support to Students From Disadvantaged Backgrounds: Western Sydney University Library Outreach Program. *The Journal of Academic Librarianship, 42(6), 694-704.*

Rees, J., (2019) Why teachers need support for burdens of pastoral care. Retrieved from https://www.tes.com/news/why-teachers-need-support-burdens-pastoral-care

Roach, G. (2014). A Helping Hand? A Study into an England-wide Peer Mentoring Program to Address Bullying Behavior. *Mentoring & Tutoring: Partnership in Learning, 22(3), 210-223.*

Roberts, A. (2000). Mentoring Revisited: A phenomenological reading of the literature. *Mentoring & Tutoring: Partnership in Learning, 8(2), 145-170.*

Rogoff, B (2003). *The cultural nature of human development.* New York: Oxford University Press.

Rosa, E., & Tudge, J. (2013). Urie Bronfenbrenner's Theory of Human Development: Its Evolution From Ecology to Bioecology. *Journal of Family Theory & Review, 5(4), 243-258.*

Russell, L. (2007). Mentoring is not for you!: Mentee voices on managing their mentoring experience. *Improving Schools, 10(1), 41-52.*

Santrock, J. W. (2007). *A Topical Approach to Life-Span Development.* New York, NY: McGraw-Hill.

Sheridan, R. A., Hammaker, D. J., De Peralta, T. L., & Fitzgerald, M. (2016). Dental students' perceived value of peer-mentoring clinical leadership experiences. *Journal of Dental Education, 80(3), 311-317.*

Swick, K (2004). *Empowering parents, families, schools and communities during the early childhood years.* Champaign, IL: Stipes.

Thompson, L., & Kelly-Vance, L. (2001). The impact of mentoring on academic achievement of at-risk youth. Children and *Youth Services Review, 23(3), 227-242.*

Tudge, J; Mokrova I, Karnik RB & Hatfield BE (2011). "Uses and misuses of Bronfenbrenner's bioecological theory of human development". *Journal of Family Theory & Review. 1(4): 198–210.*

Vander Zanden, J. W., Crandell, T. L., Crandell, C. H. (2007).*Human Development.* 8th edition (ed.), New York: McGraw Hill.

Vygotsky, L. (1978). Interaction between learning and development. *Readings on the development of children, 23(3), 34-41.*

Vygotsky, L. S. (1980). *Mind in society: The development of higher psychological processes.* Harvard university press.

Wax, M. (1982) Research reciprocity rather than informed consent in fieldwork. In J. Sieber (ed.) *The Ethics of Social Research: Fieldwork, Regulation and Publication* . New York: Springer--Verlag, pp. 33– 48.

Wellington, J. (2015) *Educational Research (second edition).* London: Bloomsbury Academic.

Whittaker, F. (2019) Some pupils may not access new school mental health services for a decade. Retrieved from: https://schoolsweek.co.uk/some-pupils-may-not-access-new-school-mental-health-services-for-a-decade/

Wiseman, P.J., Kennedy, G.E. & Lodge, J.M. (2016). Models for understanding student engagement in digital learning environments. In S. Barker, S. Dawson, A. Pardo, & C. Colvin (Eds.), *Show Me The Learning.* Proceedings ASCILITE 2016 Adelaide (pp. 666-671).

Won, M., & Choi, Y. (2017). Undergraduate nursing student mentors' experiences of peer mentoring in Korea: A qualitative analysis. *Nurse Education Today, 51, 8-14.*