A scoping review and thematic analysis of mentoring models that include leadership and school connectedness theories

Anita Suleman[1] ⓘD **Philemon Chigeza**[2] ⓘD **Jo Mensinga**[3] ⓘD

[1] College of Arts, Society and Education, James Cook University, Cairns, Australia (anita.suleman@jcu.edu.au)
[2] College of Arts, Society and Education, James Cook University, Cairns, Australia (philemon.chigeza@jcu.edu.au)
[3] College of Arts, Society and Education, James Cook University, Cairns, Australia (jo.mensinga@jcu.edu.au)

Abstract

Little is known about mentoring programs that focus on peer to peer mentoring as a leadership program or peer and school connectedness within Australia in the last ten years. In fact, according to Nora and Crisp (2016), 'research in the last 15 years on assessing mentoring programs was mainly focused on the academic success of students' (p. 339). Given the limited reviews addressing the leadership and school connectedness factors in Australia, the objective was to understand the scope of published literature, identify evidence gaps and suggest future research needs. This scoping review searched within five electronic databases, in which only studies reported in English during the period 2010-2020 and published on mentoring, leadership and connectedness were selected. Studies were coded using thematic analysis. Included studies (n=25) were multi-clustered into five themes: peer support and peer relationships (68%), school connectedness (52%), well-being (48%), transition (40%), and leadership (20%). Most studies (64%) were conducted in private or independent schools within Australia, and 65% were qualitative. Future research efforts should focus on the interrelationship of peer to peer mentoring, leadership or school and peer connectedness. Additional studies within all school sectors would help low socio-economic areas, including vulnerable children, Indigenous populations, and regional areas.

Keywords: mentoring, peer to peer, leadership, school connectedness, high school

1. Introduction

Currently, there is little known about peer to peer mentoring programs within Australia in the last ten years that relate to peer mentoring, leadership or peer and school connectedness. Increasingly, schools are being called upon to enhance their students' well-being through mentoring. However, some North Queensland schools call for programs and protocols to allow their students to experience and develop these skills to help them feel connected to their

school and peers. In fact, according to Nora and Crisp (2016, p. 339), 'research in the last 15 years on assessing mentoring programs was mainly focused on the academic success of students'. Nora and Crisp further suggest that these peer to peer mentoring or peer mentoring programs aim to enhance students' sense of belonging, academic persistence and success, but focusing on the mentees experience only. However, the literature suggests that a peer to peer mentoring program can also grow and develop leadership skills for the mentors as well (Besnoy & McDaniel, 2015; Burton, 2012; Coyne-Foresi, 2018; Willis, Bland, Manka, & Craft, 2012).

This scoping review and thematic analysis looked at different forms and models of mentoring programs: (1) Cross-age and peer to peer mentoring, (2) transition programs, (3) youth mentoring, and (4) cross-age peer teaching. The fundamental similarity in these different mentoring models is that Mentors and Mentees relationships remain consistent throughout the ages, sharing knowledge, skills and experience to assist others in progress. Searches yielded a total of 2365 citations, of which 25 were included in this review. These citations clustered according to the five primary themes of peer support and peer relationships (68%), school connectedness (52%), well-being (48%), transition (40%), and leadership (20%). The proportion of included studies revolved around the 11-17 year age groups and Australia's private school sector. Methodologically, most of the studies used qualitative (65%), and the remaining 35% used quantitative or mixed methods.

The history of mentoring dates back to ancient Greece, where the word 'Mentor originates with the story of Odysseus and his son Telemachus' (Besnoy & McDaniel, 2015, p. 18; Grassinger, Porath, & Ziegler, 2010). When Odysseus fought in the Trojan War, he entrusted his friend Mentor with educating his son. Mentor was a 'teacher, friend, counsellor, protector' and "father-figure" (Besnoy & McDaniel, 2015, p. 18; Grassinger et al., 2010, p. 28; Sinclair & Larson, 2018, p. 3). Since that time, mentoring relationships have helped individuals navigate life's obstacles. It can be argued that mentoring and mentors' role in schools today are no different from the role Mentor played for Telemachus.

Contemporary research suggests that peer mentors' benefits outweigh the negatives when it comes to in-school mentoring (Besnoy & McDaniel, 2015; Chambers & Coffey, 2019). Some of the favoured peer mentoring aspects that enhance students' growth include 'academic connectedness, self-esteem, responsibility, leadership and hopefulness' (Karcher, 2014, p. 2). Karcher further suggests that these benefits can counter some of the potential negative aspects of bullying, lack of connectedness to peers or school, and a negative self-image. These negative aspects, if not addressed, can be detrimental to any student's social and academic growth. The following section will look at the different mentoring models analysed in this review; cross-age and peer to peer mentoring, transition programs, youth mentoring, and cross-age peer teaching.

2. Cross-Age and Peer to Peer Mentoring

Both cross-age mentoring and peer to peer mentoring recommend that an older student (mentor) be paired with a younger one (mentee). The many advantages attributed to these models include regularly scheduled meetings, the development of learning skills and the possibility of developing a "sibling type relationship" (Besnoy & McDaniel, 2015, p. 19; Karcher, 2014). However, the most impactful outcome is the age gap between the mentor and mentee (Karcher, 2014). This is so because, although the age difference is enough for the mentee to perceive the mentor as knowledgeable, it is small enough for them to interact as peers. Willis, Bland, Manka & Craft (2012, p. 173) believe that 'cross-age mentoring is an educational model that builds on peer support and mentoring to enhance their social relationships, develop cognitive skills and promote positive identity development'. Similarly, Gonsoulin, Robin and Candace (2006); Karcher, Davidson, Rhodes and Herrera (2010); Karcher (2014) and Manning (2005) suggest a minimum difference of two years between mentor and mentee is essential to enhance the friendly relationship. However, this can also be considered problematic because the goal and outcome of mentoring are a 'working relationship' and not a 'friendly relationship'.

Karcher (2014, p. 2) suggests that the 'working relationship, conducted in schools predates the more

formally known "school-based mentoring" or youth mentoring where adults come into the school' (p. 2). This formal aspect of mentoring assumes the responsibility of the mentor for the mentee's learning and development. However, it can be argued that peer mentoring can be varied and informal to suit the school's needs at different times. These variants could be for academic or connectedness purposes by helping to lift the results of mentee students involved, or they could be used to have older students connecting with the younger, more vulnerable students. This approach ensures they are no students left behind academically or emotionally. This informal mentoring style is closely aligned with the transition program, which adapts to the new students' need in a school.

3. Transition Programs

The primary to secondary school transition for most students requires a strong social and educational support system. However, there are currently 'few evidence-based, system-wide strategies to support students in the transition' (Evans-Whipp, Mundy, Canterford, & Patton, 2018, p. 1). The physical and social changes in children in their middle school years can have implications for their education and learning, such as the development phase during the middle school years. At this stage of development, the brain is adaptable and sensitive to social and educational influences; therefore, optimising well-being, academic and social competence can lead to improved learning. This means that transition programs such as mentoring, including school and peer connectedness, can be a foundation for learning, growth and social development throughout their remaining schooling years and beyond.

The Universal Design for Learning (U.D.L.) provides a useful basis for developing transition programmes that address all participants' needs. This program is based on three principles: multiple means of engagement, multiple means of representation, and multiple means of action and expression; which, if applied to programs, can benefit students who struggle to adapt to the new content and school environment (Chambers & Coffey, 2019, p. 29). The mentors influence the mentees to engage in their learning and content. Mentees' understanding of the information can vary; therefore, mentors' many means of representation can lift mentee students' capabilities. Physical activities, such as role-playing can be utilised to open communication with peers and mentees in these mentoring programs. This transition program can have many benefits to all involved, including the learning of leadership skills.

Another study drew data from *The Supportive Schools Project*, measuring the 'impact of a whole-school intervention, including curriculum, on Western Australian students' experiences of bullying' (Waters, Lester, & Cross, 2014, p. 156). Children's socio-emotional well-being influences how well they manage the move to secondary school. For example, West, Sweeting, & Young (2010) found that children with lower self-esteem and high anxiety levels often experience difficulties during the transition to secondary school. At the same time, other studies have found that children with "behaviour difficulties" in primary school are more likely to struggle with the transition to secondary school (Bailey & Baines, 2012, p. 48). Students in this project transitioned from primary school at the end of Grade 7 and commenced secondary school in Grade 8. The studies highlight that a peer-to-peer mentoring program could provide these vulnerable students with skills to combat bullying, which may occur, and help them feel connected to their school and peers by regularly meeting with older mentors.

4. Youth mentoring

Youth mentoring is characterised as an individualised supportive relationship between a young person and a non-parental adult (DuBois & Karcher, 2014, p. 2; Lakind, Eddy, & Zell, 2014; Pryce, 2012; Pryce & Keller, 2011). Youth mentor programs are run mainly by volunteers; however, there are some programs of 'professional' paid mentors, such as the Friends of the Children (F.O.T.C.) program (Lakind, Eddy, & Zell, 2014). Literature suggests that there are limitations to recruiting and maintaining professional mentors, and the 'student need far exceeds the supply' (Lakind et al., 2014, p. 706). Programs like F.O.T.C. can be seen as a social intervention to fix the lives of disadvantaged youth (Pryce, 2012). As an intervention, youth mentoring is

individualised and useful. However, bringing together an adult stranger 'into the life of a child to form a trusting and supportive relationship, is not necessarily an easy proposition' (Pryce & Keller, 2011, p. 99). They have different 'social positions defined by age, race, class, and educational level' and brings to the new relationship their personality, relationship history, goals, expectations, and social and emotional resources (Pryce & Keller, 2011, p. 99). These can include their own assumptions about academic progress, which would be a high adaption/goal for any mentoring program.

The youth mentoring program F.O.T.C. guarantees that if the child lives in the 'service area, they will have a F.O.T.C. mentor continuously involved in their lives for their 12 years of schooling' (Lakind et al., 2014, p. 710). This mentoring style is generally accessible to children who have been in trouble with the law or truant many times from school. The mentoring program supports the youth's development and guides them in an area relevant to academic, sport or arts program goals. However, the age or experience of the Mentor is a significant factor in the outcomes of these programs.

There can be significant issues that hinder success in this type of mentoring program. For example, those mentees with personal histories of mental health or abuse are not likely to have long-term mentoring relationships by not having a mentor's consistency to support them (Lakind et al., 2014). Also, the difficulty of parental support and meeting with the youths regularly impedes the program's goals and progress by further igniting the need for peer mentors/teachers to have better access to support if attending regularly.

5. Cross-Age Peer Teaching

The final model explored in the literature is cross-age peer teaching. Burton (2012, p. 45) researched the use of peer teaching as an approach to stimulate learning in schools. Burton believed students teaching, tutoring, or academically mentoring each other can improve education in the classroom. Extensive research studies focusing on the topic highlight that the mentoring approach enabled students' intellectual, social and personal growth (Cohen, Sampson, & Boud, 2001; Goodlad & Hirst,

1989; Gordon, 2005; Simmons, Fuchs, Fuchs, Mathes, & Hodge, 1995). The students interact with their younger peers to re-engage in their learning, increase their self-esteem and motivation and develop leadership skills beneficial for their future. It can be argued that this approach is a win-win for all students involved and ensures that peer teachers also acquire benefit for their education and learning.

The majority of mentoring styles introduced in this scoping review have a form of peer teaching included. Mentors are trained to teach concepts to their mentees, although this may not be formally conveyed to them as peer teaching. Therefore, the training could be different for each school, depending on the type of mentoring program/goal they are implementing. If the goals were curriculum-based, the Mentors would need to train before teaching so they know the material ahead of time. However, students may already have top grades in these areas, so that this training may be seen as a refresher. If the Mentors were teaching organisational type practices, they might have been chosen based on their behaviour and organisational practices already displayed. They may have high skill levels in these areas before their peer teaching and may not need formal training. Whatever the type of training is implemented, the mentors would have a knowledge base already, which is why they are chosen to peer teach.

6. Methods

Scoping reviews are used to determine the value in undertaking studies by identifying important evidence gaps (Arksey & O'Malley, 2005). This method was used to summarise and disseminate research findings while discovering research gaps in the literature. The Arksey and O'Malley (2005) framework was used, which identifies five stages for scoping literature. Stage 1: identify the research question helps to define parameters and adopt particular positions at the outset. Stage 2: identify the relevant studies from electronic sources to answer the central question. Stage 3: study selection which indicated irrelevant papers for this project. Stage 4: charting the data in remaining studies for relevance to answering the central question. Stage 5: collating,

summarising and reporting the results found in table 1 ([Arksey & O'Malley, 2005](#)).[1]

For this review, five electronic databases (Informit A+ Education, Informit AED, ProQuest, ERIC (Education Resources Information Seminar) and Scopus) were searched with the date range 01/01/2010 to 31/12/2020. Search terms included "peer AND mentor", "peer mentor", "peer to peer mentor", "student peer", "student mentor", "junior high school", "junior high", "secondary school", "Australia", "North Queensland", "expectation", "benefit" and "aid transition". Restrictions were initially applied with respect to language and geographical location, such as English and Australia only. After moving duplicates and mapping recurrent themes, further excluding books, book chapters, book reviews, not English only, not Australian research only, not theme focused, not peer-reviewed, and not education-themed only was needed. Newly added filters such as scholarly Journals (not secondary school teachers AND interviews AND STEM education AND At-risk students), high Schools NOT Postsecondary Education and geographical locations such as New Zealand, the United Kingdom, Canada, and the United States of America were included within the search parameters (see Figure 1). Further reviewing of titles and abstracts revealed further exclusions and recurring themes, leaving a review of 25 included citations.

---

[1] See page 8 - below

Figure 1

Study Selection Flowchart
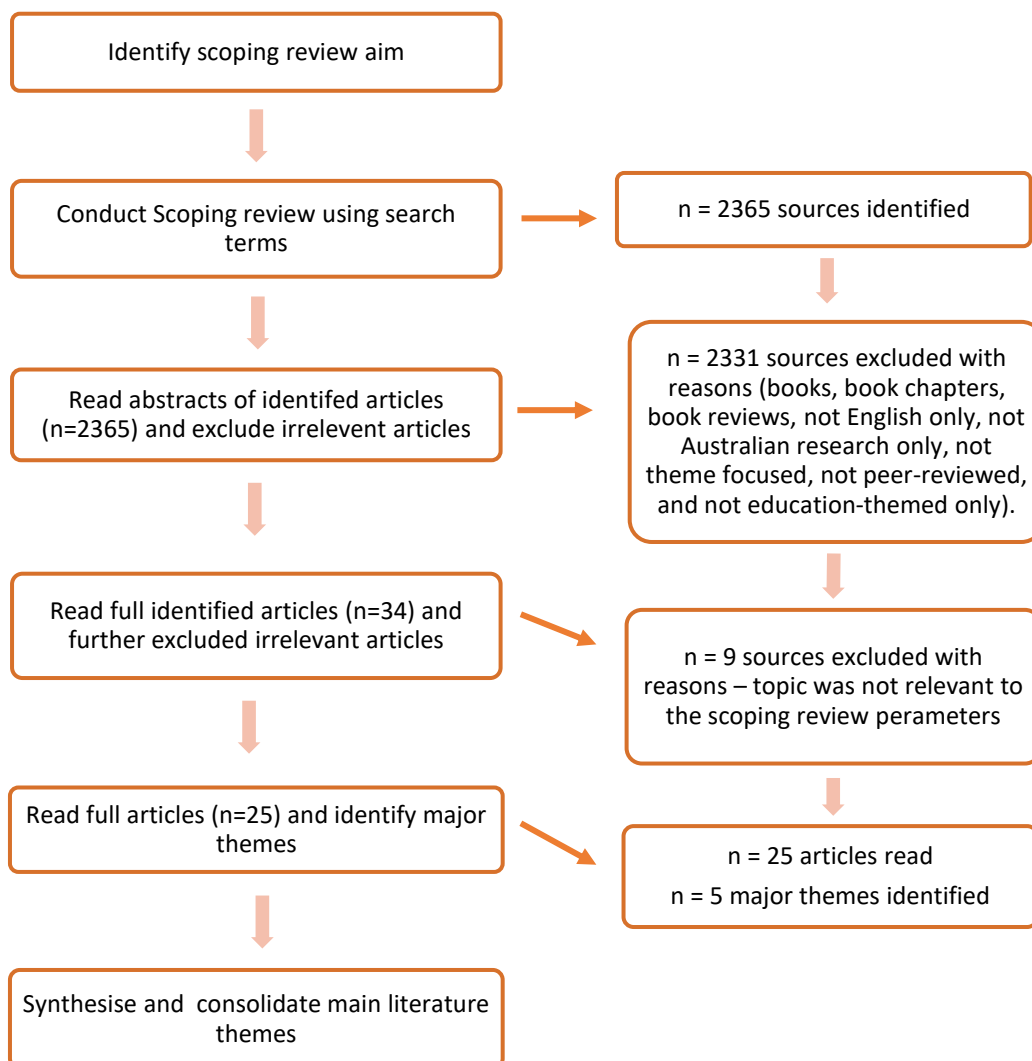
A preliminary reading of these 25 studies developed an initial thematic framework based on the primary outcomes reported. Each study was assigned to a theme within this framework; however, as coding progressed, new themes emerged and previous studies were reassessed within the updated framework. With this final framework, primary themes were assigned to each study or were assigned secondary themes. The results of the

studies were grouped according to the primary themes (see Table 1 – below). Each study was also categorised by location, methodology and participants age groups. This scoping review did not involve research with human subjects and did not warrant institutional ethical approval.

7. Results

Searches yielded a total of 2365 citations, of which 25 were included in this review. These citations clustered according to the five primary themes of peer support and peer relationships (68%), school connectedness (52%), well-being (48%), transition (40%), and leadership (20%). The proportion of included studies revolved around the 11-17 year age groups and Australia's private school sector. Methodologically, most of the studies used qualitative (65%), and the remaining 35% used quantitative or mixed methods.

Table 1

Summary of included studies

1st Author	Year of publication	Location/s	Methodology	Participants age or grades	Themes				
					Leadership	Connectedness	Transition	Well-being	Peer Support and Peer Relationships
Alf Lizzio	2011	Queensland	Qualitative	Grade 11 students (average age 16.6 years)	X	X			X
Anne Coffey	2015	Western Australia	Mixed	Grades 7			X	X	X
Anne Graham	2016	New South Wales, Victoria and Queensland	Qualitative	Grades 1-2, 5-6, 8 and 11		X		X	
Brigit Maguire	2015	Australia Wide	Qualitative	Grades 7 and 8			X	X	X
Bruce Burton	2012	Australia	Mixed	Grades 10 and 11	X			X	X
Davielle Lakind	2014	New York City, United States of America	Qualitative	Between 5 and 17 years old		X	X		
Dianne Chambers	2019	Western Australia		11-12 years old				X	
Tracy Evans-Whipp	2018	Melbourne, Victoria	Mixed	In 2012, Year 3: 8-9 years of age and in 2016, Year 7: 12-13 years of age		X	X	X	X
Eric Sinclair	2018	United States of America	Qualitative	Grades 11 and 12	X				
Helen St Clair-Thompson	2016	United Kingdom	Qualitative	11-16 years			X		X
Jill M Aldridge	2015	Perth, Western Australia	Qualitative	12 to 17 years old		X		X	X
Justin C. Perry	2019	United States of America	Qualitative	Grades 9-12 14-18 years old		X		X	
Kevin D. Besnoy	2015	United States of America		Six high school mentors and 11 mentees	X				
Leanne Lester	2012	Western Australia	Qualitative	11-14 years old		X	X		X
Leanne Lester	2013	Western Australia	Qualitative	11-14 years old		X			X
Mariko Carlisle	2011	United States of America	Quantitative	Grades 6, 7, and 8		X			X

Melissa Coyne-Foresi	2018	Canada	Qualitative	7-9 years old and 12-14 years old		X			X
Paul Willis	2012	Australia	Qualitative	Grades 7 and 10	X	X		X	X
Rosalind Murray-Harvey	2010	South Australia	Qualitative	Grades 5-9				X	X
Stacey K Waters	2014	Perth, Western Australia	Mixed	12–13 years old			X		
Stacey K. Waters	2012	Western Australia	Qualitative	12-13 years old		X	X	X	X
Suzanne Bailey	2012	United Kingdom	Mixed	Grades 6 and 7					X
Julia Pryce	2011	United States of America	Mixed	Grades 3-5		X		X	X
Julia Pryce	2012	United States of America	Qualitative	Grades 3-5					X
Patrick West	2010	United Kingdom	Qualitative	11, 13, 15 years old			X	X	

8. Peer Support and Peer Relationships

Studies were assigned to the 'peer support and peer relationships' theme if they focused primarily on the social/behavioural aspect or social/emotional impact on students during the studies. There is evidence of established friend dependence on peers for social support comes with increasing pressures when moving into secondary school. The student's social and emotional changes can manifest into frustration, anxiety, harmful and disruptive social behaviours (Lester, Cross, Dooley, & Shaw, 2013). One can argue that students who demonstrate these behaviours may not have positive relationships with peers and educators in the school community. This means that building a positive school connectedness can negatively impact a student's personal relations with others (Carlisle, 2011).

There is also evidence that peers are influenced daily by each other's behaviours in school, and peer support is vital to young people's motivation (Lizzio, Dempster, & Neumann, 2011). Therefore, peer support programmes and feedback can also support effective communication and introduce coping strategies for students to self-regulate and give them opportunities to express thoughts and feelings and reflect on experiences.

Peer support programs can adapt differently to other mentoring style programs. For example, Coffey, Berlach and O'Neill (2015) used year 11 students to join small groups of year seven students for an allocated lesson each week. The program was adopted to foster peer relationships and to teach various organisational aspects of the school, including managing lockers and equipment. Other schools in the study used year 12 students to participate in activities with the year seven students on induction day, while another used year ten students for their peer support program similar to the year 11 student approach. These studies show that the first few weeks were difficult because of mixed anxiety levels among most of the year seven starters. However, the support provided by their peers included 'emotional, instrumental and informational support' and also from the peer support leaders became a valuable source of support for the new student (Chambers & Coffey, 2019, p. 36; Evans-Whipp et al., 2018, p. 31).

These outcomes were very similar across all the schools involved.

9. School Connectedness

The discourse of *school connectedness* is often considered very important within education. Consistent evidence indicates that *school connectedness* correlates with a definite sense of well-being. Graham, Powell and Truscott (2016, p. 368) suggest that 'half of all secondary school students have a challenged sense of school connectedness'. They argue that this is due largely to the lack of harmony between students and educators, leading to student disengagement and tension in relationships with teachers, reinforcing a lack of connectedness and negatively impacting well-being.

Carlisle (2011, p. 19) implemented a 'strategy to increase positive attributes for mentors such as problem-solving, cooperation and service-learning'. The students contributed to 'team-building activities, community service learning projects, participated in a mentoring program on healthy relationships and conflict resolution and journaled their reflections of these activities' (Carlisle, 2011, p. 19). There was evidence of an increased sense of belonging and well-being among the students. This positive sense of belonging and impact on well-being was attributed to improved peer relationships and a sense of connectedness and community within the school.

Perry and Lavins-Merillat (2019) believe belonging to a group makes one feel accepted, cared for, and supported, which he calls *school belongingness*. Developing a positive relationship with other adolescents, friends, teachers, and other students give a young student a sense of connectedness/belongingness to their school community and peers, contributing to a confident school career. Moreover, many adolescents may be turning away from their parents as primary role models and shaping their own identity; the teacher-student relationship can be a vital source of support for these growing students.

There was evidence that was developing empathy, self-esteem, self-efficacy, and the quality of relationships all help to create a powerful sense of belonging, and because of this, students can

contribute to an encouraging school community (Carlisle, 2011; Lizzio et al., 2011; Perry & Lavins-Merillat, 2019). The students' sense of attachment to their school is essential, and 'participation in extracurricular activities is associated with higher school connectedness, enhanced school engagement and to be protective against students' dropping out' (Lizzio et al., 2011, p. 89). Therefore, improved connectedness to a school for the newly transitioned students can result in higher school community engagement with peers and their curriculum.

10. Well-being

The *well-being* theme was evidenced in 48% of the articles reviewed and is a significant contributor to research involving mentoring where students needed or received further assistance other than just a peer mentor. In most cases, the students may have had underlying mental health issues, which became a concern during the running of the mentoring program. This also included already at-risk students or those who may have had low self-esteem or sought advice from other stakeholders in their school or community (Perry & Lavins-Merillat, 2019). However, there was evidence that the meaning of well-being is still a term not well understood in the general community.

Well-being can also be related to the adaption of resilience to situations faced by students because of strong ties to family, school and peers. The 'link between school connectedness and relationships is further evidenced in children's conceptualisations of their well-being at school, which emphasises the importance of social relations and activities over their educational experiences' (Graham et al., 2016, p. 368). Therefore, student mentors can be more accessible to younger mentees and have the potential for positive influence and well-being (Coyne-Foresi, 2018). One study states, the 'growing body of research indicates how the well-being of children influences both economic and emotional well-being in later life' (Aldridge, Fraser, Fozdar, Ala'i, Earnest, & Afari, 2015, p. 6). This means the 15,000 hours children spend during their education, ongoing growth of well-being issues need to be addressed at a school level.

The inclusion of peer and school connected concepts into a mentoring program can help develop students' well-being and positively connect their feeling of connection to their peers and school. The promotion of well-being in mentoring programs within schools could provide an environment for students to achieve and target the development of their well-being and feeling of safety (Murray-Harvey & Slee, 2010). Moreover, the outcomes of any mentoring program could have well-being as a priority to its goals. A student who is coping academically throughout their early years of secondary school can be seen as an indicator of their positive well-being. However, socially they may not be coping, and mentoring programs could assure students have peers to rely on if needed for the social aspect as well. This not only lifts a student's academic well-being but could support the lifting of the emotional/social aspect as well.

11. Transition

Transition as a theme was included as it was prominent throughout the thematic analysis. About 40% of the articles analysed mentioned or included statistics of transition within them. *Transition* was defined by authors as the process when students move from a 'familiar environment, taught by one teacher and in the same classroom with the same group of peers, to the secondary school environment that is usually larger; unfamiliar; and more diverse' (Coffey et al., 2015, p. 2). Compounded by this, the transition to secondary school may further affect adolescents' well-being and academic engagement (Waters et al., 2014, p. 154). Some studies have identified a poor transition experience and emotional problems because of feelings of depression, anxiety, lack of well-being and general psychological distress (Maguire & Yu, 2015; Waters, Lester, Wenden, & Cross, 2012, pp. 190-192).

The onset of puberty can also be a difficult period for young people to negotiate during this time, and poorer social health outcomes such as feelings of disengagement from school and negative peer relationships have been linked with a more inadequate transition. For some students, the transition from primary to secondary school can be straightforward; for others, this move can be

challenging. Students who experience persistent difficulties across the first year of secondary school are 'therefore likely to represent a vulnerable group who may be struggling to meet the demands of secondary school' throughout their whole school career (Evans-Whipp et al., 2018, p. 42; St Clair-Thompson, Giles, McGeown, Putwain, Clough, & Perry, 2016).

The transition can be the most challenging stage in a student's educational career and seen as a rite of passage (West et al., 2010, p. 21). Not only are they learning the school's structure and dynamics quickly, but they also may not be with their close peers. The relationships with their close peers might have kept them feeling safe and secure. These students may become victims of bullying because of the loss of friendships, feelings of isolation, lack of self-esteem and disruptions to their learning (Lester, Cross, Shaw, & Dooley, 2012). However, using mentors to create a protective factor over the transition period successfully reduces bullying and reduces the effects this bullying has on these students and could allow for connectedness to peers and school to improve over the following years and give the student's transition the success it needs. They could be successful students focusing on their schooling environment as positive and feel connected to the community by helping others transition to their school.

12. Leadership

Any study assigned to the *leadership* theme discussed their program as benefitting the mentors in improving their leadership skills. Programs like the Crimson G.U.I.D.E. (Going Up in Dreams and Esteem), Peer Teaching, B.I.O.N.I.C. (Believe it or not I care), and Peer mentoring Literacy Program concentrated on the leadership aspect of their studies (Besnoy & McDaniel, 2015; Burton, 2012; Sinclair & Larson, 2018). This included all studies utilising mentoring style models and allowing the opportunity to develop leadership skills while developing community connectedness, re-engaging in their schooling, and contributing positively to aiding others younger than themselves. For example, the Crimson G.U.I.D.E. program used the "cross-age mentoring model", pairing gifted high school students with struggling younger school students in an afterschool mentoring

program (Besnoy & McDaniel, 2015, p. 19). They believe that educators must encourage leadership abilities by providing authentic experiences outside the traditional school curriculum. Whereas, Lizzio and colleagues (2011) believe formal position-based student leadership such as school/sports captain can only engage a minority of students, informal leadership activities such as mentoring can offer the potential for much broader student engagement. Therefore, mentoring programs that provide high school students with an opportunity to develop leadership skills and a commitment to the community are necessary for future success.

Using Peer Teaching as a leadership role, another study recruited students whose schools regarded having behavioural problems (Burton, 2012). These students showed transformational changes as a result of being peer teachers. Not only do these experiences steer them towards positive leadership roles, but they re-engaged them in their own learning (Burton, 2012, p. 4). Sinclair and Larson (2018) highlight that the B.I.O.N.I.C. program contributed positively to the school culture by aiding young people in need and, of course, developing positive leadership qualities in their older mentors. The Mentors selected by their teachers were allocated four to five students to Mentor through their transition to secondary school (Sinclair & Larson, 2018). The majority of peer teachers and Mentors in these programs felt a sense of pride in taking part in such a beneficial program for their younger peers and saw the benefit for their own future.

Willis and colleagues (2012, p. 176) selected mentors through a recruitment process in which senior year ten students were "invited to apply for this role as one of several leadership positions across the school". The Peer Mentoring Literacy program's implementation helped the mentors develop leadership skills and enhanced the younger year seven students with literacy and numeracy skills. The mentor role extended beyond the classroom, and the mentors had a broader capacity in the school by assisting with student leadership events such as an official launch of the program. The mentors' participation brought positive changes on an 'interpersonal level by feeling more confident about themselves, about meeting and interacting with

younger students, about helping others, and about taking on a leadership role' by "tapping into the leadership potential of youth mentors and the value in exploring an alternative learning approach to social skill development" (Coyne-Foresi, 2018; Willis et al., 2012, p. 177). Being a Mentee and having a dedicated Mentor for support help the Mentee grow academically and socially while growing the Mentors' skills towards leadership.

13. Discussion

By reviewing the 25 included citations and assigning them to the five thematic themes, this scoping review identified gaps in the school and peer connectedness of young students (Mentees) and leadership goals for the older students (Mentors). Designing studies that will contribute to further evidence in these areas should inform future research. Connectedness (52%) and peer support/relationships (68%) were explored as vital areas that could easily be included within most studies. Moreover, these were seen as areas of importance to any project, including mentoring. If students are transitioning to a new school, these areas could be studied easily with the newly enrolled students to get a sense of how they have or have not connected to peers and the school community and why this is so. School or peer-only connectedness areas are areas of great concern and could be easily implemented into future studies within any transition or mentoring program.

Leadership challenges arose within the mentoring area where limited projects (20%) saw the Mentors as leaders who could improve their skills while helping those younger than them. The main challenge is ensuring that suitable training has been conducted before the commencement or during the project and analysing for effectiveness towards potential leadership skills. All the projects, which included training, were conducted in the students own time (usually after school or during lunch breaks) and may not have been seen as highly relevant to the Mentors' future life skills. There was no mention of promoting these skills for the student's future. These areas included goal setting, establishing and maintaining boundaries, problem-solving, listening and communication skills. Most of the studies did not use

the opportunity to evaluate their training and how it benefitted the students (Mentors) or whether it impacted their leadership knowledge and skills for the future. These research opportunities were either missed initially or mentioned for future evaluation.

There were strengths and limitations to this review. Strengths included a thorough database search and broad inclusion criteria: this identified evidence gaps and possible future research opportunities needed in mentoring in the 2020s. Limitations included the omission of grey literature resulting in inherent limitations providing breadth rather than depth of information within this topic. The limitation of only including studies disseminated in English only made generalisable articles about mentoring written in English. Further research in areas of other cultures or languages would benefit this review.

14. Conclusion

Schools are being called upon to enhance students' well-being, including using mentoring programs. This review's overall goal was to summarise and disseminate research findings while discovering research gaps in the literature on mentorship in secondary schools, mentoring as transition programs, and the inclusion of leadership role opportunities. The study found that methodologically, 65% of the studies used qualitative methods, and the remaining 35% used quantitative or mixed methods. The study calls for more quantitative and mixed methods research and evaluations of students' experiences on mentoring programs.

In summary, the findings indicated a need for future research exploring mentoring programs that include the effects of peer and school connectedness for the younger students and leadership skills for the older participants. More extensive studies of mentoring programs in more schools (independent, private and public school systems from various socio-economic areas) could also be conducted to validate the data collected and for a thorough look at these issues. For example, is there a difference in support between education types (private or public) or socio-economic areas where students are based? In Australia, state by state analysis could also benefit local or state governments with decisions towards funding such projects. Moreover, further analysis in

areas of regional/city/suburban/school catchments for similar or practical support for transitioning students and peer or school connectedness can benefit education systems Australia wide.

15. Disclosure statement

The Author (s) declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

16. Open Access Policy

This journal provides immediate open access to its content with no submission or publications fees. This journal article is published under the following Creative Commons Licence:

PRISM is also indexed in the world largest open-access database: DOAJ (the Directory of Open Access Journals). DOAJ is a community-curated online directory that indexes and provides access to high quality, open access, peer-reviewed journals.

17. References

Aldridge, J. M., Fraser, B. J., Fozdar, F., Ala'i, K., Earnest, J., & Afari, E. (2015). Students' perceptions of school climate as determinants of well-being, resilience and identity. *Improving Schools, 19*(1), 5-26. https://doi.org/10.1177/1365480215612616

Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology, 8*(1), 19-32. https://doi.org/10.1080/1364557032000119616

Bailey, S., & Baines, E. (2012). The impact of risk and resiliency factors on the adjustment of children after the transition from primary to secondary school. *Educational & Child Psychology, 29*(1), 47-63. https://www.researchgate.net/publication/287448078

Besnoy, K. D., & McDaniel, S. C. (2015). Going Up in Dreams and Esteem. *Gifted Child Today, 39*(1), 18-30. https://doi.org/10.1177/1076217515613386

Burton, B. (2012, Feb). Peer teaching as a strategy for conflict management and student re-engagement in schools. *Australian Educational Researcher, 39*(1), 45-58. https://doi.org/10.1007/s13384-011-0046-4

Carlisle, M. (2011). Healthy Relationships and Building Developmental Assets in Middle School Students. *Canadian Journal of Education, 34*(3), 18-32. http://www.jstor.org/stable/canajeducrevucan.34.3.18

Chambers, D., & Coffey, A. (2019, Mar). Guidelines for designing middle-school transition using universal design for learning principles. *Improving Schools, 22*(1), 29-42. https://doi.org/10.1177/1365480218817984

Coffey, A., Berlach, R. G., & O'Neill, M. (2015). Transitioning Year 7 Primary Students to Secondary Settings in Western Australian Catholic Schools: How Successful Was the Move? *RMLE Online, 36*(10), 1-15. https://doi.org/10.1080/19404476.2013.11462103

Cohen, R., Sampson, J., & Boud, D. J. (2001). *Peer learning in higher education: learning from & with each other*. Kogan Page.

Coyne-Foresi, M. (2018). Wiz Kidz: Fostering School Connectedness through an In-School Student Mentoring Program. *Professional School Counseling, 19*(1), 68-79. https://doi.org/10.5330/1096-2409-19.1.68

DuBois, D. L., & Karcher, M. J. (2014). Youth Mentoring in Contemporary Perspective. In *Handbook of Youth Mentoring* (pp. 3-14). https://doi.org/10.4135/9781412996907.n1

Evans-Whipp, T., Mundy, L., Canterford, L., & Patton, G. C. (2018). *Student well-being, engagement and learning across the middle years*. https://docs.education.gov.au/documents/student-wellbeing-engagement-and-learning-across-middle-years

Gonsoulin, W. B. J., Robin, W., & Candace, F. (2006). Learning by leading: using best practices to develop leadership skills in at-risk and gifted populations. *Education, 126*(4), 690-701. https://link-gale-com.elibrary.jcu.edu.au/apps/doc/A149157227/AONE?u=james_cook&sid=AONE&xid=b894c920

Goodlad, S., & Hirst, B. (1989). *Peer tutoring: a guide to learning by teaching*. Kogan Page.

Gordon, E. E. (2005). *Peer tutoring: a teacher's resource guide*. Scarecrow Education.

Graham, A., Powell, M. A., & Truscott, J. (2016, Dec). Facilitating student well-being: relationships do matter. *Educational Research, 58*(4), 366-383. https://doi.org/10.1080/00131881.2016.1228841

Grassinger, R., Porath, M., & Ziegler, A. (2010). Mentoring the gifted: a conceptual analysis. *High Ability Studies, 21*(1), 27-46. https://doi.org/10.1080/13598139.2010.488087

Karcher, M. J. (2014). Cross-Age Peer Mentoring. In *Handbook of Youth Mentoring* (pp. 233-258). https://doi.org/10.4135/9781412996907.n16

Karcher, M. J., Davidson, A. J., Rhodes, J. E., & Herrera, C. (2010). Pygmalion in the Program: The Role of Teenage Peer Mentors' Attitudes in Shaping Their Mentees' Outcomes. *Applied Developmental Science, 14*(4), 212-227. https://doi.org/10.1080/10888691.2010.516188

Lakind, D., Eddy, J. M., & Zell, A. (2014, Dec). Mentoring Youth at High Risk: The Perspectives of Professional Mentors. *Child & Youth Care Forum, 43*(6), 705-727. https://doi.org/10.1007/s10566-014-9261-2

Lester, L., Cross, D., Dooley, J., & Shaw, T. (2013, Aug). Bullying victimisation and adolescents: Implications for school-based intervention programs. *Australian Journal of Education, 57*(2), 107-123. https://doi.org/10.1177/0004944113485835

Lester, L., Cross, D., Shaw, T., & Dooley, J. (2012). Adolescent bully-victims: Social health and the transition to secondary school. *Cambridge Journal of Education, 42*(2), 213-233. https://doi.org/10.1080/0305764x.2012.676630

Lizzio, A., Dempster, N., & Neumann, R. (2011). Pathways to formal and informal student leadership: the

influence of peer and teacher-student relationships and level of school identification on students' motivations. *International Journal of Leadership in Education, 14*(1), 85-102. https://doi.org/10.1080/13603124.2010.482674

Maguire, B., & Yu, M. (2015). Transition to secondary school. In *The Longitudinal Study of Australian Children Annual Statistical Report 2014* (pp. 83-104). Australian Institute of Family Studies. https://growingupinaustralia.gov.au/research-findings/annual-statistical-reports

Manning, S. (2005). Young Leaders: Growing through Mentoring. *Gifted Child Today, 28*(1), 14-20. https://doi.org/10.4219/gct-2005-163

Murray-Harvey, R., & Slee, P. T. (2010, Jun). School and Home Relationships and Their Impact on School Bullying. *School Psychology International, 31*(3), 271-295. https://doi.org/10.1177/0143034310366206

Nora, A., & Crisp, G. (2016). Mentoring Students: Conceptualising and Validating the Multi-Dimensions of a Support System. *Journal of College Student Retention: Research, Theory & Practice, 9*(3), 337-356. https://doi.org/10.2190/CS.9.3.e

Perry, J. C., & Lavins-Merillat, B. D. (2019). Self-Esteem and School Belongingness: A Cross-Lagged Panel Study Among Urban Youth. *Professional School Counseling, 22*(1). https://doi.org/10.1177/2156759x19826575

Pryce, J. (2012). Mentor Attunement: An Approach to Successful School-based Mentoring Relationships. *Child and Adolescent Social Work Journal, 29*(4), 285-305. https://doi.org/10.1007/s10560-012-0260-6

Pryce, J. M., & Keller, T. E. (2011). Interpersonal Tone Within School-Based Youth Mentoring Relationships. *Youth & Society, 45*(1), 98-116. https://doi.org/10.1177/0044118x11409068

Simmons, D. C., Fuchs, L. S., Fuchs, D., Mathes, P., & Hodge, J. P. (1995, May). Effects of Explicit Teaching and Peer Tutoring on the Reading-Achievement of Learning-Disabled and Low-Performing Students in Regular Classrooms. *Elementary School Journal, 95*(5), 387-408. https://www.jstor.org/stable/1001654

Sinclair, E., & Larson, H. A. (2018). Striving for contribution: the five Cs and positive effects of cross-age peer mentoring. *Pastoral Care in Education, 36*(1), 3-15. https://doi.org/10.1080/02643944.2017.1422008

St Clair-Thompson, H., Giles, R., McGeown, S. P., Putwain, D., Clough, P., & Perry, J. (2016). Mental toughness and transitions to high school and to undergraduate study.

Educational Psychology, 37(7), 792-809. https://doi.org/10.1080/01443410.2016.1184746

Waters, S. K., Lester, L., & Cross, D. (2014, Aug). Transition to secondary school: Expectation versus experience. *Australian Journal of Education, 58*(2), 153-166. https://doi.org/10.1177/0004944114523371

Waters, S. K., Lester, L., Wenden, E., & Cross, D. (2012, Dec). A Theoretically Grounded Exploration of the Social and Emotional Outcomes of Transition to Secondary School. *Australian Journal of Guidance and Counselling, 22*(2), 190-205. https://doi.org/10.1017/jgc.2012.26

West, P., Sweeting, H., & Young, R. (2010). Transition matters: pupils' experiences of the primary-secondary school transition in the West of Scotland and consequences for well-being and attainment. *Research Papers in Education, 25*(1), 21-50. https://doi.org/10.1080/02671520802308677

Willis, P., Bland, R., Manka, L., & Craft, C. (2012). The ABC of peer mentoring – what secondary students have to say about cross-age peer mentoring in a regional Australian school. *Educational Research and Evaluation, 18*(2), 173-185. https://doi.org/10.1080/13803611.2011.650920