

**PARENTAL CHOICE TO HOME EDUCATE CHILDREN WHO
ARE GIFTED IN AUSTRALIA**

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Abstract

Families who home educate their gifted children have received scant research attention. Participants ($N = 42$) were Australian parents of children identified as gifted or high ability who had experienced both school and home education environments. An online survey assessed factors contributing to the decision to home educate and measured parent perceptions of their child's engagement and access to gifted education practices in school and in home education. The most common factor in the decision to home educate was parents' dissatisfaction with school, which included their child's affective responses, school or teacher failure to meet gifted learning needs, and absence of challenge. Paired-samples *t*-tests indicated significantly greater parent-perceived emotional engagement ($p < .001$) and cognitive engagement ($p < .001$) in home education compared to school. In home education settings parents reported children were supported, engaged and motivated, and curriculum was delivered at the required pace and challenge level. Parent perceptions were useful indicators of engagement and access to gifted practices, which suggests a need to address the cognitive and emotional needs of children who are gifted in school.

Statement of Originality

This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the dissertation contains no material previously published or written by another person except where due reference is made in the dissertation itself. The data that forms the basis of this submission was obtained from a single study utilising a sample of home educating parents with children who were gifted in New South Wales and the Australian Capital Territory. This study was conducted with the approval of the Macquarie University Ethics Review Committee (Human Research), protocol number 5201700385.

(Signed) _____
Amy M. Thomas

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And to neurodiversity itself, you don’t make the job easy, but you certainly make the journey worthwhile!

In loving memory of Jennifer Thew who showed nothing less than unconditional love and support for her beautiful children. You are sorely missed.

1976 – 2017

1 Introduction

Home education is an educational phenomenon that has seen growth in recent decades, with more families disengaging from the school system or choosing to never send their children to formal schooling (Lubienski, Puckett, & Brewer, 2013; Rothermel, 2002). The reasons why families choose to home educate is one of the most researched areas of home education (Spiegler, 2010), with reasons for this choice reportedly becoming more diverse (Butler, Harper, Call, & Bird, 2015; Jackson & Allan, 2010; Rothermel, 2002; Spiegler, 2010). Although there are several known factors associated with the decision to home educate, these factors have not been closely explored in Australian families. There is a lack of research on why specific groups, such as families with children who are gifted, choose home education. This dissertation will examine the factors influencing family decisions to home educate their child who is gifted and will explore, from the perspective of the home educating parent, the educational conditions and engagement of the child in school and home environments. This research aims to increase understanding of the home education phenomenon and provide insights about the home education of children considered gifted or high ability.

1.1 Home Education in Australia

Home education for the purpose of this study is defined as parents taking direct responsibility for the education of their children at home (Harding & Farrell, 2003; Home Education Australia, 2013). The terms home education and homeschooling are often used interchangeably. However, preference is given to the term home education (Select Committee on Home Schooling, 2014). There is poor understanding of the prevalence of home education as not all families register with their state or territory authorities (English, 2015a; Jackson & Allan, 2010). Lack of registration may be an international phenomenon (Arai, 2000; Lindsay, 2003; Webb (2011). Parents electing to home educate their children in Australia are required by law to

register with their state or territory Education Department. From those families who are registered, most states and territories, with the exception of South Australia and the Northern Territory, publish school census reports that record the number of home schooling registrations. For example, the Board of Studies, Teaching and Educational Standards (BOSTES)—now known as New South Wales Education Standards Authority (NESA)—identified that the number of children registered for home education continued to grow, with 3703 students (plus another 184 students who were exempt from registration) registered for home education in NSW in the 2015-2016 period (BOSTES, 2016). Similarly, in 2016, the Australian Capital Territory (ACT) recorded 252 students registered for home education, equating to a 30% increase over two years (ACT Education Directorate, 2016). There have been discrepant estimates of home education across Australia. For example, using Australian Bureau of Statistics (ABS) data, English (2015a) reported that 184 000 school-aged children were not accounted for in school enrolments. However, it is not known whether these children were home educated or unaccounted for in school enrolments for other reasons. In contrast, Guterman and Neuman (2017) reported approximately 30 000 children were home educated in Australia, though no method of calculation was given. However, Home Education Australia (2013) is one of the peak advocacy bodies for parents who home educate; research with parents in their organisation estimated approximately 1-2% of the school-age population are home educated. These varying estimates suggest that there is currently no means to accurately calculate the number of children who are home educated in Australia.

Uncertainty about identification of the population of home educated children is exacerbated by a known concern about non-registration of home schooled children (Select Committee on Home Schooling, 2014). Non-registering parents present a difficulty for authorities as they are engaging in an illegal activity in NSW (BOSTES, 2013). This also creates research and ethical problems for researchers, as this hidden population is very difficult to access (English, 2015a), and hinders the potential to fully understand this phenomenon. Additionally,

gifted children account for approximately 10% of the population of all school-aged children. (Gagné, 2004). The difficulty in locating this small number of home educators may partially explain why there is even less data on families with gifted children in home education research. In summary, little is known about the population of home educators in Australia, but reports suggest a small but significant number of families are engaged in the provisions of educating their children at home.

1.2 Research on home education and schooling experiences of children who are gifted

Research on home education is contained in a small body of empirical research (See Chapter 2). Several scholars, such as Isenberg (2007), Jolly, Matthews and Nester (2013), Kunzman and Gaither (2013) and Spiegler (2010), have agreed that the body of research is scant and more empirical research is needed. Although there is little data available about specific groups who home educate, it is known that families with students who are gifted are an identified subgroup (Bell, Kaplan, & Thurman, 2016; Jackson & Allan, 2010; Jolly et al., 2013; McFall, 2016).

There is some evidence to suggest that schooling experiences of children who are gifted may contribute to parents' decision to home educate. For example, Jolly et al.'s (2013) study of gifted home educators reported parents were dissatisfied with the school's ability to meet their child's needs. There is evidence that gifted provisions are effective in meeting the needs of children who are gifted in school (Rogers, 2007), and that the delivery of gifted practices influences child engagement (Bennett-Rappell & Northcote, 2016; Landis & Reschly, 2013). However, according to Gross, Urquhart, Doyle, Juratowitch, and Matheson (2011) and Jarvis and Henderson (2015), Australian schools do not consistently use the range of recommended provisions. These findings suggest that gifted practices and child engagement are important variables to explore in the literature in order to understand parents' decision to home educate their children who are gifted. However, there has been no Australian research to indicate whether

curriculum, educational provisions or child engagement contribute to this decision.

1.3 Educational Needs of Children Who Are Gifted

Research over several decades has revealed common characteristics of children who are gifted. Intellectually, these children have the ability to think quickly, remember and learn easily, and to understand complex and abstract concepts at considerably faster rates than their same age peers (Clark, 2013; Koshy & Robinson, 2006; Treffinger, Young, Selby, & Shepardson, 2002). They also prefer challenge and some autonomy in their learning (Eddles-Hirsch, Vialle, Rogers, & McCormick, 2010). There are also social and emotional characteristics associated with giftedness (Eddles-Hirsch et al., 2010), such as a preference for older or equally mature companions (Koshy & Robinson, 2006) and an early sense of ethics and justice (Clark, 2013). These characteristics can mean these children may be out of step in age-based classrooms geared towards the typical learning characteristics of children their age. For some gifted children there are additional asynchronies because of an accompanying disability or learning difficulty, which is often referred to as *twice exceptionality* (Reis, Baum, & Burke, 2014).

Parents' decision to home educate children who are gifted or high ability in light of what is known about gifted characteristics, engagement and the inconsistent use of gifted practices requires further investigation. There is very limited empirical data about these families, even though there are known concerns with engagement of children who are gifted and the delivery of gifted education in schools.

1.4 Education of Children who are Gifted in Australia

There are many theories and models of giftedness that continue to be debated (Kaufman & Sternberg, 2008), in part because the definition has changed and broadened over time (Castellano & Matthews, 2014; Kaufman & Sternberg, 2008). In Australia, giftedness is commonly defined through a developmental perspective using Gagné's Differentiated Model of

Giftedness and Talent [DMGT] (Gagné, 2008). This definition is adopted in the gifted and talented education policies of State and Territory public schools in Australia, including in NSW and the Australian Capital Territory (e.g., NSW Department of Education, 2004; ACT Education Directorate, 2014). The revised NSW Department of Education policy, expected to be released in 2018, will also retain the DMGT definition (Scott, 2017).

The DMGT refers to giftedness as untrained, natural ability that places an individual among the top 10% of same aged peers (Gagné, 2008). The definition carefully distinguishes natural ability from talent by describing talent separately as the mastery of developed abilities that places an individual among the top 10% of same aged peers in an area of human endeavour (Gagné, 2008). Synder and Linnenbrook-Garcia (2013) agreed that separating giftedness from talent was important because it creates an understanding of the catalysts that can lead to either underachievement or the development of talent. Gagné (2008) describes some of these catalysts as environmental (e.g., the influence of parents and teachers and the availability of gifted provisions) and interpersonal (e.g., the child's individual traits, and levels of motivation, autonomy, effort and perseverance).

Australia does not have legislation that mandates meeting the needs of students who are gifted (Merrotsy, 2017; Townend, Pendergast, & Garvis, 2014; Vialle & Rogers, 2009). The Australian National Curriculum states that “gifted and talented students are entitled to rigorous, relevant, and engaging learning opportunities drawn from the Australian Curriculum and aligned with their individual learning needs, strengths, interests and goals” (Australian Curriculum, Assessment, and Reporting Authority, n.d., para. 1). This policy aligns with gifted education policies in NSW (NSW Department of Education, 2004) and the ACT (ACT Education Directorate, 2014) in which schools have a responsibility to identify students who are gifted and to implement developmentally appropriate provisions. The policies of both jurisdictions have drawn on the evidence base for gifted education to recommend enrichment, accelerated learning, grouping and counselling as appropriate provisions in schools.

It is clear that teachers are responsible for the successful implementation of gifted provisions (Rogers, 2007; Rowley, 2012; VanTassel-Baska, 2005). This is also evident in the Australian Professional Standards for Teachers, which outlines the need to meet the specific learning needs of all students in standard 1.5 (Australian Institute for Teaching and School Leadership, 2011). Yet Australian teachers do not necessarily receive pre-service training in gifted education (Fraser-Seeto, Howard, & Woodcock, 2016) or take advantage of professional development opportunities to increase their knowledge and skills in this area (Fraser-Seeto et al., 2015). In summary, gifted practices and teacher knowledge and skills regarding these practices can influence the quality of education for children who are gifted.

1.5 Context of This Study

Home education numbers are increasing in Australia, following a global trend (Kunzman & Gaither, 2013; Morton, 2010). There is an unknown number of home educators who do not engage with their State or Territories regulatory body (Jackson & Allan, 2010), so estimates of the total number of home educators in Australia vary widely (English, 2015a). This study is primarily located in the state of NSW and the geographically co-located territory of the ACT. There are slightly differing legislative requirements directing home education registration in each state and territory, known as the Education Act 1990 in NSW (NSW Parliamentary Counsel, 1990) and the Education Act 2004 in the ACT (ACT Parliamentary Counsel, 2004). This legislation directs home education registration and compliance procedures. According to the NSW home-schooling registration information package (BOSTES, 2013), registration can only be made on a full-time basis, meaning the child cannot be simultaneously enrolled in school. In contrast, in the ACT parents may negotiate the terms of enrolment with their local school, allowing part-time enrolments (ACT Education Directorate, 2013). NSW home educators are required to follow the Board of Studies syllabus, encompassing six key learning areas, while ACT home educators have no set curriculum requirements. As such the population of interest in

this study may be engaged in full time or part time home education and due to the strong legislative requirements to register children for home school in these jurisdictions it is likely the majority of respondents will be registered home educators. Although the growth in home education numbers has generated an increased interest in home education research, there is very limited knowledge of home educators with children who are gifted in the Australian educational context.

1.6 Statement of the Problem

There is very limited empirical data about home educators in Australia or why they decide to home educate their child who is gifted. In addition, there are internationally reported concerns about the use of gifted educational provisions and the school engagement of children who are gifted. Currently there is poor understanding of factors influencing the decision to educate children who are gifted at home or whether the educational provisions or engagement of the child influences this decision. A key aim of this study is to draw together the body of research on gifted provisions and the theoretical lens of school engagement to investigate parent decisions to home educate their children who are gifted.

2 Literature Review

This chapter first explains the review process used to locate literature for this review.

From this review the known factors associated with the decision to home educate will be identified. The role of specific learner characteristics such as giftedness or other learner differences will be specifically investigated. Following this, the review considers research findings about the availability of gifted provisions and the engagement of the gifted or high ability child in school. Empirical evidence concerning child engagement and the development of the school engagement construct will be explained to provide an understanding of engagement and how this may relate to home education decisions.

2.1 Literature Review Process

Research on home education is contained within a small body of empirical studies in peer-reviewed journals (e.g., Morton, 2010; Parsons & Lewis, 2010) and dissertations. A larger body of ‘grey literature’¹ also comprises opinion pieces, government reports and parliamentary enquiries (e.g., Tabrett & McHugh, 2003; Select Committee on Home Schooling, 2014).

This literature review identified scholarly sources using Informit’s education, arts and humanities, and social sciences databases. EBSCOhost platform databases searched included Academic Search Premier, Education Research Complete, Humanities International Complete and Psychology and Behavioral Sciences Collection. In addition, PsycINFO, ERIC and the International Center for Home Education Research (ICHER) databases were also searched. Key search terms included: home+education, homeschool, gifted+engagement, gifted+achievement, underachievement, gifted+school dropout and various combinations of these descriptors (e.g., “gifted+homeschool”). Home education studies were included if they addressed factors associated with home education decisions. The search parameters applied to peer-reviewed

¹ Grey Literature is produced at all levels of government, by academics, business or other interested parties and industry in print and electronic formats, but which is not controlled by commercial publishers (Saleh, Ratajeski, & Bertolet, 2014).

journals with dates inclusive of 2000 – 2017.

This comprehensive search revealed 63 international peer-reviewed articles addressing factors associated with home education, however most lacked empirical data. A separate gifted engagement and underachievement search was conducted that revealed 80 peer-reviewed articles relevant to the aims of the current study. Due to limited empirical evidence in peer-reviewed journals, some examples of grey literature were included such as empirical research reports and literature reviews commissioned for government agencies. In addition, research dissertations were also consulted to gain thorough understanding of research being conducted in this field.

2.2 Factors Associated with the Decision to Home Educate

This section of the literature review will discuss known factors leading to home education, as identified in the review of literature. The factors identified include: religious and philosophical reasons, flexible educational choices, dissatisfaction with school and learner differences. Historically, religion was one of the most commonly cited reasons for choosing to home educate (Carper, 2000; Harding, 2011). Recently, research evidence suggests that the reasons families choose to home educate have become more diverse (Jackson & Allan, 2010; McFall, 2016). For example, Jackson and Allan (2010) concluded that reasons to home educate fell into two broad categories: “real or perceived negatives” of mainstream education and “real or perceived benefits” of home education (p. 351). Similarly, Parson and Lewis (2010) and Croft (2013) described “push” factors away from school-based education. Through the analysis of their online survey, Parson and Lewis (2010) described these negative or push factors as dissatisfaction with school and perceived child needs that were unmet. Additionally, Croft (2013) described “pull” factors to describe positive parent perceptions towards home education such as increased family time.

Recent empirical evidence suggests that these broad categories also reflect factors associated with the decision to home educate in Australia and similar countries. These can be

described as: philosophical choice and religious reasons (Bielick, Chandler, & Broughman, 2001; BOSTES, 2016; Isenberg, 2007; Select Committee on Home Schooling, 2014), flexible schooling options and the availability of school choice (Buckingham & Jha, 2015), dissatisfaction with school education (McFall, 2016), a belief that the family can provide a better education at home (Bielick, Chandler, & Broughman, 2001), positive relationships with home education regulatory bodies (Arora, 2006), special needs or disability (Bielick et al., 2001; Select Committee on Home Schooling, 2014) and addressing the needs of specific groups (Kendall & Taylor, 2016). These identified factors will be discussed in the following sections.

2.2.1 Religious and Philosophical Reasons.

Literature suggests home education has historically been a choice made for religious or philosophical reasons (Aurini & Davis, 2005; Isenberg, 2007; Jackson & Allan, 2010; Jolly et al., 2013), but religious reasons may be declining as a major influence in this decision (Arai, 2000; McFall, 2016). According to Canadian studies by Arai (2000) and Aurini and Davis (2005), home education increased in the 1970s and many home educators were fundamental Christians who chose to home educate as a way of exposing their children to religious teachings. However, in Arai's (2000) study ($N = 23$), only eight participants said religion was the most important reason for their decision to home educate. Similarly, McFall (2016) found that moral and religious reasons ranked as the fourth most important reason for home education, behind academic concerns, family time and untraditional educational approaches. It is difficult to know with certainty whether religious reasons are declining or reasons for home educating are becoming more diverse.

In contrast to religious belief, philosophical reasons identified by researchers include holding different beliefs to those of the child's school or different beliefs about the value of school environments and how children learn (Isenberg, 2007; Spiegler, 2010). As for religious reasons, the categories describing philosophical reasons in research are also ambiguous. Bielick, et al. (2001) analysed data from the Parent Survey of National Household Education ($N = 275$) in

the USA and found the reasons parents chose to home educate could be coded into sixteen categories, of which six broadly related to philosophical reasons. These included to give a child a better education at home (49%), poor learning environment at school (26%), family reasons (17%), to develop character/morality (15%), objection to what school teaches (12%), and other problems with available schools (12%). Several studies have also found that parent views of family and parenting roles have shaped the decision to home educate. For example, Green and Hoover-Dempsey's (2007) survey research suggested that parent participants ($N = 136$) reported the belief that they were personally responsible for their child's education, hence influencing a decision to home educate their child. A further example is evident in a case study of three families (English, 2015b), which found that parents' decision to home educate was linked closely to their philosophical views of attachment parenting and family cohesion. A study by Butler et al. (2015) focused on family-centric home educators and family-centric public school families, comparing their level of cohesiveness and positive interactions to see if these influenced the choice to home educate. Although home education families scored more positively on measures of cohesion and interactions, Butler and colleagues concluded the differences between the two groups were only moderate and did not account for the decision to home educate. However, they did suggest the necessity of more research to determine if the experiences of specific sub-groups would yield a different result. Nevertheless, these studies demonstrate that a diverse range of factors have been described as philosophical reasons in the literature and these clearly influence the decision to home educate.

2.2.2 Flexible Education Options and the Availability of Educational Choice.

A perception of lack of choice in more traditional schooling may be a factor in the decision to home educate, according to Jolly et al. (2013). They point to the example of the United States where a perceived lack of control over their children's education appears to be an overarching theme in parents' choice to home educate. A similar factor may be relevant in the Australian context, as strictly applied school enrolment zones, selective-entry processes for

schools designed for gifted and talented children, and financial constraints can also limit educational choices (Buckingham & Jha, 2015). However, it is notable that parents in Australia have a relatively wide selection of schooling options including home education as well as schools operated by government (including selective schools for high ability learners in some states), independent, religious, and alternative schools such as Steiner and Montessori. Lindsay (2003) suggested that Australia has relatively high rates of home education, possibly due to the availability and legality of home education in Australia alongside these more traditional schooling options.

Therefore, lack of availability of educational choice is a possible factor in some educational jurisdictions while in countries like Australia where home education is legal, the availability of this choice of education may also influence the decision to home educate.

2.2.3 Dissatisfaction with Schooling.

Evidence from both empirical research and grey literature indicates that dissatisfaction with schooling is a factor leading to disengagement from school systems and subsequent decisions to home educate. In doctoral research, McFall (2016) used a snowball sampling strategy to survey 1,971 families who home educated in the United States and found the most common factor related broadly to dissatisfaction with academic instruction. Parents reported that large class sizes, the overall quality of classroom instruction, a lack of confidence in teaching staff, and a focus on ‘teaching to the test’, were all influential factors in their decision to home educate. Further, Mazama and Lundy (2013) found in their study of African American parents that their reasons to home educate also related to a lack of quality school education. Additionally, these parents commonly reported racism in schools as a factor in their decision to home educate. Parents in these studies largely reported dissatisfaction with the quality of education (Mazama & Lundy, 2013; McFall, 2016) and culturally insensitive curriculum (Mazama & Lundy, 2013).

In Morton’s (2010) descriptive study of 19 parents in the United Kingdom (UK), parents

reported that bullying, special needs of their child, other negative experiences of their child and the attitudes of the school influenced their decision to home educate. Morton's study clearly identified that decisions to home educate do not come easily to many families. Eight of the nineteen parents interviewed chose to home educate as 'a last resort', feeling they had no option other than to home educate. These parents also described the considerable length of time it took to decide to home educate and described numerous attempts to address the issues at school before electing to home educate. Similarly, McDonald and Lopes (2014) reported many Australian families worked with the schools to meet their child's needs, often until a crisis point occurred, which became the point of withdrawing their child from school. Arai (2000) agreed that specific incidents usually precede the decision to home educate. Therefore, in comparison to the notion of school choice as a factor in home education, parents' decision to home educate is not necessarily their first educational choice, with some evidence suggesting parents may only make this decision after dissatisfaction with formal schooling.

2.2.4 Learner Differences.

While some studies report dissatisfaction with school, other studies report learner difference as a factor in their decision to home educate. Research on the home education of specific populations such as children with a disability generally support the findings of other researchers that parent dissatisfaction with schooling is a major factor in the decision to home educate. The literature in this field has mostly involved small sample sizes and case studies. Kendall and Taylor (2016) in the UK investigated the perspectives of parents ($N = 7$) whose children had disabilities (mostly Autistic Spectrum Disorder). Parents in this study reported child needs were not met and perceived a lack of understanding from staff about their child, a lack of school partnership with families and an adverse effect of the school environment on their child. Similarly, a study by McDonald and Lopes (2014) also included parents ($N = 7$) of children aged 4-14 years with an Autistic Spectrum Disorder (ASD). These parents also perceived there to be a lack of "fit" between school practices and individual needs of their children. Arora (2006) also

reported in a UK study ($N = 65$) that a perception that the child needs were not met and bullying were the most frequent reasons for the decision to home educate. Parson and Lewis (2010) categorised reasons such as those described above as “push” factors away from school. In their online survey research based in the UK ($N = 27$), parents reported these push factors as negative experiences with formal provisions in schools and the perceived inability of schools to meet the needs of their children. In summary, the perceived lack of fit and an inability of the school to meet the needs of children with disability could be categorised as push factors away from school and significant factors influencing home education choice.

2.2.5 Children who are Gifted and Home Educated.

Although there is very little research about gifted populations in home education environments (Winstanley, 2009), a link between giftedness and home education choice has been established in a small number of reports. Killeen (2000) conducted a case study ($N = 3$) which found that in the flexibility of home education environments, children’s interests, needs and abilities were well catered for. Two empirical studies have specifically focused on parents of children who were gifted and have also found evidence of home education in this population. For example, Rimlinger (2016) investigated psychological well-being of parents with children who were gifted and found a portion of the sample did home educate (Australian sample $n = 9$; American sample $n = 71$). Parents in each country indicated they did not believe schools could meet their children’s needs. These findings are supported by Jolly et al.’s (2013) exploratory survey of American home educating parents ($N = 987$), which included interviews with 44 participants. Parents reported their children were bored, the work was not interesting, the pace was slow, relationships were difficult, and parents saw little if any growth in their children’s learning prior to their decision to home educate. A lack of mandate protecting the rights of gifted learners may have led to a perceived lack of support for the family and contributed to the decision to home educate (Jolly et al., 2013; Jolly, 2014). A further study by Jolly and Matthews (2017), reported the stories of four mothers of home educated children who were gifted and had

started blogging online to reduce feelings of isolation. These parents reported that blogging allowed self-expression, social interaction and exchanges of information. Additionally, Jolly et al. (2013) suggested that home educators with children who are gifted tend not to seek out gifted organisations for support, possibly perceiving a disconnect between such organisations and the needs of their gifted children who are home educated. While there is a necessity for further research on children who are gifted and the choice to home educate, it is evident from Jolly et al.'s (2013) and Rimlinger's (2016) research that parents perceive there to be a lack of support and that their children's needs are not being met in school.

In summary, there is a broad range of reasons why families choose to home educate. While religious reasons were historically reported as one of the main reasons families home educated, reasons today tend to be more diverse. Recent research identifies reasons such as the availability or lack of availability of educational choice, philosophical reasons, dissatisfaction with schools and specifically dissatisfaction with the education of learners with disability and differences. Critically, only a small body of empirical research about the home education of children who are gifted could be identified. Little is known about this group, about why parents have chosen to home educate, what their needs are and how these needs can be accommodated. Research by Rimlinger (2016) and Jolly et al. (2013) suggests a need to review literature in gifted education to understand the school environment prior to some families' decision to home educate.

2.3 The Use of Gifted Provisions in Schools

Common approaches to providing gifted education in schools are acceleration, enrichment, grouping and counselling. Acceleration involves moving through the curriculum more quickly and can take many forms, including grade skipping or part-time placement in a higher grade (Davis, Rimm, & Siegle, 2011; Vialle & Rogers, 2009). Rogers' (2010) review of 234 studies of various forms of acceleration concluded acceleration had a strong, positive overall

academic effect and a smaller but still positive social-emotional effect. Others such as Marsh (2016) have found that acceleration can have a negative effect on academic self-concept, while Neihart (2007) and Freeman (2010) found negative effects for some individuals but no adverse effects for groups of accelerated students. Overall, however, acceleration is widely recommended as a positive intervention (Colangelo, Assouline, & Gross, 2004; Gross & Van Vliet, 2005; Hattie, 2009; Rogers, 2010a; Steenbergen-Hu & Moon, 2011). In contrast to faster movement through curriculum content, enrichment involves undertaking educational activities outside the core curriculum or pursuing topics in greater depth or breadth (Davis, Rimm, & Siegle, 2011; Vialle & Rogers, 2009).

Grouping children who are gifted together, on a part-time or full-time basis, is an organisational strategy that has been shown to increase achievement in reading (Reis, 2014) and mathematics (Gavin & Adelson, 2014) and social acceptance (Kronborg & Plunkett, 2015), although both like-ability and mixed-ability groupings are seen as beneficial by children who are gifted (Schroth, 2014). According to Clark (2013) and Eddles-Hirsch et al. (2010), support from school personnel who understand both the cognitive and affective implications of giftedness is required.

There are a number of evidence-based provisions available according to State and Territory gifted education policies (ACT Education Directorate, 2014; NSW Department of Education, 2004), yet research into education of gifted children in Australian schools indicates that some provisions are much more commonly used than others. In a study by Gross et al. (2011) with experienced educators from each State, enrichment in mixed-ability classrooms, access to curriculum beyond grade level and performance-based grouping for differentiated tasks were most frequently provided. Grade skipping or part-time placement in a higher grade were much less common than in-class provisions, which is similar to findings from Jarvis and Henderson's (2015) study of 71 schools in South Australia.

Rogers' (2007) synthesis of published international research produced five provisions

that schools and education systems should consider, while VanTassel-Baska (2005) created a list of “nonnegotiable” provisions. Both scholars agreed that children who are gifted need differentiated instruction regarding daily access to an appropriately accelerated level of content and resources in their areas of talent, a faster pace of instruction with less revision, and opportunities to learn with like-ability peers. Both emphasise that gifted practices should be individualised according to a child’s needs and what is possible in a given school. VanTassel-Baska (2005) also advocated an active partnership with the family to ensure a good fit for the child.

2.4 Experiences in School and Underachievement of Children who are Gifted

While there are known concerns about the limited use of gifted provisions in schools (Jarvis & Henderson, 2015), there are also concerns about the underachievement of children who are gifted (Landis & Reschly, 2013). Gifted underachievement has been defined as the failure to transform exceptional ability (giftedness) into exceptional achievement (talent) (Gagné, 2004; 2008) and as a significant gap between expected superior ability and actual achievement (Reis & McCoach, 2000). Estimates of underachievement range from between 38 and 75 percent of children who are gifted (Senate Select Committee, 2001), which are consistent with others’ estimates that up to 50% of children with high ability do not reach their potential (McCormick & Plucker, 2013; Morisano & Shore, 2010).

Low self-concept, low self-motivation, low goal-valuation and negative attitudes toward school and teachers are also common characteristics associated with underachievement (Reis & McCoach, 2000; Snyder & Linnenbrink-Garcia, 2013). In addition, common reported characteristics of children who are gifted, such as perfectionism, asynchronous development, and a mental age mismatch with peers, may make engagement difficult in inclusive, age-based classrooms (McCormick & Plucker, 2013).

There is some suggestion that gifted underachievement begins with a lack of adequate

challenge in the early years of schooling. Snyder and Linnenbrink-Garcia (2013) described a number of pathways that lead to gifted underachievement. One of these pathways demonstrates the problematic nature of a child who links their high academic self-concept to their academic achievement in the absence of challenge at school. When the challenge level increases it may threaten a child's academic self-concept and the child may respond by disengaging (e.g., using less effort to complete tasks). Over time this can lead to underachievement.

Some scholars suggest that gifted underachievement can be reversed through the use of appropriate educational provisions. For example, Bennett-Rappell and Northcote (2016) recommended one-to-one teaching, positive teacher-child relationships and curriculum differentiation. In addition, Gagné (2004; 2008) reported that provisions such as enrichment, pacing of curriculum, grouping and acceleration can influence whether a child underachieves.

Child gender may also influence gifted underachievement and school dropout. While there is some research on school dropout of children who are gifted (Renzulli & Park, 2000), studies on general child populations have reported males being approximately three times more likely than females to underachieve (McCoach & Siegle, 2003) or to drop out (Renzulli & Park, 2000).

Common explanations for school dropout in these general populations include a low sense of school belonging (Hansen & Toso, 2007), poor relationships with teachers (Kanevsky & Keighley, 2003; Renzulli & Park, 2000), boredom with school work (Hébert, 2001; Kanevsky & Keighley, 2003; Renzulli & Park, 2000), frustration with meaningless school work (Hébert, 2001; Kanevsky & Keighley, 2003) and lack of school support (Ritchotte & Graefe, 2017). Clearly underachievement appears to be linked to many indicators of the child's engagement and sense of wellbeing in school, while boys are a known risk group for school dropout in the general populations of students. While there is some evidence of school dropout being prevalent in gifted school populations, these studies largely reported disengagement factors such as poor relationships with teachers and boredom. Landis and Reschly's (2013) review of the literature

through a child engagement lens offered further insight into gifted underachievement and dropout literature. Landis and Reschly (2013) found that research consistently supported the relationship between child engagement and positive outcomes, such as academic achievement and social and emotional wellbeing. More research is needed using engagement theoretical frameworks to guide underachievement and engagement research. The following section will consider school engagement, followed by a discussion on engagement theory. Finally, engagement of children who are gifted will be investigated in the literature.

2.5 The Importance of School Engagement

Interest in school engagement from researchers, teachers, and policymakers has increased in the last decade (Appleton, Christenson, & Furlong, 2008; Christenson, 2012; Fredricks, Blumenfeld, & Paris, 2004; Fredricks, Filsecker, & Lawson, 2016). In part, there is an interest in school engagement because it is seen as a significant variable that can influence academic achievement (Fredricks et al., 2004; Reschly & Christenson, 2012) and influence child outcomes in a positive way, reducing dropout rates, boredom and alienation (Chapman, Laird, Ifill, & Kewal Ramani, 2011; Fredricks et al., 2004; Fredricks et al., 2016). According to Eccles and Wang (2012), Fredricks et al. (2004), Fredricks (2014), Landis and Reschly (2013) and Marks (2000), positive academic outcomes follow high levels of child engagement in school and classroom settings. Research also supports that having a sense of belonging and acceptance within a group is crucial to children's engagement and thus their academic achievement (Finn & Zimmer, 2012; Fredricks et al., 2004).

Although school engagement is well established as a concept, there is a lack of clarity surrounding the definition of engagement and therefore many different approaches exist for assessing and reporting engagement. Reschly and Christenson (2012) described the confusing descriptions of engagement as a *jingle jangle* of terms, that is, "the same term is used to refer to different things (jingle) and different terms are used for the same thing (jangle)" (p. 11).

Engagement research has grown from several guiding theories (Reschly & Christenson, 2012), which has possibly led to the fragmented engagement literature (Fredricks et al., 2016).

One of the most significant theoretical developments in the engagement field has been the change from a singular concept of engagement to a meta-level and multi-component construct (Fredricks et al., 2016; Reschly & Christenson, 2012). Early studies viewed engagement as having one or two components. For example, two studies conducted by Finn (1993) focused on observable classroom behaviours such as being off-task and getting into trouble. These early studies linked engagement with participation constructs. Earlier behavioural engagement definitions among scholars tended not to make specific distinctions among various types of behaviour, such as participation in academic and non-academic school activities (Fredricks et al., 2004). While some early scholarly approaches represented behavioural engagement as encompassing effort and attention (Connell, 1990; Finn, 1989), Fredricks et al. (2004) subsequently presented effort as cognitive engagement and attention as behavioural aspects of engagement. Subsequently, a general consensus has emerged that engagement is a meta-construct or organising framework consisting of behavioural, emotional and cognitive forms of engagement (Eccles & Wang, 2012; Fredricks et al., 2004, 2016; Linnenbrink & Pintrich, 2003; Reschly & Christenson, 2012).

There have been calls for definitional clarity of the engagement construct (Fredricks et al., 2016; Reschly & Christenson, 2012) as it is essential for making predictions about the relationships between contextual factors, engagement, and learning outcomes (Eccles & Wang, 2012). As Fredricks et al. (2004) suggested, behaviour, emotion, and cognition can be analysed simultaneously when engagement is viewed as a meta-construct.

Although there is general agreement that engagement consists of at least these three types of engagement, some scholars suggest other types: social-behavioural engagement, relating to student attitudes and behaviour during collaborative group work (Linnenbrink-Garcia, Rogat, & Koskey, 2011; Reschly & Christenson, 2006a, 2006b); psychological engagement, based on

student perception of belonging to a community (Appleton, Christenson, Kim, & Reschly, 2006), and volitional engagement, described as “energy in action” (Filsecker & Kerres, 2014). However, more research is needed to understand how these aspects relate to existing frameworks of engagement (Fredricks et al., 2016).

2.6 Behavioural, Emotional and Cognitive Engagement

Fredricks et al. (2004) viewed engagement as a multifaceted construct, which allowed the antecedents and consequences of behaviour, emotion, and cognition to be examined simultaneously and dynamically. The construct of engagement was explained as having three types of engagement defined in line with the work of earlier scholars as outlined below. Fredricks et al.’s (2004) notion of behavioural engagement incorporated much of the earlier focus on engagement as a singular behavioural construct (e.g., Connell, 1990; Finn, 1989). It refers to participation and involvement in social, academic and/or extracurricular activities, which is considered imperative for positive academic outcomes and preventing school dropout (Fredricks et al., 2004). Emotional engagement refers to affective reactions to teachers, peers, academics or school and can influence children’s motivation to do school work (Connell, 1990; Finn, 1989; Fredricks et al., 2004). Emotional engagement also creates a sense of belonging to a school community and influences willingness to be involved (Fredricks et al., 2004). Cognitive engagement, as described in this theory, involves investment in learning, being thoughtful and having a willingness to put in effort to master complex ideas and strive for mastery (Corno & Mandinach, 1983; Fredricks et al., 2004; Newmann, Wehlage, & Lamborn, 1992). In this view, cognitive engagement allows the child to understand the full meaning of material and become an expert in the learning area (Fredricks et al., 2004).

There are several measures of child engagement. Some focus on high school students only, specific subject areas such as mathematics or do not provide measures of internal consistency (Fredricks, McColskey, Meli, Mordica, Montrosse, & Mooney, 2011). Fredricks, Filsecker, and Lawson (2016) argued scholars do not always use strong conceptual frameworks

to guide the development of their measures. However, Fredricks et al. (2004) based their multidimensional construct of engagement when developing the School Engagement Measure (SEM). This measure of child engagement was used for the purpose of this research because it measured behavioural, emotional and cognitive engagement within a substantiated theoretical framework and also had reliable internal consistency when used with upper primary school children. Due to the reliability of this instrument it is fair to assume that high levels of engagement as measured by the scale are associated with other positive outcomes such as academic achievement (Fredricks et al., 2016).

In summary, there is consensus that engagement is a multifaceted construct consisting of at least behavioural, emotional and cognitive engagement, along with more recent suggestion of other types. Because of its conceptual clarity and cumulative evidence base, Fredricks et al.'s (2004) three-component conception of engagement will provide a theoretical foundation for this research.

2.7 Engagement of Children who are Gifted

This review identified very few studies focusing specifically on the school engagement of children who are gifted. The following review summarises the small body of extant research and highlights the concern for conceptual clarity and theoretical definition of the engagement construct.

Engagement of children who are gifted has been described in terms of what children do or what they need from schools in order to be engaged. In Forster's (2010) study of teacher beliefs about engagement of children who were gifted, teachers reported these children were engaged when on-task and involved in challenging work. Although Forster (2010) did not define engagement, teachers in this study predominantly described elements of cognitive and behavioural, but not emotional, engagement, as described in Fredricks et al.'s (2004) engagement construct.

Scholars such as Rumberger and Rotermund (2012) have drawn strong connections between dropout and engagement theory, indicating disengagement is a process that can lead to school dropout. While not directly measuring or assessing engagement, scholars have proposed that a range of elements are prerequisites to prevent school dropout of learners who are gifted. These elements include: curriculum that is responsive to children's individual needs and interests (Hansen & Toso, 2007; Housand, 2016; McCormick & Plucker, 2013; Renzulli & Park, 2000), curriculum that is challenging (Hansen & Toso, 2007; Renzulli & Park, 2000), and use of specific provisions such as acceleration, challenge and higher order thinking (McCormick & Plucker, 2013; Rogers, 2007; VanTassel-Baska, 2005). Studies of the effects of acceleration, while not measuring engagement directly, have also suggested a possible relationship with engagement. For example, McClarty (2015) found accelerated children were generally self-motivated and exceptionally driven to gain new knowledge and skills compared to nonaccelerated children, and Rogers' (2010a) synthesis of 234 studies covering academic, social and psychological outcomes of acceleration, found a strong positive effect size (0.68) for acceleration on academic outcomes.

Some research has focussed on child-adult relationships in schools as a factor influencing engagement. Action research by Crupi Jr (2012) measured the engagement of children ($N = 7$) in Grades 6 to 8 who were gifted using Appleton and Christenson's (2004) understanding of engagement as a four-component model: academic, behavioural, cognitive, and affective. Using observation checklists, student engagement scales and interviews, Crupi Jr (2012) found that child-teacher relationships were a major influence on children's engagement. Similar findings were produced by a Canadian case study that reported caring teachers were influential to the learning of children who were gifted (Kanevsky & Keighley, 2003). These studies suggest that teacher-child relationships are a variable with the potential to support achievement and engagement.

In summary, there are a small number of studies that link the use of gifted provisions and

teacher support in schools and the engagement of children who are gifted. While few of these studies have directly measured engagement, or referred to a specific theoretical view of engagement, it appears reasonable to infer from McCormick and Plucker (2013), Renzulli and Park (2000) and others, that when a child's academic learning needs are met, their engagement and achievement also improves.

2.8 Summary of the Review of Literature

The review of home education literature suggests many factors that influence the decision to home educate including religious and philosophical reasons, flexible educational options, dissatisfaction with school and learner differences. Dissatisfaction with schooling and particularly, the experience of schooling and provisions for the child accounts for some decisions to home educate. Home educating parents tend to report disaffection and discontent with pedagogical decisions. These parent concerns appear to be supported in other research evidence such as Snyder and Linnenbrink-Garcia (2013) that suggests school factors, such as the infrequent provision of appropriate challenge, play a role in the underachievement and disengagement of children. Similarly, for children who are gifted, infrequent use of provisions in school may be a contributing factor to possible underachievement and disengagement at school. While there is substantial evidence supporting the use and benefits of gifted provisions there is less empirical understanding of gifted engagement. The link between school engagement and the decision to home educate appears plausible given links between school engagement and dropout (Landis & Reschly, 2013), indicating this may be a fruitful line of enquiry in understanding the decisions of home educating families of children who are gifted.

It became evident through the limited empirical data that the area of home education for children who are gifted is under-researched, with little understanding about this population of children, their experiences with home and school education and the factors leading to their parents' decision to home educate.

2.9 Study Purpose and Aim

There is limited empirical data on home education and children who are gifted. As introduced in Chapter 1, there are also known problems with the use of gifted provisions and the engagement of children who are gifted in school, which may be factors in the decision to home educate these children. However, there is no research to indicate whether educational provisions or school engagement of the gifted student contribute to parent decisions to home educate.

The purpose of this study was to understand the reasons why parents of children who are gifted choose to home educate. This study aimed to identify parent perceptions of their child's engagement at school and the educational provisions or practices available to their child in both school and home education settings. The research questions for this study are:

Research Question 1. What factors contribute to the parental decision to home educate children who are gifted or high-ability?

Research Question 2. What are parent perceptions of gifted educational practices in school settings and how do these compare to parent perceptions of gifted practices in home education?

Research Question 3. What are parent perceptions of children's engagement in school and home education settings?

3 Methodology

3.1 Research Design

This study employed survey research design with a combination of quantitative and qualitative response options. Quantitative methods were employed to gather demographic data and data on parent perceptions of children's engagement in school and home environments so that direct comparisons between home education and school engagements could be made. Qualitative questions were used to gather information about factors that influenced the decision to home educate and the child's learning and support needs. The use of mixed qualitative and quantitative methods led to a more complete understanding of the research topic (Creswell, Klassen, Plano Clark, & Smith, 2011). The term "homeschool" was used throughout the survey as this is a familiar term to parents and was the term used in the recent NSW enquiry into home education (Select Committee on Home Schooling, 2014).

The use of an online survey supported wide distribution to a group described by English (2015a) as a difficult-to-locate group. A particular benefit of an online survey for this population is the preservation of anonymity for the participant, which allowed protection of their privacy (Johnson & Christensen, 2012). For some home educating families, anonymity was likely an important consideration in their decision to participate in this research. This would have been especially important for those who were not registered with educational authorities in their state or territory and did not want to be identified. All responses remained anonymous except where participants chose to disclose their email addresses as an invitation for the researchers to ask further questions, or to enter the participation draw, which was separate to the survey submission.

3.2 Participants

The participants were 42 home educating parents ($n = 41$ female and $n = 1$ male) of children who were identified by their parents as gifted or high ability. Parents ranged in age from 29 to 54 years ($M = 42$, $SD = 5.77$). These parents were recruited from a known population of registered home educators in NSW ($N = 3955$) (BOSTES, 2016) and the ACT ($N = 252$) (ACT Education Directorate, 2016). However, there is some uncertainty about the number of home educators because it is suspected that some do not register with their state or territory regulatory body (Jackson, 2009; Reilly, 2007). Therefore, the reach and return rate of the survey was difficult to estimate. Assuming estimates of 10% of gifted children in the general population (Gagné, 2004) and a conservative estimate of 20% survey return rate, it might be expected that approximately 84 surveys would be returned from the known and registered populations.

In this exploratory study, initial participant selection was restricted to NSW and the ACT due to the uncertainty of overall home education numbers and time constraints of this research. Additionally, once the survey was released online, the researchers anticipated a “snowballing” effect since participants were encouraged to further distribute the online survey to other home educating families. For this reason, any participants from other Australian states who completed the survey were also included in the sample if they met the other inclusion criteria. To be included in the study parents were required to have made the decision to home educate after the child had experienced enrolment in a formal school system. Of the 81 people who responded to the survey, 39 were ineligible for inclusion in the sample for reasons as follows: respondents’ children had *not* experienced a school environment and had only experienced home education ($n = 21$); parents did not believe their child was gifted or left this question blank ($n = 7$); responses were deemed incomplete when less than 30% of the survey was completed ($n = 8$); the nominated children were older than school age and had completed schooling ($n = 3$).

3.3 Measures

3.3.1 Demographic information.

Participants provided socio-demographic data about age, gender, occupation (using categories drawn from the Australian Bureau of Statistics, 2013), marital or partnership status, ethnicity, language, educational level, and location. Participants were asked to answer survey questions about a focal child, which was their most recently home educated (or youngest) child to ensure the most recent transition from school to home education was reported. Child demographic information including age, gender and ethnicity were also collected. It was necessary to collect demographic information as there was limited empirical understanding of this population in the Australian context. The complete survey can be found in Appendix A. See Table 1 for a summary of parent demographic information.

3.3.2 School and home education information.

Survey questions were designed to gain a deeper understanding of the context of home education and school education for children who were gifted. Data were collected about the following aspects of home education: the duration or period of time of home education, whether it was current and part-time or full-time, and whether it was seen as a temporary or permanent choice. Additionally, parents were asked about the type of school their child had previously attended (selecting from “Public”, “Independent”, “Steiner”, “Montessori”, “Religious” or “Other”).

There is no current understanding of the relationship that home educating parents of gifted children have with regulatory bodies for home education. To explore these relationships, parents were asked, “How would you describe your relationship with your state or territory’s regulatory body for homeschooling?”. A list of responses included: “Very good”, “Good”, “Acceptable”, “Poor”, “Very poor”, “Not applicable, I do not interact with any regulatory bodies”. An open-ended response item gave parents an opportunity to describe or provide examples of this relationship.

3.3.3 Child giftedness and exceptionalities.

Parent understanding of child giftedness and other characteristics was assessed with three questions. Parents were first asked to explain how they had identified that their child was gifted (“How do you know your child is gifted?”) by selecting a response option from the following categories: cognitive assessment, academic testing, teacher nomination, own observations, as well as an “Other” option that invited details. Parents could also select “I don’t believe in labelling children, but my child has high abilities”, which allowed parents who do not label children to participate. Parents could also select a statement about their child *not* being gifted or high ability, which excluded them from the sample. An open-ended response item also asked parents to describe their child’s areas of ability or achievement in the gifted range. A further question with a “Yes” or “No” response option asked about any other learning needs or disabilities (“Do you believe your child also has a learning challenge or disability?”). Parents who selected “Yes” were asked to select from a list of commonly cited learning challenges or disabilities that co-exist with giftedness according to researchers such as Rogers (2010): ADHD, learning disability, Autism Spectrum Disorder, anxiety and “other” (inviting details).

3.3.4 Factors associated with parent decision to home educate.

This measure addressed the first research question about factors influencing the parents’ decision to educate their child at home. These factors were assessed using an open-ended response item with the question prompt, "What factors contributed to your decision to homeschool?". This method ensured parents were not prompted or guided by pre-determined response options. To assess whether they had previously considered home education prior to their child commencing school, parents were also asked a “Yes” or “No” question, “Before your child started school, had you considered homeschooling as an option for your child?”.

3.3.5 Parent perceptions of school and accommodation of learning needs

The second research question addressed the child's learning needs, how these needs were met in school and home education, and the parent's perception of the child's 'fit' at their former school. Parents were provided with an open-ended response item and question prompt, "How would you describe your child's learning needs?". No prompts or guidance were given to ensure the researcher did not influence responses. Parent perceptions of how the children's needs were met in school were assessed by asking, "Did your child's most recent teacher accommodate your child's needs?". Response options were "Yes", "No" and "Partly", with a space to add further comment. Parents were also provided with an open-ended response item and question prompt, "Thinking back to the learning needs you identified for your child, how are these needs being met through homeschooling?". No further prompt or direction was given to avoid any researcher influence over the answers. These two questions were separated in the survey to avoid parents perceiving any researcher expectations that they make direct comparisons between school and home environments.

Parents were also asked whether school was a good fit for their child (response options were "Yes", "No" and "Unsure") and "How long did you work with the school to create a good fit for your child at school before deciding to homeschool?", with four response options including "Less than 1 year", "About 2 years", "About 3 years" and "More than 3 years". Parents were also asked an open-ended response question, "Under what circumstances would you consider returning your child to school?"

3.3.5.1 *Child access to gifted education practices in school and home education.*

This measure also addressed the second research question about parent perceptions of gifted educational practices in school and home education. For the purpose of the current study, a measure was developed to assess children's access to six gifted education practices. First, the practice of acceleration was assessed by analysing child acceleration at school. Parents rated acceleration using multi response options including "No", "Accelerated by 1 year", "Accelerated

by 2 years”, “Accelerated by 3 years”, and “Accelerated by more than 3 years”. Parents were also asked, “If your child was to return to school today, what year level do you think they should go into?”, selecting from a list of grades (first year of school to Year 12). This was then compared to child age data provided in the demographic measure. Children were allocated a current grade level range based on their reported age. Grade level ranges were used because child age data were not sensitive enough to determine exact grade level (e.g., a six year old could be in first year of school or year one). A comparison was made between the allocated grade level range and the grade level parents would place their child if immediately returning to school.

A further five gifted educational practices were based on Rogers’ (2007) literature review and synthesis of gifted education practices. Rogers (2007) identified five practices that should be utilised at least some of the time: (a) challenge in the child’s specific area of talent, (b) opportunities to work independently in the child’s area of talent, (c) being allowed to work at a higher grade level as needed, (d) opportunities to learn and socialise with children of similar ability, and (e) adjustments to the pace of learning and the amount of practice and review. These practices have been further supported in the work of more recent scholars (Housand, 2016; McCormick & Plucker, 2013; VanTassel-Baska, 2011). Parents rated these practices on a 5-point Likert scale where a score of 1 relates to *never* and a score of 5 relates to *all the time*. (See Appendix B). A score out of 25 was calculated by summing the scores for each of the five practices. A higher total score on this measure indicated parent belief that their child had more frequent access to gifted education practices than parents who scored lower on the same measure. Gifted education practices mean scores above three indicated these practices were available *at least* some of the time as recommended by Rogers (2007).

3.3.6 Parent perceptions of child engagement in school and home education environments.

This measure addressed the third research question about parent perceptions of engagement in school and home education to determine if the perception of the child's engagement differed for school and for home. Although engagement is typically assessed from the child's point of view, in this study the parent perspective was particularly sought because of an interest in parent perceptions of formal schooling and, beliefs about the child, and because engagement is a known factor of concern in the gifted child population. There is limited research about parent views of child engagement (Hancock & Zubrick, 2015); only two measures of parent perceptions of engagement were identified (Bell et al., 2016; Urban Institute, & Child Trends, 2002).

In this exploratory study of parent perceptions of engagement, the established measure of child-reported engagement —Fredricks, Blumenfeld, and Paris (2003) School Engagement Measure (SEM)— was modified because existing parent measures were not as comprehensive and inclusive of the dimensions of engagement as the Fredricks et al. (2003) measure. The original SEM measured child-reported perceptions of classroom engagement in three domains of engagement: emotional engagement (e.g., “I am interested in the work at school”), behavioural engagement (e.g., “I pay attention in class”) and cognitive engagement (e.g., “When I read a book, I ask myself questions to make sure I understand what it is about”). In the current study, items were slightly modified to reflect parent perceptions (e.g., “My child was interested in work at school”). Following Fredricks et al.'s (2003) scale, the modified scale retained the original 19 items rated on a 5-point Likert scale, where a score of 1 represented *never* and a score of 5 represented *all of the time* (See Appendix C). The higher the score, the more engaged the parent perceived the child to be in school. Mean and standard deviation were calculated for total scores, which were a score of 30 for emotional engagement (6 items with five ratings each), 20 for behavioural engagement (4 items, and one scale item was removed), and 40 for cognitive engagement (8 items).

The school engagement scales indicated good internal consistency with a suitable Cronbach's alpha for emotional engagement ($\alpha = .87$) and cognitive engagement ($\alpha = .86$). The internal consistency of the behaviour engagement scale yielded a lower Cronbach's alpha of .61. Fredricks et al. (2003) similarly reported a lower alpha (.75) for behavioural engagement compared to emotional and cognitive engagement. Following Pallant's (2016) suggestion that the reliability of a scale can be improved by removing low scoring scale items, one item was removed ("When I am in class, I just act as if I am working"), which improved the alpha ($\alpha = .67$). This alpha is slightly below the minimum acceptable .70 alpha level suggested by Pallant (2016), which could also be due to the small number of items in the scale (Pallant, 2016). The remaining 18 items were used for analysis in this study.

The measure of parent perceptions of their child's engagement in home was applied as a parallel measure of engagement at school. This measure was located in an earlier section of the survey to ensure some separation from the home engagement scale. The same Likert scale described above assessed the 19 items (see Appendix D). Items were further modified to reflect the home education context (e.g., "My child is interested in the work we do while homeschooling."). The scales of engagement at home had slightly lower internal consistency than the school scales (emotional, $\alpha = .76$; cognitive, $\alpha = .79$), while the behaviour engagement scale yielded an unsatisfactory Cronbach's alpha of .58 after the same low scoring item was removed as in the school scale ("When my child is completing work, they just act as if they are working"). Despite the unacceptable alpha for behavioural engagement in home education, the behaviour engagement scales were still of exploratory interest in the study. Possible reasons for the low alpha will be addressed in the Discussion.

Parent perceptions of school engagement were also investigated with further analysis of open-ended responses. In particular, it was theorised that if child engagement was a factor influencing parent decisions to home educate this might be indicated in parent responses to questions about the factors that influenced their decision and their perceptions of how the child's

needs had been met in the former school environment. Qualitative responses were scrutinised for examples specifically indicative of parent reports of the child's behavioural, emotional and cognitive engagement.

3.4 Procedure

An online survey was developed and presented in Qualtrics. The link was sent in an invitational email to identified gifted and home education organisations in NSW and the ACT. These were Home Education Australia (HEA), Home Education Network of Canberra and the Southern Tablelands (HENCAST), Sydney Home Education Network (SHEN), Australian Capital Territory Gifted Families Support Group (ACT GFSG), and New South Wales Gifted Families Support Group (NSW GFSG). The organisations distributed the survey through their usual methods of online communication, such as email and posting to Facebook groups. Organisations and members were encouraged to share the link with other home educators to reach as many parents as possible. This form of snowball sampling is an effective strategy to find hard-to-reach groups (Johnson & Christensen, 2012).

Parents accessed the survey online and were able to complete it anonymously at their convenience, using large or small screen devices. The survey remained open for four weeks, and a request to re-distribute was sent to the organisations approximately one and a half weeks before the closing date. A Participant Information and Consent Statement was presented first and parents clicked to consent to participation. The survey was completed in an average time of 80 minutes reflecting the extent to which parents volunteered their time to provide extended responses to open-ended questions. At the end of the survey, parents were offered the opportunity to enter a draw to win one of two fifty-dollar Coles/Myer vouchers as an incentive for participation and a token of appreciation. Sixty-one of the original parents completing the survey took part in the draw. Parent names and contact details for the draw were entered on a separate survey page and not linked to parents' survey responses. Names were only accessed

after two independent researchers chose a number at random (between 1 and 61), which selected the winners who were then contacted.

This research project received ethics approval from Macquarie University Human Research Ethics Committee (reference number: 5201700385), which ensures the research design considers the rights, needs, and values of the participants (Creswell, 2003) by anticipating and minimising harm to participants. Confidentiality was assured, and participants had the right to withdraw at any time without consequence.

3.5 Data Analysis

Descriptive statistics such as frequencies and percentages were reported for most demographic data, as well as school and home contextual information and child giftedness and learning challenges. Means and standard deviation were reported for basic demographic information such as parent and child ages. Means and standard deviation were also reported for engagement scales and assessment of child access to gifted education practices. Paired-samples t-tests compared parent perceptions of behavioural, emotional and cognitive engagement in school and in home environments. Acceleration was reported as frequencies and percentages. Differences in actual and parent judged grade levels were reported as frequencies and percentages.

Qualitative data gathered from open-ended response questions such as “What factors contributed to your decision to homeschool?” and “How would you describe your child’s learning needs?” were analysed. Responses were coded according to discrete themes, which is a method of thematic analysis used to explore variables (Johnson & Christensen, 2012). Inter-coder agreement for thematic coding was assessed using the method described in Campbell, Quincy, Osserman and Pedersen (2013). For each open response question, one supervisor and the researcher developed emerging themes and independently coded 20% of responses to determine the percentage of agreement (agreements divided by a sum of agreements plus

disagreements, multiplied by 100). When agreement fell below the researcher-agreed acceptable level of 85%, the two coders revised themes together and independently coded a further 20% of the question's responses. This process continued until the researchers achieved agreement of 85% or higher. Final agreements achieved were between 87% and 100%. Once acceptable agreement was achieved, one researcher continued to code the remaining responses. As described in the previous engagement measure, parent responses to open-ended questions were also analysed for indicators of the child's engagement at school. Responses were coded as behavioural, emotional or cognitive engagement and reported as frequencies and percentages.

4 Results

This chapter presents the findings for the three research questions. The principal analysis focused on parent reported factors that contributed to their decision to home educate. Parents' perceptions of the availability of gifted education practices and the engagement of their children in both school and home education settings, are also reported. Demographic and background information on the participating families are presented first to frame an understanding of the population of interest in this study.

4.1 Demographic and Background Information

This section reports demographic and background information relating to home educating parents and their focal child who is gifted. Information on schools attended and relationships with school systems and home educating regulatory bodies are also reported. This section also reports on the identification of giftedness and prevalence of twice exceptionality in the population of children in this sample.

Thirty-five surveys (83.3%) were completed by parents who were primarily responsible for home education, while the remaining seven surveys (16.7%) were completed by parents who shared the responsibility with a partner or family member. Thirty-nine parents lived with a partner (92.9%); one parent did not disclose this information (2.4%). At the time of the survey 37 parents (88.1%) were actively home educating their children and five parents had returned their children to school at the time of the survey.

4.1.1 *Parent and child demographic information.*

Demographic information on parent and child provided an initial understanding of this population in the Australian context. The duration of home education for the focus child ranged between 2 months and 10 years with an average of 3.6 years ($SD = 2.3$). These children ranged in age from 5 to 18 years ($M = 11.21$, $SD = 2.92$). Seventeen children were male (40.5%), 24 were female (57.1%) and one child was identified with a gender other than male or female (2.4%).

Parent demographic information is reported in Table 1. More than 75% of parents reported their level of education as undergraduate or above and over 50% nominated their occupation as “professional”, according to ABS (2013) occupation categories. Specifically, nine (21%) parents reported their occupation in fields of education such as teaching in schools and early childhood services.

Table 1

Parent Demographic Information

Characteristic	<i>n</i>	%
Ethnicity		
- Australian	39	92.9
- Blended Australian identity ^a	3	7.1
Main language^b		
- English	42	100
Highest level of education		
- Postgraduate	19	45.2
- Undergraduate	13	31.0
- Post School Cert./ Diploma	7	16.7
- Year 12 or below	3	7.1
Occupation		
- Managers	5	11.9
- Professionals	22	52.4
- Community & Personal Service	5	11.9
- Sales Workers	5	11.9
- Occupation not specified	5	11.9
Place of residence		
- ACT	5	11.9
- NSW	29	69.0
- QLD	2	4.8
- TAS	1	2.4
- VIC	4	9.5
- WA	1	2.4

Note. ^a Self reported as Australian/Chinese (*n* = 1), and Australian/English (*n* = 2).

^b Other languages spoken at home included Auslan, Cantonese, Japanese, Maori and Spanish.

4.1.2 *Child giftedness and exceptionalities.*

One of the criteria for participation in this study was that the home educated child was considered gifted or high ability by the parent. Parents indicated from a given list how they knew their child was gifted, and 59% of parents specified more than one method of identification. Parents selected their own observations ($n = 25$), reading or mathematics assessment ($n = 24$), cognitive assessment ($n = 23$), teacher nomination ($n = 13$), and other ($n = 2$), a category which included open-ended responses indicating a therapist had assessed the child or the child had been assessed with a special test.

Half of the parents ($n = 21$) identified that their child was twice exceptional, having both parent-defined giftedness or high ability and a learning challenge or disability. Twelve of these parents (57% of those reporting a child with twice exceptionality) said their child had more than one learning challenge or disability. The most commonly reported conditions were anxiety ($n = 11$), autism ($n = 9$), ADHD ($n = 4$), and learning disability ($n = 4$). The ‘other’ ($n = 10$) category included a range of conditions: Obsessive Compulsive Disorder (OCD), hearing impairment, motor skills, Sensory Processing Disorder (SPD) ($n = 2$) and Auditory Processing Disorder (APD). Two parents reported they were not sure if their child was twice exceptional. One of these wrote, “Likely to be mildly ASD [Autism Spectrum Disorder], but very hard to say as there is so much cross over between PG [Profoundly Gifted] and ASD”; the other parent reported, “I’m actually not sure if there’s a learning challenge or if it’s just part of the nature of being gifted. He certainly has many over excitabilities/sensitivities”.

4.1.3 *Child learning needs.*

Parents’ perceptions of children’s learning needs provided further information about the learning needs to be accommodated in school and home education settings. Parents could mention as many learning needs as appropriate to their child. Parents ($n = 41$) provided 73 descriptions of their child’s learning needs. These were coded and thematised according to similar units of meaning, as summarised in Table 2.

Table 2

Parent Perceptions of Child Learning Needs

Learning Need	Frequency	Example
Intellectual challenge or stimulation	19	“Needs to be challenged by learning at a level much higher than her age or year level.”
Learning or emotional support	16	“Difficult to balance immature emotional level/age with advanced ability. Learning needs are few, emotional support required is greater than average.”
Adjusted pace of learning	13	“A need to progress at a fast rate” “Learns best when allowed to progress at her own pace”
Learn autonomously in their area of interest or strength	12	“Needs to set her own goals and achieve them in her own way with her own timing and not too much interference.”
Physical action	3	“Needs hands on, interactive learning with lots of movement.”
Sense of belonging	3	“Needs to feel comfortable and accepted to learn well. Things that everyone needs, I just notice it more for him.”
Like-minded peers	3	“He can be easily frustrated by same age peers. He needs to be intellectually stimulated, socialise with peers of similar abilities.”
Other	4	“complex” and “special”
Total	73	

Note. Parents could mention more than one learning need.

The most frequent reported need was *Intellectual challenge or stimulation* (19 responses, 26%). Parent responses indicated that their child needed a high level of challenge or stimulation. For example, “Needs to be challenged by learning at a level much higher than her age or year level.”

The second most frequent reported need was *Learning or emotional support* (16 responses, 22%), which was characterised by responses such as “Difficult to balance immature emotional level/age with advanced ability. Learning needs are few, emotional support required is greater than average.”

The third most reported need was an *Adjusted pace of learning* (13 responses, 18%), which related to needing a faster or slower pace of learning. For example, “A need to progress at a fast rate” and “Learns best when allowed to progress at her own pace”.

Parents also perceived their child needed to *Learn autonomously in their area of interest and strength* (12 responses, 16%) and to a lesser extent needed *Physical action* (3 responses, 4%), *Sense of belonging* (3 responses, 4%), *Like-minded peers* (3 responses, 4%) and *Other* (4 responses, 6%). *Other* included comments such as “complex” and “special”.

4.1.4 School background.

Analyses of the type of school that children attended provided contextual information about the environment prior to the decision to home educate. Over half of the children ($n = 23$, 57.5%) had attended a public school, five attended independent schools (12.5%) and seven had attended religious (17.5%) schools. Five parents (12.5%) said their children attended two or more schools before making the decision to home educate.

4.1.5 Parents’ relationships with regulatory bodies.

To provide further contextual understanding of the home education environment parents were asked about their relationship with their State or Territory home education regulatory body. On average parents reported their relationship with regulatory authorities as “Good” or “Very good” ($n = 30$) indicating the two highest response options ($M = 4.75$, $SD = 1.43$). Four parents reported an acceptable relationship, three parents rated their relationship as “Poor” or “Very poor”, and three parents reported no interaction with a regulatory body at all.

4.2 Factors Contributing to Parents’ Decision to Home Educate

These results addressed the first research question about factors that contributed to the decision to home educate. This question was addressed with open-ended qualitative responses that were thematically grouped as described in Chapter 3 (p. 35). The factors identified by parents as contributing to their decision to home educate are summarised in Table 3.

Table 3
General Factors for Home Education Choice

Factor	Frequency	Example
Dissatisfaction with school	87	"So, basically, my decision was based on dealing with ignorant teachers who lacked compassion and any ability to see a child as an individual."
Parent centred concerns	9	"By the end of the year, we were so stressed, we knew home-schooling had to be on the cards."
Positive perceptions of home education	9	"I love that we can cater to his desires to learn and question."
Philosophical and religious reasons	7	"I preferred her to learn for its own sake rather than as a way to value herself." "Faith."
Parent relationship with teacher	2	"The teacher pretty much laughed in my face when I suggested it."
Total	114	

Note. Parents could report more than one factor.

The most frequent factor identified was *Parent dissatisfaction with school* (87 responses, 76%). Other responses of dissatisfaction with school included lack of understanding or inability of an individual teacher or school to meet the needs of gifted/twice exceptional children and lack of availability of challenge.

The second factor identified was thematically labelled as *Parent-centred concerns* (9 responses, 8%). Responses in this factor indicated parent affective reactions to their child's experiences in school. For example, one parent reported "By the end of the year, we were so stressed, we knew home-schooling had to be on the cards."

Several responses were also thematically grouped as *Positive perceptions about home education* (9 responses, 8%). These were distinguished from the factor of *Parent dissatisfaction with school* because these responses did not refer to school environments as a source of dissatisfaction, rather parents replied with positive responses about home education. For example, one parent said, "We wanted to allow our daughter to slowly work on her weaknesses in a supportive environment".

A small number of parent reported factors were thematically grouped as *Philosophical reasons* (6 responses, 5%). These responses focussed on what could be achieved in home education, rather than a concern with the school environment. For example, “We wanted to know our kids well and give them all freedom to learn at their own pace”. Only one response indicated *Religious reasons* as a factor. This person provided the response “Faith”.

Given that 76% of responses referred to parent dissatisfaction with school as a reason they chose to home educate, these responses were further analysed. These perceptions included the following sub-themes:

(a) *A lack of understanding or inability of the school or individual teacher to meet the needs of gifted/twice exceptional children* (30 responses, 34.4% of dissatisfaction) described a major source of dissatisfaction with school. For example, “A well resourced school was unable to cater for her.”, and “My decision was based on dealing with ignorant teachers who lacked compassion and any ability to see a child as an individual.”

(b) *Child’s emotional response* (22 responses, 25.3% of dissatisfaction) a theme indicative of emotional reactions. For example, “She was having melt down and school refusal.”

(c) *Lack of availability of challenge* (13 responses, 17.2% of dissatisfaction) indicated concern about the challenge level of schoolwork. For example, “She didn’t mind helping other kids but wanted more of a challenge.”

(d) *Poor relationships with peers* (8 responses, 9.2% of dissatisfaction). For example, one parent said, “Students were bullying her as she was different”.

(e) *Poor relationships with teachers and other staff* (7 responses, 8% of dissatisfaction), included responses about poor relationships with adults as well as inappropriate adult behaviours. For example, “Bullying within the school system from teachers and admin staff” and “Bad teaching, a teacher in Year 2 screwed up her homework in front of her and threw it in the BIN!”

(f) *Suggested provision for gifted or twice exceptional child not deemed appropriate* (5

responses, 5.7% of dissatisfaction) indicating the parent was not satisfied with the level of provision offered to their child. For example, “The local school wanted to accelerate her 3yrs for maths and English. We felt this was too big an age gap socially and emotionally”. Another parent reported, “Having been approached, the grade 7 teacher's disappointing solution to placating me was to send my daughter to supervise prep [first year of school] and grade one children, rather than providing extra learning opportunities.”

Parents were also asked whether they had considered home education as an option for their child prior to starting school (selecting from yes or no). This would indicate parents' awareness of home education as a legitimate alternative to sending their child to school. Forty parents responded to this question with 19 (47.5%) of these parents indicating they had not considered home education prior to their child's schooling experience. In total 19 of the 42 (45.2%) parents saw home education as a permanent choice for their child, seven (16.7%) reported home education was a temporary choice and 16 (38.1%) were undecided.

4.3 Parent Perceptions of Gifted Educational Provisions in Schools and How These Perceptions Compared to Home Education

Results presented in this section address research question 2: What are parents' perceptions of gifted educational practices in school and how do parents' perceptions of school gifted education compare to parents' perceptions of gifted practices in home education? To answer this question, an analysis of school acceleration and other gifted practices in school and home education are reported. Parent-reported child needs and how these needs were met by their child's last school teacher and through home education were also analysed.

4.3.1 Parent perception of access to gifted education provisions in school and home education.

Parents first reported whether or not their child had been accelerated at school and if accelerated if this was by one or more school grades. Ten children (25%) were accelerated by the school, while all others remained with their chronological same aged cohort ($n = 30$). Data were missing for two parents in this analysis. Two children identified as twice-exceptional experienced school-based acceleration (5%) compared to children with no exceptionalities (20%).

Parents ($n = 38$) who completed both questions about acceleration and expected grade level were included in the following analysis to understand the extent of this gifted provision in the sample. Only nine children (23.7%) in this sample had experienced acceleration at school and all were female (data for one child were missing for this analysis). Thirty-three parents (86.8%) believed their child should have been accelerated by a minimum of one year (range 1 – 5 years).

In addition, parents rated the availability or frequency of five specific teaching practices recommended by Rogers (2007). A score of three or higher was taken to indicate the child experienced the educational provision at least some of the time. As indicated in Table 4, parents perceived all five gifted provisions were available at least some of the time in home education, but none of the five had been available at least some of the time in the child's previous school setting.

Table 4

Frequency of Child Access to Gifted Provisions at School and Home

Practice	School		Home	
	M	SD	M	SD
My child was challenged in their specific area of talent	1.68	0.69	3.92	0.75
My child was given opportunities to work independently in their areas of passion or talent	1.78	0.73	4.33	0.72
My child was allowed to work at a higher grade level as needed	1.6	0.67	4.83	0.38
My child had opportunities to learn and socialise with children of similar ability	2.0	0.91	3.48	0.94
My child's teacher adjusted the pace of learning and reduce the amount of practice and review for my child	1.68	0.76	4.38	0.91

4.3.2 Parents' perceptions of accommodation of child's learning needs at school.

Thirty-two (80%) parents believed school was not a good fit for their child, while five (12.5%) were unsure. Only three (7.5%) parents believed school was a good fit for their child.

Parents were also asked if their child's previous teacher had accommodated their child's needs (selecting from "Yes", "No" or "Partly") and were provided with open space to provide further comment. These responses were thematically coded. Most parents in this analysis reported that the school did not accommodate their child's needs at all ($n = 20$, 50%) or only partly ($n = 19$, 47.5%). One parent believed the teacher accommodated their child's needs (2.5%). Additional comments provided by parents did not necessarily relate to how their child's last teacher accommodated their needs. Instead, parents provided responses that were thematised according to the categories below.

(a) *Teacher capabilities in gifted education* (43 responses, 63%) which indicated a parent perceived the teacher's capabilities in gifted education influenced whether their child's needs were met. For example, "He was aware that she had been accelerated a year but showed little appreciation for why or what that might mean emotionally."

(b) *The role of the school system in supporting teachers* (15 responses, 22). Parent

responses indicated that the school system did not support teachers in meeting gifted needs. For example, “They did the best they could but with a class of 20 it’s impossible to accommodate all the different learning needs.”

(c) *The child became unmotivated to learn* (7 responses, 10%) which was always reported in accompaniment of other themes and indicated that the child’s level of engagement had been affected. For example, “Unfortunately, by this stage my son was too disengaged with school and showed little interest in the projects.”

(d) *Child’s relationship with peers or teachers* (3 responses, 4%) which related to bullying, not relating well to others and teachers drawing attention to differences in a manner that made the child uncomfortable. For example, “He was also being bullied (teased) though he had a great best friend who he saw outside of school.”

The overall most reported theme in parent perceptions of teacher accommodations of their child was the teacher's capabilities in gifted education (63% of responses). These perceptions of teacher capabilities were further analysed and reported as the following sub-themes:

(a) *The teacher made an effort but did not meet gifted learning needs* (18 responses, 41.9%). Parents reported they believed the teacher was trying to meet their child’s needs. However, the child’s needs remained unmet. One parent reported, “She tried to change things for him but basically I had to continually suggest things and articulate why I thought it would change things for him. She would change things for a little bit and they would work, so then she would let them go. I had to keep reminding her!”

(b) *The teacher’s ability to deliver curriculum at the required pace and challenge level* (10 responses, 23.2%). Parents reported that teachers generally did not provide sufficient adjustment to the pace of learning: “They didn’t understand that she was an independent learner and wouldn’t let her move ahead independent of the teachers (sic) instructions.”

(c) *The teacher lacked skill and knowledge about gifted and/or twice exceptional children*

(7 responses, 16.3%). A number of parents reported that teachers lacked an understanding of giftedness or did not acknowledge the giftedness of their child: “The teacher did not recognise giftedness, only viewed as behavioural issues.”

(d) *The teacher made an effort and met gifted learning needs* (4 responses, 9.3%). A small number of responses demonstrated parents’ belief that the teacher’s effort in addressing gifted needs was sufficient: “As she was in a 5/6 composite class it was easy to give her Year 6 work as extension work...she basically joined in with Year 6.”

(e) A small number of responses were classified as *Other* (4 responses, 9.3%). An example includes: “... we became aware that some parents complained he was allowed to opt out of reading time and this created a lot of tension.”

4.3.3 Parent perceptions of child needs being met through home education.

Parents were subsequently asked to report on how their child's needs were met in home education. This open-response question was posed in a later part of the survey to create some separation of the questions about school and home environments. Responses were coded and thematised according to similar units of meaning, as summarised in Table 5. Parents provided 100 different types of accommodations of needs met through home education.

The most frequently identified way child needs were met through home education was *child’s interests were addressed* (27 responses). Responses in this theme indicated children were engaged through interest-led learning. Examples were: “She is able to work...in areas she is interested in.” Parents also reported the need for pace (18 responses) and challenge (16 responses) were addressed in home education settings. For example, “She is able to work at her own pace.” and “We were able to accelerate him to a level he feels challenged by, and can explore mathematical concepts without restriction.”

Another identified theme was *support*. Parents reported children required support to have their needs met (12 responses): “He is better supported emotionally at home. He feels more in control of his learning and less anxious about being in a school environment.”

Some responses were categorised in the theme *removal of a social or emotional trigger* (9 responses) indicating the home environment removed a negative factor present in the former school environment. For example, “Taking away [h]is propensity to be highly anxious in school, removes the triggers for meltdowns and self loathing.” Another theme *access to a broader range of people, including like minds* (7 responses) indicated parent beliefs that home education addressed the child's need for like minded associates or peers. Another theme, *physical environment better suited to child's needs* (7 responses) reflected the idea that the home environment suited their child's needs better than classrooms and the *other* category (4 responses) included commentary about home education or the state of schools, without providing information about how their child's needs were met through home education: “It is not so much that these needs are being met as that these needs are not being stymied by the school system, truth be told.”

Table 5

Parent Perceptions of Child Needs Met Through Home Education

Theme	Frequency	Example
Child interests addressed	27	“She is able to work...in areas she is interested in.”
Curriculum delivered at the required pace	18	“She is able to work at her own pace.”
Curriculum delivered at the appropriate challenge level	16	“We are able to accelerate him to a level he feels challenged by, and can explore mathematical concepts without restriction.”
Support	12	“He is better supported emotionally at home...He feels more in control of his learning and less anxious about being in a school environment.”
Removal of a social or emotional trigger	9	“Taking away [h]is propensity to be highly anxious in school, removes the triggers for meltdowns and self loathing.”
Access to a broader range of people, including like-minds.	7	“He is socially able to mix with children of all ages and abilities in homeschooling groups.”
Physical environment is better suited to child’s needs	7	“It is a one to one environment with all background noise removed.”
Other	4	“It is not so much that these needs are being met as that these needs are not being stymied by the school system, truth be told.”
Total	100	

Note. Parents could mention more than one factor.

Additionally, parents were asked if there were any circumstance in which they would consider returning their child to school. Parents provided 54 responses, and these were thematically coded. Parents most frequently reported they would return their child to school if *the child chose to return* (17 responses, 32%), for example, “If our child wanted to attend school”. Second most frequent response reported by parents was *child needs could be met at school* (13 responses, 24%), for example, “If the school provided more individualised academic and emotional support to meet the needs of each child.” Additionally, parents reported they would return their child to school if *home education no longer working* (11 responses, 20%), for example, “If she became unhappy homeschooling or if I felt that we couldn’t meet her needs at

home.” A smaller number of responses related to *social benefits of school* (5 responses, 9%), for example, “If we felt he needed the social benefits of a school environment more profoundly than the individualised learning benefits of the home schooling environment.” Some parents (5 responses, 9%) said there would be no circumstance where they would return their child to school, and three parents (6% of responses) would return their child to improved or alternative school systems, for example: “If school was run more like university, with an opt-in system where children chose learning areas...”

4.4 Parent Perceptions of Child Engagement in School and Home Education

Environments

This analysis addressed research question three. Engagement scales measured parent perceptions of their child’s engagement in school and home education settings and gave scores of emotional, behavioural and cognitive engagement in each environment. Scores above the midpoint of each scale total would indicate higher and positive levels of engagement.

Results of engagement measure are as follows: emotional engagement in home ($M = 25.17$, $SD = 2.33$) and school ($M = 13.9$, $SD = 3.91$), behavioural engagement in home ($M = 16.19$, $SD = 2.18$) and school ($M = 15.29$, $SD = 4.08$) and lastly cognitive engagement in home ($M = 30.31$, $SD = 4.86$) and school ($M = 19.88$, $SD = 6.77$).

Paired-samples t-tests were conducted on 40 complete cases of data to compare perceived emotional, behavioural and cognitive engagement in school and home education environments. There was a statistically significant difference in parent perceived emotional engagement between school ($M = 13.90$, $SD = 3.91$) and home education ($M = 25.23$, $SD = 2.36$), $t(39) = 15.52$, $p < .001$, two tailed, $d = 3.50$. For cognitive engagement there was a statistically significant difference between school ($M = 19.88$, $SD = 6.77$) and home education ($M = 30.33$, $SD = 4.98$), $t(39) = 9.03$, $p < .001$, two tailed, $d = 1.76$. For behavioural engagement no significant differences were detected between school ($M = 15.29$, $SD = 4.08$) and home

education environments ($M = 16.10$, $SD = 2.12$), $t(40) = 1.32$, $p = .195$, two tailed, $d = 0.25$.

4.4.1 *Parent Responses Indicative of Engagement.*

Using Fredricks et al. (2004) engagement lens, further analysis was conducted on parent qualitative responses for factors contributing to home education, and accommodation of child needs in school and home education. There were 77 responses (68%) that provided indication of disengagement factors that contributed to the decision to home educate. For example, half of all coded factor responses (57 responses, 50%) indicated emotional disengagement which included boredom, lack of interest, affective reactions to peers, teachers and the school, as well as lacking a sense of belonging to the school or classroom. An example was, “Her needs were not being met in the school system. Her confidence levels were dwindling as a result and she was not feeling that she could show her true ability as the other children were not totally accepting of ‘smart’ kids.”

Another 20 responses (18%) indicated cognitive disengagement in the absence of challenge, acceleration or a lack of investment or willingness of the child to put in effort. An example was, “If she isn't challenged intellectually she will look for challenges socially & we didn't want her to establish bad relationships with her peers or teachers in trying to be challenged.”

Analysis of child needs accommodated by their last teacher suggested that 43 responses (63%) were indicative of engagement. One response was thematised as behavioural disengagement because “The teacher did not recognise giftedness, only viewed as behavioural issues.” There were 21 responses (31%) that were indicative of emotional disengagement, which included boredom, lack of interest, affective reactions to peers, teachers and the school, as well as lacking a sense of belonging to the school or classroom, for example, “He was a perfect student for them - kept his suicidal thoughts quiet, self-harmed only at home and falsely smiled and was quiet and obedient at school.” A further 17 responses (25%) were categorised as cognitive disengagement, which related to a lack of challenge or acceleration. An example was,

“He was reading his sister's high school text and taking encyclopaedias to school. The principal said his hands were tied and they couldn't do anything for him especially because he was the youngest in the class. They only suggested he could teach the students who were struggling.”. Only four responses (6%) could be coded positively for engagement, as opposed to disengagement, for example, “She had lovely teachers who cared about her.”

Using Fredricks et al.'s (2004) engagement lens, further analysis of child needs met through home education indicated that 76% of parent responses related to child engagement. Parent's reports contained 44 responses (44%) that were indicative of emotional engagement. Examples were, “He doesn't feel he needs to be someone else any more” and “We still cover the curriculum, but we also allow him to focus on the things he enjoys most.”

Parent responses (32 responses, 32%) were also indicative of cognitive engagement. These included parent responses relating to schools' ability to accelerate or challenge their children in home education, for example, “We are able to accelerate him to a level he felt challenged by, and can explore mathematical concepts without restriction – i.e., he is just beginning to learn calculus at his instigation.” No parents provided responses that were indicative of behavioural engagement in the home environment.

In summary, this further analysis of parent responses viewed through Fredricks et al.'s (2004) engagement lens indicates that 57% – 68% of all responses were indicative of child *disengagement* at school. In contrast, 76% of responses were indicative of *engagement* factors in home education.

4.5 Chapter Summary

Results presented in this chapter address the three main research questions. First, what factors contributed to the decision to home educate for parents with children who are gifted or have high-ability? The most frequently reported factor was parent dissatisfaction with school. Further analysis indicated the source of dissatisfaction was frequently reported as a lack of understanding or inability of the school or teacher to meet gifted needs, the child's emotional response and a lack of availability of challenge.

The second question, what are parents' perceptions of gifted educational practices in school settings and how do parents' perceptions of school gifted education compare to parents' perceptions of gifted practices in home education? Firstly, parents most frequently reported their child's learning needs as intellectual challenge or stimulation, support, adjusted pace of learning, and autonomy. Results showed that very few children experienced the practice of acceleration in school, while all other gifted education provisions were reported at the lower end of the frequency scale, yet all provisions were perceived to be more available in home education environments. Finally, most parents believed their child's last teacher did not accommodate their child's needs. It is notable that only one parent reported their child's needs were met at school. Parents provided additional comment about needs being met at school, which suggested teacher capabilities in gifted education and the role of the school system in supporting teachers were of concern to parents. In comparison to school, parents perceived that child needs were most frequently met in home education through the child being engaged and motivated to learn, curriculum delivered at the required pace and challenge, appropriate support and the removal of a school-based social or emotional trigger.

The third question, what are parents' perceptions of children's engagement in school and home education settings? In this exploratory measure parents reported statistically significant differences between school and home environments for their child's cognitive and emotional engagement. Cognitive and emotional engagement were reported as high in home education and

moderate in school. Behavioural engagement was not significantly different in home and school environments with high levels of behavioural engagement reported.

The lens of Fredricks et al.'s (2004) conceptualisation of cognitive, emotional and behavioural engagement was further applied to qualitative responses. This analysis demonstrated that factors reported by parents closely reflected *disengagement* factors in school. Parents also frequently mentioned *engagement* factors in home education responses, indicating that disengagement was not a concern in this environment.

5 Discussion

This research investigated the factors that led to parent decisions to home educate their children who were gifted. It focused on parent perceptions of children's engagement in school and home education, and parent perceptions of gifted educational practices in school compared to home education settings were also explored. This chapter will begin with a discussion of the demographics of the sample of parents and children.

Research evidence indicates that home educators with children who are gifted may be a distinctive parent group. In this study parent educational attainment and occupation were different to Australian national averages reported in ABS data (2012; 2013). A high percentage of parents identified their highest level of education as undergraduate or above (76%), which was considerably higher than the national average of 23% (41% in the ACT) holding undergraduate degrees or above (ABS, 2013). Similarly, Rimlinger's Australian sample of parents of children who are gifted ($N = 117$) had approximately 72% of parents with a bachelor degree or higher. Home educators in the USA also have higher educational attainment than the general population of parents (Princiotta & Bielick, 2006). Given the current sample is distinct from other home education groups but similar to other parents of children who are gifted, there appears to be a need to research this group as a specific sub-group of home educators if more is to be learned about home education of children who are gifted.

A further finding of demographic questions was that half (50%) of the children were identified by their parents as twice exceptional. Estimates and reports of twice exceptionality within gifted populations vary considerably: 2-5% (Nielsen, 2002), 14% (Rogers, 2011), and 28% (Rimlinger, 2016), for example. This suggests twice exceptionality is over-represented in this sample of home educated children. The sample size of twice exceptional children, however, was not sufficient to conduct meaningful analysis and draw conclusions about differences between gifted and twice exceptional groups. Nevertheless, this is a crucial area for further

research with larger samples, considering the factors influencing parent decisions to home educate their child frequently related to concerns about educational provisions and dissatisfaction with accommodation of their child's needs, which is discussed later in this chapter. It is possible that children who are twice exceptional are more likely to be represented in home education due to these heightened accommodation needs.

5.1 Factors Influencing Parent Choice to Home Educate: An Issue of Gifted Needs

This research provides substantial evidence that supports previous findings from Jolly et al. (2013) and Rimlinger (2016) that parents of children who are gifted often make the choice to home educate due to a dissatisfaction with school. Close scrutiny of parent responses in the current study revealed reasons for dissatisfaction largely related to their child's engagement, specifically their child's emotional responses and a lack of availability of challenge. Parents also frequently reported specific gifted issues such as a lack of understanding or inability of the school or teacher to meet gifted needs. Similarly, parents in Jolly et al.'s (2013) and Rimlinger's (2016) studies perceived their children who were gifted did not have their academic and social needs met while at school.

While parents in this study predominantly reported a dissatisfaction with school, 24% of responses indicated their decision to home educate related to parent factors (e.g., parental stress or parent relationship with the teacher), positive perceptions of home education, and philosophical or religious reasons. There is evidence that religious reasons (e.g., Aurini & Davis, 2005; Isenberg, 2007) and philosophical beliefs (e.g., Isenberg, 2007; Spiegler, 2010) are known factors in the decision to home educate. However, there is only limited mention of parental factors such as stress (e.g., Kendall & Taylor, 2016) or parental relationships with teachers, and these have not been closely scrutinised. It is also possible that a source of this parent stress relates to their dissatisfaction with school and concern about their child.

The high prevalence of twice exceptionality in this sample makes it difficult to

distinguish factors that are due to giftedness alone from factors due to twice exceptionality. The extent of parent dissatisfaction with schools' lack of understanding or inability to meet gifted needs, lack of challenge and lack of accommodation of their child's emotional needs may reflect the proportion of children with twice exceptionality in this sample. This would parallel other studies that found that parents had high levels of dissatisfaction with school because of the school's inability to meet children's special needs (Kendall & Taylor, 2016; McDonald & Lopes, 2014; Parson & Lewis, 2010).

The aspects of parent dissatisfaction identified in this study are important findings given that schools and teachers are described as necessary catalysts to achievement in Gagné's (2008) DMGT, the model guiding gifted education policy in most Australian schools. Gagné named some of these catalysts as individual (peers, teachers and mentors) and provisions (curriculum, pacing, grouping and acceleration) (Gagné, 2008); parents in this study have reported these as inadequate in the delivery of gifted education in schools.

5.2 Parent Perception of Lack of Provision in Schools

Although there is general support for the use of evidence-based gifted provisions in State and Territory gifted education policies (ACT Education Directorate, 2014; NSW Department of Education & Training, 2004), it appears for this sample of families there was insufficient access to such provisions in schools. Parents most frequently identified their child's learning needs as a requirement for intellectual challenge or stimulation, adjusted pace of learning, autonomous learning, and emotional support. These needs are consistent with the learning needs of children who are gifted as identified in the literature (e.g., Clark, 2013; Rogers, 2007; Vialle & Rogers, 2009). This finding indicates that parents in this study were acutely aware of their children's learning needs.

Parent perceptions that none of the recommended gifted provisions were available at a satisfactory level add support to the existing body of evidence that some gifted provisions, especially acceleration, are under-utilised in Australian schools (Gross et al., 2011; Jarvis &

Henderson, 2015). Parents perceived their child's access to acceleration in schools as limited, with 87% reporting their child should have been accelerated at least one year whereas only 25% of their children were accelerated by their school. A high prevalence of twice exceptionality in this sample may partially explain these findings since children with twice exceptionality are less likely to be accelerated because giftedness may not be recognised in this population (Foley Nicpon, Allmon, Sieck, & Stinson, 2011). In summary, perceived lack of access to gifted provisions clearly influenced parents' decision to home educate.

Closely related to parent concern about gifted provision was a concern for the child's support needs. Some parents viewed the child's need for emotional support as greater than their need for learning support, as stated by one parent: "Learning needs are few, emotional support required is greater than average." The need for both learning and emotional support may have been frequently nominated in this study due to the high prevalence of twice exceptional children and their need for both learning challenge and support. Although Jolly et al. (2013) reported inadequate support networks of gifted families who home educate, the current study appears to be the first to link the decision to home educate with the level of support given in school to children who are gifted.

Given parents' perceptions of lack of gifted provisions and emotional support in schools, it is unsurprising that almost all parents reported a poor fit between school and their child. Like parents in Jolly et al.'s (2013) study, many worked with the schools for substantial periods of time, trying to create a good fit for their child before deciding to home educate. There is a need for schools to develop effective home-school partnerships that allow sharing of child information to improve schooling for children who are gifted. Viewing home education as a last resort was also found in studies of home education and special needs such as those by McDonald and Lopes (2014) and Morton (2010). The current study provides further evidence there is a parent desire for a good fit between the school and their child, and it is the loss or lack of this fit that leads to the decision to home educate.

5.3 Parent Perceptions of Child Engagement in School

This study advances the research area of parent perceptions of child engagement, of which there is very limited understanding (Hancock & Zubrick, 2015). This largely under-researched area is important because it may provide crucial empirical data to guide development of effective home-school partnerships and thus positive learning outcomes for children.

Most parents in this study clearly perceived that their children experienced some level of disengagement from school, which was frequently linked to the lack of availability of provisions in school and limited teacher capabilities in gifted education. When teachers lack the ability or understanding to meet the needs of these children, as reported by parents, it would be difficult for classroom conditions and interactions between teacher and child to be sufficient for high levels of engagement.

According to Fredrick's (2004) engagement model and Gagné's (2008) model of giftedness and talent, engagement and achievement are hindered when a teacher or school lacks understanding or has an inability to meet the needs of these children, or if the child has poor relationships with teachers or peers, or there is a lack of available challenge. It is not surprising that a large number of parent responses related to factors indicative of emotional engagement (e.g., child's emotional response) and cognitive engagement (e.g., lack of availability of challenge) as well as barriers to child engagement (e.g., the infrequent use of gifted provisions). Some theorists would argue that when these crucial elements are lacking, these children are at-risk of disengagement and potential school dropout (Landis & Reschly, 2013). Qualitative parent responses in this study indicated parents' concern about their children's well-being and levels of engagement in school, thus, the decision to home educate has potentially alleviated further risk of disengagement, potential school dropout and the risk of longer lasting negative life outcomes (Landis & Reschly, 2013).

The multifaceted engagement construct as described by Fredricks et al. (2004) allows the relationship between schooling and behavioural, emotional and cognitive engagement to be

better understood, which provides the potential to guide more appropriate interventions and strategies to improve school experiences for children who are gifted. In summary, the unique application of the engagement and gifted education lenses in this study provided additional insight into parent beliefs about the contribution of their child's schooling experiences to eventual disengagement from school and the decision to home educate.

5.4 Meeting Child Needs in Home Education

Parent responses in this study provide substantial support of the findings of Jolly et al. (2013). Parents in both studies reported they were able to provide curriculum that accommodated their child's interests and need for challenge, which was perceived by both samples to be lacking in schools. Harding (2011) indicated that home education environments allow flexibility, smaller numbers of children to cater to, and closer relationships where there is an in-depth understanding of child needs. Thus, it is not surprising that parents in this sample reported being able to adapt gifted education provisions to meet their child's needs.

Parents in this study also reported high levels of behavioural, emotional and cognitive engagement in home education, which supports the findings of Bell et al. (2016) that engagement levels are high in home education. Bell et al. (2016) concluded high levels of parent-perceived academic engagement were due to positive relationships in the home rather than the home education environment itself. In the current study, parent reports of offering access to gifted provisions may also be associated with high levels of engagement. For example, one parent's report that "he doesn't feel the need to be someone else anymore." suggests emotional engagement was high, while another report, "We are able to accelerate him to a level he felt challenged by.", is indicative of high cognitive engagement. As such, parent responses in this study indicated child engagement in home education settings was high due to positive child emotional responses and the use of gifted provisions.

Although parents reported home education allowed their children's needs to be met,

nearly 90% of parents indicated they would send their child back to school if particular conditions were met. These conditions largely related to emotional engagement (e.g., the child wanted to go to school), and cognitive engagement (e.g., the school could meet the child's needs through the use of gifted provisions) or the child's becoming disengaged in home education. While it is evident parents felt able to meet their children's learning needs in home education through greater access to gifted provisions, they were not fundamentally opposed to the idea of school. These parents were concerned for their children's wellbeing. Most parents indicated that if schools addressed gifted engagement factors, their children would return to school.

5.5 Limitations

This study faced many of the same limitations as other studies of home education. Since participants self-selected to participate, there was a possibility of a sampling bias, with an element of reporting only the voices that wanted to be heard. The number of home educators in Australia is also unknown, so there is no way of knowing whether the sample collected is representative of the general gifted home education population.

Initially this study was limited to residents of NSW and the ACT for pragmatic reasons and the time restrictions of this research. The sample was further restricted by the conceptual interest in families whose children had experienced both school and home education, yet this focus has been important to gain insight into families' perceptions of the two settings.

An exploratory aspect of this study was the use of the Fredricks et al. (2003) engagement scale as a measure of parent-perceived engagement in school and home education settings. Although never used previously for this purpose, the scale was chosen because of high reliability in previous studies and conceptual identification of cognitive, emotional and behavioural forms of engagement. In the present study emotional and cognitive engagement scales were deemed reliable measures while the behavioural engagement scale did not achieve a sufficient reliability rating. It is also important to be mindful that this was a measure of the parent's perception of,

and not a child's actual level of, engagement. Longitudinal research is needed to understand parent perceptions of engagement beyond this point in time.

The finding of no significant differences between parent perceptions of school and home behavioural engagement may be attributed to the instrument's poor reliability. Alternatively, it may reflect that parents could not directly observe behavioural engagement in schools and make valid judgements about this or comparisons to home education. It is also possible that children talk to their parents more about emotional engagement (e.g., being happy, bored, excited, interested in things at school, Fredricks et al., 2003) than behavioural engagement (e.g., how much they pay attention in class and if they act as if they are working, Fredricks et al., 2003). A final possibility is that behavioural engagement *was* the same in both environments and children were considered highly engaged in both environments.

Notwithstanding these limitations, this scale provided an important insight into an additional factor that appeared to influence parent decisions to withdraw their child from formal schooling. The application of the engagement lens to analyse qualitative data was a particular innovation in this study because it provided additional insight about parent beliefs of their child's schooling experiences and their decision to home educate their child. Future investigation of parent perceptions of the child's engagement in school or in other educational settings may need to consider the reliability of this scale and further research is needed to explore the construct of engagement in home and school settings.

5.6 Implications and Directions for Future Research

This study provided a rare insight into factors leading to home education for children who were gifted. This is also the first known study of this kind in the Australian context. Parent perceptions in this research add to evidence of the importance of school and teacher use of gifted provisions and of meeting the needs of children who are gifted. This study also provided evidence that parents perceived a strong link between the use of gifted provisions and child

engagement. These results suggest a need for schools to treat gifted provisions and teacher capability in gifted education as important variables in achieving high levels of engagement for children who are gifted. High levels of child engagement will have positive benefits for individuals and schools in terms of higher academic achievement. Gifted engagement is a young research field and its advancement is important to understanding the engagement, wellbeing and achievement of children who are gifted. There is a need for further research to explore how the three types of engagement relate to the use of gifted provisions and other variables such as teacher capability in gifted education.

The high prevalence of twice exceptionality in this study suggests that such children may be particularly vulnerable to school factors. There is a critical need for identification of twice exceptionality in schools and an equally pressing need to find ways to support this group so that needs can be met in school. There are known concerns with the identification of twice exceptionality (Foley Nicpon et al., 2011) and there is a growing body of research in how to meet the needs of these children (Wormald, Vialle, & Rogers, 2014). However, further research with a larger and more representative sample is needed to understand the specific link between gifted provisions and child engagement for children who are twice exceptional.

These parents had important insight into their child's giftedness and their children would benefit from schools viewing parents as having important contributions to make to the education of their children. The gifted learning needs that parents in this sample nominated align with those identified in the literature. Additionally, these parents reported they were using evidence-based gifted provisions to meet their children's needs through home education. It appears that greater sharing of information about children who are gifted would improve their education in schools. Without effective home-school partnerships and improvements in the delivery of gifted education, more children will effectively be 'pushed' out of the school system as parents make the decision to home educate. More research is needed that focuses on parent and school relationships within gifted education and parent involvement frameworks. There is currently a

strong focus on parent involvement in government education documents (e.g., Australian Government Department of Education and Training, 2017; ARACY, 2015; Fox & Olsen, 2014) as a means to involve parents in the school community. Yet parents in this research chose to disengage from school education for their children. Given these parents are highly educated, many with professional backgrounds in education, there is a need to further examine how schools can foster better relationships with gifted families and particularly if these families consider or choose to leave formal education. Parents did appear willing to send their children back to formal schooling in the future, thus, it would seem pragmatic and also positive if school systems and home educating parents could work together closely to examine best practices and support the child who is gifted. This is likely to be the case for the child with twice exceptionality in particular.

5.7 Conclusion

This study was the first known study to explore the factors influencing the choice to home educate children who are gifted in Australia. As one of few empirical studies of home education internationally, this study supports the findings of Jolly et al. (2013) and adds empirical understanding about a relatively unknown group of home educators. These home educators of children who are gifted may be a distinct group with parent educational attainment and professional occupations disproportionately higher than Australian national averages in the current study. This population of home educated children may also be characterised by a high prevalence of twice exceptionality. The primary reason identified for the decision to home educate their child was dissatisfaction with formal schooling. More specifically, factors reflecting the child's engagement and educational provisions for the gifted largely accounted for the parent decision to home educate their child. While the findings from this study present parent perceptions and not child perspectives, parents ultimately make the decision about where their child will be educated. As such, further research is needed to understand these parent

perspectives and explore ways, to support *both* parents and children who are gifted in school and home environments.

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Appendix

Appendix A

Parents of gifted homeschool families questionnaire

Associate Investigator: Dr Anne McMaugh

Co-Investigator: Dr Kerry Hodge

Co-Investigator: Amy Thomas

Participant Information and Consent Form

You are invited to participate in a study of parents of gifted or high ability homeschooled children. The purpose of the study is to explore why parents of gifted or high ability homeschooled children choose to homeschool.

This study is being conducted by Amy Thomas to meet the partial requirement of a Master of Research in Education under the supervision of Dr Anne McMaugh (anne.mcmaugh@mq.edu.au), and Dr Kerry Hodge (kerry.hodge@mq.edu.au), Department of Educational Studies, Macquarie University.

If you decide to participate, you will be asked to complete this electronic questionnaire asking about the reasons you chose to homeschool your gifted or high ability child, their learning and support needs and how these needs are met in school or homeschool environments. The questionnaire will take approximately 35 minutes to complete. Alternatively you may wish to participate in this research by telephone and this means supplying your contact details to Amy Thomas (amy.thomas@hdr.mq.edu.au). Your responses on the questionnaire are anonymous. Any name or contact number provided by you will be kept strictly confidential for the purpose of this study only.

Any information or personal details gathered in the course of the study are confidential, except as required by law. No individual will be identified in any publication of the results. Only the named Researchers on this project will have access to the data. A summary of the results of the data will be made available to the community groups who helped distribute the questionnaire. Participation in this study is entirely voluntary; you are not obliged to participate, and if you decide to participate, you are free to withdraw at any time without having to give a reason and without consequence.

The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics & Integrity (telephone (02) 9850 7854; email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

If you experienced any negative emotions or thoughts associated with any adverse memories while filling out this questionnaire please visit <https://www.beyondblue.org.au/> or contact beyondblue on 1300 22 46 36.

To show appreciation for your time and efforts in completing this questionnaire, you may choose to enter the draw for the chance to win one of two \$50 Coles/Myer gift card. More details will follow at the end of the survey.

By clicking ‘next’ you are consenting to participation in this research project. You may withdraw from participation in the research at any time without consequence.

[NEXT]

Q1 Are you the person primarily responsible for homeschooling one or more children who you consider gifted?

- ☐ Yes
 - ☐ No, I share responsibility with my partner
 - ☐ No, my partner homeschools the children
 - ☐ No, another family member homeschools the children
 - ☐ Other _____
-

Q2 What is your gender?

- ☐ Female
 - ☐ Male
 - ☐ Other
-

Q3 How old are you?

Q4 What race or ethnicity do you identify with?

☐ Australian

☐ Chinese

☐ English

☐ Indian

☐ Italian

☐ Other _____

☐ Prefer not to say

Q5 What is the main language spoken at home?

☐ Arabic

☐ Cantonese

☐ English

☐ Greek

☐ Italian

☐ Mandarin

☐ Other _____

☐ Prefer not to say

Q6 Are there any other languages spoken at home?

Q7 What is the highest level of education you have completed?

- ☐ Year 9 or below
 - ☐ Year 10
 - ☐ Year 11
 - ☐ Year 12
 - ☐ Post school certificate or diploma
 - ☐ Undergraduate degree
 - ☐ Post graduate or above
 - ☐ Other _____
 - ☐ Prefer not to say
-

Q8 What is or was your occupation prior to homeschooling?

- ☐ Occupation _____
 - ☐ Prefer not to say
-

Q9 Do you have a partner who lives with you?

- ☐ Yes
 - ☐ No
 - ☐ Prefer not to say
-

Q10 What state or territory do you reside in?

- ☐ Australian Capital Territory
 - ☐ New South Wales
 - ☐ Northern Territory
 - ☐ Queensland
 - ☐ South Australia
 - ☐ Tasmania
 - ☐ Victoria
 - ☐ Western Australia
 - ☐ I do not live in Australia
-

Q11 What is your postcode?

Please complete the following questions, for **your most recently** homeschooled child who is gifted or who has high ability.

Q12 How old is your child?

Q13 What is your child's gender?

- ☐ Male
- ☐ Female
- ☐ Other
-

Q14 What race or ethnicity do you identify for your child?

- ☐ Australian
- ☐ Chinese
- ☐ English
- ☐ Indian
- ☐ Italian
- ☐ Other _____
- ☐ Prefer not to say
-

Q15 Is your child currently being homeschooled?

- ☐ Yes
- ☐ No

Q16 Is your child homeschooled part time or full time?

- ☐ Part time
- ☐ Full Time
-

Q17 How many years has your child been homeschooled (Between First Year of School and Year 12)?

Q18 Do you see homeschooling as a temporary or permanent choice for this child?

- ☐ Temporary
- ☐ Permanent
- ☐ Undecided

Q19 How do you know your child is gifted? (click all that apply)

- ☐ Cognitive assessment
- ☐ Reading or mathematics test showing very advanced for age
- ☐ Teacher nomination
- ☐ My own observation
- ☐ I don't believe in labeling children, but my child has high abilities
- ☐ ☒² My child **isn't** gifted or high ability, but I believe all children are gifted
- ☐ Other _____

Q20 Please briefly describe the areas in which your child's ability or achievement levels are in the gifted range.

² Participant exit from survey

Q21 Do you believe your child also has a learning challenge or disability?

☐ Yes

☐ No

Skip To: Q23 If Do you believe your child also has a learning challenge or disability? = No

Q22 What learning challenge(s)/disabilities do you identify for your child?

☐ ADHD

☐ Learning disability (e.g. dyslexia)

☐ Autism Spectrum

☐ Anxiety that interferes with daily activities.

In which settings is anxiety most elevated?

☐ Other (Please describe) _____

☐ Prefer not to say

Q23 How would you describe your child's learning needs?

Q24 What factors contributed to your decision to homeschool?

Q25 Thinking back to the learning needs you identified for your child, how are these needs being met through homeschooling?

Page _____
Break

In my child's current homeschool environment, I believe:

Q26 My child feels happy being homeschooled.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-



3

Q27 My child feels bored being homeschooled.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q28 My child likes being homeschooled.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q29 My child follows the rules while homeschooling.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q30 My child's homeschool 'classroom' is a fun place to be.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-



Q31 My child gets into trouble while homeschooling.

- ☐ 1. Never
- ☐ 2. On Occasion
- ☐ 3. Some of the Time
- ☐ 4. Most of the Time
- ☐ 5. All of the Time

In my child's current homeschool environment, I believe:

Q32 My child is interested in the work we do while homeschooling.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-



Q33 When my child is completing work, they just act as if they are working.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q34 My child is excited by their work while being homeschooled.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q35 My child checks their work for mistakes.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q36 When reading a book, my child asks him/herself questions to be sure of

understanding what it is about.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q37 My child completes their homework on time.

- ☐ 1. Never
- ☐ 2. On Occasion
- ☐ 3. Some of the Time
- ☐ 4. Most of the Time
- ☐ 5. All of the Time

In my child's current homeschool environment, I believe:

Q38 If my child doesn't know what a word means while reading, they do something to figure it out, like look it up in the dictionary or ask someone.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q39 If my child doesn't understand what they read, they will go back and read it over again.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q40 My child pays attention during learning activities.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q41 My child talks with people outside of home about what they are learning at homeschool.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q42 My child studies at home even when they don't have a test.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q43 My child reads extra books to learn more about things they learn in homeschool.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q44 My child will try to watch TV shows about things they were doing during homeschooling.

- ☐ 1. Never
- ☐ 2. On Occasion
- ☐ 3. Some of the Time
- ☐ 4. Most of the Time
- ☐ 5. All of the Time

Q45
How often do you believe the following occurs in your homeschooling environment?

In my child's current *homeschool environment*, I believe:

	Never (1)	Rarely (2)	Some of the Time (3)	Most of the Time (4)	All the Time (5)
My child is challenged in their specific area of talent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My child is given opportunities to work independently in their areas of passion or talent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My child is allowed to work at a higher grade level as needed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My child has opportunities to learn and socialise with children of a similar ability.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I adjust the pace of learning and reduce the amount of practice and review for my child.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q46 Has your child ever attended a school?

☐ Yes

☐ No

Skip To: Q78 If Has your child ever attended a school? = No

Q47 Before your child started school, had you considered homeschooling as an option for your child?

☐ Yes

☐ No

Q48 Under what circumstances would you consider returning your child to a school?

Q49 What type of school did your child attend?

☐ Public

☐ Independent

☐ Steiner

☐ Montessori

☐ Religious

☐ Other _____

Q50 Was your child whole-grade accelerated at any point by the school?

- ☐ No
 - ☐ Accelerated by 1 year
 - ☐ Accelerated by 2 years
 - ☐ Accelerated by 3 years
 - ☐ Accelerated by more than 3 years
-

Q51 If your child was to return to school today, what year level do you think they should go into?

- ☐ First year of school (FYOS)
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ 11
- ☐ 12

Q52 Did your child's most recent teacher accommodate your child's needs?

- ☐ Yes
- ☐ No
- ☐ Partly

Q53 Please comment.

Q54 Was school a good fit for your child?

- ☐ Yes
- ☐ No
- ☐ Unsure

Skip To: Q57 If Was school a good fit for your child? = Yes

Q55 How long did you work with the school to create a good fit for your child at school before deciding to homeschool?

- ☐ Less than 1 year
 - ☐ About 2 years
 - ☐ About 3 years
 - ☐ More than 3 years
-

Q56 Please comment.

In the last year that my child attended school, I believe:

Q57 My child felt happy in school.

- ☐ 1. Never
- ☐ 2. On Occasion
- ☐ 3. Some of the Time
- ☐ 4. Most of the Time
- ☐ 5. All of the Time



Q58 My child felt bored in school.

- ☐ 1. Never
- ☐ 2. On Occasion
- ☐ 3. Some of the Time
- ☐ 4. Most of the Time
- ☐ 5. All of the Time

Q59 My child liked being at school.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q60 My child followed the rules at school.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q61 My child's classroom was a fun place to be.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-



Q62 My child got in trouble at school.

- ☐ 1. Never
- ☐ 2. On Occasion
- ☐ 3. Some of the Time
- ☐ 4. Most of the Time
- ☐ 5. All of the Time

In the last year that my child attended school, I believe:

Q63 My child was interested in the work at school.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-



Q64 When my child was in class, they just acted as if they were working.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q65 My child felt excited by the work in school.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q66 My child checked their schoolwork for mistakes.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q67 When reading a book, my child asked him/herself questions to be sure of understanding what it is about.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q68 My child completed their homework on time.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Page _____
Break

In the last year that my child attended school, I believe:

Q69 If my child didn't know what a word means while reading, they would do something to figure it out, like look it up in the dictionary or ask someone.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q70 If my child didn't understand what they read, they would go back and read it over again.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q71 My child paid attention during class.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q72 My child would talk with people outside of school about what they were learning in class.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q73 My child studied at home even when they didn't have a test.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q74 My child read extra books to learn more about things they did in school.

- ☐ 1. Never
 - ☐ 2. On Occasion
 - ☐ 3. Some of the Time
 - ☐ 4. Most of the Time
 - ☐ 5. All of the Time
-

Q75 My child tried to watch TV shows about things they were doing in school.

- ☐ 1. Never
- ☐ 2. On Occasion
- ☐ 3. Some of the Time
- ☐ 4. Most of the Time
- ☐ 5. All of the Time

Q76 Thinking back to *your child's last year in school*, how often do you believe the

following occurred?

	Never (1)	Rarely (2)	Some of the Time (3)	Most of the Time (4)	All of the Time (5)
My child was challenged in their specific area of talent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My child was given opportunities to work independently in their areas of passion or talent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My child was allowed to work at a higher grade level as needed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My child had opportunities to learn and socialise with children of similar ability.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My child's teacher adjusted the pace of learning and reduced the amount of practice and review for my child.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page _____
Break

Q77 Is there anything else you would like us to know about your gifted child in school education?

Q78 Do you currently have a relationship with the school system?

- ☐ Yes
- ☐ No
- ☐ Some relationship

Q79 Please comment.



Q80 How would you describe your relationship with your state or territory's regulatory body for homeschooling?

- ☐ 1. Very good
- ☐ 2. Good
- ☐ 3. Acceptable
- ☐ 4. Poor
- ☐ 5. Very poor
- ☐ Not applicable, I don't interact with any regulatory bodies

Q81 Please describe any relevant examples of this relationship here:

Q82 Is there anything else you would like us to know about homeschooling your gifted child?

Q83 Where did you find this questionnaire?

- ☐ A friend sent it to me
- ☐ Gifted Facebook group
- ☐ Home Education Australia
- ☐ Homeschool Facebook group
- ☐ State/Territory home education association
- ☐ State/Territory gifted association
- ☐ Other _____

This is the end of the survey. Thank you for your time in completing this survey.

If you have experienced any negative emotions while filling in this survey and feel you need support or advice about any issues raised by this survey please visit www.beyondblue.org.au or contact beyond blue on 1300 22 46 36. Alternatively, you may visit www.lifeline.org.au or contact Dr Anne McMaugh (anne.mcmaugh@mq.edu.au) or Dr Kerry Hodge (kerry.hodge@mq.edu.au).

After clicking next (>>), you will be re-directed for your chance to enter the draw to win one of two \$50 Coles/Myer gift card. Please leave this form blank if you do not wish to participate and click next (>>) to submit your responses.

Appendix B

Child Access to Gifted Education Practices in School and Home Education.

How often do you believe the following occurs in your *homeschooling environment*?

(Never/ Rarely/Some of the time/Most of the time/All the time)

My child is challenged in their specific area of talent.

My child is given opportunities to work independently in their areas of passion or talent.

My child is allowed to work at a higher grade level as needed.

My child has opportunities to learn and socialise with children of a similar ability.

I adjust the pace of learning and reduced the amount of practice and review for my child.

Thinking back to *your child's last year in school*, how often do you believe the following occurred? (Never/ Rarely/Sometimes/Most of the time/All the time)

My child was challenged in their specific area of talent.

My child was given opportunities to work independently in their areas of passion or talent.

My child was allowed to work at a higher grade level as needed.

My child had opportunities to learn and socialise with children of a similar ability.

My child's teacher adjusted the pace of learning and reduced the amount of practice and review for my child.

Appendix C

Parent perceptions of child engagement in school.

How much do you agree or disagree with the following statements?

(Strongly disagree/Disagree/Neither agree nor disagree/Agree/Strongly agree)

In the last year that my child *attended school*, I believe:

Measures of emotional engagement.

My child liked being at school.

My child was excited by their work at school.

My child's classroom was a fun place to be.

My child was interested in the work at school.

My child was happy in school.

My child felt bored in school (reversed).

Measures of behavioural engagement.

My child followed the rules.

My child complained about the work they had to do in class.

My child paid attention in class.

My child got into trouble at school (reversed).

My child completed their work on time.

Measures of cognitive engagement.

When reading a book, my child would ask him/herself questions to be sure of understanding what it is about.

My child studied at home even when they didn't have a test.

My child would try to watch TV shows about things they were doing in school.

My child talked with people outside of school about what they were learning in class.

My child checked their schoolwork for mistakes.

If my child didn't know what a word meant when reading, they would do something to figure it out, like look it up in the dictionary or ask someone.

My child read extra books to learn more about things they did in school.

If my child didn't understand what they read, they would go back and read it over again.

Appendix D

Parent perceptions of child engagement in home education.

How much do you agree or disagree with the following statements?

(Strongly disagree/Disagree/Neither agree nor disagree/Agree/Strongly agree)

In my child's current *homeschool environment*, I believe:

Measures of emotional engagement.

My child likes being homeschooled.

My child is excited by their work.

My child's 'classroom' is a fun place to be.

My child is interested in the work we do.

My child is happy being homeschooled.

My child feels bored being homeschool (reversed).

Measures of behavioural engagement.

My child follows the rules.

My child complains about the work they do.

My child pays attention during learning activities.

My child gets into trouble while homeschooling (reversed).

My child completes their work on time.

Measures of cognitive engagement.

When reading a book, my child asks him/herself questions to be sure of understanding what it is about.

My child studies at home even when they don't have a test.

My child will try to watch TV shows about things they were doing in their learning.

My child talks with people outside of homeschool about what they were learning.

My child checks their work for mistakes.

If my child doesn't know what a word means when reading, they will do something to figure it out, like look it up in the dictionary or ask someone.

My child reads extra books to learn more about things they learn in homeschool.

If my child doesn't understand what they read, they will go back and read it over again.

Appendix E

Ethics approval letter.

Office of the Deputy Vice(Research)

-Chancellor



MACQUARIE
University
SYDNEY · AUSTRALIA

Research Office

Research Hub, Building C5C East

Macquarie University NSW 2109 Australia

T: +61 (2) 9850 4459 <http://www.research.mq.edu.au>

5 June 2017

Dear Dr McMaugh

Reference No: 5201700385

Title: *Parents of homeschooled gifted children and their choice to homeschool in New South Wales and the Australian Capital Territory.*

Thank you for submitting the above application for ethical and scientific review. Your application was considered by the Macquarie University Human Research Ethics Committee (HREC (Human Sciences & Humanities)).

I am pleased to advise that ethical and scientific approval has been granted for this project to be conducted by:

- Macquarie University

This research meets the requirements set out in the *National Statement on Ethical Conduct in Human Research* (2007 – Updated May 2015) (the *National Statement*).

Standard Conditions of Approval:

1. Continuing compliance with the requirements of the *National Statement*, which is available at the following website:

<http://www.nhmrc.gov.au/book/national-statement-ethical-conduct-human-research>

2. This approval is valid for five (5) years, subject to the submission of annual reports. Please submit your reports on the anniversary of the approval for this protocol.

3. All adverse events, including events which might affect the continued ethical and scientific acceptability of the project, must be reported to the HREC within 72 hours.
4. Proposed changes to the protocol and associated documents must be submitted to the Committee for approval before implementation.

It is the responsibility of the Chief investigator to retain a copy of all documentation related to this project and to forward a copy of this approval letter to all personnel listed on the project.

Should you have any queries regarding your project, please contact the Ethics Secretariat on 9850 4194 or by email ethics.secretariat@mq.edu.au

The HREC (Human Sciences and Humanities) Terms of Reference and Standard Operating Procedures are available from the Research Office website at:

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics

The HREC (Human Sciences and Humanities) wishes you every success in your research.

Yours sincerely



Dr Karolyn White

Director, Research Ethics & Integrity,

Chair, Human Research Ethics Committee (Human Sciences and Humanities)

This HREC is constituted and operates in accordance with the National Health and Medical Research Council's (NHMRC) *National Statement on Ethical Conduct in Human Research* (2007) and the *CPMP/ICH Note for Guidance on Good Clinical Practice*.

Details of this approval are as follows:

Approval Date: 26 May 2017

The following documentation has been reviewed and approved by the HREC (Human Sciences & Humanities):

Documents reviewed	Version no.	Date
Macquarie University Ethics Application Form		Revised application received 08/05/2017
Response addressing the issues raised by the HREC		Received 08/05/2017
Participant recruitment letter and advertisement	1	08/05/2017
Project Advertisement:	1	08/05/2017
Parent Information and Consent Form	1	08/05/2017
Questionnaire	1	08/05/2017

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