

# Ceilinged Out: Gifted Preschoolers in Early Childhood Services

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## Abstract

A relatively pervasive “silence” exists concerning giftedness in Australian preservice early childhood teacher courses. There is also a lack of research about educator attitudes to giftedness and programming in Australian early childhood services. This study, consisting of a survey and interviews, is intended to help to fill the research gap. A total of 184 early childhood educators were surveyed in relation to their knowledge and attitudes about giftedness, and 10 of those respondents were also interviewed. A purposive sample of eight parents whose gifted preschoolers had been recommended for early entry by a psychologist were also interviewed. Findings indicate that early childhood educators are at a loss in relation to gifted children’s intellectual, social, and emotional needs that are neither understood nor met according to their parents. Compulsory preservice coursework about giftedness is recommended.

## Keywords

gifted preschoolers, early childhood, educators, school readiness, parents of gifted children, early entry

It has long been a struggle to obtain an appropriate education for gifted children (Robinson, 2003) who often have to be kept educationally engaged by their parents through extracurricular activities. Lack of an appropriate education is even more likely to impact on the achievements of gifted children from low-income families, who may have limited access to equitably funded schools (Churchill, 2019) or to costly extracurricular activities, and are more likely to leave school early (Wyner, Bridgland, & DiIulio, 2009).

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The problem with obtaining an appropriate educational program for gifted children may be partly due to teachers' implicit theories or personally held ideas (Sternberg & Davidson, 1986). Implicit theories have been shown to guide attitudes and behaviors, including the attitudes and behaviors of school teachers, in relation to the identification and nomination of giftedness in children (Garcia-Cepero & McCoach, 2009). Implicit theories held by teachers about gifted children can lead to a misconceived focus on perceived socioemotional weaknesses and may therefore deny these children of opportunities to further their strengths (Baudson & Preckel, 2013). Early childhood teachers have also been found to hold beliefs about characteristics in young gifted Australian children (Lee, 1999), for example, that they are immature, in contrast to existing literature on the characteristics of giftedness in young children, for example, their advanced personal maturity (Robinson, 1993). Teacher beliefs that are not based on research may therefore adversely affect how early childhood educators relate to, program for, and make future recommendations about young gifted children.

Inadequate knowledge about identification and appropriate programming for the gifted have been shown to result from deficiencies in teacher training (Hansen & Feldhusen, 1994). It has also been demonstrated that preservice teacher training increases responsive and appropriate educational provisions (Bangel, Moon, & Capobianco, 2010). Such provisions can include the intervention option of early entry to school, requiring identification before school entry. Early entry to school is one intervention option aimed to prevent long-term educational disadvantage and disengagement from the educative process through forced "learning" of already mastered content in a class with same-aged children. Additional provisions to early entry could include ability or achievement grouping and enrichment based on children's special strengths (Gross, 1999).

In Australia, the early childhood sector is strongly committed to children with disability and to the inclusion of disadvantaged children. This appears to have created a view that giftedness is somehow the opposite, an advantage, and that whatever additional needs gifted preschoolers may have will be addressed adequately once they enter school (Walsh, Hodge, Bowes, & Kemp, 2010). However, according to an Australian expert in giftedness, school education also presents challenges in obtaining an adequate education for gifted children due to an "egalitarian social ethos," coupled with a view that gifted students are middle-class achievers from the dominant culture (Gross, 1994, p. 15).

Early childhood giftedness can be defined as an accelerated state in a child with potential to perform or achieve beyond age-peers (Harrison, 2005; Wellisch, 2015), expressed in a number of different abilities. In the Australian state of New South Wales (NSW), the gifted policy is based on Gagné's (2003) definition of giftedness: "those whose potential is distinctly above average in one or more of the following domains of human ability: intellectual, creative, social and physical" (p. 6). Intellectual giftedness, the focus of this article, is identified through multiple means, for example, through observation, parent information, and a variety of assessments, including IQ testing. Gifted levels are described similarly to levels of disability, with mild giftedness starting at 115 IQ, moderate giftedness at 130 IQ, and high giftedness at 145 (Gross, 2000).

Gross (1994) had noted that school teacher reluctance to differentiate the curriculum for the gifted was an outcome of tokenistic government initiatives in promoting gifted education in preservice teacher programs, often amounting to a single 1-hr lecture. The “silence” around giftedness in education is also reflected in preservice early childhood teacher courses and research about Australian early childhood settings. Wellisch (1999) conducted the first study of early childhood educator attitudes to giftedness in rural NSW and found that the majority of educators believed that the early childhood setting, opportunity to play, and the early childhood curriculum would automatically provide adequately for all young children, including those who were gifted. These beliefs are possibly additional reasons for the lack of attention paid to giftedness.

Gifted preschoolers are likely to be disadvantaged if the education provided them fails to address their special learning requirements (Diezmann, Watters, & Fox, 2001). Early childhood services therefore have an important role to play in identifying giftedness and in providing appropriately enriching and validating educational environments to encourage these children’s development. Ideally, services should provide a well-planned differentiated program based on the interests and unique learning needs and strengths of the gifted child, as well social opportunities with other gifted or older children (Walsh et al., 2010).

Within the next major section of this introduction, by way of background, early entry will first be defined and discussed, followed by a description of the characteristics of gifted children, available information about compulsory course content on giftedness for preservice early childhood teacher students at NSW universities, a brief overview of programming for gifted preschoolers, an examination of the available research about teacher attitudes and knowledge about early childhood giftedness, and parents’ perceptions about early childhood service provisions.

## **Background**

### ***Early Entry***

The term *early entry* is easily misinterpreted as an option within general school commencement. Instead, it is an acceleration option for young gifted children in NSW. The earliest that children can commence school in NSW is at the age of 4.6 years, and the latest is at the start of the year they turn 6. However, an early entry provision in the NSW Department of Education’s gifted policy enables a gifted child to start school from the age of 4 provided that the child is ready for school and if the principal of the enrolling school deems that early enrollment will appropriately meet the child’s educational, social, and emotional needs (Department of Education and Training, 2004). The policy provides the following explanation:

Early entry is a placement procedure. This placement should not be considered an educational program. Schools should ensure that an appropriate educational program is available for students who enter school early. Parents/caregivers and preschool teachers can provide information about the abilities and achievements of early entrants. (Department of Education and Training, 2004, p. 5)

This provision was first included in policies about gifted children several decades ago (Department of School Education, 1991). The benefits of early entry and other acceleration strategies for children who are gifted are well supported by research (Rogers, 2004) as they ensure that the children remain engaged in learning experiences appropriate to their intellectual and social needs (Diezmann et al., 2001; Vialle, Ashton, Carlon, & Rankin, 2001).

Early childhood educators, however, are more likely to be familiar with findings from studies that support delaying school entry due to immaturity of language and behavior skills in children who attend school at the earliest time of entry (Norbury et al., 2016) and because of initial problems concerning inattention/hyperactivity that may have long-term effects (Dee & Sievertsen, 2015). Educators may harbor a belief in such negative outcomes due to confirmation bias in relation to young children's social and emotional immaturity (Diezmann et al., 2001). Educators may also favor holding children back if they suspect the children are not school ready, a phenomenon also known as redshirting (McLean, 2016), and thus be less motivated to question or critique research with negative early-commencement outcomes. In fact, none of these studies compared typically developing children with children who are gifted, contributing to the impression that commencing school early is a disadvantage for *all* young children, including the gifted. In addition, depending on the information educators have received in their preservice courses, they may have limited knowledge about giftedness, the NSW gifted policy's early entry provision, or gifted characteristics that may help them identify giftedness in young children.

### *Characteristics of Gifted Children*

Identification of giftedness in children initially involves educator awareness of characteristics that are not normally found in neurotypically developing children. Frasier and Passow (1994), who were interested in the development of gifted children from diverse and low-income backgrounds, identified 10-core gifted characteristics, not all necessarily possessed by each individual. The characteristics are as follows:

- a high level of motivation
- highly expressive communication skills
- intense or unusual interests
- effective problem-solving abilities
- imagination or creativity
- excellent memory
- inquiry, questioning, experimenting, exploring
- quick grasp of concepts, making connections
- use of logic and reasoning
- conveying and picking up humor.

As well as being core characteristics for gifted children of diverse and low-income backgrounds, these characteristics overlap with a range of levels in giftedness, for

example, those reported for highly and profoundly gifted children from other income backgrounds (Rogers & Silverman, 1997).

### *Programming for Gifted Children in Early Childhood Settings*

A search of the literature to gauge the level of compulsory information about giftedness available to Australian early childhood preservice educators did not identify any Australian research. Fraser-Seeto, Howard, and Woodcock (2013) did, however, investigate Australian university provisions for school teacher courses and found that, of the 14 universities offering teacher education courses within NSW, only two included compulsory content about giftedness in their preservice courses. It is therefore likely that the same applies to early childhood courses, thereby limiting the knowledge of early childhood educators about how to identify young gifted children and how to provide an adequate program for them.

Australia has national regulations that set out specific principles (New South Wales Government, 2011/2018). These regulations include the National Quality Standards (NQS) used to rate service quality. At the time of writing, only one-third (32%) of all children's services (Australian Children's Education & Care Quality Authority, 2019) were rated high quality—the quality category always cited to benefit vulnerable children (Sylva, Melhuish, Sammons, Siraj-Blachford, & Taggart, 2004), and likely also the gifted. It is therefore not a given that all or even most early childhood services are equally capable of providing an appropriate program that can address the unique needs of gifted preschoolers. The regulations require that records be kept of special consideration for children with additional needs, which includes children who are gifted. The NQS further requires that services establish and maintain links with support agencies, provide parents with access to relevant information, and facilitate inclusion and support assistance as needed.

Although the regulations require adequate programming (New South Wales Government, 2011/2018), services are able to provide their own interpretations and practice their preferred approach. In services with a high-quality rating, programs would typically involve learning through discovery and play, for example, the Reggio Emilia approach (Edwards, Gandini, & Forman, 1993). This group approach has been very popular in Australia and involves shared interests and their representations. An educator using the Reggio Emilia approach sees children as capable, plans activities based on children's interests, and actively engages with children in those activities and interests. Such a program can theoretically engage children who are gifted (Lai, 2009), provided the projects undertaken coincide with the children's fast pace of learning and particular interests.

More recently, a longitudinal research project in the United Kingdom (Sylva et al., 2004) has been noted in Australia because it provided evidence of specific elements that make up high-quality practices. One such element, associated with better cognitive achievement in the children, has been labeled "sustained shared thinking" with the educator engaging in prolonged discussions with a child. Because advanced language is one key gifted characteristic, the sustained shared thinking approach can be expected to engage these children who already have a preference for interactions with adults rather than their same-aged peers (Koshy & Robinson, 2006).

There are very few research reports of effective interventions for young gifted children (Walsh, Kemp, Hodge, & Bowes, 2012). Among these is a targeted curriculum that “creates challenges and optimum match” with children’s level, pace of development, and interests (Koshy & Robinson, 2006, p. 119). The program uses high-order thinking strategies, enrichment (a broader and wider approach to a child’s particular gifts or interests), acceleration into an older group, and pull-out programs with mentally matched peers (Koshy & Robinson, 2006; Walsh et al., 2010).

### *Previous Research About Early Childhood Giftedness in NSW*

The apparent lack of attention to young gifted children within preservice university coursework also appears to limit postgraduate research interest as there has been a historic paucity of Australian research about giftedness in the early years and in early childhood settings (Koshy & Robinson, 2006; Walsh et al., 2012). This observation is supported through a search for the word *gifted* in the titles of registered Australian early childhood research articles in the Australian Education Index. There are only five articles with the word *gifted* in the title among the total of 268 articles published since 1997 (1.8%) by the only regular peer-reviewed Australian early childhood journal, the *Australasian Journal of Early Childhood*.

Although there are recent qualitative studies about early childhood giftedness (see, e.g., Grant, 2013; Masters, 2015; Walsh, 2015), the relative lack of quantitative research in early childhood services has not changed significantly since Wellisch’s (1999) mixed-methods research mentioned earlier, involving 46 NSW-based early childhood educators. Findings included 76% of respondents believing in the sufficiency for gifted children of the Developmentally Appropriate Practice (DAP), the then-curriculum framework that emphasized deficit needs. At the time, Wellisch concluded that educators held incorrect beliefs about giftedness, that gifted children needed an alternative framework to the (then) focus on deficit needs, and that there was a need to review preservice teacher education and include a compulsory subject about giftedness.

A recent survey of 80 educators was undertaken by Hodge (2016), who also wanted to explore early childhood educator knowledge about giftedness. Hodge interviewed 12 of these educators. Only 27% reported some training during their preservice studies. The majority (64%) were confident that the curriculum provided sufficiently for gifted children, and 26% did not approve of early entry. Hodge reported that the strengths (or characteristics) listed by educators in relation to gifted children were consistent with the research base about what constitutes giftedness, although no evidence was provided to support the claim. It was also not clear whether educators were aware of the real purpose of early entry, for example, that it was related to giftedness. Hodge’s study indicated that there had been improvement in general awareness of giftedness since the 1990s despite the continued paucity of preservice information.

### *Parent Perceptions About Early Childhood Service Provisions*

Grant (2004) collected anecdotal responses from parents of gifted preschoolers and found that the parents had little confidence in the adequacy of early childhood programs.

In an Australian qualitative case study of five young children, Grubb (2008) found that parents received limited access to information and resources about giftedness from early childhood services. Grubb also found that educator-held myths and misconceptions about giftedness contributed to the inadequate educational provisions for young gifted children.

## The Current Study

The lack of clarity about educator knowledge concerning giftedness or early entry in NSW indicates that there is a need for more research in NSW. This Australian state is situated on the east coast where the early childhood sector consists of both private and not-for-profit services, and service types include preschools, long day care, family day care, and occasional care services. In order to add to the existing research and examine the need for preservice education about giftedness, a mixed-methods study, consisting of a survey and interviews, was undertaken. The aim was to explore the level of educator knowledge about giftedness and gifted characteristics, necessary for initial identification, and knowledge and understanding of the longstanding early entry educational option, as the meaning of early entry remained unexamined in Hodge's (2016) study. Assistance provided to parents of gifted children by services was also explored. Finally, the study extended previous research by reporting on the lived preschool experiences of gifted children and their mothers and compared these with the beliefs, attitudes, and practices of early childhood teachers.

Although this article reports on survey data about educator knowledge and attitudes to giftedness, early entry, and the effect of training in giftedness ( $N = 184$ ), the main focus is the knowledge and attitudes of the 10 educator survey respondents who agreed to be interviewed about giftedness, compared with a purposive sample of eight interviewed parents and the lived experience of their gifted preschoolers at early childhood services.

## Research Questions

There were two overarching research questions:

1. To what extent are early childhood educators aware of giftedness in young children, their programming needs, and the option of early entry to school, and what are their attitudes toward these?
2. How well do educator attitudes and practices compare with and appropriately address gifted preschoolers' needs as reported by their parents?

## Method

This study comprised two phases, one with educators, and the other with parents of gifted children.

**Table 1.** Demographic Details About Educators.

Educator	Age group	Years worked with 0-5 s	Undertaken course about giftedness	Qualification	Place of work in NSW
Cassie	Over 50	20+	No	Bachelor in Early Childhood	Regional/rural
Maria	30-40	10-20	No	Bachelor in Early Childhood	Sydney
Kate	40-50	9	Honors in gifted children	Bachelor in Early Childhood	Sydney
Rachel	Over 50	25	Yes	Bachelor in Early Childhood	Regional/rural
Helen	Over 50	39	Yes	Bachelor in Early Childhood	Regional/rural
Tina	Over 50	10-20	No	Bachelor in Early Childhood	Regional/rural
Gaby	Over 50	35	No	Masters of Early Childhood	Regional/rural
Janice	Over 50	36	Yes	Bachelor in Early Childhood	Sydney
Anne	40-50	10-20	Yes	Bachelor in Early Childhood	Sydney
Joan	30-40	5-10	No	Graduate Diploma in Early Childhood	Sydney

### Phase 1

*Participants and data collection.* A total of 184 female educators were recruited through the regular newsletters of four large nonprofit early childhood organizations. They responded in the first instance to a 32-item online survey (see Supplemental Material). The survey consisted mainly of fixed-choice response items, eight items with either a fixed-choice or open-ended response option, and two open-ended items asking responders to list gifted characteristics. Survey data was used to triangulate the interview findings (Meijer, Verloop, & Beijaard, 2002).

One survey item asked about respondents' willingness to be interviewed about their experiences with gifted children. Ten of the 184 educators indicated a willingness to be interviewed, and semi-structured follow-up interviews were all conducted face-to-face, ranging in duration from 21 to 54 min. Table 1 contains the pseudonyms assigned to the participants, their ages, how long they had worked in services, their qualifications, and whether they were working in Sydney or in rural/regional NSW.

Guiding interview questions sought further information from educators about their attitudes and practices, supplemented by additional questions arising from their individual survey responses (Appendix A).

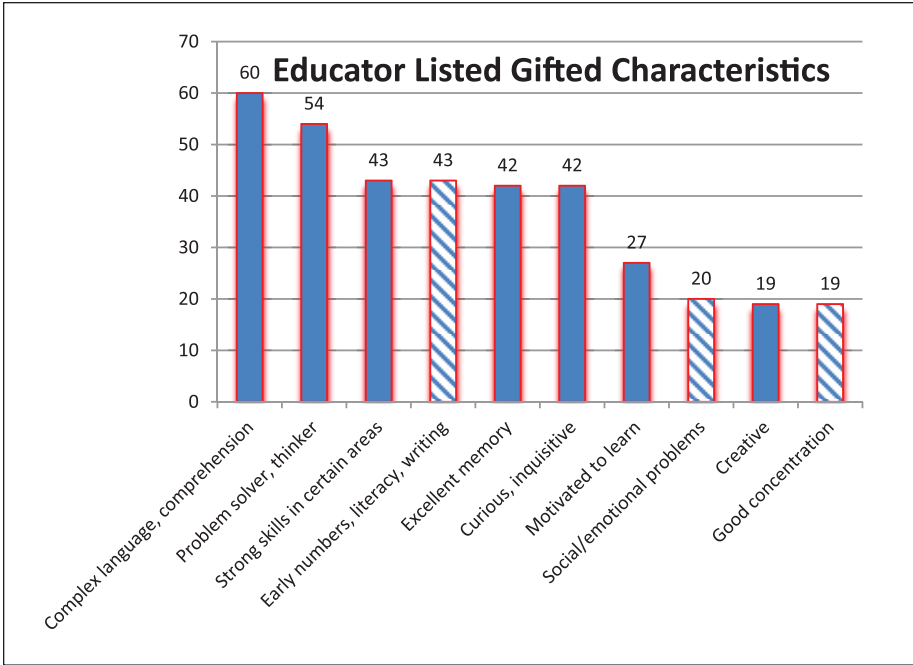


*Analysis.* Statistical analyses were conducted to test whether training in giftedness made a difference to educators' attitudes and knowledge about giftedness. Only related item with dichotomous response options were used for these analyses.

For the qualitative research a framework method was chosen (Ritchie & Spencer, as cited in Ritchie & Lewis, 2003) over content analysis because the framework method requires thorough familiarity with the data and enables the reporting of patterns, and because there was limited need for quantification of the data (Vaismoradi, Turunen, & Bondas, 2013). The data were coded, analyzed, and chunked into categories and themes. This method allowed for a clear interpretation of the qualitative data and a more reliable representation of the educators' practices and knowledge about giftedness. All interviews were recorded and transcribed, then sent to the interviewees for verification. Data analysis occurred manually by the researcher using the thematic analysis procedure (Braun & Clarke, 2006) whereby each open-ended survey question or interview transcript response was read several times and key phrases, concepts, and words were analyzed. Some phrases, concepts and words were retained while others required merges and were then renamed to be more appropriately descriptive. For example, in the case of gifted characteristics, "Early language" was eventually subsumed under "Complex language and comprehension." Color coding was also used to help identify similarities within characteristics. They were then themed and tallied. In the case of characteristics, one item asked for a list three characteristics, and a subsequent item simply asked for a list of characteristics. All characteristics were tallied, although if a participant listed the same characteristic in both her responses, it was counted only once. In all, 56 separate educator nominated characteristics were categorized, and eventually reduced to 10 of those most frequently listed (Figure 1). They could then be compared with Frasier and Passow's (1994) 10 most recognizable characteristics.

## Phase 2

*Participants and data collection.* Eight parents of gifted children were recruited for interviews so that their children's experiences at early childhood services could be compared with early childhood educator perceptions and attitudes about giftedness, program provisions, and early entry. Parents were recruited through a number of means given the small population of children who are identified as gifted and requiring early entry. About 12 former clients of the researcher's psychology service, Clever Kids Consultancy, who had been advised to consider early entry for their children, were sent an email invitation to participate in the research. An advertisement was also placed on the researcher's consultancy Facebook and website pages and a further invitation was made for participants on the closed Facebook group *Parents of Gifted Children—Australia*. Parents who lived in a state or territory with an early entry provision were eligible to be interviewed. Two additional criteria were applied:



**Figure 1.** Gifted characteristics most frequently listed by educators.  
Note. Characteristics that did not overlap with those of Frasier and Passow (1994) list are patterned.

1. The children had been recommended for early entry by a psychologist.
2. The children had no additional diagnoses (e.g., attention deficit hyperactivity disorder).

Four parents who agreed to participate were previous clients of Clever Kids Consultancy, and four were recruited from Facebook and website sources. Table 2 contains the pseudonyms assigned to the parent participants as well as background information about them and their children.

At the time of the interviews, the children’s ages ranged from 4 to 12 years. The age range provided an opportunity for parent insight into both current early entry issues and reflections about later outcomes.

Parent interviews included demographic and early entry questions (Appendix B). Six parent interviews were conducted face-to-face, and two were conducted via Skype due to distance.

*Analysis.* Analysis was carried out as for the educators, and interviews were transcribed and sent to each parent for verification. The interviews were searched for parent experiences that could be matched to and compared with findings related to educator attitudes.

**Table 2.** Parents, Children's Test and School Details, and Early Entry Choices.

Parent and location	Parent Education	Past client	Year of child's IQ test	Child's age at IQ test	Test type	Early entry	Child's current school year <sup>a</sup>
Sandra NSW	Bachelor's degree	Yes	2010	4.8	WPPSI-III	Yes	Year 6
Jane NSW	Master's degree	Yes	2008	3.9	WPPSI-III	No	Year 4
Angela NSW	Bachelor's degree	Yes	2014	3.9	WPPSI-IV	No	Kindergarten class
Steph NSW	University student	Yes	2015	3.9	WPPSI-IV	Yes	Kindergarten class
Alexa NSW	Master's degree	No	2014	4.5	SB-5	No	Year 1
Louise VIC <sup>b</sup>	Bachelor's degree	No	2015	4.9	WPPSI-III	Yes	Year 2
Michelle NSW	Bachelor's degree	No	2015	3.5	SB-5	No	Kindergarten class
Cassie ACT <sup>c</sup>	Bachelor's degree	No	2016	3.11	SB-5	Yes	Kindergarten class

Note. WPPSI = The Wechsler Preschool and Primary Scale of Intelligence, SB-5 = Stanford-Binet Intelligence Scales (SB5).

<sup>a</sup>Kindergarten class is the term used for the first year of school in some Australian states and territories. Kindergarten class is followed by Year 1.

<sup>b</sup>State of Victoria.

<sup>c</sup>Australian Capital Territory.

## Findings

This section is presented under two separate subsections, one for educators and the other for parents. Where relevant, data are triangulated between educator surveys, educator interviews, and parent interviews.

### Educators

**Surveys.** A total of 138 (75%) of educators responded that they had worked with gifted children, and 113 (62%) indicated that they had heard about early entry. Only seven of Frasier and Passow's (1994) 10 core characteristics were included in the top 10 most frequently listed educator characteristics categories, and numbers were low. For example, 32% nominated complex language, and 23% listed excellent memory (see Figure 1). Frasier and Passow's (1994) characteristics *conveying and picking up humor, use of logic and reasoning, and quick grasp of concepts* were not included in the educators' top 10 list. Instead, educators had nominated *early numbers, literacy, and writing; social/emotional problems; and good concentration*.

The responses to dichotomous survey items by educators who had undertaken any amount of training about giftedness ( $n = 49, 27\%$ ) compared with educators who had not trained in that area showed significant outcomes in knowledge about gifted children, in providing appropriate advice to their parents, and in their attitudes, as shown in Table 3.

**Table 3.** Trained and Untrained Educator Responses to Binary Gifted Attitude and Knowledge Items.

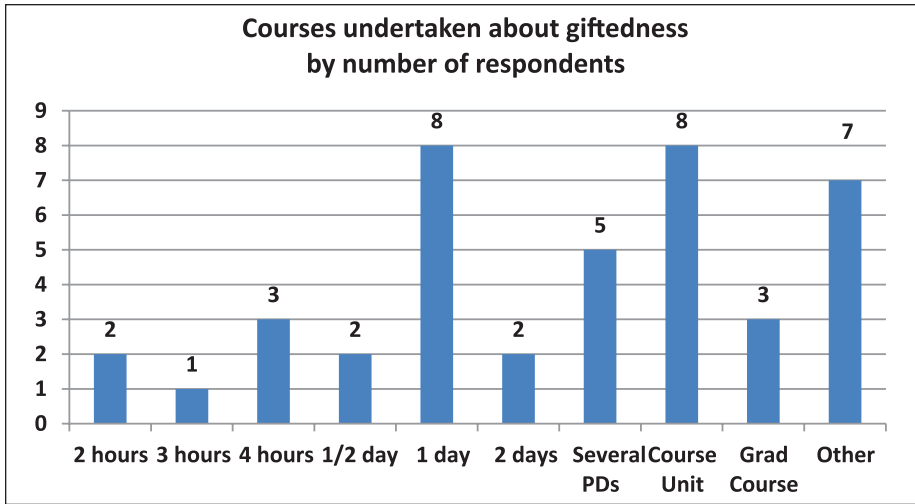
Item group/item(s)	% of participants with responses of yes or true		$\chi^2$	<i>p</i>	Cramer's V
	Exposed to gifted education	Not exposed to gifted education			
General attitude					
28. I feel uncomfortable about describing a child as "gifted."	27	41	(1; <i>n</i> = 180) = 5.06	.025	.17
Attitude to programming					
19. I believe that all children should wait to learn about reading, writing and maths till they get to school	4	14	(1; <i>n</i> = 181) = 3.71	.054	.14
Knows gifted characteristics					
24. I can identify a child who is gifted.	78	47	(1; <i>n</i> = 177) = 10.52	.001	.24
Knows about early entry					
17. I have heard about early entry to school.	86	53	(1; <i>n</i> = 183) = 13.62	< .001	.27
Parent advice					
18. I once recommended early entry to parents of a gifted child.	12	3	(1; <i>n</i> = 182) = 3.95	.047	.15
26. I once recommended that a parent should take their child to a psychologist for testing because I thought their child may be gifted.	39	15	(1; <i>n</i> = 182) = 11.98	< .001	.26

Note. Survey population = 184. Not all educators responded to all items. Number of educators who responded to each item is shown in the  $\chi^2$  column. In order to avoid Type I errors the critical value for *p* after applying a Bonferroni correction = 0.008.

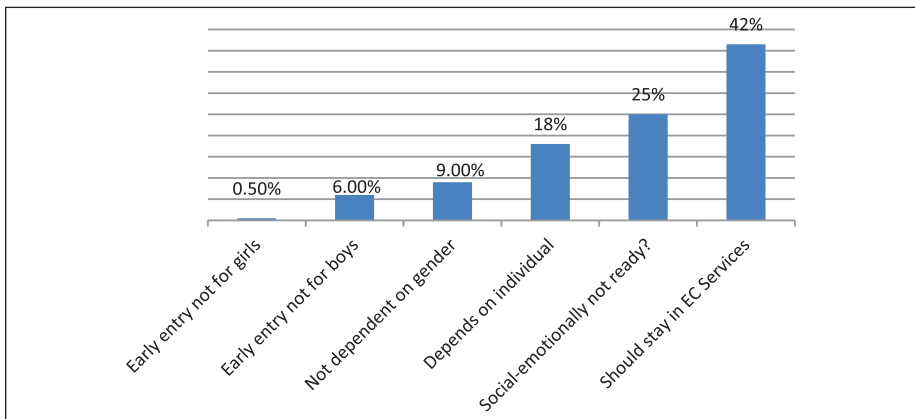
There were statistically significant differences, with between small and medium effect sizes (see Table 3, last column, Cramer's V) on three items: knowledge of gifted characteristics, early entry, and recommendation for a parent to get their child tested for giftedness despite the brevity of training undertaken (Figure 2). Note that eight educators did not provide the length of their training.

One survey item about early entry included both fixed-choice and open-ended options. The responses to both of these have been combined in Figure 3. The majority of respondents referred to children's readiness and thought that staying in early childhood services rather than choosing early entry was the better option.

Opinions were split among surveyed educators whether programming in accordance with the current curriculum framework (Australian Government, Department of



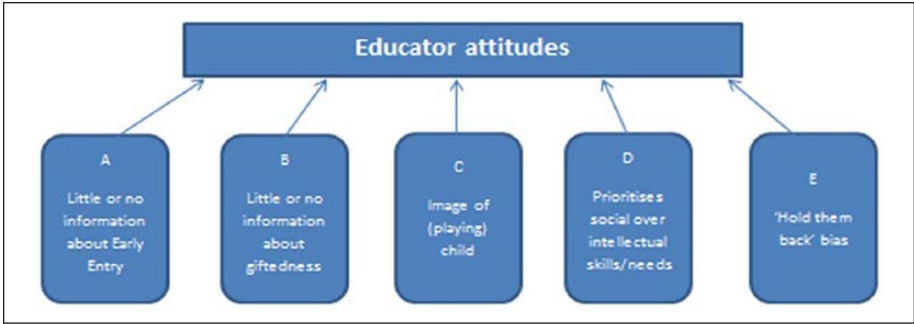
**Figure 2.** Length of courses undertaken about giftedness by respondents.



**Figure 3.** Graph of educator attitudes to early entry, combining binary fixed-choice data (“boy” or “girl”) and open-ended (“other”) survey responses.  
 Note. EC: Early Childhood.

Education, Employment and Workplace Relations, 2009) was in itself sufficient for gifted children. Only 34% agreed compared with Hodge’s (2016) 67%, while 36% did not agree, and 30% thought this depended on other variables.

*Interviews.* Five categories were identified from the themes that informed educator attitudes to giftedness (Figure 4). The following subsections outline information about each category, and are triangulated where relevant with survey data.



**Figure 4.** Five attitude categories informing educator perception of gifted children's needs.

*Little or no information about early entry.* Only four of the 10 educators who were interviewed guessed or actually knew that early entry was an option in the NSW gifted policy (Department of Education and Training, 2004) although seven had responded in their surveys that they had heard of early entry. During the interviews, six admitted that they had never heard of it prior to the survey. Helen, for example, had responded in the affirmative in the survey and was asked during the interview what she knew about it:

Helen: Early entry into school? Not very much  
 Interviewer: Do you know anything [about it]?  
 Helen: No. No. (Interview, April 1, 2017)

*Little or no preservice information about giftedness.* The interview questions did not include gifted training, because two survey items had covered this topic. However, most educators brought the subject up during interviews:

I had not been exposed to [gifted education] at all, not across one single day, in my early childhood degree in 5 years at [name of university]. (Kate, Interview, April 5, 2017)

There was an elective on the area, but it wasn't course content. [And later:] As . . . supervising teacher for [listed six universities] it hasn't been . . . addressed within practicum requirements. (Anne, Interview, April 27, 2017)

Rachel, an educator working in a country mobile service, lamented her limited knowledge about where to refer parents of gifted children:

I don't know of anywhere that supports children or parents when they have gifted children. (Interview, May 5, 2017)

*The (noninclusive) image of the child.* Conceptions about childhood have historically ranged from children as smaller versions of adults before the 17th Century (Ariès,

1962) to the latest version, that of the child who learns through play (Australian Government, Department of Education, Employment and Workplace Relations, 2009). Given this currently held view, most educators unquestioningly promoted the image of the playing child. Anne stated,

I think that children 0–8 learn best in a play-based environment. We are a play-based service . . . it's our job as early childhood professionals to promote how they actually grow in play. (Interview, April 24, 2017)

However, when Anne was asked if she had observed gifted children playing, she admitted that “they struggled to.”

*Prioritizing social over intellectual skills/needs.* Educators expressed concern that gifted children followed them around, interpreting this behavior as evidence of them not fitting in socially. One educator also worried about the lack of one-on-one time that gifted children needed:

In childcare, especially, the groups are big, and sometimes you have to work with all of them, and there is not so much time to sit down and like actually pay attention as much as you want. (Maria, Interview, March 27, 2017)

Educators reported frequent occurrences of “meltdowns” in gifted children; and observed that the children showed little interest in the program offerings. Educators hypothesized that the children had social/emotional problems and that these could be best addressed in early childhood services, leading to recommendations of holding children back from school:

There seems to be a tendency . . . to want to send them to school younger . . . because they're cognitively so advanced . . . yet socially and emotionally they are so immature that often they struggle at school. (Rachel, Interview, May 5, 2017)

Helen, who worked in a rural/regional preschool, spoke about readiness for school and social/emotional readiness, stating,

I don't think that entry into school is about academic work. It's about social-emotional development. (Interview, April 1, 2017)

*The “hold them back” bias.* The hold them back bias was evident among the educators who were interviewed. This could also be observed from the survey data in relation to early entry (Figure 3). One educator said that when families told her they would send their child to school early, she would ask,

Have you considered that your child doesn't need to be at school till they are 6? . . . And you know we are very capable. (Gaby, Interview, April 25, 2017)

## Parents

The experiences of parents and their preschoolers at early childhood services are arranged below in subsections related to the five identified educator attitude categories. The contrast between educator attitudes and parent experiences is set out in Table 4.

*Early entry.* None of the parents reported having received any information about early entry from their early childhood services. Louise said,

I think she was a really good preschool teacher for the majority of the children, but absolutely no ability to handle a gifted child.

Interviewer: So, clearly she didn't talk about early entry

Louise: Oh God no. No, no, no. (Interview, February 9, 2017)

*Lack of information provided to parents.* Only one parent reported receiving information related to giftedness. Alexa, who was a mother of three gifted children as well as a teacher, was alerted by her son's educator to his poor social fit and advanced abilities. The preschool had tried very hard to provide for his needs and even secured funding for an aide. The aide had

organized a whole lot of small-group stuff plus extension stuff so he did projects on hermit crabs and things like that, and, and it held him. It didn't make him thrive, but it held him because he was lonely. (Alexa, Interview, December 9, 2016)

*Image of playing child play: Ceiled out at preschool?* Parent narratives related to play and children's social versus intellectual needs have been combined in this subsection because they overlap in gifted children. The term *ceilinged out* is used to describe a child who has already mastered the age-appropriate knowledge level in a test and requires above-level testing. Ceilinged out may also be the case for preschoolers who are gifted and participate in an early childhood curriculum. For example, Jane, who held a master's degree, said that her oldest child (IQ 153) had taught herself to read at the age of 3, and made the following comment about play:

I understand that . . . play-based learning is really important, but the definition of play was too narrow and I had a child whose idea of play was to read a book and nobody would accept that that was play. (Interview, December 22, 2016)

Alexa provided further insight into how gifted children play. Her middle child, a boy (IQ 150), would have liked to play with other children, but his same-aged peers at preschool would not cooperate with the kinds of complex games he wanted to play, rendering the company of other preschoolers a poor fit for him both intellectually and socially. Instead,



**Table 4.** Educator Themes and Subthemes Compared With Parent Experiences Concerning Early Childhood Services.

Educator themes	Educator subthemes	Parent experiences
Educator attitude—early entry	Never heard of early entry Don't believe in early entry Depends on child's social/emotional maturity Know about early entry, has recommended it	No educator interest in looking at acceleration They thought level of giftedness wasn't high enough for early entry [despite recommendation by psychologist] Child would have been happier [with early entry], because she wasn't happy where she was
Information about giftedness	Every child has a gift If you are 4, socially and emotionally you are 4. Children who may appear "gifted" in one area are usually lacking in other areas Gifted children may not be emotionally or socially ready for school It is not (or poorly) covered in teacher training	Child bored at preschool even though they tried very hard to keep it interesting Child not allowed into older group because she was too young [They said] she lacked social skills, [but] maybe it's just not the right kids for her
Image of (playing) child	Expected they should play like all other children Gifted prefer to be around adults, they don't know how to enter play Other children's games bore them	Child wanted to play shops [and] count the money while other children grabbed the shopping and ran off. They didn't have enough challenging puzzles, "everything had such a cap on it" They . . . reported child was reading and wouldn't play with anyone
Prioritizing social over intellectual skills/needs	Gifted children often struggle socially and emotionally Socialization is a prerequisite for school and gifted children struggle and may find transition to school difficult	Mother chose early entry for social reasons: "she was getting so sad. Not having people whom she could play with in a more complex way . . . it was actually about getting her with a group of kids who were [mentally] more like her"
"Hold them back" bias	Not a fan of children going to school young School teachers are not as well equipped as early childhood educators The school curriculum is so prescribed and doesn't allow the individual focus that early childhood can Never heard of anyone regret holding their child back	The zeitgeist at the moment is give them "the gift of time," you know, the older the better to start school It's when you speak to other parents and teachers, they are "hold them back, hold them back" and everyone's holding their kids back [After early entry] She's so happy. I think this is the happiest I've seen her

[He] used to bring these math books to preschool instead of teddies, and they were math books for 6–8-year-olds and division and multiplication and things like that and they were his comforter, so whenever it was all too much he would go and do math. And he would read stories ‘cause he was a fluent reader. (Interview, December 9, 2016)

Similarly, Louise’s daughter had many interests, including a fascination with how rainbows got their colors. Having researched rainbows online with her mother, she told her preschool teacher:

Did you know that rainbows are round from above if you look at them from above?—to which her teacher responded, “Would you like to paint a rainbow?” (Interview, February 9, 2017)

Louise cited this incident as evidence that the service was not providing for her child’s intellectual needs, commenting during the interview:

No, she doesn’t want to paint a rainbow . . . they could not deliver any more to her.

The curriculum framework’s superiority was certainly failing Louise’s moderately gifted child (IQ 135):

Towards the end . . . she was packing, you know, an enormous stash full of her own stuff to take with her, puzzles and games and craft . . . ‘cause basically she was so bored she was taking her own activities to do at preschool. The bag was like a giant beach bag full of stuff every day . . . It was ridiculous. (Interview, February 9, 2017)

*The hold them back bias.* One mother described how her child was prevented from early entry because she had not turned 4 prior to the start of the school year, as required by the gifted policy of the NSW Department of Education (Department of Education and Training, 2004), while another mother held her child back to allow his 1 year older sibling to flourish. Two mothers, Michelle and Angela, had been told by psychologists that their children were gifted and that early entry was recommended. However, they held their children back based on educators’ incorrect interpretations of their children’s intellectual abilities and social challenges. Michelle was new to the concept of giftedness, and, because her daughter was her only child, she felt unsure about how to proceed, letting the educators guide her. Her child’s educators ignored the psychologist’s report recommending early entry and refused to accelerate her child into the older group to prepare her for transition to school. Michelle said,

They were horrified and, like, “No, she’s not ready, we would have to do so much work.” . . . so I left her there even though they weren’t going to do anything to extend her. (Interview, February 26, 2017)

Angela, a mother of two gifted children, said that her young son was given a trial period to attend a private school 1 day per week. The school then decided that her son

was not socially ready. This view was supported by his preschool teacher, despite the psychologist's recommendations.

These two children's intellectual and social needs could have been met through early entry because they would have been provided with more formal learning activities and because the school children they would have been placed with would have been older, thus a better mental fit. This opportunity was, however, passed up due to a mistaken belief that they were not intellectually and socially ready. The children then developed real problems. Although Michelle's child befriended another child who was gifted at the service and played with her exclusively the following year, the year did not end well. Michelle said,

Day care called me in last year about behavior. It must have been about, towards the end of the year; it must have been October/November, and said she was easily upset. . . . And I said, "Yes I know, she's been doing that at home as well." And they said, "We just think it's because she needs to be at school." . . . And I said, "Look, I don't know what you want me to do about it." (Interview, February 26, 2017)

Angela reported about her son's first year at school that

We are certainly seeing an awful lot of anger. And there have been . . . aggressive episodes at school which we have never had before, so obviously there is some forms [sic] of frustration. (Interview, December 5, 2016)

She added that although her son had just commenced at school, he preferred the company of older children, was very popular with the older children, and played frequently with them in the playground.

Alexa recalled her son's struggles when he finally started school, trying to fit in both socially and intellectually. He had little in common with his age peers and had already mastered the curriculum before the start of the school year:

I wish that [early entry] was seen as an option by preschools . . . 'cause preschools tend to focus on the holding children back . . . particularly with boys . . . it is particularly gendered. (Interview, December 9, 2016)

Parent reports of the outcomes of moderately and highly gifted children within early childhood services demonstrate a poor fit, as highlighted in Table 5. At the same time, mildly gifted children who display few of the emotional and behavioral issues of the moderately and highly gifted may therefore be missed altogether.

One of the four moderately and highly gifted children in Table 5 does not have a highlighted row because she did not have a high "issues" score when attending an early childhood service. Her mother, Michelle, described the child as a chameleon, able to intellectually blend in well by adjusting her skill level to fit in with other children. In addition, another gifted child who later attended the service addressed her social needs.

**Table 5. Issues Noted by Parents of Gifted Children in Attending Early Childhood Services.**

Parent	Gifted children's characteristics within early childhood services							Social barriers			Total
	1	2	3	4	5	6	7	Prevented from playing with older children	Parents reported "Hold them back" bias	Child deemed socially immature by preschool or school	
Children's IQ	Melt-downs	Cried, screamed, didn't want to go to preschool	Constant need to know more	Bored	Fluent reader	Socially did not fit	Socially mature, preferring older children's company				
1	127	✓	✓	✓	✓	✓	✓	✓	✓	✓	4
2	153	✓	✓	✓	✓	✓	✓	✓	✓	✓	9
3	130						✓			✓	2
4	129				✓		✓		✓		3
5	150	✓	✓	✓	✓	✓	✓	✓	✓	✓	8
6	135		✓	✓	✓	✓	✓		✓	✓	5
7	154	✓	✓	✓	✓	✓	✓		✓	✓	5
8	146+	✓	✓	✓	✓	✓	✓	✓	✓	✓	10
TOTAL	4	3	6	6	3	3	8	2	6	5	N/A

Note. Mean IQ of children = 141. Highlighted horizontal rows shows the most frequent issues per level of IQ. Child 7 was an exception, possibly as another gifted child joined the service in her final year of attendance.

## Discussion

The paucity of training in giftedness was evident during both educator and parent interviews through the poor advice provided to parents and in educators' lack of information about the availability of additional services—a regulation requirement for children with additional needs. For educators who had undertaken any amount of training ( $n = 27\%$ , similar to Hodge, 2016 findings), however, the survey data showed significant outcomes of improved attitudes and knowledge about giftedness, even though over half the “trained” educators had only attended between 1 hr and a few professional development courses.

Educators perceived that gifted children were unable to enter and maintain play relationships with peers. However, according to Wilson (2015), gifted children may not play at all or they may approach play differently. His finding is supported by the comments of a number of parent participants in this study.

At the same time, there is a high expectation, as set out in the current curriculum framework, for the child to be resilient and a “competent learner”—convenient expectations in a society based on working parents. In contrast, children who are gifted can be very sensitive (Diezmann et al., 2001), crave intimate connections, have close attachments with parents (Van IJzendoorn & Van Vliet-Visser, 1988; Wellisch et al., 2011), and thus seek to repeat similar relationships with their educators (Grant, 2013). Due to insufficient information, interviewed educators tended to interpret gifted children's social and emotional needs as evidence of immaturity. This was supported by the survey findings, with social/emotional problems being one of the 10 educator nominated gifted characteristics. However, social/emotional problems were not one of Frasier and Passow's (1994) characteristics, in keeping with research by Neihart, Reis, Robinson, and Moon (2002), who found no evidence that gifted children were “any more vulnerable or flawed in adjustment than any other group” (p. 268). This included Michelle's highly gifted daughter who did not have any social problems because she was able to “read” how to blend in, and because she had found a mentally suitable playmate. Michelle's daughter was described as a chameleon, a common phenomenon in girls who are gifted (Silverman, 1998).

The majority of educators did not have sufficient information about gifted characteristics to identify giftedness. They seemed unaware that gifted children have a hunger to learn more quickly and crave to know more than their neurotypical peers, as shown by Louise's account of the rainbow incident. A more informed educator may have engaged Louise's child through sustained shared thinking (Sylva et al., 2004), actively engaged the child in the scientific exploration of rainbows, suggested that she start a rainbow project (Edwards et al., 1993), or even have specifically suggested painting a rainbow as a circle. Louise interpreted this incident as an example of the educator's low intellectual expectation of her child, in contrast to the Reggio Emilia image of the child as capable. Grant (2013) also found that the current image of a playing child includes low expectations in the area of intellectual ability when compared with a gifted child's home learning. In the case of Louise's child, a perfect incidental

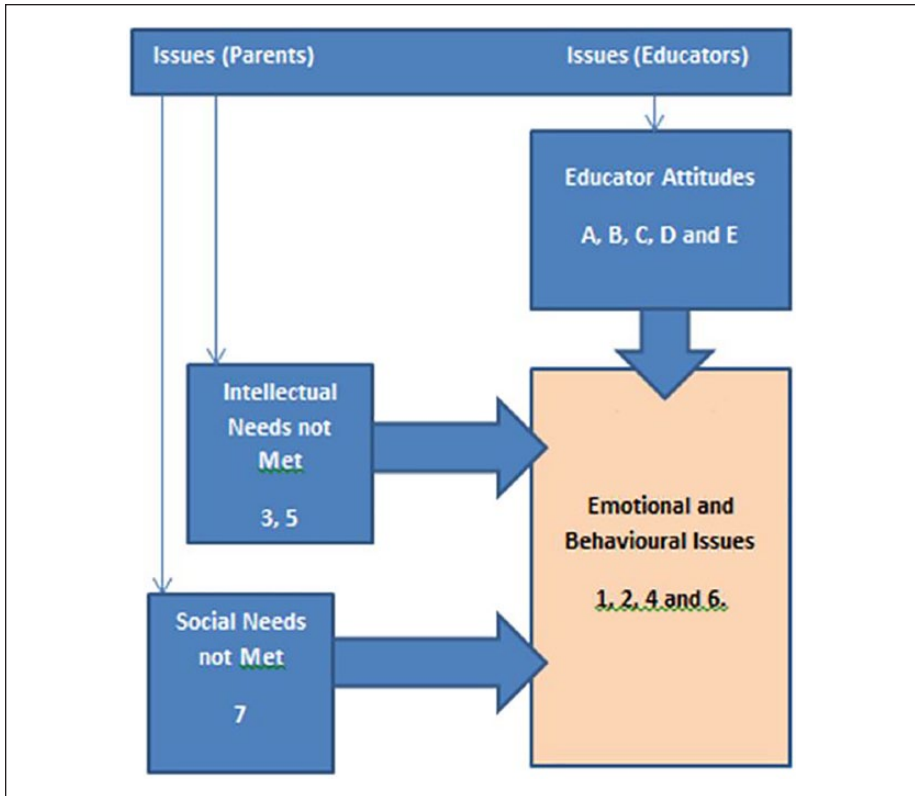
science teaching moment was missed. This and other parent experiences mentioned above demonstrate that gifted children require more than an open-ended early childhood curriculum if they are to avoid being ceilinged out.

Educators saw social and emotional maturity as essential to school readiness and evaluated children's meltdowns as social immaturity, as also reported by Grant (2013). Neither the survey respondents nor the educators who were subsequently interviewed suspected that gifted children may be intellectually and socially frustrated by the limitations of their learning and social environments, although this was evident to the parents and is quite likely the case according to Harrison (2005). A recent study similarly found that educators were more concerned with social issues than with children's academic needs (Siegle, Wilson, & Little, 2013). Grant (2013) found that the same emphasis continued when children attended school: high priority was given to emotional security and the establishment of social connections. This disappointed most of Grant's (2013) case study gifted preschoolers because they had been looking for challenging and stimulating learning opportunities. The findings indicate that educators who hold strong beliefs in the adequacy of social and emotional development over intellectual needs and misinterpret gifted children's behaviors may advise parents to hold their children back from school, further compounding their disadvantage.

Given the above, it was evident that educators who had not undertaken any training about giftedness after they graduated had not been informed adequately, or at all, about giftedness during their studies. For example, the mixed methods uncovered discrepancies between survey responses and educator interviews about early entry, as 62% of survey respondents indicated that they knew about early entry. However, extrapolating from the outcome of interview questions, only 40% or less may have actually known that early entry was an option within the gifted policy. This lack of information rendered the majority of educators unable to identify or program for gifted children and unable to provide informed and appropriate assistance to their parents.

These findings clarify why preservice coursework about giftedness should be compulsory. A compulsory subject about giftedness would convey its unique importance within the additional needs area. The coursework itself should aim to prevent misconceptions by including early identification through information about evidence-based culturally and socially applicable gifted characteristics (Frasier & Passow, 2004), information about early entry and gifted children's different intellectual and social needs (Diezmann et al., 2001), information alerting undergraduate students to hold different expectations for gifted children's play and learning (Wilson, 2015), planning for interests to ensure engagement (Koshy & Robinson, 2006), and an emphasis on ample time to engage gifted children in sustained shared thinking (Sylva et al., 2004).

Despite the lack of one-on-one time required to adequately address the intellectual and relational needs of gifted children alluded to by educator Maria and mentioned earlier, another educator working in the metropolitan area who was also interviewed



**Figure 5.** Emotional and behavioral issues that arise when gifted children’s needs are not met in early childhood services.

*Note.* The issues were noted by both educators and parents. Numerical issues are referenced from Table 5. Alphabetically listed contributing educator attitudes and practices are referenced from Figure 5.

said that the preschool program is set in such a way that there is no ceiling. (Janice, Interview, April 28, 2017) This observation was not supported by parent experiences. Although other educators also expressed belief in the adequacy of the curriculum, most added a caveat, for example, “It depends on the service that they attend” (Anne, Interview, April 27, 2017), indicating an awareness of the scarcity of high-quality services. This was supported by the survey data, with only 34% certain that the current program was sufficient for gifted children’s needs. Educators, therefore, seemed to believe that only high-quality services could address the needs of gifted preschoolers, while parent experiences indicated that educators within high-quality services would also have to be well informed about giftedness.

Both the educators and the parents of moderately and highly gifted children reported similar emotional and behavioral issues. Figure 5 illustrates how ignoring or

being unaware of gifted children's intellectual and social needs can result in these children exhibiting emotional and behavioral problems when attending early childhood services. The problems, as reported by parents, are numbered 1 to 7 and taken from Table 5, combined with the contributing categories A to E of educator attitudes, taken from Figure 4.

### *Limitations*

Caution should be exercised in generalizing these findings because they may apply only to the state of NSW in Australia. In addition, the educators were self-selected to be interviewed, and may not have been representative of educators who were surveyed. They were almost twice as likely to have undertaken a course about giftedness, and they were all 3- or 4-year university degree qualified early childhood teachers compared with only 79% of the survey population. Although it is unclear why educators who were interviewed all had a 3- or 4-year university qualification in early childhood and were more likely to have undertaken gifted courses, they may have had greater confidence about their knowledge and therefore an increased willingness to be interviewed. Similarly, compared with parents who did not participate in the study, parents who chose to participate may have had either more positive or more negative experiences that they wanted to share. Finally, the researcher had also been the testing psychologist of the children of half of the parent participants, and although testing was not explored in this study, the relationship with the researcher may have affected parent responses.

### **Conclusion**

This study has demonstrated that there has been little change in the decades since Gross's (1994) observations about educator reluctance and tokenistic government initiatives in promoting gifted education in preservice teacher education programs. The study adds to the body of work on implicit teacher-held theories about gifted children and provides new information about the specific assumptions held by early childhood educators. Also outlined are consequences of educator practices: how educators who attribute gifted children's problems to poor social and emotional maturity do so as a result of limited information about giftedness, their current image of a child, the prioritizing of social over intellectual development, early entry, and the hold them back bias. The emotional and behavioral problems observed by educators and viewed through their prevailing attitudes can therefore result in the intellectual needs of gifted preschoolers being underestimated or downplayed in favor of a perceived deficiency or immaturity in their social skills, seen as the more important concern. As a consequence, educators are at a loss, and gifted children's intellectual, social, or emotional needs are neither understood nor met unless their parents are better informed and confident enough to take independent action by, for example, applying for early entry. It is an avoidable problem that can easily be addressed by including compulsory preservice coursework about gifted children in early childhood teacher/educator courses.



## Appendix A

### *Educator Interview Questions*

1. How long have you lived in [location]?
2. What circumstances led to you choosing to work with young children?
3. Do you have children yourself? [and if “yes,” how old are they]?
4. Do you have an interest in giftedness? [and if “yes,” how did this interest develop]?
5. [If interviewee has children]: Do you think your own children are gifted? [if “yes,” have you had them tested]?
6. In the survey you answered that you have [or haven’t] undertaken studies in giftedness. Why is that?
7. What problems do you see for young children who are gifted?
8. Do you feel you could identify a young gifted child, and if so, what would alert you to their advanced development?
9. Whose role is it to identify a child as gifted?
10. Have you ever “missed” a gifted child during your career?
11. Have you ever alerted a parent that their child may be gifted? [If “yes” what did you say/do]?
12. How do you feel about parents who tell *you* that their child is gifted?
13. How do you currently program for children who are gifted in your early childhood service?
14. What advice would you give parents of a gifted child?
15. How would your programming be affected if a parent brought you a psychologist report stating that their child is gifted?
16. What did you know about early entry before you participated in this survey?
17. Would you recommend early entry to parents of gifted preschoolers?
18. What do you see as a problem in young gifted children starting school early?

## Appendix B

### *Parent Interview Questions*

1. How long have you lived in Sydney?
2. What sort of work do you do?
3. How old were you when you had your child?
4. How was your child identified as gifted?
5. How has this affected your child’s siblings?
6. Has anyone else in the family been identified as gifted?
7. What has it been like to have a child of his or her intellectual level?
8. When you look back over the history of your experience with your child’s schooling, what stands out for you?
9. Tell me about your decision to apply for early entry OR wait till your child was school age before sending him or her to school

10. What was the most important factor in that decision?
11. Why did you think this was so important?
12. How do you think early entry has worked out for your child?
13. How has it affected your child's siblings?
14. What barriers have you encountered as a result of early entry OR as a result of waiting until your child was school age?
15. How well do you think your choice has resulted in relation to your child's intellectual needs?
16. How well do you think your choice has resulted in relation to your child's emotional needs?
17. How well do you think your choice has resulted in relation to your child's social needs?
18. Have you got any regrets in relation to your early entry choice?

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## About the Author

**Mimi Wellisch** is a registered psychologist with bachelor's and master's degrees in early childhood education and a passionate advocate for gifted children. Mimi is director of Clever Kids Consultancy where she assesses children for giftedness, and she is also author of books, peer-reviewed journal articles, and other publications. She has presented at many local and international conferences, and has been president, vice president, and treasurer of the NSW Association for Gifted and Talented Children. As a result of her converging interests in psychology and early childhood development, she was awarded a PhD in psychology in 2015 for her research on the association between attachment and IQ. Mimi has recently undertaken independent research about the attitudes of early childhood educators to giftedness and early entry.