"They show how smart you are": A mixed methods study of primary students' perceptions of assessment tasks

Gerald Wurf
Monash University, Australia
Rachel Povey
Charles Sturt University, Australia

Across the developed world high stakes assessment is routinely used in primary schools and it is essential educators consider how students perceive assessment. This study used a sequential mixed methods design, incorporating *the Student Perceptions of Assessment Questionnaire* (SPAQ), to examine the perceptions of 82, year five and six students in three Australian primary schools. Significant negative correlations were obtained between students' self-efficacy and assessment transparency, congruence with planned learning, and authenticity. Paradoxically, students who had the highest levels of self-efficacy had the least confidence in their knowledge of assessment. Boys obtained significantly higher scores when rating assessment congruency and transparency. Focus group data from 13 students highlighted themes related to intrinsic motivation, affirmation of ability/achievement levels, conformity to expectations, and support/feedback for learning. To improve assessment in the primary years it is recommended that educators use authentic tasks and explicitly discuss the purpose of assessment with their students.

Introduction

Assessment in Australian schools has progressed from the predominant use of external and norm-referenced assessments in and prior to the 1980s, to a wider range of tasks designed to meet diverse student learning needs and mandated standards. Assessment typically refers to the process of collecting evidence of student learning in order to draw inferences about current levels of attainment by individuals or groups (NSW DoE, 2020). Historically, the forms of assessment and specific assessment tasks employed in schools were overwhelmingly decided by teachers and administrators (Adie et al., 2018; Brookhart & Bronowicz, 2003; Cavanagh et al., 2005).

The significance of teachers' perceptions of assessment, and the associated effect on how and what is assessed in classrooms, has been highlighted in seminal work by Pajares (1992) and Brown (2004). Teachers generally believe that assessment improves teaching and learning, makes students accountable, is relevant, and makes schools and teachers accountable (Brown & Hirchfeld, 2008). It is commonly argued that it is the teacher's duty to design and implement effective classroom assessments (McMillan, 2013; NSW DET, 2020). Nevertheless, concerns continue to be expressed by teachers about aspects of assessment including the value of externally mandated, high stakes assessment. For example, Australian teachers surveyed by Thompson and Harbaugh (2013) reported that the *National Assessment Program – Literacy and Numeracy* (NAPLAN) resulted in teaching to the test, spending less time on other curriculum areas, and negative consequences for the classroom environment and student engagement.

Consistent with surveys of teachers, high stakes testing in primary schools has been identified as a concern for some students and their parents. Polesel et al. (2012) found evidence that it results in self-reported negative consequences for children's health and well-being and a more teacher-led assessment regime. However, causal relationships between student well-being and assessment regimes have not been established and studies have typically relied on limited survey data. In addition, contrary evidence suggests that assessment does not negatively impact on students' emotional states (Joseph, 2018; Muir et al., 2018; Rogers et al., 2016). Nevertheless, Rogers et al. (2018) in a survey of independent primary school teachers and parents in Western Australia found an overall low opinion of NAPLAN and high stakes testing. Of greater concern is recent evidence indicating that primary students received little, if any, clear and consistent information about NAPLAN (Howell, 2017; Swain et al., 2018).

Teacher perceptions of assessment often influence students' responses to assessment. A teacher who appears disengaged with assessment is likely to find their students responding in kind and a school's ethos around high stakes testing appears to influence both the positive and negative perceptions of students (Groundwater-Smith et al., 2014; Swain et al., 2018). However, the effectiveness of assessment depends not only on teachers' perceptions and practices, but also on student perceptions.

In contrast to teachers' perceptions, comparatively little research has been conducted on the perspectives of students. Studies that have been published have used a range of research methods and have more frequently targeted high school students. Qualitative studies have typically used student interviews to explore perceptions (Brookhart & Bronowicz, 2003; Moni, van Kraayenoord & Baker, 2002; Triplett & Barksdale, 2005; Triplett et al., 2003). A common finding is that although students understand that they need "to study", they know less about why they are learning the required material.

Qualitative studies of student perceptions of assessment

Brookhart and Bronowicz (2003) focused their study of 161 U.S. students' perceptions on three areas that had empirically established associations with academic achievement: inherent interest in and understanding of the importance of assessment tasks, self-efficacy beliefs, and goal orientations. From an analysis of the primary and high school students interviewed, the authors proposed a developmental progression in students' understanding of assessment. Primary students focused more on the rudimentary mechanics (performance requirements) and the basic content of the assessment. They readily identified a need to do well. Primary students' perceptions were more likely to be influenced by judgements about their overall abilities than their inherent interest in the assessment task or its importance. In contrast, high school students displayed a greater appreciation for the processes required to successfully complete assessments. High school students were more likely to believe that grades were, "no one else's businesses" and they should be kept to oneself.

Moni and her colleagues (2002) undertook a year-long case study of two city classrooms in two schools in south eastern Queensland. They noted an increased understanding of

assessment at the end of year eight compared to the beginning of the year. Reflecting back to primary school, students identified changes in assessment practices, particularly the increased use of task sheets in secondary school. Negativity and resistance towards assessment early in the school year remained at the end of the year, and of concern, some students who commenced the school year positively had negative perceptions about assessment by the end of the year. From their observations they identified the need for teachers to explicitly teach the nature and purpose of assessment tasks. To deal with resistance towards assessment, Moni et al. (2002) recommended the adoption of adaptive strategies that are known to enhance assessment outcomes.

Measures of student perceptions of assessment

Although interviews have typically been used to investigate high school and university student beliefs, quantitative research has also been important in understanding the perceptions of students. The *Students' Conception of Assessmen*t (SCoA) inventory (Brown, 2011; Brown & Hirschfeld, 2008; Weekers, Brown & Veldkamp, 2009) consists of four subscales that capture students' perceptions. The four subscales are: assessment improves learning and teaching; assessment relates to external factors; assessment is fun (i.e., emotionally laden); and assessment is irrelevant (i.e., is ignored). Brown (2011) has demonstrated that for New Zealand students each subscale has statistically significant correlations with measures of academic achievement; however, only the perception that assessment makes students accountable had a positive (beneficial) association with achievement. Statistically significant, negative correlations with achievement were found for perceptions that equated assessment with external or emotional attributions (i.e., assessment is the realm of teachers/schools, assessment is fun, and assessment is disregarded).

Recently Hue, Leung and Kennedy (2015) used a simplified, translated version of the SCoA to investigate minority student perceptions of assessment in Hong Kong. They found primary students were more likely to believe that assessment was a teacher-student collaborative process whereas secondary students believed assessment was teacher directed. Of note, Hue et al. (2015) argued that the perceptions of their Hong Kong sample are best represented by three factors: assessment as a teacher-student interactive process, assessment as a teacher-dominated process, and assessment as a student-centred process (e.g., "I mark my own work"). In this Hong Kong sample, the role of positive affect (e.g., "Assessment is fun") is ambiguous and it did not emerge as a validated factor in the final three factor model of assessment that was proposed.

The *Student Perceptions of Assessment Questionnaire* (SPAQ) is a second psychometrically validated instrument that has been used to investigate Australian high school students' beliefs (Dorman, Fisher & Waldrip, 2006; Koul & Fisher, 2006; Waldrip, Fisher & Dorman, 2008). Items on the SPAQ were found to load onto five factors: congruence with planned learning, authenticity, student consultation, transparency, and diversity. As defined by Waldrip et al. (2008), congruence reflects the extent to which students affirm that tasks align with the goals, objectives, and activities of the learning program. Authenticity captures the extent to which assessment used real world tasks that were

relevant to the students. Student consultation refers to the extent to which students are consulted and informed about the forms of assessment being employed. Transparency captures how clearly assessments are defined, and diversity represents the extent to which students have an equal chance at completing assessment tasks.

Koul and Fisher (2006) trialled the SPAQ in a sample of 470 Year 8-10 students at three high schools in Western Australia and concluded that high item means for the student consultation factor and the congruence with planned learning factor, confirmed favourable perceptions of assessment. Nevertheless, consistent with previous research, students reported they had little say in their assessment tasks. This was demonstrated by the student consultation factor having the lowest item mean scores. Koul and Fisher also found significant positive correlations between the SPAQ subscales and a measure of science self-efficacy. The highest correlation reported was between academic efficacy and transparency ($r = .46$). The lowest correlation was between academic efficacy and student consultation ($r = .21$).

Dorman et al. (2006) reported measures of the classroom environment and student perceptions of assessment were significantly correlated with Australian secondary students' academic self-efficacy ratings. In primary schools, similar correlations were recently found when Victorian students' attitudes to school were correlated with NAPLAN test data (Turner & Pale, 2019). Synthesising data for 35 schools, these authors reported significant correlations between school level mean standardised test data, especially writing and student attitudes such as paying attention and putting in effort. These findings underscore the importance of considering student perceptions of assessment.

Assessment as self-regulation for learning

Brown et al. (2009) suggested their findings support theories that emphasise the role of self-regulation and motivation in learning. For example, the benefits of adopting an internal locus of control, effort-based attributions, and a growth mindset (Dweck, 2017) have been comprehensively documented in the motivation literature. Drawing on studies of classroom assessment, Andrade and Brookhart (2016) also strongly advocated that teachers use assessment to develop students' self-regulation of learning. They defined self-regulation of learning as setting goals and students' use of cognitive, affective and behavioural practices that move them closer to these goals. The crucial importance of developing self-regulation is underscored by the problematic consequences of poor self-regulation during adulthood. Brindle et al. (2019), for example, found strong links between poor self-regulation, low levels of academic achievement and increased antisocial and risk-taking behaviour in their survey of 285 Australian adults.

Student perceptions of assessment can be expected to have a strong impact on their academic achievement. There is already convincing evidence (Ehrlinger et al., 2008; Kruger & Dunning, 1999) the top quartile of students score higher in their assessments than they estimate, while the bottom quartile of students have little awareness they are below average and significantly overestimate their actual achievement. Hattie (1992) also

noted that while high achieving students can be expected to have greater insight into their stronger intellectual abilities, they typically underestimate their actual abilities.

Self-efficacy and perceptions of assessment

Self-efficacy is the belief that the individual can accomplish a task or skill and from it produce positive outcomes, it is an essential belief for children to develop (Bandura, 1993). The concept has emerged as a powerful predictor to explain students' motivation and learning (Komarraju & Nadler, 2013; Marsh & O'Mara, 2008; Usher et al., 2019). Children display high levels of self-efficacy in their early primary school years; however, significant declines, especially for girls, have been consistently reported during the early high school years (Diseth, Meland & Breidablik, 2014; Robins & Trzesniewski, 2005). More specifically, Webb-Williams (2018) used a mixed methods study to investigate the science self-efficacy beliefs of 182 primary students and noted that girls frequently underestimated their abilities. Whereas boys were more influenced by mastery experiences, girls were more likely to disregard teacher feedback. Instead, girls favoured affective experiences and social comparison as sources for their self-efficacy beliefs.

Self-efficacy can encourage academic achievement both directly and indirectly and has complex links with students' motivation, self-regulation, and emotions (Mega, Ronconi & De Beni, 2014). For example, Galos and Aldridge (2020) in a survey of 609 primary school students in Western Australia found at risk students had lower self-efficacy beliefs, less task orientation, and considered the learning environment to be less positive than other students. As well as strong evidence for the direct relationship between self-efficacy and achievement, in seminal work Hattie (1992) found that some high achieving students may strategically set their academic self-efficacy beliefs lower than other students in order to gain a competitive advantage. Given this, and emerging self-regulation skills, the role of mediating variables and individual differences is likely to be even more salient in younger students' self-efficacy beliefs.

Gender differences in self-efficacy and perceptions of assessment

Gender differences in self-efficacy and general confidence in academic outcomes have been widely reported (e.g., Diseth et al., 2014; Todor, 2014; Verniers & Martinot, 2015). Typically, males have been found to be more overconfident, even on assessment items they get wrong (Jakobsson, et al. 2013; Lundeberg, Fox & Pun coha , 1994). Boys' academic self-efficacy beliefs have also been found to be higher, except in the domain of language/arts (Hattie & Yates, 2014; Huang, 2013). Pajares (2003) found that females generally have higher writing self-efficacy than males during upper primary and early high school years with the gender gap disappearing or reversing during the latter years of high school. Similarly, Koul and Fisher (2006) found that male self-efficacy in science in year eight, nine, and ten was higher than females; however, male self-efficacy also consistently fell during the high school years.

Given the forgoing, identifying how students perceive their assessment tasks is likely to improve learning and teaching in the classroom. Understanding and developing students'

knowledge about how assessments are planned, implemented, and evaluated may help ease student, teacher and parent concerns. As well as this, accommodating student diversity and ensuring equity in assessment are crucial issues in primary classrooms. Teachers must be able to design assessment tasks which cater for different levels of ability. This study aimed to investigate primary students' perceptions of assessment, how these relate to their self-efficacy beliefs, and their understanding and knowledge of assessment. Specifically, the following research questions were investigated:

1. Upper primary SPAQ ratings were predicted to be low. Previous studies suggest that as students' progress through school, they develop a greater understanding and more favourable perceptions of assessment.
2. Students' academic self-efficacy was predicted to be positively correlated with their ratings on the SPAQ.
3. Consistent with previous findings, boys were expected to have higher self-efficacy, obtain higher SPAQ ratings, and overestimate their understanding of assessment items.

Method

Participants

One hundred and forty-two upper primary students in three regional Catholic schools were invited to participate in the study via a letter to their parents/carers. Fifty-eight percent of these students received permission from their parents and assented to be included in the study. The final sample comprised 82 students drawn from three Year five classes (26 students) and three Year six classes (56 students). Forty-six students were female and 36 students were male.

Thirteen students from the final sample were also nominated by their classroom teachers to take part in a focus group. Focus group participants comprised: four male Year five students, two female Year five students and seven female Year six students.

Materials

The *Student Perceptions of Assessment Questionnaire* (SPAQ) contains 30 items that are rated using a four-point scale (Almost never, Sometimes, Often, and Almost always). Factor analysis (Waldrip et al., 2008) has yielded five, six-item subscales: Congruence with planned learning; Authenticity; Student consultation; Transparency; and Diversity. Analysis of the results obtained from 3098 students showed Cronbach alpha reliability scores ranging from .82 for the Authenticity subscale to .62 on the Diversity subscale (Waldrip, Fisher & Dorman, 2009).

The SPAQ was developed for research with students in the early years of secondary school and minor word modifications to the scale were used in the current study. These modifications included deleting specific references to "science" and replacing "assignments" with "class projects". The reported psychometric properties for the Diversity subscale were lower than other subscales and did not meet recommended

criteria for scale refinement and item selection (Lance, Butts & Michels, 2006; Nunnally & Bernstein, 1994). Consequently, the Diversity subscale and the items loading onto it, were not included in the current study. These modifications resulted in the *Student Perceptions of Assessment Questionnaire – Modified* (SPAQ-M, see Appendix 1).

Self-efficacy was measured using the cognitive competence subscale from the *Perceived Competence Scale for Children* (Harter, 1982; Liew, McTigue, Barrois & Hughes, 2008). Items included such statements as: "I think I know a lot in school" and "I think I am good at spelling". Extensive investigations (e.g., Byrne & Schneider, 1988) have shown it has excellent psychometric properties and the factor structure has been well established. For each of the six items on the scale participants used a four-point scale to rate their responses.

Focus group questions were designed to investigate what classroom assessment meant to students and how and why assessment occurs. Initially students were asked about what assessments are, and "What do they do"? Students were asked how assessments are similar and different to other activities they complete in class, as well as if they talk about assessment with their teachers. They were also asked if and how assessments help, and if they know what to do in assessment tasks. The focus group finished with a question about how easy or hard assessment tasks were at school.

Procedure

University and school authority ethics approvals were obtained before the study commenced. Following modification and initial piloting, the questionnaire was made available to schools in both online and hard copy format. All schools opted for online administration of the questionnaires during scheduled class time under examination conditions. Statistical analysis was completed using *IBM SPSS 24*.

The focus group was conducted by the second author with a teacher nominated subsample of participants from one of the participating schools. Students' responses were audio-recorded, transcribed, and analysed using categorical analysis. This included coding the responses and identifying important themes within the data (Creswell, 2014; Saldaña, 2016). Data collection and analysis occurred during the 2015/2016 school year.

Results

To investigate the first research question, SPAQ-M subtest scores were analysed. On the Congruence subscale of the SPAQ-M the majority of students did not feel that the tasks they completed aligned with, or only sometimes aligned with, the stated objectives and activities of the learning program. Most students reported that sometimes the assessments they completed were authentic, featuring real and relevant tasks. The highest rankings were given on the Student consultation subscale. Participants agreed that either sometimes or often they were consulted about the types of assessment tasks being used by their teacher. On the Transparency subscale participants affirmed that the assessment

tasks utilised in their classrooms are at best sometimes well-defined and made clear by their teacher. These results are summarised in Table 1.

Table 1: SPAQ-M upper primary students subscale
scores, standard deviations and subscale item means

Subscale	Mean N = 82	SD N = 82	Item mean N=82	High school mean * N = 3098
Congruence	10.01	2.57	1.66	12.43
Authenticity	13.05	4.03	2.17	15.60
Student consultation	15.00	3.57	2.50	16.69
Transparency	11.28	2.74	1.88	11.65

* Indicative high school mean subscale scores from Waldrip et al. (2009).

The second research question investigated the correlation between academic self-efficacy and SPAQ-M subscale scores. The largest correlation ($r = -.419$, $p < .001$) was obtained between students' Self-efficacy and Authenticity scores. The higher the participant scores were on the Self-efficacy scale, the lower the scores were on the Authenticity scale. A significant negative correlation was also obtained between students' Self-efficacy and Transparency scores ($r = -.364$, $p < .001$). Similarly, a moderate, significant negative correlation was obtained between students' Self-efficacy and Congruence ($r = -.358$, $p < .001$). A small, non-significant negative correlation ($r = -.212$, $p > .05$) was found between students' Self-efficacy and Student Consultation. These results are summarised in Table 2. Of note, unlike the perceptions of assessment scores, self-efficacy scores were highly skewed towards the positive end of the scale. Most students were very confident in their beliefs about how well they are doing in academic tasks while at the same time they held relatively negative perceptions about the classroom assessments being used by teachers. Research question two was not supported.

Table 2: Correlations of self-efficacy with SPAQ-M subscale scores

Variable	1	2	3	4	5
1 Congruence	1	.476	.447	.530	**-.358***
2 Authenticity		1	.722	.403	**-.419***
3 Student consultation			1	.344	**-.212**
4 Transparency				1	**-.364***
5 Self-efficacy					1

*** = $p < .001$

A series of independent sample t-tests were used to test the third research question that male students would obtain higher scores on the SPAQ-M and Self-efficacy scale. Male Congruence scores *(M = 10.94, SD = 2.60)* were significantly higher ($t(80) = 2.998$, $p < .01$) than female *(M = 9.28, SD = 2.33)* scores. Similar gender differences were found in the Transparency subscale scores ($t(80) = 2.22$, $p < .05$) with males *(M = 12.02, SD = 2.70)* having higher scores than females. On the other subscales of the SPAQ-M no statistical differences between males and females were found. These results provide some support for the predicted finding. Gender differences were found in students' perceptions

of Congruence and Transparency, but not in their perceptions of Authenticity or the degree of Student consultation.
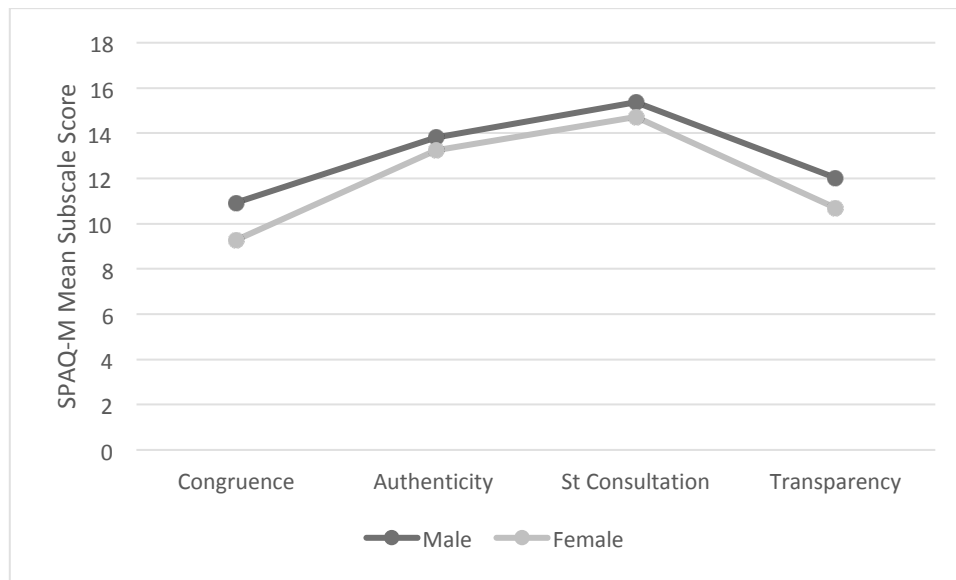

Figure 1: Gender differences in SPAQ-M subscale scores

An independent samples t-test was also used to compare differences between boys and girls on the self-efficacy scale. Males ($M = 19.66$, $SD = 3.28$) had a lower self-efficacy rating than females ($M = 20.41$, $SD = 2.84$); however, no significant difference ($t(80) = -1.102$, $p > .05$) between the ratings was found.

Four major themes were identified from students' focus group responses. These themes related to the role of assessment in intrinsic motivation, affirmation of ability/ achievement levels, conformity to expectations, and support/feedback for learning.

Intrinsic motivation and choice

The first theme captured the importance students placed on having choices in assessment tasks and relates to intrinsic motivation. Overwhelmingly students recognised that if they had some influence over the way they were assessed, they selected assessment methods that best matched their preferences.

> Because if you … choose how you were tested … you would do it how you prefer to do it and if you prefer to do it in a way … then it'd be easier for you…[be]cause…you know how to do that better than somebody else. (F06)

> I was gonna say the same thing … you might … not like doing … bookwork and you're not very good at it so you like building stuff better so you choose building [to be assessed on]. (F02)

Affirmation of ability/achievement levels

The second theme related to how classroom assessment affirms students' abilities and/or achievements. Participants described abilities they felt they already possessed, as well as the more specific skills they were learning. They discussed what they were "good" and "bad" at and believed that assessments are used by teachers to ascertain their level of ability as well as to provide an indicator of their achievement level.

> They [assessments] show how smart you are. (F03)

> It depends on the subject and the marks like some subjects I'm good at and then some I'm not. (F01)

Conformity to classroom expectations

A third theme captured how assessment represents conformity to the expectations of teachers and peers. This theme related not only to the expectation to "do well", but also conforming to peer group expectations of poor performance.

> Sometimes we get peer pressure. Like … peer pressure … like, 'Aw, you're gonna get a low mark' … (F09)

> Or if you got a very good mark and the teacher wants you to, like, live up to it. (M02)

> … sometimes pressured [be]cause of … the marks you got before … if they weren't good". (M03)

Feedback and teacher support for learning

The final theme identified focused on teacher support and feedback for learning. This theme was strongly related both to the participants' comments in the focus group and to their responses on the SPAQ-M subscales. Teachers were perceived to structure and use assessment tasks in a supportive, helpful manner. Both formative and summative feedback was acknowledged; however, formative feedback allowing students to improve their achievement was highly valued.

> [Assessments are used] … to see what you need to learn. (F02)

> Normally when we do assignments, like, last week I think we had to finish a prime minister one … we get our mark and, like, what we did right or wrong and we get a comment at the end of what we could have done better and what we did good. (F04)

> While you're doing the assessment she walks around the … classroom … and sees if you need help … and makes sure you're getting it … and makes you talk to her. (M02)
> Well … you do the test and then after the teacher tells you what you got wrong and next time you do the test you know what to do. (M03)

> Tests are pretty easy, but if you do get something wrong [the teacher] tells you how to do it right and next time you know what to do. (F09)

Sometimes when we … first get an assignment … we'll get a sheet with all the things on it and she'll go through it with us and explain it to us. (F01)

Discussion

The findings of this study suggest that the majority of students had a limited understanding of how assessment tasks align with the learning program. Most students felt that sometimes the assessments they completed were authentic and the results reflect many of the concerns that have been highlighted in comparable high school findings (Koul & Fisher, 2006; Waldrip et al., 2009).

A negative correlation was found between the SPAQ-M subscales and self-efficacy. The results did not support the prediction that students with higher self-efficacy would have more favourable perceptions of assessment. Indeed, the nature of the relationship suggests that students with the highest self-efficacy scores had the lowest scores for assessment authenticity, transparency, congruency, and levels of student consultation. The finding is unexpected, but it is consistent with previous findings showing primary school students' ratings of self-efficacy are skewed and highly positive. Children at this age are likely to overestimate their likelihood of academic success and this finding suggests a challenge for teachers aiming to create more favourable perceptions of assessment in young students by relying on encouraging growth mindsets and more facilitative efficacy beliefs.

In an analogous study Brown and Walton (2017) have reported on the relationship between the SCoA inventory and self-efficacy. From their data, high or low scores on brief measures of self-efficacy appeared to make little difference in how perceptions of assessment influenced achievement on standardised measures of reading. As the authors note, this does not mean that self-efficacy is unimportant, but rather self-regulated learning is a multi-dimensional, complex construct. As outlined earlier, self-regulated learning incorporates not just cognitive practices, such as maintaining high efficacy beliefs, but also adaptive affective and behavioural practices that contribute to achieving assessment goals.

Qualitative data obtained from the student focus group corroborated the quantitative findings as well as established principles relating to the role of motivation and self-regulation in assessment. The importance of student input into the assessment tasks/goals was valued, the limiting role of low self-efficacy/fixed mindsets was acknowledged, and the value of high teacher expectations and feedback was recognised.

Gender differences in perceptions of assessment were examined and the results provided some support for findings showing widespread overconfidence amongst boys (e.g., Diseth et al., 2014; Todor, 2014; Verniers & Martinot, 2015). Consistent with the predicted findings, boys perceived that assessments were more transparent and congruent with their learning. Nevertheless, significant gender differences were not found in ratings of task authenticity or in student consultation. Although previous research has found that boys have higher self-efficacy in the primary years, except in the domains of language/arts,

statistically significant differences were not found in the current study. Recent international studies (Chou, 2019; Huang et al., 2019) have also failed to detect significant gender differences in self-efficacy. This may reflect fewer gender stereotypes operating in contemporary classrooms; however, the data is limited, and further large-scale studies are warranted.

Four major themes were identified from the focus group data which highlighted connections between assessment and intrinsic motivation, affirmation of ability/achievement levels, conformity to expectations, and support/feedback for learning. Participants spent a significant amount of time identifying whether they found their assessments "easy" or "hard". This was an unexpected outcome given the results obtained from the self-efficacy scale suggested most students believed they could achieve at high levels. Through their discussion participants identified that assessments could be made easier, clearer, and better suited to the strengths of individual learners.

An important classroom implication from this study is the need to improve primary students' understanding of assessment. Students are likely to be more motivated if they perceive they have some choice in assessment and if their strengths are acknowledged. Encouraging students to set high, authentic goals for their learning (McMillan, 2013) needs to be matched with explicit teaching regarding the requirements of assessment tasks. Assessment practices designed to enable students to connect assessment tasks to real-life experiences and to engage in higher-order thinking and deeper appreciation of content (Lambert & Lines, 2000; McMillan, 2013) are also likely to be perceived more positively by students. Further, how well these expectations are met helps students form concepts about what is important to learn and how good they are at learning (Brookhart & Bronowicz, 2003).

Students believed they often achieved the assessment result they personally expected, the result expected by their teacher, or the result expected by their peers. Notwithstanding this, there is substantial evidence that with intentional, focused brief writing interventions, self-affirmative beliefs can be positively enhanced in classrooms (Cohen, Garcia, Purdie-Vaughns, Apfel & Brzustoski, 2009). Complementing such approaches Andrade and Brookhart (2016) strongly advocated that teachers need to develop high levels of assessment literacy. This includes skills in conceptualising, communicating, and using success criteria when providing feedback to students. For Andrade and Brookhart (2016) teacher feedback must focus on the process of assessment (cognitive, affective and behavioural) as well as actual student achievement. Similarly, increasing student agency across temporal and relational contexts has been found to be essential for effective, contemporary assessment practices (Adie et al, 2018). Specifically, peer assessment, habitual self assessment, and encouraging student responsibility in collecting and identify evidence of learning led to increased student agency.

Several features of the current study limit the extent to which the results can be generalised. All participants were in the upper years of primary school and attended Catholic schools located in a regional, Australian city. Sample selection biases, including bias associated with the requirement for parental permission to participate may have

influenced the results. In addition, selection of the focus group participants was facilitated by the class teachers with the intention of including a range of students with different abilities and perceptions; however, bias may have influenced the nomination process. Coding of the responses from the focus group was undertaken using categorical analysis and although codes were checked by two researchers a more systematic investigation of interrater reliability was not undertaken. Finally, an examination of the validity and factor structure of the SPAQ-M for use in primary schools requires further investigation. Validation studies have demonstrated good reliability and discriminant validity for the original SPAQ in high school contexts, nevertheless further investigation of the psychometric properties of the SPAQ-M is warranted.

Conclusion

This study examined the perceptions of upper primary school students in relation to the assessment tasks and practices they undertake as well as their self-efficacy beliefs. Frequently used negative and mid-range responses suggest that primary students only sometimes believe that assessments are congruent with learning outcomes, connected to life outside the classroom, collaborative, and transparent. In contrast to these perceptions, students' self-efficacy beliefs were very strong. Although previous research demonstrates that knowing student perceptions can result in improved classroom practice (Adie et al., 2018; Brookhart & Bronowicz, 2003; Brown & Hirschfield, 2008; Triplett & Barksdale, 2005) the current findings underscore how challenging understanding these perceptions may be for primary school teachers. Examining perceptions can help teachers ascertain what students think about the assessment practices they currently use and allow for more individualised instruction. Conversely, if educators do not understand or acknowledge student perceptions, assessment tasks may lack meaning for primary students despite the very high self-efficacy beliefs students are likely to hold.

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Appendix

Students' perceptions of assessment questionnaire - modified (SPAQ-M)

Section one: Tick the box that shows your age, gender and school year.

1. My age is:		
☐ 9 years old	☐ 10 years old	☐ 11 years old
☐ 12 years old	☐ 13 years old	
2. I am a: ☐ Boy ☐ Girl		
3. My school year is: ☐ Year Five ☐ Year Six		

Section two: Tick the box that best matches how much you agree with each sentence.

Part one

4. Class projects check what I know.
☐ Almost always ☐ Often ☐ Sometimes ☐ Almost never

5. I can use my learning outside my class.
☐ Almost always ☐ Often ☐ Sometimes ☐ Almost never

6. In my class, I am asked about the kinds of tests or projects that are used.
☐ Almost always ☐ Often ☐ Sometimes ☐ Almost never

7. I understand what is needed in all projects or tests.
☐ Almost always ☐ Often ☐ Sometimes ☐ Almost never

8. Class projects or tests are on topics that I do in class.
☐ Almost always ☐ Often ☐ Sometimes ☐ Almost never

9. My class projects or tests help me in everyday things.
☐ Almost always ☐ Often ☐ Sometimes ☐ Almost never

Part two

10. My teacher tells me how my project or test will be marked.

☐ *Almost always*   ☐ *Often*   ☐ *Sometimes*   ☐ *Almost never*

11. I know what is needed to finish a test or project well.

☐ *Almost always*   ☐ *Often*   ☐ *Sometimes*   ☐ *Almost never*

12. My projects or tests are about what I have done in class.

☐ *Almost always*   ☐ *Often*   ☐ *Sometimes*   ☐ *Almost never*

13. What I learn in class projects or tests help me in what I do outside of school.

☐ *Almost always*   ☐ *Often*   ☐ *Sometimes*   ☐ *Almost never*

14. I can choose the way that my teacher will test what I know.

☐ *Almost always*   ☐ *Often*   ☐ *Sometimes*   ☐ *Almost never*

15. I am told about a test or project a long time before it will happen

☐ *Almost always*   ☐ *Often*   ☐ *Sometimes*   ☐ *Almost never*

Part three

16. How I am tested on my work is like what I do in class.

☐ *Almost always*   ☐ *Often*   ☐ *Sometimes*   ☐ *Almost never*

17. Class projects or tests help me to use what I know outside of class.

☐ *Almost always*   ☐ *Often*   ☐ *Sometimes*   ☐ *Almost never*

18. I have helped the class develop rules for testing what we know.

☐ *Almost always*   ☐ *Often*   ☐ *Sometimes*   ☐ *Almost never*

19. I am told about what I will be tested on a long time before it will happen.

☐ *Almost always*   ☐ *Often*   ☐ *Sometimes*   ☐ *Almost never*

20. How I am tested on my work is similar to what I do in class.

☐ *Almost always*   ☐ *Often*   ☐ *Sometimes*   ☐ *Almost never*

21. Class projects or tests check how well I can answer everyday questions.

☐ *Almost always*   ☐ *Often*   ☐ *Sometimes*   ☐ *Almost never*

Part four

22. My teacher has explained to me how each type of test or project will be used.

☐ *Almost always*   ☐ *Often*   ☐ *Sometimes*   ☐ *Almost never*

23. I know what my teacher wants in my class projects or tests.

☐ *Almost always*   ☐ *Often*   ☐ *Sometimes*   ☐ *Almost never*

24. I am tested on what the teacher has taught me.

☐ *Almost always*   ☐ *Often*   ☐ *Sometimes*   ☐ *Almost never*

25. I can show others that what I have learned has helped me do things.

☐ *Almost always*   ☐ *Often*   ☐ *Sometimes*   ☐ *Almost never*

26. I have a say in how I will be tested in my class.

☐ *Almost always*   ☐ *Often*   ☐ *Sometimes*   ☐ *Almost never*

27. I know how a class project or test will be marked.

☐ *Almost always*   ☐ *Often*   ☐ *Sometimes*   ☐ *Almost never*

Gerald Wurf joined Monash University in 2017 as a senior lecturer in educational psychology. Prior to this, he worked in teacher education at Charles Sturt University. He has also taught in Hong Kong. Gerald is currently Chair Elect of the APS College of Educational and Developmental Psychologists.
Email: gerald.wurf@monash.edu

Rachel Povey is an early career classroom educator. She currently teaches in a range of educational settings in the Illawarra and Southern Highlands regions of New South Wales. In 2015, after completing research focusing on student perceptions of assessment, Rachel was awarded her Bachelor of Education (Primary) (Honours) degree.
Email: rachel.povey2@det.nsw.edu.au