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First-Year University Students' Authentic Experiences with Evaluation Anxiety and their Attitudes toward Assessment

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Abstract

In this study, we sought to understand assessment-related attitudes and authentic experiences of evaluation anxiety with a sample of first-year university students. We focused on identifying (a) why students had reported high levels of anxiety on a recent, grade-bearing assessment, and (b) how their attitudes toward assessment type and weighting influenced their views on anxiety and learning. Drawing on social constructivist principles, 31 first-year students in New Zealand participated in a 25-minute interview. Semi-structured interviews included open-ended items about students' experiences with anxiety, followed by a Q-sort task that structured dialogue around assessment attitudes. Results show that evaluation anxiety was reportedly caused by several factors, including students' doubts about their capabilities, concerns about insufficient time and time management, external pressures to be successful, unclear institutional standards for quality, and concerns about performing well on certain types of assessment. Students reported that oral presentations and high-stakes written tasks were more anxiety-inducing for them. Meanwhile, students reported that high-stakes written tasks, low-stakes tests, and low-stakes written tasks helped them learn more effectively than other assessment types and weightings. We discuss the implications of assessment design, including the challenges of evaluating students in a way that facilitates learning and limits unnecessary evaluation anxiety.

Keywords: anxiety; assessment; evaluation; first-year university students; learning

Introduction

In theory, assessments should inform students and educators about learning successes and gaps (Boud, 2013). Having an expert judge the degree to which a novice performs a task can offer a glimpse into the learner's current skills and areas for improvement. In ideal circumstances, assessments serve as adaptive tools that represent one's existing knowledge, facilitate mastery, and motivate behaviour. In practice, however, assessments can add considerable pressure on students. These pressures of assessment on students are powerful at the university level where grades have a considerable bearing on individuals and their futures. Grades may be used not only as one's ability and aptitude at university, but also tools that employers may use when identifying and classifying student competencies and skills (Cohen et al., 2008). This structure is said to have indirect socialising effects on learners (Meyer et al., 2007), and university students today have become keenly aware of how grades matter.

The pressure of grades on university students starts early. Within a matter of weeks, most first-year students go through a major life transition where the learning environment, self and identity, and social settings are in flux. Such changes can be daunting and, although some stress is presumed to be helpful, demands that are viewed as unmanageable can lead to anxiety (Zeidner, 2007). It is not surprising that high levels of assessment-related anxiety are frequently reported by university students (e.g., Putwain, 2008). One rather dramatic change during this transition is the need for first-year university students to adapt to a new–and often unfamiliar–assessment regime (Sotardi & Brogt, 2016). Indeed, not all students cope well with this change (Sotardi, 2018). Students who struggle to adjust during the university transition report high anxiety, low self-efficacy, poor academic self-concept (Raufelder & Ringeisen, 2016), and ineffective management of time and study resources (Brackney & Karabenick, 1995).

First-year students who are preoccupied by threats to their achievement or reputation may encounter a range of educational and personal challenges. The adverse impact of assessment-related anxiety on learning, performance, and mental health has been well documented (von der Embse et al., 2018). To limit the effects of anxiety on students, it is essential to better understand assessments in relation to their qualitative experiences of evaluation anxiety and attitudes toward assessment. We explore this narrative with a sample of first-year university students in New Zealand who had reported high levels of evaluation anxiety upon completing an early, summative assessment in their first term of study.

Evaluation Anxiety in the Higher Education Context

Evaluation anxiety has been defined as:

> A state of uneasiness which accompanies somatic indicators (emotionality) and a focus on anticipated future threat(s) to achievement and/or reputation (cognitive worry) for assessed situations in which a performance is measured, judged, and compared to a particular standard of excellence. (Sotardi, 2018; p. 349)

In the current study, we use the term “evaluation anxiety” as it is intentionally broader than specific types of assessed tasks. It is necessary to acknowledge this breadth in higher education contexts because reports of emotionality and cognitive worry are present across different assessment types, including tests (Putwain, 2008), written assignments (Daly & Miller, 1975), and oral presentations (Sotardi et al., 2018). There is also evidence that intra-individual variations in evaluation anxiety exist according to assessment type (Sotardi et al., 2020; Kuhlemeier et al. 2002). A student may, for instance, report high anxiety when giving an oral presentation but low anxiety when writing an academic essay. If assessment type is not considered, then it might appear as though the individual does not struggle with

evaluation anxiety at all. When conducting research on evaluation anxiety, the assessment context matters.

The weighting of an assessed task relative to the total course grade is another contextual factor to be considered. Assessments are considered “low-stakes” when a task performance has little impact on one’s total course grade whereas assessments are considered “high-stakes” when a task performance has a substantial impact on one’s total course grade (Finn, 2015). From judgment and decision-making perspectives, high-stakes assessments have greater utility for performance outcomes, and may have a greater likelihood (than low-stakes assessments) for evaluation anxiety. However, this is not to say that low-stakes assessments are without their own challenges. In universities, the design of low-stakes assessments may be intended to lessen the pressure of singular tasks; however, motivating students to perform to capacity on low-stakes assessment is a major issue (Ekman & Pelletier, 2008). An assessment that does not contribute greatly to one’s course grade may not be seen as worth the time (Sundre & Kitsantas, 2004). In terms of resource allocation, students may have learned to be strategic: they maximise the likelihood of their performance-focused successes by placing their energy into the tasks with the greatest bearing on their course grade. Meanwhile, students give less effort to tasks with a smaller influence on their course grade. As a result, students may have attitudes in which high-stakes assessments increase anxiety and low-stakes assessments do not increase anxiety *but* reduce motivation. According to Harland et al. (2015), for example, university students held attitudes that smaller quizzes (low-stakes) were less risky grade-wise; however, larger, inquiry-based tasks (high-stakes) increased their learning. This anxiety-learning duality could shape how students approach assessment.

The contextual factors that contribute to anxiety need investigation for three reasons. First, the assessment context is known to influence evaluation anxiety and performance even

when personality factors are controlled for (Sotardi et al., 2020). Thus, modifications to the learning environment can decrease (or increase) stress and anxiety. Second, understanding how the assessment context affects students can help design assignments that limit unmanageable stress and support learning. Third, there is insufficient literature on the student voice in relation to assessment, anxiety, and learning. A long-standing tradition of causal and correlational methodologies (see Sapp, 2013) has provided insight into evaluation anxiety; however, it is also important to consider students' experiences, attitudes, and the authentic setting in which these are both situated.

The Current Study

Here, we adopt a student-centred perspective to consider the perceived causes of and contributors to evaluation anxiety. Participants completed a grade-bearing, summative assessment in the first term of university, and were then invited to be interviewed because of their relatively high levels of evaluation anxiety on these assignments. With this setting in mind, we first explore students' subjective reasons for having felt anxious on their assessed tasks. Second, we identify the task characteristics that give rise to (a) low versus high levels of evaluation anxiety and (b) less versus more effective learning. Our research questions were:

1. What factors contribute to first-year university students' evaluation anxiety?
2. What are first-year university students' attitudes toward assessment types and weightings in terms of evaluation anxiety and effective learning?

Method

Participants

Participants were 31 university students (23 females, eight males) and ages ranged between 17 to 53 years (*M* = 22.42). Of the sample, 27 participants self-reported as domestic (New Zealand) students and four were international students. Participant ethnicity was self-

reported as New Zealand European/Pākehā (*n* =21), New Zealand Māori (*n* = 3), Asian (*n* = 4), and another ethnicity (*n* = 3).

Participants were part of a larger (*n* = 238), convenience-based quantitative study on the student transition to university with a particular focus on evaluation anxiety. Recruited individuals were purposively sampled according to their higher scores on a self-report instrument measuring “state evaluation anxiety” upon completing a recent assessment. The recent assessments came from students’ enrolment in one of five first-year undergraduate courses: chemistry (26%), education (35.5%), law (19%), communications (13%), and philosophy (6.5%). The first, major summative assessment for students in the education and chemistry courses was a test, while the law, philosophy and communications courses required an essay. Tests were weighted at 35% (education) and 30% (chemistry), while essays were weighted at 10% (law), 30% (philosophy), and 35% (communication) of the course grade. Students completing a test were given basic information in terms of the structure of their examination (e.g., multi-choice questions, calculation-based work, and short-answer items); however, students were not given information about test-taking skills. Students completing an essay had been given in-class advice and academic resources in terms of how to approach their assignments; however, the degree to which students had used this guidance is assumed to have varied between individuals.

Methodology

In line with our research questions, we adopted a social constructivist paradigm, an interpretive framework where participants describe personal examples and present their perceptions about a given situation or phenomenon (Creswell, 2003). To support this methodology, we used an interview-based qualitative design (Creswell et al., 2003). The interview was divided into two sections, each designed to answer one of our research questions. For our first research question, we developed a semi-structured interview schedule

with an emphasis on open-ended questions that could capture students' descriptions and views on their recent anxiety experiences. We used semi-structured interviews because they offer researchers insight into participants' unique positions and perspectives with the design of common questions that can be used for interpretation. Such insights are compatible with the fundamental goals of social constructivism. Building on these goals, we developed a ranking activity based on Q-sort methodology (Lundberg et al., 2020; Ramlo, 2016) to understand students' attitudes toward assessment types and weightings in terms of anxiety and learning. The ranking exercise was designed to provide consistency across interviews (i.e., all participants discussed the same types of assessment) and provoke thoughtful dialogue. As such, we sought to expand on students' experiences by using a person-centred process that adds richness while limiting the potential influence and bias from the researcher (Lundberg et al., 2020).

Interview Procedures

An interview schedule was created to guide the conversation. For the first part of the interview, we asked participants to reflect on their specific assessment. They were asked to describe the assessment process and how they experienced evaluation anxiety. For this study, our primary focus was on the perceived contributors to anxiety for the specific context. Participants were asked: "What do you think most contributed to your anxiety?" Follow-up questions were asked by interviewers so that there would be adequate clarity and depth.

The second part of the interview included ranking-based activities based on Q-sort methodology. These activities were designed to better appreciate students' attitudes toward certain assessment types and weightings. For this study, a set of six cards were created, each representing a different type of assessment design: high-stakes tests; high-stakes written assignments; low-stakes tests; low-stakes written assignments; oral presentations; and group projects. These were chosen because they represent assessment formats that are typical of this

institution across different disciplines. Each card was described briefly by the interviewer (see Table 1). Descriptions were given to participants in case they did not have personal experience with a particular type(s) of assessment. Students were invited to select the card that best reflected their attitude toward each prompted question. Questions were: "Of these cards, (a) …which gives you the *most* anxiety? Why? (b) …which gives you the *least* anxiety? Why? (c) …from which type of assessment do you *learn* the most? Why? (d) …from which type of assessment do you *learn* the least? Why?" Interviewers asked follow-up questions until there was sufficient information regarding justification and context.

Interviews lasted about 25 minutes, were recorded, and transcribed verbatim. Interviews were conducted by one of three interviewers, either by Skype or in person. Interviewers were staff at the institution had experience teaching first-year undergraduate courses, and well-versed in the contemporary literature on evaluation anxiety, student well-being, and assessment design in higher education. They were, therefore, equipped with knowledge and experience to take students through the interview and elicit authentic responses from them.

Analysis

Analysis was undertaken in two phases. For the open-ended questions related to our first research question, transcripts were analysed using a reflexive approach to thematic analysis (Braun & Clarke, 2021). Reflexive thematic analysis is an interpretive methodology, in contrast to other methods of thematic analysis (e.g., codebook approaches aligned with post-positivism; Terry et al., 2017) and therefore better aligns to our social constructivist position. Moreover, we used an experiential orientation within thematic analysis (Terry et al., 2017) that suited our research questions focused on understanding experiences of anxiety.

The process of thematic analysis began with familiarisation of the data, including the identification of initial codes for inclusion. We considered manifest and latent features of text

with regards to participant responses. The coding process was unstructured and organic; this enabled us to consider the data based on our subjective interpretations. We generated and systematically assigned codes according to each researcher's interpretations, then collated codes into potential themes. These themes focused on topic summaries (relying on the initial codes) as the more frequent responses that participants made in response to each interview question. We considered the themes and checked for commonalities and discrepancies. We made decisions about appropriate units of analysis and identification of themes aligned with the literature on evaluation anxiety. Finally, the refinement, definition, and naming of themes were done, assessing the coherence of the themes, and thus finalising those presented here.

The ranking exercise provided a structure for analysis based on assessment types, weightings, and the justifications students gave for their ratings. We counted the number of times each Q-sort card had been selected as the most/least anxiety-inducing and most/least promoting of effective learning. The data, based on each student's justifications for their ratings, were analysed following the same thematic analysis procedure as described above.

Results

Contributors to Evaluation Anxiety

Doubts about one's capabilities: *"Am I capable of being a successful student at university?"* Students emphasised assessments as indicators of potential success and failure with university. During the interviews, early course grades were referred to as clear-cut evidence that could be used to gauge students' general capabilities. Indeed, navigating their first assessments was daunting: "I was anxious because I lack confidence. […] There was the drive to succeed in the course and, obviously, the suggestion that you could fail." (Participant 5, Education). One student explained:

> It's really hard to tell where you're at in comparison to everyone else. And people sitting in lectures answering questions—stuff I had never heard before—and some

> people knew it. It's like, 'Am I supposed to know this stuff? Why am I here?' (Participant 16, Law)

Not all students began the first year of university with the same causes for self-doubt. Mature students expressed that being away from student life for a while was anxiety-inducing because they doubted their readiness, suitability, and belonging. They expressed that university was meaningful to them, thus contributing to anxiety. Mature students acknowledged the importance of learning; however, this mindset still contributed to anxiety:

> My lecturer taught me that my grade is not that important: it's how I'm learning. And that was huge for me. But now I'm worried about how I'm learning, and why I'm not retaining. (Participant 2, Education)

Concerns about insufficient time and time management: "*Do I have enough time to learn, prepare, and successfully complete my assessments*?" Some students were confident learners but their anxiety came from time constraints. First, participants explained they were not given enough time to learn the material to a degree in which they were confident about being assessed on it. One student explained, "Work is not difficult, there's just a lot of it and it often feels like you have too much work—not enough time, which is very overwhelming" (Participant 3, Chemistry). Second, students lacked time management skills. Leaving work to the last minute and realising too late that there was more to do than anticipated led to an increase in anxiety. This was compounded by students having jobs in addition to university. This was noted by mature students, who tended to have jobs and families to care for, thus struggling to keep on top of coursework. Students who had planned their work ahead of time had opportunities to prepare, and were less likely to struggle with time pressures.

External pressures to be successful: "*What are the 'costs' of failure*?" Students attributed evaluation anxiety to external sources. Participants expressed they would

disappoint family and friends if they were to fail or underperform on early assessments. Others reasoned that this would limit their prospects to be recognised by their lecturers. This concern was the case for students enrolled in limited-entry programmes where classmates compete for second-year admission. For example, one student illustrated:

> There's a lot of pressure just trying to make a good impression and I'm not as vocal in class. Like, I want to make a good impression: I want whoever is actually marking my paper to be like, 'I need to keep an eye on this girl.' (Participant 19, Law).

Participants also saw the financial costs of university as pressure to perform well. One Law student stated, "I don't want to repeat a year. I don't have the money for that, you know? It's so expensive!" (Participant 19).

Another elaborated on a downward spiral of anxiety when preoccupied with external pressures:

> You start with not knowing the answer to the question. And then, within eight seconds, you're thinking about how you've failed your family. How you've failed. You're in debt. You're going to end up working at the McDonald's checkout. It's sort of the pressure, I guess, to succeed and to do well. (Participant 5, Education).

Unclear institutional standards for quality: ***"What counts as 'good' work?"***

Students experienced anxiety when uncertain of the standards for high-quality work. Students were not given enough information about assessment criteria, and this left them "blind" to the process. Without knowing what success looks like, it was difficult to set goals and pursue them.

When students felt uncertain about the institution's academic standards, they sometimes lowered their standards: "It's probably not the best thing to think, but 'C's get degrees.' So as long as I get a C, I'm okay" (Participant 4, Education). In contrast, self-

described perfectionists struggled because they were unsure whether their work was good enough.

Concerns about performing well on certain types of assessment: ***"Am I 'good' at completing these kinds of assessments?"*** Students preferred certain types of assessments, and this dialogue is discussed in detail in the subsequent section. Evaluation anxiety, for some, was caused by assumptions that students could not be successful on tasks that they disliked or had been unsuccessful with in the past. Such perceptions guided their emotions, thoughts, and actions. Students selected their courses according to the assessments that they would need to complete, rather than the subject that interested them:

> I dropped every course that has an essay, just specifically because they have essays. I just really dislike writing. I prefer research papers where you can just say what you did and just lay it out. (Participant 1, Philosophy)

Students held attitudes towards live examinations. They were worried about feeling distracted when they needed to focus and complete an assessment. Phrases such as "making stupid mistakes," "blanking out," and "freezing," were all used. Especially for timed tests, students reported being concerned about forgetting, failing to retrieve, and having difficulty with applying course content. One Education student explained:

> I was really scared. I was studying all day and I was going over everything four times and making sure I knew everything and then when I walked into the room I was like 'Ahh…please stay with me, brain!' (Participant 4).

Avoiding undesirable assessments could be seen as an effective strategy that improves students' likelihood for performance success; however, such action also implies that students did not see such tasks as a challenge and opportunity to improve on potential weaknesses.

Views on Anxiety, Learning, and Assessment

Which assessment types and weightings influence evaluation anxiety? Results with examples are presented in Table 2. Based on ordinal rankings from Q-sort data, the most anxiety-inducing types of assessments were oral presentations and high-stakes written tasks. The least anxiety-inducing were low-stakes tests and low-stakes written tasks. When probed, participants reasoned that anxiety was higher when a task called for retrieval—rather than recall—of knowledge. Participants also reported higher evaluation anxiety when assessments were cumulative and took place at the end of a course. They preferred to be assessed based on isolated segments of knowledge, rather than having to integrate concepts.

Which types and weightings of assessment influence learning? We discussed the types and differing weightings of assessments that helped participants learn the most (or least). Results are presented in Table 3. Based on Q-sort data, assessments that helped students learn the most were high-stakes written tasks, low-stakes tests, and low-stakes written tasks. The assessments that helped students to learn the least were group work, low-stakes tests, and oral presentations. Participants explained that high-stakes written tasks might have the most potential to facilitate meaningful learning because such assessments require multiple layers of thinking to demonstrate and de-emphasise the challenges of memorization.

Opinions of low-stakes tests and group work were divisive. For instance, students explained that low-stakes tests were useful in terms of building their knowledge and that "bite-size" tasks were more manageable. On the other hand, they could be dismissed because they were worth fewer marks, contributed little to the course grade, and typically took a structured, repetitive format. When probed further, students explained that such tasks capture their initial understandings rather than deeper levels of learning: "I don't usually do a lot of preparation. It's usually not a brain dump, but forgotten about pretty quickly after I move on to the next thing" (Participant 13, Chemistry). With regards to group assessments, students had mixed feelings. Participants explained that a learning-related challenge is that group

work is usually designed in ways that require designating individuals to assigned areas. By doing so, the task may be done more efficiently; however, students felt as though separating parts of the task to other group members could result in substantial knowledge gaps.

Discussion

Our study focused on identifying why first-year university students were anxious about their assessments, and how assessment type and weighting influence their attitudes toward anxiety and learning. Our findings reveal that reports of cognitive worry—a central feature of evaluation anxiety–was experienced at multiple levels. Notably, students were anxious because they lacked confidence in particular tasks (self-efficacy). One step further, students questioned whether they should be attending university in the first place (self-concept). Student commentaries suggest that there are reciprocal forces at play: first-year students' concerns about assessment tasks give rise to global levels of self-doubt, and these generalisations cast a shadow over how individuals view other assessment tasks. We found that within the first few weeks of university courses, students had drawn conclusions about their self-ascribed inadequacies. Students approached their first assignments with the belief that they were ill-prepared to handle university assessments and questioned whether their study strategies had been effective. This doubt was more pronounced when students lacked the time and skills to correct ineffective preparation strategies. Students held a self-perception that they could perform well only on certain types of tasks, such as multi-choice examinations or essays. This rigid way of thinking presumably reduces academic self-efficacy when students encounter tasks that are incongruent with their preferences and perceived capabilities. This mindset leads students to avoid enrolling in certain courses altogether, therefore missing out on topics they find interesting and failing to improve on their skillset.

Our results suggest that during a school transition where expectations and standards may be unclear, experiences with early assessments can be viewed as pseudo-objective indicators of success, failure, aptitude, and ability. First-year students who enter a new learning environment without possessing flexible, self-regulatory skills may develop self-critical academic beliefs that contribute to evaluation anxiety upon assessment time. We contend that it is important for institutions to help prepare first-year students for their early assessment activities. It is critical that institutions help students learn to make sense of their assessment-related emotions and outcomes. Students must learn to pinpoint the source of their worries, regulate their emotions before adverse experiences generalise to a higher level of self-doubt, and come to understand that setbacks are typical during schooling transitions. Struggling on one's first assignment at university does not mean that they are doomed to failure and should give up.

We also found that evaluation anxiety was experienced across diverse first-year student cohorts. Mature students doubted their capabilities because they had been away from studying for a while and had "forgotten" how to learn. Some needed to recover from past failures encountered at university. Distance students were anxious because they often enrolled part-time and had work and family commitments beyond university. Traditional first-year students felt high school had not prepared them adequately, and also faced complex developmental changes that accompany major life events at university (e.g., leaving home and making new friends). Across these cohorts, anxiety was heightened when students focused on the costs of failure: disappointing their family, friends, and self, as well as financial and time pressures. This could be burdensome for students from groups who have historically been excluded from higher education (e.g., indigenous Māori and Pasifika students in New Zealand) and may be sensitive to academic failure and suitability for

study. Drawing on the results of this study, evaluation anxiety appears to be pervasive and no singular cohort was safeguarded.

At a task level, students were anxious about their assessments when they felt as though their university had failed to communicate its assessment standards and procedures. Students were uncertain what "good" work entails; thus, with low perceptions of competence and unclear goals for success, anxiety seemed to snowball. Students did not know how to access task instructions, how to read and understand the instructions, where to begin, and how they would be graded. In addition to aforementioned comments on self-regulated learning strategies, such skills are likely to be more effective when they are practised in real (rather than abstract) situations. It may be useful for university lecturers to demonstrate how to access and make sense of task instructions, model different ways to develop and monitor a plan, and provide ways for students to interpret their grades and feedback so they may improve. Test-taking strategies may be beneficial to students, as individuals in this study were worried about losing a sense of control over their mental processes (e.g., feeling distracted or "blanking out") during monitored examinations. Similarly, we acknowledge that late adolescents are often vulnerable to experiencing mental health difficulties and although this did not appear as a theme in our findings, it is possible that evaluation anxiety either exacerbates, or is exacerbated by, such difficulties.

Lastly, our research shows that students hold different opinions toward assessment types. We found the most anxiety-inducing assessments were those that require students to demonstrate broad, cumulative knowledge, and evidence of deep mastery (e.g., conditional and applied knowledge rather than declarative knowledge). This suggests that higher-order levels of understanding and considerable demands on cognitive load add to evaluation anxiety. This connects to students' previous commentary on invigilated exams and their worry about losing control over their mental processes. Although it is reasonable for

educators to measure the breadth and depth of course content, there may be a point in which too many cognitive demands negatively affect students' confidence, reduce opportunities to demonstrate knowledge and perform well and, in turn, compromise the validity and reliability of the particular assessment tool. Individuals were aware, however, that certain types of assessments help them learn. Students identified high-stakes written tasks, low-stakes tests, and low-stakes written tasks as the most helpful to learn course content. Meanwhile, group work, low-stakes tests, and oral presentations were described as the least helpful to learn course content.

Our findings should be considered in light of several limitations. Findings should not be generalised because they are specific to particular academic situations in a small sample of students who had reported high levels of evaluation anxiety. Also, the dialogue between participant and researcher relies on rapport, which could have affected participants' responses. Our findings bring forth questions for future research. For instance, is it possible to design university assessments that limit anxiety *and* promote meaningful learning? Our participants highlight noteworthy complexities. High-stakes essays, in particular, emerged as the type of assessment that was an anxiety-inducing task but also the most effective for students to learn the course content. It is plausible that features of the assessment contribute to this phenomenon. Also, more research is needed to examine these phenomena involving not only traditional, summative assessment designs, but the diversity in contemporary assessment designs at university (e.g., learning diaries, self-assessment practices, and formative tasks). It may be beneficial for researchers to better understand the features of assessment tasks, how students judge those kinds of tasks, and how these tasks reciprocally influence students' self-perceptions, evaluation anxiety, and learning.

Conclusion

Our results show that first-year university students are able to articulate the self-, task-, and context-related causes of their evaluation anxiety. Students also have clear preferences for, and attitudes toward, certain types of assessment. These beliefs may lead to differences in motivation, emotion, and action. Importantly, students are aware that certain types and weighting elicit states of anxiety *but* these very same tasks can lead to effective learning. Institutions and educators must acknowledge that extreme evaluation anxiety has the potential to lead to crippling self-doubt in first-year students. It is equally important to remember that shielding students from experiencing any stress is neither realistic nor beneficial. Indeed, when principles of self-regulated learning are scaffolded and supported, manageable levels of evaluation anxiety can accompany successful learning. Based on the current research, students' voices about assessment should be heard and considered in the design of first-year university assessments and institutional policies on evaluation.

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Table 1

Characteristics of Q-sort cards presented to interview participants

Assessment Format	Low vs. High Stakes	Assessment Setting	Examples
Test	Low	In-person or online; “live”; may have time limitations	Semi-regular quizzes
Test	High	In-person or online; “live”; may have time limitations	Mid-term or end-of-semester examinations
Written assignment	Low	Completed at one’s own pace; often given time to prepare and submit	Short written tasks or brief reflections
Written assignment	High	Completed at one’s own pace; often given time to prepare and submit	Essays or laboratory reports
Group work	Not specified	Collaboration with other students and presentation of work (oral or written)	In-class group presentation or group written reports
Oral presentations	Not specified	In-person or online; “live” or pre-recorded	Class presentations

Table 2

Students' reporting of the most and least anxiety-inducing types of assessments based on Q-sort data (n = 31)

	Type of Assessment	#	Example
Most Anxiety-Inducing	Oral Presentations	9	"You're out there alone. I can already imagine myself in front of everyone, and I'm like, 'Okay, my Malaysian accent is going to come out. Nobody is going to understand me. I don't know what I'm talking about. People are going to start asking questions and I won't be able to answer them.' Just standing alone."
	High-stakes Writing	7	"If I don't do well, this is a huge part of my grade that's going to be quite hard to make up. But it's also not "one and done." With tests, you can study but once it's done you can't do anything and you don't really know what's there. But with writing an essay or report, you have the question. You have what you have to write and it's down to you. So if you don't write it well enough, then that's on you."
	Group Work	6	"I hate group work. From what I've experienced, it's been me doing the work and everybody else kind of sitting around and then being like 'Oh, can you write my name on it?' at the end."
	High-stakes Tests	5	"It's six weeks' worth of work and you have to put it down in a two-hour test."
	Low-stakes Tests	0	N/A
	Low-stakes Writing	0	N/A
Least Anxiety-Inducing	Low-stakes Writing	12	"It's a small section I have to write. I can really focus on it and make sure it's good. So I can just write the main things, whereas high stakes written [tasks], you have to elaborate more."
	Low-stakes Tests	9	"[Multiple choice quizzes] are not as scary because you don't have to think of your own answers. Or, if you do have to think of an answer, it's really short and sweet. You don't have to put all the detail and thought into it."
	Oral Presentations	5	"I really love public speaking."
	Group Work	5	"I'm better at getting ideas out and everyone's got ideas so it makes it much better. It makes me more confident with the work."
	High-stakes Writing	3	"High stakes written tasks I find really enjoyable, where I can spend a lot of time developing something by myself that will then get great results for it."

High-stakes Tests	1	"Either you already know the content or you don't by the end of the time. Most of the time, I know the content so I'm not having that stress or that anxiety present."

Table 3

Students' reporting of the types of assessments in which they learn the most and least based on the Q-sort data (n = 31)

	Type of Assessment	#	Example
Learn the most	High-stakes Writing	9	"There is more reading that goes into them and you've got to elaborate on your ideas more than you do in tests. In tests, you can write, 'This is the answer,' whereas in written tasks you've got to be like, 'This is the answer because of this.' I feel like I learn more explaining why I know things."
	Low-stakes Tests	8	"Because you know the specific amount of information that you are going to be tested on, you can go over and over and over it."
	Low-stakes Writing	8	"Because you're doing small assignments, you're on a constant basis so you're learning how to improve your writing, grammar, and all that. You're learning more content but in a shorter amount."
	Group Work	7	"You have to talk about what you're doing, and talking about learning usually helps you to remember what you're learning about."
	High-stakes Tests	4	"You have to go over all of your notes and you're studying, so it's all learning for that […]. I learn more for a test than I do for a task because I'm actually looking over notes and I'm studying rather than just making s**t up."
	Oral Presentations	1	"Because I'm up there by myself, I have to prepare. I'll have to know my stuff. I can't depend on anyone else. I'll probably learn more about what I'm studying and more stuff about myself, and how I manage my time and how I learn stuff and how quickly I pick up things."
Learn the least	Group Work	9	"With the groups that I've been in, normally we just get assigned to roles. To make the load easier, it's just been delegated. You only end up with one question. I always try to be prepared for a group task, but someone will always know more than me, which means I don't have to learn it."
	Low-stakes Tests	6	"The harder way is learning when you haven't got any teacher support or peer support, so sometimes you kind of just whizz through them to just to make sure you've done it, but maybe not really retaining it."
	Oral Presentations	5	"Oral presentations are so daunting to so many people that kind of lowers the standard and that you only do the bare minimum. And like even me, who I'm not too bothered with an oral presentation, I'd still only do the bare minimum […]. I don't know if I learn a whole lot of things and make a really as well of a well-rounded argument."

Low-stakes Writing	4	“There’s very little overall effort put into low-stakes writing. I do remember quite a few of my tasks, but afterwards it's not so much where I'm like ‘Man, this is going to stick with me forever,’ it’s like ‘Bang! Next week, what’s going on?’”
High-stakes Tests	3	“They cover a lot [of content] because it has a large amount of time given for that slot. You'd have to read up on everything and sort of memorise it, rote learn it, and then when you go into the test you spit it all out and you forget about it after that. You're not really learning, you're just memorising temporarily.”
High-stakes Writing	2	“I feel like you're just so focused on making sure there's enough words and, like, cramming all the information in that you're not really paying much attention to what you're learning. You're just trying to get it done."