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The nature of teacher anxiety in English-medium tertiary education in Saudi Arabia

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Introduction: While student anxiety, and factors affecting it, have been quite widely studied, this is less true of teacher anxiety, especially at tertiary level. Furthermore, inventories for the measurement of teacher anxiety seem more disparate and less standardized than those for student anxiety. These considerations prompted the present study which aimed to reveal just how anxious tertiary level teachers really are, and what factors, both demographic and situational, are associated with their anxiety, in a relatively neglected non-Western context.

Method: A comprehensive questionnaire, was employed, combining items from a number of rather different previous teacher anxiety questionnaires, and applied to 88 university teachers at a Saudi university post COVID.

Results: Although anxiety was judged to have increased due to COVID, it still remained below the midpoint of the scale in absolute terms. While age and level of academic qualification were negatively related to overall teaching anxiety, experience, training, gender, and reported general trait anxiety were not. Notably features of the students (e.g., low ability or home difficulties) and of the administration (e.g., imposing high workload and unsuitable class sizes) generated relatively stronger anxiety compared with features in the hands of the teachers themselves (e.g., speaking in front of a class or answering student questions).

Discussion: The results suggest teachers' emotional resilience after COVID, and chime with other published work in indicating a level of anxiety slightly below the scale midpoint as being the norm, and altruistic worry about students as a major cause of teacher anxiety.

KEYWORDS

teaching anxiety, predictors of anxiety, COVID, university, English medium department

Introduction

There has been considerable research on student anxiety in relation to various taught subjects, e.g., foreign language classes (Horwitz et al., 1986; Alamri, 2020), and Maths (Yamani, 2017; Zhang et al., 2019). However, teacher anxiety, especially at tertiary level and not in the West, has been much less researched. Although teacher cognition and beliefs have been a focus of attention in recent years (e.g., Borg, 2006), the emotional/affective side of the teacher has been relatively neglected.

Yet teacher anxiety is important. It has been reported that "anxiety leads to a decrease in teacher's performance" and may evidence as "lack of commitment to work, ... getting distraction at work, ineffective teachers failing to get involved in proper preparation of lessons and evaluating students' work, failing to finish content syllabus coverage" (Novious and Yawe, 2021, p. 2651). In addition, such a teacher may give signs of anxiety that are spotted by the students and this may affect their own anxiety levels and performance. Furthermore, teachers may pursue strategies to reduce their own anxiety, some of which may damage the students. For instance, they may only call on the better students so that they are not challenged by difficult problems in

explaining errors in the responses. However that neglects helping the students with the greater problems (Sutton and Wheatley, 2003). Finally, higher levels of teacher anxiety may reduce their ability to be enthusiastic (Keller et al., 2016; Moè and Katz, 2022) and motivating (Moè et al., 2022) consequently affecting student learning (Moè et al., 2021) and teaching quality (Kunter et al., 2011).This project therefore aims to add to the limited literature on teacher anxiety by exploring just how extensive it really is, and its potential sources, among teacher/lecturers at tertiary level, in a non-Western tertiary context (Saudi Arabia).

Literature review

Teacher anxiety and its assessment

The literature reveals a wide range of instruments used to assess anxiety, many of which imply a different conception of what constitutes anxiety (Julian, 2011). More direct somatic measures, e.g., of heart rate or sweating, are best suited to measuring anxiety at a given moment (state anxiety). However, anxiety other than at the moment of measurement, either as part of person's background personality (trait anxiety) or associated with a particular type of real life occasion they encounter (situation anxiety) is usually assessed by self-report questionnaire instruments.

A teacher's anxiety in their teaching activities is of the last sort and there appears to be no widely recognized single "best" questionnaire for this situation, either discipline neutral or for teachers of any individual subject, especially at tertiary level. In the psychology and education literature, the Teaching Anxiety Scale (TAS) of Parsons (1973) is still regarded as valuable. It has 29 items and applies to teachers of all subjects, worded in general across their entire experience of teaching. More recently the Ferguson and Hall (2011) instrument (FHS) is also general. Some subject specific questionnaires were also deemed useful, however: the Teacher Foreign Language Anxiety Scale (TFLAS) of Horwitz (1996), the Foreign Language Teaching Anxiety Scale (FLTAS) of Aydın and Uştuk (2020), and they will also be referred to below.

Overall amount of teacher anxiety

Surprisingly, this is quite hard to ascertain. Published studies of teacher anxiety often do not dwell on, or in some cases even report, the mean anxiety scores of participants that afford an answer to this. Some studies where it is possible to recover an overall mean from the figures cited are as follows, based on a variety of different anxiety questionnaires. Özdemir and Şeker (2017) studied prospective primary level Maths teachers in Turkey. From their closed item questionnaire response data (mostly measuring anxiety about the subject content) the mean is 2.74, so just below the midpoint (3) of the Likert 1–5 response scale. Liu and Wu (2021) studied Chinese college English teachers and record a mean of 2.64, again below the 3 midpoint of the rating scale (the TFLAS).

El Ouastani (2018) used TFLAS with secondary school teachers of FL English, French and German in the Netherlands and obtained mean anxiety rates of 2.49 (on scale 1–5) for in-service teachers vs. pre-service mean 3.04. Aydın and Uştuk (2020) used the FLTAS, more focused on anxiety about teaching than the subject, with FL teachers of mixed nationalities, and recorded overall 2.24. Aslrasouli and Vahid (2014) however used a 48 item questionnaire (FHS, again focused on anxiety about teaching the subject) and found a mean anxiety of 3.30 for a mixed group of novice and experienced EFL school teachers in Iran.

The lowest mean found was from preservice Maths teachers in the US who (on a math-specific measure, MARS), even before targeted training, recorded an average of only 1.9 (on a 1–5 scale), so well below the midpoint 3 (Sloan et al., 1997). In the UK, experienced Math teachers were measured with anxiety of 2.06 and preservice teachers 2.69 (Hunt and Sari, 2019).

We may conclude that, regardless of the country or subject or the main focus of items in the questionnaires, teachers usually report average anxiety firmly below the midpoint of the scale and seemingly more so in the US and UK.

Factors predicting teacher anxiety

Starting with aspects of teachers as predictors, as noted above, teacher experience usually correlates negatively with anxiety (El Ouastani, 2018): anxiety therefore decreases as teachers become more experienced. The results for many teacher individual difference variables are however not consistent across studies. Often different studies examine, or report, results for different sets of subject variables, and find correlations only with some individual item scores not the overall anxiety scores. Liu and Wu (2021) in China did find a significant relationship of overall anxiety scores with educational level of teacher but not with age or visiting an English speaking country and do not report the correlation with years of teaching experience. Aslrasouli and Vahid (2014) in Iran found a significant overall negative relationship of teaching anxiety with teacher experience but not with gender. Aydın and Uştuk (2020) however report gender difference (males more anxious) in anxiety related to some aspects of English teaching performance. By contrast Hunt and Sari (2019), among UK Math teachers, found females overall more anxious than males (mean 2.36 vs. 2.17).

This all suggests that probably most personal variables vary in predictive strength in different countries, at different levels of teaching, and maybe dependent on subject etc. and generalizations are difficult. The present study therefore will add to information about such variables at tertiary level in the under-researched Saudi context.

Turning to specific aspects of teaching and the teaching situation as possible sources of anxiety, again studies vary widely in what range of aspects their questionnaires include or, if they were based on qualitative interviews, what range of factors they report. Özdemir and Şeker (2017) for example, based on qualitative data (and considering primary school Maths teachers in Turkey), referred to traditional teaching categories in classifying reasons given by teachers for their anxiety as either teacher related (the vast majority), exam system related, subject syllabus related or school organization related. The main specific reasons, starting from the most mentioned, were: student lack of understanding and anxiety (which seems to be classified as a teacher related factor), teacher's own lack of self-confidence in Maths calculations, teacher choice of unsuitable teaching methods, the exam requirement for memorization, the 'intensity' of the subject taught, and teacher administrative duties.

Ganley et al. (2019), again on Math teaching, used a number of questionnaire items which imply the following as likely sources to consider. One mentioned repeatedly is the teacher's own (perceived)

ability in the subject (in that case solving Math problems), i.e., teacher self-efficacy (Bandura, 1997). The others are worded more as aspects of teaching that predict anxiety, although in fact the ulterior reason for that is in many cases probably again the teacher's limited self-efficacy (lack of confidence in ability): making mistakes in class, teaching higher grades, having to teach something unprepared, answering student questions, being observed by another teacher.

Klanrit and Sroinam (2012) studied 65 factors potentially affecting teacher anxiety about one specific aspect of teaching English in school in Thailand, specifically teacher use of English in the English class. From a factor analysis they reported four key dimensions: teacher expectation of students' language limitations and low motivation; perception that students' attitudes toward studying English were at the medium level; teachers' low reported own language proficiency; teacher teaching; and learning management issues. Hunt and Sari (2019), from a factor analysis of UK Math teacher responses, proposed in effect a simplified version of that as a division between self-directed teaching anxiety and pupil/student-directed teaching anxiety, and found the latter source markedly exceeded the former (mean 2.99 vs. 1.94).

As the above shows, teacher anxiety is reported as affected (or, perhaps safer to say, predicted) by a range of contextual sources, but even from these few studies one can detect a considerable lack of overlap between studies in the lists of factors selected or found, and how they are classified. This suggests the need for a more comprehensive instrument to accommodate the aim to reflect a full range of potential factors affecting teacher anxiety, rather than just a sample of such items that is sufficient to support a measure of teaching anxiety as a whole, so the questionnaire in the present study is more extensive.

Research questions

The above review prompted the following research questions, with respect to tertiary level teachers in Saudi Arabia (teaching through English medium, across a range of subjects). Tentative expectations from the literature are added.

> RQ1. How much teaching related anxiety do Saudi university teachers report feeling? Expectation: in the area 2.4–2.9 on 1–5 scale, not as low as UK/US.
>
> RQ2. Do Saudi university teachers report that the level has been affected by the recent COVID crisis? Expectation yes, increased.
>
> RQ3. What aspects of Saudi university teachers' situation and activity are most associated with relatively higher anxiety? Expectation: only that empathetic concern for students will yield greater anxiety than what the teachers perceive as self-related issues.
>
> RQ4. Do Saudi teacher background characteristics such as gender, age, training and experience predict their anxiety? Expectation only that experience lowers anxiety.

Methods

Overall design

Self-report survey data was elicited, in a way that followed common practice in the field, and enabled answers to be obtained for the RQs. This included measuring background demographic and other subject variables whose correlation with anxiety could be then calculated, and items measuring anxiety arising from a wide range of possible sources, which allowed for within subjects comparisons to be made, as well as measurement of overall reported anxiety.

Participants

The aim was to obtain as many responses as possible from academic staff of Northern Border University (NBU), teaching through English medium, so as to represent as wide a range of disciplines as possible. Those eligible were emailed an invitation to participate, together with a description of the study and assurances of confidentiality and absence of coercion. The sample obtained was therefore a volunteer sample. Responses were received in mid-2021 from 88 participants (out of a total possible of around 160 staff). The sample was 49% male, aged between 30 and 60 (83% below 50). 29% came from the English Department or Preparatory year English program, while the rest spanned science departments (Maths, Physics, Chemistry, Biology, Medicine, Computing) and other departments (especially kindergarten, education). 62% had more than 6 years of university teaching experience. 24% had MA, 74% PhD qualification. 17% claimed to be near native/native speakers of English, 75% of Arabic. These proportions do not suggest any great lack of representativeness of the sample, apart from some over-representation of the English department, which could be due to the researcher being head of that department.

Questionnaire instrument

Background items in the questionnaire

These covered demographic and other variables relevant to the study (RQ4): gender, department, age, time spent in English speaking countries, self-rated English ability, self-rated Arabic ability, years of university teaching experience, highest degree qualification, time since last training (years ago) and self-rated general background anxiety (as a trait). In addition (to help deal with RQ2) a retrospective question was asked: Compared with before the COVID crisis, what best describes your general anxiety about your teaching today? (responses: less than before, much the same as before, a little more than before, very much more than before).

The teaching anxiety questionnaire

This was needed to help answer all the RQs. Existing questionnaires vary considerably in coverage of potentially anxiety provoking aspects of teaching, so no single one could be regarded as ideal. While some researchers employ two previously used questionnaires (e.g., Liu and Wu, 2021), the present study instead synthesized and supplemented four leading questionnaires so as to achieve a better coverage and avoid repetition of similar items, or

inclusion of items that did not mention a possible causal factor. A qualitative analysis of the TAS, TFLAS, FLTAS, and FHS, mentioned above, was performed which identified 57 distinct and relevant items in eight themes. That analysis involved repeated iterations of reading all the items in those questionnaires, identifying items that were functionally identical, and grouping the items into conceptual themes. The researcher and another expert did this in turn and came to an agreement on disputed instances. The eight themes/dimensions were as follows (the actual items are listed in Table 1). Five items targeted anxiety about the teacher's own English proficiency (EP) which for all teachers in the study was the medium of instruction. Six items targeted teacher anxiety about their own subject proficiency (SU). The rest targeted anxiety with pedagogical sources: ten items on anxiety about personal teaching skills (PS), six items on anxiety about being evaluated (BE), five on anxiety about lack of training (LT), six items on anxiety about rapport with students (RP), four on anxiety felt empathetically with the students about their problems (SP), and 14 on anxiety due to teaching related matters that were in the hands of peers or the university authorities (PU).

Items were statements with Likert agreement scale response (1–5). Order was randomized and 39% of items were reverse worded (so that, for them, high agreement (5) indicated low anxiety rather than high).

Cronbach's alpha for the entire set (with ratings for reverse worded items reversed) was 0.867, confirming that all items taken together were reliably measuring one construct, which was taken to be university teachers' reported teaching related anxiety (as required to answer RQs 1 and 2). Cronbach alpha was also calculated within each thematic subset of items (considered separately when answering RQ3), yielding values between 0.531 and 0.704. This in some measure supports the internal reliability/consistency of the eight thematically defined subsets of items. Content validity comes in part from the fact that the items were almost all taken from, or close to, items in well-regarded and established instruments and from the care taken in the qualitative analysis of those source items by two judges.

Factor analysis of the scores for the 57 anxiety items.

Factor analysis was also pursued, as a way of further empirically supporting the 8 *a priori* thematic dimensions of the 57 items. This was conducted using Principal Components analysis and Varimax rotation in SPSS25. However, the 'five cases to one variable' prerequisite (Arrindell and van der Ende, 1985) was definitely not met. In our data the case: variable ratio is less even than 2:1 and the KMO test value was only 0.501, which is regarded as indicating unsuitability for FA (Dziuban and Shirkey, 1974). By comparison, Klanrit and Sroinam (2012) performed a similar FA in Thailand with a 65 item questionnaire and 673 teachers (so a ratio better than 10:1). Nevertheless an FA was attempted in order to ascertain if it mirrored in any way the *a priori* split into eight themes/dimensions (Table 1).

With respect to the number of factors/components to recognize, the data suggested widely different solutions dependent on the criteria used. Following the principle of taking the number of factors to the left of the point of inflection in the scree plot, a three factor solution was indicated, accounting for 34% of the variance in the data. Following the principle of taking the number of factors with eigenvalues greater than 1, an 18 factor solution was indicated, accounting for 77% of the variance in the data. The 18 factor solution was deemed insufficiently parsimonious so only the three factor solution is pursued (Table 1). Other analyses with numbers of factors between 3 and 8 did not yield anything more readily interpretable.

The three factor solution did yield a result where, in many instances, each questionnaire item was loaded above 0.4 on just one factor. However, the sets of items that loaded on a given factor did not map in any simple way onto the *a priori* themes and indeed were a challenge to interpret as making sense in any other way. That is why the main body of this paper is not based around the three components but instead follows the 8 *a priori* themes. The best that can be said about the three factor solution now follows.

Factor three was the easiest to interpret. Factor three did bring together a set of items with some apparent underlying conceptual unity. The strongly loaded items concerned anxiety due to: presenting information, having to improvise, and being observed or having their teaching compared with that of other teachers; students asking questions or testing or criticizing their subject knowledge; own subject/course content knowledge; lack of training; communicating in English with other teachers and with students, especially ones who had lived in an English speaking country. Those all share what might be called a teacher competence element, spanning subject knowledge, English language proficiency and pedagogical skills which we had treated as separate themes.

Factor two was based in part on items related to anxiety due to different aspects than factor three: lack of participation in decision making, job security; class control, class size, time for marking; students with difficulties at home, students possibly failing, poorly motivated students, student satisfaction survey, student–teacher background differences. That much is distinct from factor three, in that those sources of anxiety are more controlled by the institution or the students, and cannot be ascribed primarily to individual teacher competence. However, factor two also included items which one might have expected to belong in factor three because they seem to relate to the teacher's subject or pedagogical competence: keeping up to date with the subject, dealing with IT, preparing lessons, explaining key points unprepared, prioritizing aspects of teaching. For example, explaining key points unprepared is surely very similar to improvising: both lack warning so require the teacher to think on his/her feet. However, they are assigned to different factors, the reason for which is not immediately obvious.

Factor one is in FA analyses often the easiest to interpret, but in this case was difficult. One subset of items concerned student oriented sources of anxiety: keeping students interested, course specification too hard for students, student English not being good enough, students will not understand, lack of time to help individual students, students with special needs, individual student misbehavior, distinguishing real student problems. It is not easy to discern what distinguishes these from the student items that load on factors two or three. A possible interpretation is that these were thought of by teachers as student sources of anxiety that lacked any implication of teacher ability deficit (which seemed to explain factor three). However it is still remarkable that students not being good enough falls here while students possibly failing loads more on factor three.

The other sources of anxiety loading most strongly on factor one were only sometimes explicable. For instance, many of the other sources loading on factor one are harder to connect with those mentioned above: e.g. teaching a topic that teacher is not proficient in, and setting suitable exams resemble sources of anxiety listed in factor three, in that they involve teacher competence. On the other hand sources such as quality unit feedback, change to curriculum/course specification, paperwork, technology not working, and library support all seem akin to sources in factor two such as shortage of time and class size, in that they are institutionally controlled.

TABLE 1 Rotated factor loadings of all anxiety items from factor analysis.

	Component		
	1	2	3
1. I worry about keeping the students interested in what I teach them SR	0.495		
2. R I am not nervous because the students are unfamiliar to me SR	−0.317		
3. R I am not anxious about my students testing my knowledge of the subject SU			0.449
4. R I am not stressed about job security PU		0.410	
5. I am anxious about setting suitable tests and exams that are fair and effective PS	0.438		
6. I am anxious because I feel less well trained for teaching my subject than other teachers LT		0.320	0.341
7. I am nervous that the students will not understand me SR	0.422		
8. R I am not worried about keeping up with the latest teaching ideas LT		0.313	
9. R I am not worried about what the student satisfaction survey will say about my course BE		0.427	
10. Anything involving communication with English native speaker teachers stresses me out EP			0.415
11. R Inappropriate class size does not make me anxious PU		0.565	
12. Individual students who continually misbehave stress me PS	0.510		
13. R I am not anxious about my own English proficiency EP		0.384	0.336
14. I am worried about what feedback on my course report I will get from the quality unit BE	0.440		
15. I feel panicky when a student asks me a question I cannot answer SU			0.573
16. I am anxious about my own mastery of the specified content of the course SU			0.647
17. R I am not afraid that differences in background between me and my students will prevent me from teaching them effectively SR		0.479	
18. I worry about having a student in the class who has lived abroad and has a high English proficiency EP			0.591
19. R Lack of participation in decision-making does not worry me PU		0.559	
20. I feel uncomfortable when teaching a topic in which I feel I am not proficient enough SU	0.632		
21. Changes in the curriculum / course specifications stress me PU	0.464		
22. Rivalry among staff and academic politics stress me out PU	0.437		
23. I am afraid of my students criticizing my knowledge of the subject BE			0.570
24. I feel uncomfortable when I use Arabic in the class	0.414		
25. I am nervous because of the lack of teacher training / development programs LT	0.363		0.539
26. Lack of good communication with the administration or head of Dept worries me PU	0.525		
27. The thought of making a mistake in my PowerPoints or other materials disturbs me SU	0.529		0.336
28. R Poorly motivated students do not cause me anxiety PS		0.625	
29. I feel uncomfortable when my subject knowledge is compared to that of other teachers BE	0.590		0.390
30. I feel self-conscious about speaking English in front of other teachers EP			0.373
31. R I am not worried about my ability to control and manage the class PS	−0.329	0.483	0.301
32. Having to be jack of all trades, master of none, makes me anxious PU	0.395		
33. I feel uncomfortable when I speak in front of a class PS		0.317	0.314
34. I am nervous about distinguishing between students who have genuine problems and those that are just being silly or pretending PS	0.404		0.394
35. I am worried about not being able to identify and deal with students with special needs (e.g., dyslexia) SR	0.533		
36. I am worried that the library support for the course is insufficient PU	0.698		
37. I am stressed about balancing home and school responsibilities PU	0.605		
38. I feel uneasy when my teaching methods are compared to those of other teachers BE	0.407		0.430
39. R I am not stressed about students with difficulties at home SP		0.405	
40. I worry about lack of time to assist individual students PU	0.644		
41. I am nervous about my ability to improvise in the lesson PS			0.700

(Continued)

TABLE 1 (Continued)

	Component		
	1	2	3
42. R Having to teach too many classes does not stress me out PU		0.554	
43. I am anxious that the technology will not work properly (e.g. Zoom, BB, internet) PU	0.415		
44. I feel nervous if my lesson is observed by another teacher or coordinator etc. BE		0.366	0.446
45. R I am not stressed about being expert enough to use the technology easily (PP, Zoom, BB etc.) LT		0.573	
46. I get stressed about deciding how to present information in class PS	0.325		0.575
47. I worry about administrative paperwork PU	0.471		
48. R I am not anxious about prioritizing different aspects of teaching well PS		0.462	
49. R I am relaxed about explaining key points unprepared SU		0.615	
50. R I feel calm when I am preparing lessons PS	−0.404	0.497	0.323
51. R I am not nervous about speaking English with students EP	−0.429	0.545	0.426
52. R Lack of rapport with my students is not a worry for me SR		0.395	
53. I am fearful that the course specification that I have to follow is too challenging for the students SP	0.559		
54. R I am not worried about keeping up to date with the subject LT		0.647	
55. R I am not stressed by lack of time for marking PU		0.679	
56. R I am not anxious about some students possibly failing SP		0.531	
57. I worry that the students' English is not good enough for their needs SP	0.463		

All items are cited in the wording that was used in the questionnaire. Those marked R however have been scored as if they were worded without the negative in them. Thus higher ratings everywhere signify greater agreement that anxiety was present.
Extraction method: principal component analysis. Rotation method: varimax with Kaiser Normalization.

Overall, therefore, the conclusion must be drawn that it would not be advisable to rely on the partial insights of this FA. It corresponds only to a limited extent with the *a priori* themes, which are readily interpretable. Although it hints at results similar to those obtained by Klanrit and Sroinam (2012), we should await a larger study which would yield an adequate KMO statistic and allow for a proper exploration of the structure of the questionnaire by this means, where hopefully more readily interpretable factors would emerge. Hence, in this report, the dimensions are assumed to be the eight *a priori* themes, which are readily interpretable and whose statistics appear in the account of results below. This is a limitation of the present study that means that we must regard its findings as provisional.

Data collection and analysis

Since all participants are employed on the basis that they are required to deliver and assess their courses through the medium of English, it was considered appropriate for the questionnaire to be delivered in English, which also accommodated non Arabic staff. The questionnaire was made available for response online.

The data was analyzed using SPSS version 25. All reverse worded items (marked R below) were rescored so that higher ratings in this report always indicate higher anxiety (1–5 scale). None of the data proved to be normally distributed (Kolmogorov–Smirnov test with Lilliefors correction $p < 0.001$ for all items). Therefore nonparametric significance tests are used wherever possible (mainly the Binomial test, Spearman rho correlation, and comparison of means with Mann–Whitney).

Ethics statement

Participants gave their informed consent prior to responding to the questionnaire, if they chose to do so. They were assured that the individual identities of participants would remain confidential and that the data would be stored in a secure location.

Results

RQ1 how much teaching related anxiety do university teachers actually feel?

Mean anxiety across all items was 2.71, $SD = 0.400$. That is significantly lower than the middle of the scale (binomial test: $p < 0.001$, with only 12% of respondents higher than the midpoint 3). Overall teaching related anxiety cannot therefore be termed high. However, on some specific aspects of teaching that the teachers were most anxious about, response was significantly above the midpoint: e.g. anxiety that some students might fail obtained an average of 3.49 (77% above 3, binomial $p < 0.001$).

RQ2 do they report that the level has been affected by the recent COVID crisis?

Many teachers felt their teaching-related anxiety was higher now than before COVID. The difference, among those who did not say that the level was the same, was significant (binomial test: 37 said anxiety increased vs. 16 decreased, $p = 0.005$). However, as we have seen, any

TABLE 2 Mean ratings of anxiety items related to student problems (SP), in descending order.

	M	*SD*	%
56. R I am not anxious about some students possibly failing SP	3.49*	1.124	56.8
39. R I am not stressed about students with difficulties at home SP	3.39*	1.119	51.2
57. I worry that the students' English is not good enough for their needs SP	3.32*	1.309	48.8
53. I am fearful that the course specification that I have to follow is too challenging for the students SP	2.83	1.085	29.5

*Denotes significant difference from the midpoint 3 rating, on the binomial test.

TABLE 3 Mean ratings of anxiety items related to peers or university authorities (PU), in descending order.

	M	*SD*	%
11. R Inappropriate class size does not make me anxious PU	3.20	1.243	45.4
42. R Having to teach too many classes does not stress me out PU	3.20	1.391	47.7
19. R Lack of participation in decision-making does not worry me PU	3.18	1.120	38.6
55. R I am not stressed by lack of time for marking PU	3.16	1.123	39.8
37. I am stressed about balancing home and university responsibilities PU	3.07	1.230	34.0
36. I am worried that the library support for the course is insufficient PU	3.05	1.174	38.6
43. I am anxious that the technology will not work properly (e.g. Zoom, BB, internet) PU	3.00	1.203	37.5
40. I worry about lack of time to assist individual students PU	2.99	1.109	33.0
4. R I am not stressed about job security PU	2.89	1.299	30.7
47. I worry about administrative paperwork PU	2.82	1.180	31.9
22. Rivalry among staff and academic politics stress me out PU	2.75*	1.106	19.3
32. Having to be jack of all trades, master of none, makes me anxious PU	2.70*	1.019	17.0
26. Lack of good communication with the administration or head of Dept worries me PU	2.66	1.193	28.4
21. Changes in the curriculum / course specifications stress me PU	2.47*	1.061	18.2

*Denotes significant difference from the midpoint 3 rating, on the binomial test.

TABLE 4 Mean ratings of anxiety items related to student rapport (SR), in descending order.

	M	*SD*	%
52. R Lack of rapport with my students is not a worry for me SR	3.23*	1.080	43.2
2. R I am not nervous because the students are unfamiliar to me SR	3.09	1.310	39.8
1. I worry about keeping the students interested in what I teach them SR	3.05	1.240	43.2
35. I am worried about not being able to identify and deal with students with special needs (e.g., dyslexia) SR	2.91	1.057	29.5
17. R I am not afraid that differences in background between me and my students will prevent me from teaching them effectively SR	2.72	1.347	33.0
7. I am nervous that the students will not understand me SR	2.42*	1.266	29.6

*Denotes significant difference from the midpoint 3 rating, on the binomial test.

increase in anxiety has not driven the overall level of anxiety even close to exceeding the middle of the 1–5 scale.

RQ3 what aspects of university teacher activity are most associated with relatively higher anxiety?

The mean anxieties for each of the 57 aspects of university teaching asked about were examined, in their thematic groups. See Tables 2–9 where * indicates items with a significant majority responding above 3 rather than below, or the reverse (Binomial test $p<0.05$): lack of * therefore shows aspects where there was a more even division of opinion concerning anxiety. The percent represent the percent of all participants who responded 'agree' or 'strongly agree' so showed high anxiety.

Sixteen items (i.e., 28%) returned overall anxiety levels above 3 on the scale, but only four items were significantly above 3: three were SP and one SR. Thus the (relatively) highest sources of anxiety are the students' lack of English proficiency (item 57, $M=3.32$ $SD=1.31$), difficulty at home (item 39, $M=3.39$ $SD=1.12$), likelihood of failing (item 56, $M=3.49$ $SD=1.12$), and the lack of teacher-student rapport (item 52, $M=3.23$ $SD=1.08$). All of those can be conceptualized as student oriented. Close to those were having to teach too many classes and inappropriate class size (item 42, $M=3.20$ $SD=1.39$; item 11, $M=3.20$ $SD=1.24$), both of which are in the hands of decision makers above the teacher in the university hierarchy (PU).

TABLE 5 Mean ratings of anxiety items related to lack of training (LT), in descending order.

	M	*SD*	%
45. R I am not stressed about being expert enough to use the technology easily (PP, Zoom, BB etc.) LT	2.97	1.264	39.8
8. R I am not worried about keeping up with the latest teaching ideas LT	2.97	1.236	36.4
54. R I am not worried about keeping up to date with the subject LT	2.94	1.216	39.8
25. I am nervous because of the lack of teacher training / development programs LT	2.67	1.181	26.2
6. I am anxious because I feel less well trained for teaching my subject than other teachers LT	1.92*	1.074	9.1

*Denotes significant difference from the midpoint 3 rating, on the binomial test.

TABLE 6 Mean ratings of anxiety items related to own subject proficiency (SU), in descending order.

	M	*SD*	%
49. R I am relaxed about explaining key points unprepared SU	3.15	1.170	39.8
20. I feel uncomfortable when teaching a topic in which I feel I am not proficient enough SU	3.14	1.157	46.6
3. R I am not anxious about my students testing my knowledge of the subject SU	2.74*	1.291	28.4
27. The thought of making a mistake in my PowerPoints or other materials disturbs me SU	2.39*	1.077	15.9
16. I am anxious about my own mastery of the specified content of the course SU	2.19*	1.049	11.4
15. I feel panicky when a student asks me a question I cannot answer SU	1.98*	0.922	5.6

*Denotes significant difference from the midpoint 3 rating, on the binomial test.

TABLE 7 Mean ratings of anxiety items related to pedagogical skill (PS), in descending order.

	M	*SD*	%
5. I am anxious about setting suitable tests and exams that are fair and effective PS	3.24	1.381	39.8
28. R Poorly motivated students do not cause me anxiety PS	3.18	1.218	43.2
12. Individual students who continually misbehave stress me PS	2.98	1.203	36.3
48. R I am not anxious about prioritizing different aspects of teaching well PS	2.93	1.112	36.3
31. R I am not worried about my ability to control and manage the class PS	2.51*	1.446	30.7
34. I am nervous about distinguishing between students who have genuine problems and those that are just being silly or pretending PS	2.49*	0.983	13.6
50. R I feel calm when I am preparing lessons PS	2.28*	1.203	17.1
41. I am nervous about my ability to improvise in the lesson PS	2.26*	0.977	7.9
46. I get stressed about deciding how to present information in class PS	2.09*	0.930	7.9
33. I feel uncomfortable when I speak in front of a class PS	1.92*	1.053	6.8

*Denotes significant difference from the midpoint 3 rating, on the binomial test.

TABLE 8 Mean ratings of anxiety items related to being evaluated (BE), in descending order.

	M	*SD*	%
9. R I am not worried about what the student satisfaction survey will say about my course BE	2.92	1.186	36.4
14. I am worried about what feedback on my course report I will get from the quality unit BE	2.59*	1.090	19.3
38. I feel uneasy when my teaching methods are compared to those of other teachers BE	2.42*	1.036	15.9
29. I feel uncomfortable when my subject knowledge is compared to that of other teachers BE	2.31*	1.076	13.6
44. I feel nervous if my lesson is observed by another teacher or coordinator etc. BE	2.26*	1.045	12.5
23. I am afraid of my students criticizing my knowledge of the subject BE	2.07*	1.102	11.3

*Denotes significant difference from the midpoint 3 rating, on the binomial test.

At the low end below 2 however come possible sources of anxiety that are more matters of teacher ability or attitude (areas other than SP and SR, in many of which there were several items where a significant majority reported below 3 on the scale, signaling low anxiety). Examples are: being uncomfortable speaking in front of the class (PS item 33, $M = 1.92$ $SD = 1.05$), being panicky when students ask questions (SU item 15, $M = 1.98$ $SD = 0.92$), being anxious due to not feeling well trained (LT item 6, $M = 1.92$ $SD = 1.07$), and worrying about any student that had

TABLE 9 Mean ratings of anxiety items related to own English proficiency (EP), in descending order.

	M	*SD*	%
30. I feel self-conscious about speaking English in front of other teachers EP	2.50*	1.232	22.7
13. R I am not anxious about my own English proficiency EP	2.44*	1.249	19.4
51. R I am not nervous about speaking English with students EP	2.30*	1.270	22.7
10. Anything involving communication with English native speaker teachers stresses me out EP	2.18*	1.089	12.5
18. I worry about having a student in the class who has lived abroad and has a high English proficiency EP	1.67*	0.827	2.2

*Denotes significant difference from the midpoint 3 rating, on the binomial test.

TABLE 10 Mean ratings of 8 categories of anxiety sources (questionnaire dimensions), in descending order.

Anxiety about…	Min	Max	*Mean*	*SD*	Binomial *p*
Students' problems	1.5	4.8	3.26	0.649	0.002
Matters in the hands of peers or institution	1.4	4.5	2.94	0.535	0.010
Rapport with students	1.0	4.3	2.90	0.528	0.416
Lack of training	1.0	4.0	2.69	0.659	0.013
Own subject knowledge	1.0	4.3	2.60	0.611	<0.001
Own pedagogical skills	1.0	3.6	2.59	0.510	<0.001
Being evaluated	1.0	4.7	2.43	0.673	<0.001
Own English proficiency	1.0	3.6	2.22	0.714	<0.001

lived in an English speaking country (so by implication might be more proficient than the teacher) (EP item 18, $M = 1.67$ $SD = 0.83$).

Thus it does seem that anxiety varies in relation to its source, in the sense of different aspects of the teaching situation and the people in it that impact on teaching. The overall relationship with anxiety of different aspects of university teaching is revealed more clearly in Table 10 which shows the mean ratings for the eight themes/dimensions of the questionnaire corresponding to key separate aspects / requirements of that job which were represented in the questionnaire.

In order to further illuminate the relationship of anxiety with different aspects of university teaching, a factor analysis (FA) was conducted of the summary anxiety scores for each type of source (the 8 thematic dimensions). This analysis met the suggested requirement for FA that the cases should be at least five times the number of the variables (Arrindell and van der Ende, 1985). Here the ratio was 11:1 with a strong KMO test figure of 0.805. Both the standard criteria for selection of the number of factors (number of factors to the left of the inflection in the scree plot, and number of factors with eigenvalues greater than 1) converged on suggesting two underlying factors, explaining 64% of the variance in the data. The result was clearcut (Table 11): four sources/dimensions loaded heavily on one factor/component, interpretable as teacher self-focused, three on the second, interpretable as other-focused (on students, peers and the authorities), with only one less determinately loaded on both.

TABLE 11 Rotated component matrix of the eight thematic dimensions.

Sources of anxiety	Component	
	1	2
Own English proficiency	0.777	
Lack of training	0.770	
Own pedagogical skills	0.754	
Own subject knowledge	0.656	
Being evaluated	0.536	0.642
Students' problems		0.824
Matters in the hands of peers or institution		0.819
Rapport with students		0.675

RQ4 do teacher background characteristics such as gender, age, training and experience predict their anxiety?

It is noticeable (Table 12) that only three of the personal background variables that were measured, i.e., characteristics of the teachers, have a significant relationship with a teacher's overall level of teaching anxiety. Age ($rho = -0.227$, $p = 0.034$) and academic qualification level ($rho = -0.409$, $p < 0.001$) had significant negative relationships with teaching anxiety: understandably teachers who were older or had higher qualifications such as PhD were less anxious than those who were younger or had only MA. Departments were further divided into those where English is a great part of the content, as well as the medium (ECM = English + Preparatory year English program + Translation) versus where it is only the medium of instruction (EM = the rest). A significant difference then emerged in overall teaching anxiety level (ECM $M = 2.84$, EM $M = 2.63$, Mann–Whitney $z = -2.29$, $p = 0.022$). Thus teachers in departments where English was part of the subject matter as well as the medium of instruction emerged as slightly more anxious.

Teacher attendance at training courses and length of teaching experience however seemed to have no significant relationship and gender played no role. More surprisingly, perhaps, reported English ability or time spent in English speaking countries was not related to anxiety, even though most teachers were L1 Arabic speakers delivering courses through English medium. General level of anxiety in daily life also did not correlate significantly with teaching anxiety ($rho = 0.177$, $p = 0.099$).

TABLE 12 Significant relationships between subject variables and teaching situational variables (grouped as dimensions) (*rho* with sig. < 0.05).

Personal variables → associated with greater anxiety claimed to be due to the sources below (questionnaire dimensions) ↓	Female vs. male gender	Age	Academic level	English subject teacher vs. just EMI	Time in English speaking country	Greater anxiety due to COVID	Greater time passed since training
Students' problems	0.255		−0.230			0.280	
Matters in the hands of peers or institution	0.245	−0.269				0.258	
Rapport with students		−0.251	−0.345	0.269			
Lack of training			−0.272	0.241			
Own subject knowledge							
Own pedagogical skills		−0.212	−0.303	0.267			0.326
Being evaluated		−0.248	−0.295				
Own English proficiency					−0.213		
Overall anxiety		−0.227	−0.409	0.245			

A richer picture of correlations emerged by examining separately the eight anxiety areas which had distinct teaching-related sources (Table 12).

Anxiety due to empathetic awareness of students' problems correlated negatively with degree level ($rho = -0.230$, $p = 0.031$) and positively with greater reported anxiety increase due to COVID. ($rho = 0.280$, $p = 0.008$). There was also a gender difference (male $M = 3.12$, female $M = 3.38$; MW $z = -2.38$, $p = 0.017$).

Anxiety due to teaching related matters in the hands of the institution showed a similar gender difference (male $M = 2.79$, female $M = 3.08$; MW $z = -2.29$, $p = 0.022$) and a similar COVID anxiety related difference ($rho = 0.258$, $p = 0.015$). There was also a negative age correlation ($rho = -0.269$, $p = 0.011$).

Anxiety about rapport with students was negatively related to age ($rho = -0.251$, $p = 0.018$) and academic level ($rho = -0.345$, $p = 0.001$). This was also found more in departments where English was a subject as well as a medium (MW $z = -2.512$, $p = 0.012$; ECM $M = 3.08$, EM $M = 2.79$).

Anxiety about lack of training was not related to the amount of time reported as having passed since any previous training session. However, it was negatively related to academic level ($rho = -0.272$, $p = 0.010$). It was also found more in departments where English was subject as well as a medium (MW $z = -2.25$, $p = 0.025$; ECM $M = 2.90$, EM $M = 2.57$).

Anxiety about own subject knowledge was not related to any of the personal variables included. The closest to significance was teacher academic level ($rho = -196$, $p = 0.068$).

Anxiety about the teacher's own pedagogical skills was negatively related to age ($rho = -0.212$, $p = 0.047$) and academic level ($rho = -0.303$, $p = 0.004$), and positively to time since last training ($rho = 0.326$, $p = 0.019$). It was also found more in departments where English was the subject as well as the medium (MW $z = -2.49$, $p = 0.013$; ECM $M = 2.76$, EM $M = 2.48$).

Anxiety about being evaluated correlated negatively with age ($rho = -0.248$.$p = 0.020$) and academic level ($rho = -0.295$, $p = 0.005$).

Anxiety about own English proficiency was not related to self-rated English ability or to whether the teacher taught English as a subject or only used it as a medium of instruction (MW $z = -0.401$, $p = 0.689$). In fact the only significant relationship of this source of anxiety was with time spent in an English speaking country ($rho = -0.213$, $p = 0.046$): greater time was associated with lower anxiety.

Discussion

Discussion of RQ1, 2

The overall level of reported anxiety is similar to that across other studies of experienced teachers in countries other than US and UK, reviewed above, in being below the neutral midpoint of the scale (3), but well above 2 on the 1–5 scale. This suggests that this is a remarkably robust finding for teachers across subjects and educational levels taught, and across countries (excluding ones like US and UK).

Although a significant increase was reported due to the pandemic, the mean is still at a level similar to pre-pandemic studies and so challenges the scare reporting seen in some sources about anxiety increase due to the pandemic (e.g., Inside Higher Ed, 2020). At the very least one can say that, even if there was a spike in anxiety during the pandemic, by mid-2021 when the present study data was gathered, the level has dropped back. If so, this is a testament to the resilience and adaptability of teachers in our context. It will be interesting to see if the same appears in studies in other contexts.

The overall below-neutral level of teacher anxiety is not usually commented on. I believe it indicates that for teachers maybe a certain low amount of anxiety is the norm. This however does not imply that teachers are therefore permanently debilitated to some extent by such a level of anxiety. Many sources speak as if all anxiety is harmful, implying it ideally would be zero (i.e., 1 on the usual 1–5 scale used; e.g., Horwitz, 1996): in that case the policy aim is to reduce all anxiety. However, I argue that this finding is consistent with the view that the ideal level of anxiety to enhance task performance is low but not zero, as argued since long ago, e.g., by Alpert and Haber (1960). There is however agreement that high anxiety (presumably significantly higher than 3) is harmful and needs to be addressed. In that view, however, there is no implication that policy should aim to remove all anxiety.

Discussion of RQ3

The findings essentially show considerable variation in claimed impact of different aspects of teaching on reported anxiety. Table 10

confirms a scale running from other-centered problems (yielding relatively higher anxiety) to self-centered problems (yielding low anxiety). In many ways this is a new finding since most quantitative studies have not addressed such a wide range of types of feature in one study, due to use of questionnaires with a narrower focus. However, it does accord with Hunt and Sari's (2019) finding, in a Western context, that student directed anxiety was the strongest.

The interpretation of the FA of the themes was also straightforward. As Table 11 shows, the first component represented anxiety arising broadly from sources in the hands of the teacher, their own knowledge and skills, including training viewed as a product which is part of their own competence, and which is indeed something that is in their own hands to seek and engage in. The second component was represented by sources outside of the teacher arising from students, peers and the institution. Being evaluated rather fell between those two, perhaps reflecting a belief that evaluation is affected both by qualities of the teacher and by agents outside the teacher (slightly more the latter, according to the loadings in Table 11). In general, this analysis then again supports the kind of internal vs. external source distinction also found with FA by Hunt and Sari (2019) in the UK, and reflected in our results above.

A comparison was attempted with Aslrasouli and Vahid's (2014) study in Iran, which superficially seemed a more similar context to ours than that of Western studies. Straight away, however, a cultural difference emerged. The most anxiety provoking features of teaching reported in that study were teaching coed classes and teaching the opposite sex. In the present study that had not even been included since such classes do not exist in Saudi universities.

Where comparisons could be made, there was no systematic equivalence. Lack of time for marking was relatively high in anxiety in the above cited study ($M = 3.56$) as it also was in ours ($M = 3.16$). So also was having to teach too many classes ($M = 3.46$ and $M = 3.20$). Thus there was some support for matters out of teacher control, imposed from above, being relatively more stressful in both contexts. However anxiety due to poor communication with the authorities was much higher in the Iran study than ours ($M = 3.42$ versus $M = 2.66$). This could of course be due to purely local conditions in the particular universities studied. Furthermore, empathetic concern for student problems as a source of teacher anxiety, which ranked highest in this study, was well down the list of aspects causing anxiety in Aslrasouli and Vahid (2014) even though the actual anxiety levels were similar (anxiety concerning student difficulties at home: $M = 3.43$ vs. $M = 3.39$).

Comparison with other studies like Liu and Wu (2021) in China yields a similar mixed picture. The impression we are left with is that the reported impact of different aspects of teaching on teacher anxiety may vary considerably around the world for local or more general cultural reasons, and comparisons are further hindered by the multiplicity of instruments used. Perhaps the goal of research should be rather to first establish a robust and comprehensive model of potential factors affecting teacher anxiety which can guide researchers to gather data on the same set of aspects of teaching in different contexts. Only then can meaningful comparisons be made and any universal tendencies identified. As an example one may point to the research field of teacher and student acceptance of new technology. There, in recent years, a comprehensive and widely accepted model of all the potential factors affecting such acceptance has emerged which many researchers use to gather comparable data in any context (the UTAUT model: Venkatesh et al., 2003).

Discussion of RQ4

Many of the correlations reported above accord with common expectation and need not be further discussed. Examples are those involving greater age, higher academic level, and longer time since training being associated with less anxiety. Such results however support the validity of the research.

The lack of correlation of teachers' overall teaching anxiety with their estimation of their general trait anxiety supports the view of Horwitz et al. (1986) and Horwitz (1996) that teaching anxiety is a distinct situation specific type of anxiety, and is a separate construct from a person's overall trait anxiety, which is part of their personality.

The lack of correlation of anxiety measures with self-rated English proficiency is interesting and goes against the idea that self-efficacy (similar to self-rated proficiency) is a major predictor of anxiety (Ganley et al., 2019). In fact it was related to just one individual anxiety item out of the 57. Teachers with greater belief in their English ability were less worried about administrative paperwork. Possibly the explanation is that, in the Saudi context, student English ability is usually quite low so the only anxiety-creating challenge that teachers felt to their subjective English ability was in English used in official university communication where of course it would be embarrassing to make an error with an audience of peers and superiors.

Of the personal variables that were included, only three stood out as having a pervasive effect on many aspects of teacher anxiety: age, academic level and whether or not the teacher was involved with teaching English as subject and not just using English as the medium of instruction. Of these the first two have sometimes been found significant in previous studies (see literature review). However, more often in other studies experience has been found significant, which was not the case in the present study. Possibly the reason is that the study sample did not contain many highly inexperienced teachers. The inclusion of the English as a subject versus English only as a medium variable is, as far as we know, a novelty and the findings demonstrate that this distinction is worth pursuing. In the present results it seems to show that teachers of English as a subject are more anxious about their pedagogical skills, rapport with students and lack of training than teachers teaching other disciplines. This could be explained if training provision was better for teaching subjects other than English at tertiary level. However, my view is that that may not be the case. Rather possibly the reason lies in the extra awareness of these matters that teachers of language skills gain through the experience of that kind of teaching. They therefore notice better what they lack. However this needs further investigation.

Gender interestingly was significant for two anxiety areas, in a way matched to some extent by Hunt and Sari (2019) but not Aydın and Uştuk (2020). However, the relationships make sense in the context. Females were more anxious than males when thinking about student problems such as low English proficiency: i.e. they showed more empathy, which is consistent with general psychological studies such as Mestre et al. (2009). Also they were more anxious than males when considering matters in the hands of authority figures, such as poor communication with the head of department and being expected to

be a 'jack of all trades'. Here again there are echoes of findings about workplace stress in the general medical literature (Rivera-Torres et al., 2013).

Greater anxiety increase due to COVID was reported by those who were more anxious about student problems and about teaching matters that were more in the hands of the authorities. This may provide some amplification of the statements of Inside Higher Ed (2020) by demonstrating the locus of anxiety increase due to COVID. It suggests that teachers' extra worry primarily concerned their students coping with COVID-compliant teaching, and themselves coping with COVID related procedures imposed by the university authorities (e.g., short notice given for required use of Blackboard etc. for teaching and assessment).

Implications

The answers to RQ1 and RQ2 show that, even with some increase in anxiety admitted due to COVID, mean teacher anxiety about teaching was still below medium at a level similar to that in pre-COVID studies. This is an encouraging finding because it suggests that the teachers have resilience, which is the psychologists's term for "the role of mental processes and behavior in promoting personal assets and protecting an individual from the potential negative effect of stressors" (Fletcher and Sarkar, 2013, p. 16). While this is a valuable finding about the teachers, it also points to a need for further investigation of what made many of the teachers resilient.

The findings about the potential causes of anxiety (RQ3, 4) showed many personal variables exhibiting little relationship while different aspects of the teaching situation led to considerable variation in anxiety. The main implications of these findings are as follows.

For the research field it is informative that giving attention to the issue of English purely as medium of instruction versus English as both the medium and the subject content yielded some anxiety differences. This variable needs further investigation. An argument was also made earlier for the development of a comprehensive model of factors potentially affecting teacher teaching anxiety, which appears to be lacking but would facilitate progress in this area. The eight areas identified in the present study might be considered a contribution to this enterprise.

For the university where the research was undertaken, and indeed any others where similar findings are obtained, there are implications to address. The factors that arguably caused most teacher anxiety, at levels bordering what one might regard as excessive, and therefore call for intervention to have their effect reduced, were: perceived student problems and deficiencies, and some matters that are out of the teachers' own hands, e.g., class size, workloads, participation in decision making, and provision of library facilities. The latter matters are clearly more in the hands of the institution rather than the individual teacher to act upon. The former in fact also indirectly may have an institutional implications. Teachers were considerably worried by the weak English of the students. One solution of course is to abandon English medium teaching, but in the Saudi context (and others like it) the pressure of the globalization of English makes that an unlikely policy change. Therefore there is a need to improve the English of the students, but it is outside the hands of the individual teacher to implement the necessary action to improve student English and so reduce the anxiety of the teacher, and indeed presumably of the students, about this as they pursue their tertiary studies.

In fact most Saudi universities do have what is called a Preparatory year (or at least semester) that most students are required to take and pass before embarking on their undergraduate majors. Much of that time is devoted to intensive English. However, there is evidence that it is calibrated more to the level of what students with quite low English proficiency from school are perceived as able to easily cope with, than to meeting the actual language demands that studying their majors through English medium will place on them (Alenezi, 2016). Hence there remains a considerable gap between the level of general English that students possess on entry to their majors and the level of academic English that they need to effectively pursue their studies. What is called for is renewed efforts to raise the level of English attainment at school, which would allow for a Preparatory year that genuinely raised students' proficiency to a level enabling them to function properly in academic English medium degree courses.

Limitations and recommendations

This study must be regarded as provisional, since the number of participants was small relative to the number of questionnaire items and therefore the empirical statistical exploration (using factor analysis) of the anxiety dimensions existing within the overall construct of teacher anxiety was not entirely successful. Therefore the present findings must be regarded as tentative. A larger sample would also have had other benefits such as enabling comparisons between departments to be considered.

The other main limitation perhaps is the lack of any open response data gathering, e.g., by interviews. Although the potential sources of teacher anxiety reflected in the items were systematically based on a number of well-regarded questionnaires, none of those were originally constructed with the Saudi context in mind. Since the researcher is from that context, it was taken into account in the construction of the questionnaire for this study. However, researchers are not infallible and some qualitative data from the participants might have suggested further relevant factors that were missed.

Conclusion

Despite its limitations, this was, for the range of teacher anxiety aspects covered, a ground breaking study and contributes to the idea that a comprehensive questionnaire needs to be further worked on to provide a standard instrument for the field. The findings generally suggest that in a number of ways the Saudi tertiary context is not dissimilar to that in other countries outside of the US and UK where teacher anxiety studies have been conducted. However, at the same time it highlights some issues that remain in need of attention. The common finding was supported that mean teacher anxiety falls a little below the midpoint of the anxiety scale, even just after COVID, and the implication of this needs to be re-assessed. I believe it is necessary to reconsider what level of teacher anxiety is actually harmful rather than simply make the common assumption that all anxiety is bad and must be eradicated. The other prominent finding, that factors outside

the teacher's control (more governed by the students and the institution) are the strongest sources of anxiety, also finds parallels in other studies. However, we need to further understand how harmful the anxiety caused by these is. how teachers cope with it, and how it can be best addressed.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving human participants were reviewed and approved by the committee of research in the university. Written informed consent for participation was not required for this study in accordance with the national legislation and the institutional requirements.

Author contributions

The author confirms being the sole contributor of this work and has approved it for publication.

Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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