

University teacher educators' research engagement: Perspectives from Saudi Arabia

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ABSTRACT

This paper examines university teacher educators' engagement with and in educational research. Survey results collected from eighty-two teacher educators at a leading university in Saudi Arabia pointed to modest levels of research activity and also suggested that these individuals held largely technical views of what research is. Their assessments of their institutional research culture also signalled a perceived gap between the research productivity expected of them and the support they received from their university. The implications of these findings for promoting research activity among university teacher educators, where this is considered desirable, are discussed.

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1. Introduction

In this paper we examine the research activity of teacher educators working in a leading university in Saudi Arabia. This university, like others in the Kingdom, expects its staff to conduct high quality research, and through this study we aim to provide insight into the extent to which the teacher educators are research-engaged, the beliefs about research which underpin this engagement, and their perspectives on the extent to which their institution is conducive to productive research activity. Such insights can provide a valuable basis for considering how university teacher educators in the institution studied might be supported in extending both the range and quality of the research they do. This study has broader international relevance too, given that supporting university teacher educators' research activity in this manner will be a common goal in many higher education contexts both in the Gulf region and beyond. It is important to stress at the outset, though, that our position here is not a normative one – i.e. despite some evidence that doing research may be a core task for university teacher educators (Koster, Brekelmans, Korthagen, & Wubbels, 2005), we are not seeking to argue that the teacher educators in the context studied here or elsewhere *should* be research active; we also acknowledge Macfarlane's (2011) argument that the

increasingly specialized roles adopted by academics (e.g. in teaching or management) mean that, especially in contexts such as the UK and the USA, it can longer be assumed that all academics are research active. We make no such assumptions here and our goal is to understand, in a context where university teacher educators *are* expected to be research active, the nature of such activity and the factors that shape it.

2. Teacher educators' research engagement

Koster et al. (2005: 157) define a teacher educator as “someone who provides instruction or who gives guidance and support to student teachers”. This study, as explained above, focuses on the engagement both with (i.e. through reading) as well as in (i.e. through doing) research of teacher educators who are university-based (rather than working in schools or in non-university institutions).

In terms of teacher educators doing research, there has been much interest in recent years in practitioner research and self study (e.g. Gallagher, Griffin, Parker, Kitchen, & Figg, 2011; Lunenberg, Ponte, & Van De Ven, 2007) and numerous examples of teacher educators engaging in these forms of inquiry have been published (e.g. in the journal *Studying Teacher Education*). Broader surveys, though, of the research engagement and views about research of university teacher educators in particular contexts are lacking. Joram (2007) did examine the beliefs about research knowledge held by seven professors on a teacher education programme in the USA and found that they viewed such knowledge as falsifiable and

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generalizable, but no deeper analyses of these teacher educators' practices and beliefs in relation to research were undertaken.

Despite the lack of research that directly addresses our focus here, two additional sources of literature informed our work. Firstly, given that university teacher educators are also academics, we found of relevance a strand of work which has examined academics' conceptions of research (e.g. Åkerlind, 2008; Brew, 2001; Prosser, Martin, Trigwell, Ramsden, & Middleton, 2008). A study of particular interest here was Kiley and Mullins (2005), who examined, through open-ended written responses, the conceptions of research and of good research held by 53 research supervisors in universities in Australia, New Zealand, South Africa and the UK. The predominant view of research that emerged here was a 'technical' one, – i.e. which views research as “a scholarly process characterized by the rigorous application of systematic methods” (p.249). In describing *good* research, however, respondents emphasized above all originality and creativity. While relevant in highlighting the international relevance of the focus of this study, existing analyses of academics' conceptions of research do, however, typically assume that academics *are* engaged in research (e.g. Brew, 2001 studied the experiences of 57 senior researchers) and set out to explore their understandings of it; here, though, we adopted a more basic standpoint and, rather than assuming that university teacher educators are research-engaged, our goal was to explore the extent of such involvement and to examine factors which might shape it.

A further source of literature we found relevant to our focus here was a strand of educational inquiry which has examined what teachers across a range of subjects think about research (e.g. Allison & Carey, 2007; Barkhuizen, 2009; Borg, 2007, 2009; Everton, Galton, & Pell, 2002; Gao, Barkhuizen, & Chow, 2011; McNamara, 2002; Ratcliffe et al., 2004). Overall, what this international body of work shows is that teachers often associate research with 'scientific' notions such as experiments, hypotheses, variables and statistics. This work also highlights a range of physical, conceptual, linguistic and affective constraints which teachers feel limit their efforts to be research-engaged. A lack of time, for example, is widely cited as a key constraint, together with a lack of both access to research materials and of the knowledge and skills required to do research. Although one might expect such constraints to be less severe in the context of research engagement by university teacher educators, this literature provides reference points against which the findings of this study can be compared, as well as insights into the methodological strategies which can be used in conducting survey research into teacher educators' research engagement.

Overall, then, our analysis of the literature from a range of international contexts indicates that our understandings of the research engagement and views about research of university teacher educators are limited, both in the specific context studied here as well as more generally. This lack of empirical insight, particularly in contexts where teacher educators are required to be research active, limits the extent to which informed proposals for supporting such activity among university teacher educators in Saudi Arabia and more generally can be made. One of our practical goals here is to provide the basis of such proposals.

3. Higher education in Saudi Arabia

Higher Education in Saudi Arabia has witnessed considerable development in the last ten years in both quality and quantity. One reason for the expansion of the Saudi HE sector has been the sharp increase in the numbers of students attending university (according to Mazi & Abouammoh, 2009, 222,000 freshmen joined Saudi universities in 2009 compared to 137,438 in 2005). The number of public universities rose from eight in 2000 to 24 in 2009, while seven private universities have been also established since 2001.

In terms of research activity, the Ministry of Higher Education has taken a leading role in promoting scientific research in order to enhance the national economy and to respond to the government's commitment to a knowledge-based economy. Government research funding has risen from 0.25% of country GDP in 1996 (Alali, 2000) to 1.1% in 2010 (Abudhair, 2011). The Ministry has also encouraged universities to focus on the production of scientific research and one response by HE institutions has been to set up Research Excellence Centres. There are currently 14 Research Excellence Centres in six universities. Not surprisingly, the emphasis within these initiatives to increase the international research profile of Saudi universities has been primarily on the sciences. However, although in leading Saudi universities all academic staff (including, of course, university-based teacher educators) are expected to be research active, and are appraised accordingly, little information is available about how academics respond to these expectations. Similarly, insights into the views of research these staff hold are also lacking, though there is some evidence that the notions of research that predominate in Saudi Arabia are those associated with experimental and statistical work (Alberaidi, 2004). Such claims are borne out in the context of education by an analysis of local educational research publications; these are dominated by quantitative studies in which variables are examined using correlational or inferential statistics.

Åkerlind (2008: 17) suggests that the study of academics' understandings of research is of particular value in contexts where there is “increasing emphasis on measurement and accountability of academic research activity”. Based on the background information provided above, the setting for this study – Saudi university teacher education – is clearly such a context.

4. The study

4.1. Research questions

Informed by the theoretical and contextual issues discussed above, this study addressed the following questions:

1. What views of research are held by teacher educators at a Saudi university?
2. To what extent do these teacher educators say they are research-engaged?
3. What reasons do they give for being or not being research-engaged?
4. To what extent do they feel that their working context is conducive to their engagement in research?

4.2. Context and participants

The context for the study was a College of Education in a leading research university in Saudi Arabia. At the time of the study, this college (chosen because the second author of this study had contacts there) employed a total of 389 full-time university teacher educators who taught a range of disciplinary and pedagogical courses on pre-service teacher education programmes covering a range of subject areas. These individuals constituted the population for this study (details of the actual sample and the profile of the participating teacher educators are provided in the Findings below). In terms of the goals of the college, that most pertinent for the current study reads as follows: ‘To conduct distinguished research that will contribute to knowledge accumulation, advance professional practices, support educational reform efforts, and meet the needs of the educational field and the challenges to social and economic development’. Thus, as noted earlier, teacher educators in this institution are expected to be research active.

4.3. Research methods

Given our goal of understanding patterns of responses across a large group of participants, this study adopted a survey approach and the particular data collection strategy used was a questionnaire. The instrument used in this study was an adapted version of that utilized in Borg (2009). This instrument had originally been designed for use with language teachers and therefore needed to be modified for use with university teacher educators from a range of subject areas (e.g. examples used in the instrument were adjusted to refer to different educational disciplines rather than just to language teaching). Changes were also made to the kinds of demographic questions asked of participants and to the wording of some of the questions. The instrument was translated into Arabic by the second researcher then back translated by a second native speaker of Arabic and was finally checked against the original English version by the first researcher. The questionnaire was then piloted with 16 university teacher educators at a different Saudi institution. Further revisions were made to some of the questions after the piloting. For example, rubrics were reviewed in those questions where respondents could choose multiple answers to make this clearer (in the pilot study, most participants only chose one answer in such questions).

The final version of the questionnaire contained six sections which collectively addressed the study's research questions. Section 1 asked respondents about the extent to which they read published educational research while the focus of Section 2 was on their engagement in doing research. Section 3 elicited their views on the extent to which their working context constituted an environment supportive of research. Sections 4 and 5 focused on their views about research, while Section 6 collected demographic data. The questionnaire was circulated in hard copy and via e-mail attachment to all full-time teacher educators at the institution involved here. Participation was voluntary. As is common in questionnaire-based research, participants were not invited to sign an informed consent form; they were, though, provided with an outline of the study at the start of the questionnaire and, by agreeing to complete and return the instrument, were deemed to have provided what Dörnyei (2007) calls passive consent for their responses to be included in the study. Data analysis was supported by SPSS 18 and took the form of descriptive statistics, correlations and comparisons of means. Given the nature of the data (e.g. predominantly ordinal in nature), non-parametric statistical tests were used (e.g. Spearman for correlations between variables and Wilcoxon signed ranks for comparing means).

Like any data collection strategy, questionnaires have strengths and weaknesses (see, for example, Aldridge & Levine, 2001; De Vaus, 2002; Dörnyei, 2003; Fowler, 2002). On the positive side, they allow large amounts of data to be collected quickly and efficiently. Less positively, they do not lend themselves to in-depth analyses of issues. We acknowledge this latter limitation in particular here; respondents, however, were not available for further discussion through follow-up interviews, nor did the resources available for this study allow for a qualitative dimension to this project. Nonetheless, we believe that the rigour applied in the design of the questionnaire used here, the systematic nature of the analyses conducted, and the considered interpretation of the data we present below collectively enhance the overall trustworthiness of the study.

5. Findings

5.1. Demographic information

Questionnaires were returned by 82 respondents (48 males, 34 female), giving a response rate of just over 21%. We consider this

Table 1
Respondents by specialization.

Area	N	%
Art education	9	11.0
Curriculum and instruction	28	34.1
Education and pre-school education	8	9.8
Educational administration	6	7.3
Instructional technology	4	4.9
Islamic studies	9	11.0
Physical education	3	3.7
Psychology	8	9.8
Special education	7	8.5
Total	82	100.0

a reasonable, if modest, level of response given the length of the questionnaire, the probing nature of some of the questions, and the significant workloads our target respondents carry. The topic of the study itself may have also negatively impacted on the response rate as this would almost certainly have been the first time that these respondents were being asked to report on their research activity and to make explicit the beliefs and factors influencing this. In discussing the findings below, we acknowledge the implications of this modest response rate. At the same time, we would argue that the study does generate insights into university teacher educators' research engagement which are of value in stimulating further research into this issue in both Saudi Arabia and more generally.

Over 45% of the sample had less than 10 years' experience as a university academic, just under 40% had 10–19 years, while 22% had 20 years or more. In terms of their academic status, just over 12% were full professors, 69.5% were assistant or associate professors and just over 18% were lecturers or teaching assistants. Over 80% had a doctorate. Table 1 shows the distribution of respondents by the area of education they specialized in.

5.2. Reading research

5.2.1. Frequency of reading

Section 1 of the questionnaire asked respondents how often they read educational research publications. Table 2 summarizes their responses. These show that over 30% of the university teacher educators in this study said they read educational research publications once every six months or less (almost 10% said they did so less than once a year). In contrast, almost 70% said they read research at least once a month. These reported levels of reading were analyzed (using Spearman's correlation) for associations with teachers' years of experience, qualifications, academic role (i.e. professor, assistant professor, etc.), and gender. Significant though weak associations¹ were found between frequency of reading and all these demographic variables except gender: qualifications ($N = 82$, $\rho = 0.368$, $p < 0.001$, 1-tailed), academic role ($N = 82$, $\rho = 0.465$, $p < 0.001$, 1-tailed) and experience ($N = 82$, $\rho = 0.232$, $p = 0.018$, 1-tailed). More academically senior, highly qualified and experienced teacher educators, then, reported reading educational research more frequently than those in less senior roles, who were less qualified and less experienced.

Reported levels of reading educational research were also examined according to respondents' area of specialization. In two of these areas – art education and Islamic studies – the majority of staff (55.6% for art education and 66.7% for Islamic studies) said they read educational research once every six months or less. Islamic studies staff merit a particular comment here because

¹ Following Salkind (2004: 88), here we treat correlations of less than 0.4 as weak and those between 0.4 and 0.6 as moderate.

Table 2
Frequency of reading research.

Frequency	N	%
Less than once a year	8	9.8
Once a year	3	3.7
Once every six months	14	17.1
Once a month	21	25.6
Once every two weeks	20	24.4
More than once every two weeks	16	19.5
Total	82	100.0

although they are part of the College of Education, educational research may not be particularly relevant to the primary focus of their work, which is Islamic law and the interpretation of the Quran. This is an interesting structural feature of the college under study here which may also apply to similar colleges elsewhere in Saudi Arabia.

5.2.2. Sources and impact of reading

The 57 respondents who said they read research at least once a month were asked to indicate what they read. Table 3 presents their responses.

These responses indicate that on-line sources of educational research were most widely consulted, followed by local educational journals (e.g. *King Saud Journal of Educational Sciences and Islamic Studies*). Books and international academic journals were reportedly read by over 68% of these 57 respondents. A recurrent source of research listed in the 'other' category was Master's and doctoral dissertations.

These 57 respondents were also asked about the impact that this reading had on their work as teacher educators. Almost 44% of the respondents felt that, at most, the research they did had a moderate influence on their work (within this group, 5.3% said it had no influence at all). More positively, just over 56% felt that reading educational research had a fairly strong to strong influence on their work. On a scale of 1 (no influence) to 5 (strong influence) the mean rating for this question was 3.63, which indicates that overall the teacher educators in this study perceived the impact on their work of the research they read to be moderately to fairly strong. The precise nature of this impact is an issue that would merit further qualitative study.

5.2.3. Reasons for not reading research

The 25 respondents who said they read educational research once every six months or less frequently were asked to comment on why they did not engage in such reading more often. The reasons identified by the teacher educators are listed in Table 4. A lack of time was the most commonly cited reason here for not reading research, though several respondents also said they preferred to read research specifically about their subject area (e.g. linguistics or Islamic studies) rather than research in which these topics were tackled from an educational perspective (e.g. research on how languages are learned). A small number of respondents stated that access to resources for reading research is limited (though there was no support for such a claim in the data for this study more

Table 3
Sources of educational research ($N = 57$).

Source	N	%
Books	39	68.4
International academic journals	39	68.4
Local academic journals	43	75.4
More practical journals for educators	16	28.1
On-line sources	48	84.2
Conference proceedings	25	43.9
Other	10	17.5

Table 4
Reasons for not reading research ($N = 25$).

Reason	N
I am not interested in educational research	3
I do not have time	17
Research books and journals are not available to me	8
I find published research hard to understand	2
Research publications are not interesting to read	8
I prefer to read research about my specialist subject area	14
Published research is not relevant to my work	6

generally), that published research is not interesting and that it is not relevant to their work. While such views were expressed by a small minority of the total sample in this study, they do signal concerns which may merit more focused investigation in further research of this kind. The three individuals who said they are not interested in reading educational research specialized in art education, Islamic studies and psychology.

5.3. Doing research

Section 2 of the survey focused on respondents' engagement in doing research. They were asked how often they did research and for their reasons for doing or not doing so.

5.3.1. Frequency of doing research

In terms of doing educational research, 18.3% of respondents said they never did it, 13.4% said they did it rarely, 26.8% occasionally and 41.5% regularly. Thus 58.5% of these teacher educators said that doing research was, at most, an occasional activity for them. While such a finding would not be surprising with a sample of school teachers, this reported level of doing research is low for academics working in a research-active university. If, additionally, we accept that frequency descriptors such as 'occasionally' are often used euphemistically (i.e. when a more accurate answer would be 'rarely' – see Borg, 2009 for a discussion of this phenomenon), then the actual levels of engagement in research may be even lower than those reported here. Furthermore, we must factor into our interpretation of these results the potential bias caused by the modest response rate we had in this study, particularly the distinct possibility that non-respondents may have often been those who were less research active. This would point to actual levels of doing research among the population of teacher educators which are considerably lower than these results suggest.

In terms of associations with other variables studied here, a significant but weak correlation was found between reported levels of reading research and how often respondents said they did research ($N = 82$, $\rho = 0.392$, $p < 0.001$, 2-tailed). Levels of doing research also correlated positively (but again weakly) with experience as a university lecturer ($N = 82$, $\rho = 0.246$, $p = 0.013$, 1-tailed), qualifications ($N = 82$, $\rho = 0.345$, $p = 0.001$, 1-tailed) and academic role ($N = 82$, $\rho = 0.335$, $p = 0.001$, 1-tailed). Higher levels of engagement in research were thus reported by teacher educators with higher levels of experience, qualifications and rank. No gender differences in reported levels of engagement in research were found.

Fig. 1 summarizes the reported levels of doing research by area of specialization. We are mindful of the small numbers of staff involved in most areas here, but it is nonetheless interesting to note that none of the Islamic studies staff said they did educational research regularly, while in several other cases the percentage of staff who reported doing so did not exceed 50%.

5.3.2. Reasons for doing research

Teacher educators who reported doing research regularly or occasionally ($N = 56$) were asked to indicate their reasons for doing

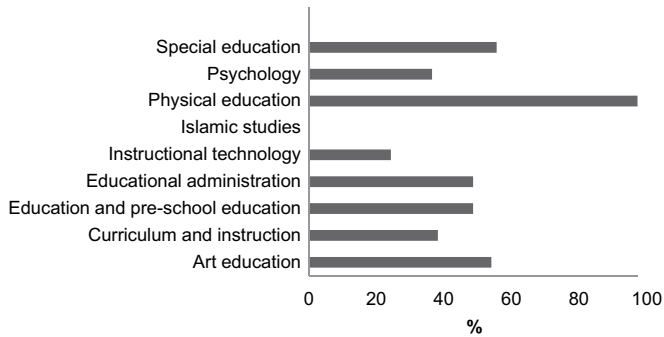


Fig. 1. Reported percentage of staff doing educational research regularly.

so by selecting items from a list provided and suggesting others if required. The findings are summarised, in descending order of frequency, in Table 5. The four main reasons for doing research cited here were because it is an important part as my work as a faculty member (48), because it is good for my professional development (44), because it will help me get a promotion (39) and to contribute to knowledge of my discipline generally (38). These reasons reflect a mixture of intrinsic and instrumental motives, as well as personal benefits and those relevant to the field of education more generally. In contrast, a concern for collaboration with colleagues did not emerge here as strong motivating factor in doing research (implying perhaps that in this context research was seen as a more individual activity). And in contrast to the responses teachers gave to a similar question (e.g. in Borg, 2009), research here was also not strongly motivated by a desire to improve teaching and solve professional problems. This suggests that practitioner research and self study – i.e. inquiry conducted to understand and improve one's own practice – were not powerful concepts here. Nor was there evidence to suggest that research-led teaching – a concept that has received much attention in higher education in recent years (e.g. Schapper & Mayson, 2010) – was an issue that motivated these teacher educators' research activity. The reason for doing research least cited in this list was 'because my employer requires me to'. This could mean that although their university required these teacher educators to do research, that is not a key reason in these respondents' decision to do so; it could also mean, though, that respondents do not feel that their employer requires them to be research active. An additional questionnaire item relevant to this theme will be discussed below and will shed further light on this matter.

As Table 5 shows, 11 respondents gave 'other' reasons for doing research. A number of these can be accommodated under topics already listed (e.g. two said they did research as part of their Master's course); additional reasons given were 'to increase my income' (mentioned twice) and 'to innovate in my field' (also twice).

Table 5
Reasons for doing research (N = 56).

Reasons	N
Because it is an important part as my work as a faculty member	48
Because it is good for my professional development	44
Because it will help me get a promotion	39
To contribute to knowledge of my discipline generally	38
As part of a course I am studying on	30
Because I enjoy it	24
To find better ways of teaching	23
To contribute to the improvement of my department/institution	22
To solve problems in my professional work	22
Because it allows me to collaborate with colleagues	12
Other	11
Because my employer requires me to	3

Table 6
Reasons for not doing research (N = 26).

Reasons	N
I do not have time to do research of any kind	18
I do not know enough about educational research methods	6
My job is to teach not to do research	4
I cannot think of any topics that are worth researching	3
Most of my colleagues do not do educational research	3
I need someone to advise me but no one is available	2
My employer does not support me	1
I am not interested in doing educational research	1
I do not have access to the books and journals I need	1
Doing educational research is not relevant to my teaching	1
It is difficult to get educational research published	1

5.3.3. Reasons for not doing research

The 26 respondents who said they did research rarely or never were also asked to indicate reasons for this. Their responses are summarised in Table 6. The most common factor cited here (by just under 44% of this sub-group) was a lack of time. For example, one respondent explained their answer by writing that "Research needs a lot of effort and time. My current duties supervising many students prevent me from doing my research" while in a similar vein another said that being "busy teaching and academic advising and working on an accreditation and quality project prevent me from doing research". The next most common reason respondents cited for not doing research was a lack of knowledge (this implies that these teacher educators are less likely to engage in research if they lack self-efficacy in relation to this activity). Just under 10% said their job was to teach rather than to do research.

5.4. Research cultures

While teacher educators' views of research will influence the extent and nature of their research engagement, there is evidence in the literature that institutional cultures do also impinge on research activity (for a discussion in the context of language teaching, see Borg, 2010). Section 3 of the questionnaire thus aimed to elicit teachers' views of the extent to which they worked in an environment which was conducive to their being research-engaged. Table 7 summarizes these views (the original five point scale, with 'disagree strongly' and 'agree strongly' at the extremes, has been collapsed into three categories and responses expressed as percentages, in descending order according to levels of agreement).

The eleven items in this question were devised on the assumption that they addressed a common underlying concept, which we may refer to as institutional research culture. A measure of the extent to which this assumption is justified is provided by Cronbach's alpha; an alpha level in this case of 0.75 suggests that the items in this question were in fact conceptually related (versions of a similar scale used in other studies of teachers' conceptions of research have yielded similarly positive measures of internal consistency – e.g. 0.8 in Borg, 2009).²

In terms of individual items, the responses here suggest that this group of university teacher educators assessed their institutional research cultures moderately positively in several respects (see the four most highly rated items, all with more than 60% agreement). In particular, almost 80% of respondents agreed that they are expected by their employer to do research (a figure we can contrast with the

² We are aware that in the statistical methods literature debates exist about the use of Cronbach's alpha as a measure of internal reliability (e.g. Sijtsma, 2009); our use of this statistic for such a purpose, though, reflects widespread practice in social science research.

Table 7
Institutional research culture ($N = 82$).

Statement	Agree %	Disagree %	Don't know %
The management expects faculty to do educational research	79.3	3.7	17.1
Faculty feel that doing educational research is an important part of their job	64.6	18.3	17.1
Faculty have access to research books and journals	61.0	28.1	11.0
Faculty have opportunities to learn about current educational research	61.0	19.5	19.5
Faculty new to doing educational research can get advice from colleagues	50.0	31.8	18.3
The management supports faculty who want to do educational research	40.2	26.9	32.9
Faculty like to talk about educational research	40.2	30.5	29.3
Faculty work collaboratively on educational research projects	39.0	34.2	26.8
Time for doing research is part of faculty workloads	34.1	57.3	8.5
Most faculty do educational research themselves	32.9	21.9	45.1
Most faculty read educational research publications	19.5	20.8	59.8

earlier finding that just of 5% (3 out of 56) said they did research because their employer expected them to). On a number of others statements, though, ratings were lower, with fewer than 50% of the respondents agreeing. Thus, only 40.2% agreed that the management supports staff wanting to do research, and (using a Wilcoxon signed ranks test) there was a statistically significant difference between the mean response on this item compared to the item 'the management expects Faculty to do educational research' ($Z = -5.015, p < 0.01$). In other words, teacher educators perceived a significant gap between expectations and support in relation to doing research.

Particularly low were the percentages of teacher educators agreeing that most of them read educational research (19.5%) and do research themselves (32.9%). Together, these two findings suggest a tension between the levels of research engagement reported earlier by respondents and the levels of such engagement generally perceived to exist in the College by staff working there. The high proportions of 'don't know' answers for the questions about reading and doing research are also interesting here; they support the suggestion made earlier that in this context research is seen as an individual rather than a collaborative enterprise, leading to a situation where colleagues are not aware of one another's research activity. More generally, the percentages of 'don't know' answers for the majority of the statements here were relatively elevated (over 10% for all but one). The one where there was least uncertainty (but by no means consensus) related to whether time for research was part of teacher educators' workloads; interestingly, while over 34% agreed it was, over 57% disagreed. One interpretation of these contrasting figures is that the allocation of time for research varies across academic roles, but no statistical support exists for this when responses to the question about workloads are correlated with respondents' academic status ($N = 82, \rho = 0.316, p = 0.054, 1$ -tailed). Overall, these results suggest that there was no shared understanding among these teacher educators about the extent to which research time was an officially allocated part of their workload.

5.5. Views of research

A further key concern in this study was to examine respondents' views of research. These were examined in two ways. First (in

Section 4 of the questionnaire) respondents were asked to assess a series of scenarios, then (in Section 5) their views on the characteristics of 'good' research were elicited.

5.5.1. Evaluating scenarios

The first strategy used here for exploring university teacher educators' views of research was to ask them to rate the extent to which a series of scenarios depicting various kinds of inquiry constituted research (see the Appendix for a list of the scenarios). This elicitation strategy was first used in Borg (2007) and has been utilized in other studies of teachers' conceptions of research since (Borg, 2009; Gao et al., 2011). For the purposes of this study the original scenarios (written with language teachers in mind) were revised for an audience of university teacher educators.

For each of the 10 scenarios, respondents were asked to state whether they felt it was definitely research, probably research, probably not research or definitely not research. Table 8 presents the findings for this question in descending order according to how highly rated as research they were. Here, 'Research' includes the percentage of probably and definitely research ratings, while 'Not research' includes probably not and definitely not research.

A reliability coefficient of 0.82 for these ten items suggests that they address a shared underlying concept, which we can call views of educational research. Scenarios 6, 2, 4 and 9 were, in descending order, those most highly rated as research, while 8, 7, 3 and 1 were those that received the lowest ratings. In only two cases, though, did the percentage of positive ratings fall below 50%. We will now comment on these results in order to ascertain if any patterns can be extracted.

Scenario 6 consisted of a pre- and post-test inquiry in which two methods for teaching mathematics were compared. Scenario 4 involved a large-scale study utilizing questionnaires and statistics and which resulted in a publication in an academic journal. Taken together, these two scenarios represent many features of 'scientific' research, such as experiments, pre- and post-test comparisons, questionnaires and statistics. That they were the scenarios most highly rated as research here suggests that these respondents strongly associated research with activity having these characteristics. Scenarios 2 and 9 lack explicit reference to the kinds of 'scientific' features of research listed above, but they were also quite highly rated as research. They both, however, describe systematic processes of inquiry conducted by lecturers and which were communicated through oral presentations. At the other end of the scale, Scenarios 8 and 7 were those least highly rated as research. The first of these depicts a routine teaching activity (collecting student feedback) rather than a systematic process of inquiry. The second constitutes more of an evaluation than a piece of research and the fact that the inquiry was conducted by a Ministry official (rather than a lecturer as in many of the other scenarios) may also have influenced respondents' judgements here (commenting on a similar scenario, Gao et al., 2011 note that the Chinese teachers in

Table 8
Ratings of research scenarios ($N = 82$).

	Research %	Not research %
Scenario 6	87.8	12.2
Scenario 4	82.9	17.1
Scenario 2	75.6	24.4
Scenario 9	74.4	25.6
Scenario 5	62.2	37.8
Scenario 10	61.0	39.1
Scenario 1	53.7	46.3
Scenario 3	50.0	50.0
Scenario 7	40.2	59.8
Scenario 8	32.9	67.0

their study rated less highly as research evaluative inquiries which led to reports submitted to a Ministry). Scenarios 3 and 1 also received relatively low levels of approval; the first of these involved library research (rather than empirical research) while the second was an example of informal reflective activity (which we would contrast with the more systematic and explicit processes involved in research). The latter, though, was still rated as research by more than 50% of the respondents here.

Overall, then, responses to the scenarios suggested that inquiry involving experimental designs, large samples, questionnaires and statistics were more likely to be acknowledged as research by these university teacher educators. They did also, though to a lesser degree, recognize as research systematic inquiry having a more qualitative dimension. In contrast, informal and routine activities associated with teaching were less highly valued as research, as were library research and evaluations conducted for the purposes of writing official reports.

5.5.2. Characteristics of 'good quality' educational research

In Section 5 of the questionnaire responses were presented with a list of 20 criteria and asked to indicate (on a scale of 'very important' to 'not important') the extent to which they felt each was important in defining the quality of a piece of educational research. The results in Table 9 are organized in descending order according to the percentage of respondents who said a criterion was 'more important' (i.e. quite important or very important). 'Less important' here covers 'not important' and 'slightly important'.

Except for one, all the criteria listed here were seen to be important in defining the quality of educational research by more than half of the respondents. Thus, although statistical analysis was seen to be more important than qualitative data, these results, overall, do not point in any clear way to a preference among these university teacher educators for a particular type of research. In fact, the five criteria seen to be most important (all by over 90% of the respondents) were, methodologically speaking, relatively neutral (i.e. not associated with a particular research paradigm). At the bottom end of the scale, responses indicate that quality in educational research was not seen as a product of particular data collection strategies, with both questionnaires and interviews, in themselves, not being rated highly as quality criteria.

Respondents were asked to suggest any additional criteria they felt informed their decisions about the quality of educational research. The answers given are listed in Fig. 2. Two recurrent themes here are a concern with rigorous technical procedures and the need for research to have local relevance.

6. Discussion

The purpose of this study was to examine the reported engagement with and in research of university teacher educators in a Saudi university and the views of educational research held by these individuals. Also examined here was the extent to which the institution they worked in was seen to be an environment conducive to research activity. We will first review the key insights to emerge here then conclude with suggestions for promoting more productive research cultures among university teacher educators, both in Saudi Arabia and elsewhere where such cultures are considered to be desirable.

6.1. Levels of research engagement

Given that the teacher educators in this study work in a research-active university, the levels of research engagement reported here must be considered moderate. In fact, these levels were lower than those emerging from some studies of teachers. For

Table 9
Criteria for defining research quality (N = 82).

Criterion	More important %	Less important %	Unsure %
The research has a clear purpose	98.8	0.0	1.2
The research is ethical	96.4	1.2	2.4
Conclusions are supported by evidence	96.3	3.6	0.0
Previous research is reviewed	93.9	2.4	3.7
Data are analyzed systematically	91.4	4.9	3.7
A representative sample is studied	89.1	4.9	6.1
Data are collected in natural settings	89.0	7.3	3.7
The researcher is objective	89.0	7.3	3.7
An original topic is studied	84.1	8.6	7.3
Hypotheses are tested	81.7	6.1	12.2
Information is analyzed statistically	80.4	14.7	4.9
Variables are controlled	79.3	8.5	12.2
A large volume of information is collected	78.0	14.6	7.3
The results give teachers ideas they can use	76.9	14.7	8.5
The results are publishable	76.8	12.2	11.0
A large number of people are studied	70.7	19.5	9.8
Qualitative data are collected	70.7	18.3	11.0
The results apply to many educational contexts	64.7	23.2	12.2
Questionnaires are used	56.1	31.7	12.2
Interviews are used	39.0	39.0	22.0

example, in a study that is currently under review³ almost 86% of 725 College English teachers in China said they read research at least occasionally, while over 73% said they did research at least occasionally (the equivalent figures in the current study were just over 69% and 68% respectively). Our interpretation of these findings needs to be qualified with reference to three factors we have already noted. Firstly, although Islamic Studies staff are part of the College of Education, their research interests may not be educational in nature and excluding them from this study would generate a slightly more positive picture of how often the university teacher educators read and do research. Secondly, given the natural tendency in questionnaire items for respondents to lean towards more socially desirable responses, a more realistic assessment of the extent that the Saudi respondents are research-engaged might conclude that this is even more modest than suggested here. Finally, too, our conclusions must also consider the real possibility that many of the university teacher educators who opted not to participate in this study are not positively disposed towards educational research and do not engage with and in it in any significant way. Taking all these factors into account, we feel we are justified in concluding here that the levels of reading and doing research reported here are modest.

In order to develop a deeper understanding of such activity what is also needed is insight into the kinds of work the teacher educators engage in when they say they are reading and doing research. For example, on-line materials were the most commonly cited source of educational research read by the respondents here. What kinds of web-based resources are being consulted and the extent to which these constitute educational research are examples of questions which merit further closer scrutiny. Similarly, when

³ Borg & Liu. Chinese college English teachers' conceptions of research.

- choosing the proper methodology, proper instruments
- clarity of research problem
- clarity of variables, clarity of limits and samples, clarity of methods, presentation of results and interpretation of them according to scientific method
- linking the goal of the research to the local setting
- new references
- not to be others' idea
- quality of results discussion. and using different ways of gathering data
- related to the local setting
- the degree of change to the researcher himself, what knowledge this research has added to the field
- the extent to which the research is related to the context and its ability to contribute to solve the problems of the educational system
- the research problem is clear
- the research must be related to the current situation.
- the suitability of the methodology to the research questions
- to solve local problems, provide workable suggestions according to society standards
- topic importance

Fig. 2. 'Other' characteristics of good quality educational research.

teacher educators report that the research they read influences their work, it would be valuable to learn more about the nature of such influences. The study of such issues is most likely to be insightful if it is approached qualitatively, reflecting the kinds of phenomenographic work in studying academics' conceptions of research evident in sources such as [Brew \(2001\)](#).

In terms of the reasons respondents here gave for doing research, both intrinsic motivations (such as professional development) and external drivers (e.g. promotion) seemed influential, though in regards to the latter the teacher educators in this study did not feel that they did research because of employer expectations (even though these do exist). The university teacher educators in this study, also, did not seem strongly motivated in their research activity by its potential to enhance their own teaching. The two key reasons by respondents here for not doing research were a lack of time for research and a lack of knowledge of educational research. Clearly, at least for some of these respondents, the lack of such knowledge negatively affected their self-efficacy in relation to doing research.

6.2. Research cultures

Institutional factors have been shown to impact on the extent to which individuals can be research active (for example, for evidence from schools and colleges in the UK, see [Barker, 2005](#)). The current study shows that, overall, respondents felt the context they worked in was only moderately conducive to research activity. In particular, there was a perceived tension among respondents between institutional expectations and the actual support they received in relation to their research activity. The large number of 'don't know' answers which were salient in the questions about colleagues' research activities also signal an individualist rather than a collaborative research ethos which provided limited opportunities for teacher educators to talk about the research they are doing. Such an individualist research ethos may hinder the development of productive research-engaged organizations, for such organizations, as described for example by [Sharp, Eames, Sanders, and Tomlinson \(2006\)](#) and [Carter and Halsall \(1998\)](#), are typically defined by communities of research in which members work with and for each other in exploring issues of common interest. We understand that a recent development in the university where this study took place is a drive to create research groups which may facilitate the kind of collaboration and communication vis-à-vis research which these results suggest may be currently lacking.

6.3. Views of research

Teachers educators' views research were elicited through two items: that involving the rating of scenarios and that where they rated 20 criteria for assessing research quality. Considering the responses to these items collectively, we would cautiously suggest that there was evidence here of a preference for a 'scientific' view of research involving experimental designs, large samples, questionnaires and statistics (this is not surprising given that this is the mode of inquiry which has been traditionally most valued, and which continues to be more widely recognized, in the Saudi Context). There was also, however, a clear awareness among respondents of the value in research of generic qualities (e.g. systematicity, and purposefulness) which are not strongly associated with any one way of doing research. This latter finding reflects that in [Bills \(2004\)](#), whose study of academic supervisors' conceptions of research also generated a set of generic criteria such as being rigorous and methodical. These findings also echo the conclusion in [Kiley and Mullins \(2005\)](#) that the predominant conception of research among university supervisors was a technical one; the kinds of characteristics of research most valued by the Saudi respondents here did in fact emphasize the importance of systematic and rigorous procedures, rather than, for example, originality or relevance for practice.

Two final comments on this aspect of the study are warranted. Firstly, we need to remember that the teacher educators here represented nine different specialist areas; within, these, therefore, differences in conceptions of research may exist and which explain the rather broad view of what counts as research that has emerged here. The frequencies of staff in each separate area were considered too small, though, for any meaningful statistical comparisons of differences across these areas to be made. A second point relates to the elicitation techniques themselves. Given their replicated use in different studies and the consistently positive reliability scores they have generated, we feel that the scenarios are an established and reliable way of exploring views of educational research. We remain, however, less satisfied with the results of the second strategy used here for eliciting respondents' views about the criteria for assessing research. In this study, the list of items used was expanded to 20 from the 11 previously used ([Borg, 2009](#)), yet the discriminatory power of the revised list does not seem strong, with only one of the 20 items receiving an approval rating of less than 50% in relation to its importance in defining good quality research. Clearly, this is a design issue we will continue to reflect on and experiment further with in continuing research of this kind. An analysis of inventories

that have been used for studying conceptions of research in HE contexts (e.g. Meyer, Shanahan, & Laugksch, 2005) may inform this task; the kinds of qualitative prompts utilized by Kiley and Mullins (2005) in studying academics' conceptions of research may also have potential for our continuing inquiries.

7. Conclusion

This study contributes to the international literature on university teacher educators' research engagement by exploring the degree of research activity reported by full-time teacher educators working in a leading Saudi university, their views about educational research and about the extent to which their institution is conducive to research engagement. Overall, our key conclusions here are that, despite institutional expectations to the contrary, rather modest levels of research engagement were reported by the teacher educators and that such engagement seemed to be constrained by what respondents perceived as unsupportive institutional conditions. Before responding to these findings with some practical recommendations, we must reiterate our earlier statement that our agenda here has not been to advance the argument that teacher educators should be research active; rather, our goal has been to understand research engagement in a context where university teacher educators, in line with the broader goals of their institution, are expected to conduct and publish research. No existing work of this kind has been conducted in Saudi Arabia or in the Middle East more generally, and while these findings will be of particular relevance to researchers and policy-makers working in such contexts, a concern for the extent to which university teacher educators are and can be research-engaged is an issue of broader international interest. Additionally, our knowledge and experience of university teacher education in Saudi Arabia, in the Gulf region more generally, and further afield (e.g. in Turkey, Kenya and China, to name just a few settings where research productivity among university teacher educators is promoted) suggest that this study has implications beyond the specific institution examined here. With these broader international connections in mind, then, and informed by the results reported above, we conclude that institutional encouragement may not suffice in enabling university teacher educators to be productively research-engaged; rather, this goal is more likely to be achieved when university teacher education departments:

1. Create mechanisms through which information about teacher educators' attitudes to and engagement in and with research can be collected, shared and discussed. In the absence of such information, informed decision-making about how to support teacher educators' research engagement is not possible.
2. Ensure that institutional expectations regarding teacher educators' research activities are explicit, along with a transparent statement of the support the institution provides to support such activities.
3. Identify any additional support teacher educators feel they require in order to be research active and seek feasible ways of providing it. This support can take many forms – e.g. physical and financial resources, training courses, and encouragement and recognition from managers. This measure can minimize tensions that teacher educators experience between perceived institutional expectations of research and the support they actually receive to meet those expectations.
4. Provide teacher educators with opportunities to broaden their understandings of the various forms that educational research can take. For example, in contexts where quantitative methodologies dominate, teacher educators will also benefit from opportunities to learn about the uses of qualitative research.

5. Foster a collaborative research ethos through which teacher educators are encouraged to work together and which is supported by regular opportunities (physical and virtual) for them to talk about research and to learn about the research colleagues are doing.
6. Encourage teacher educators to adopt (and recognize as a legitimate form of inquiry) inward rather than just outward looking perspectives on the purposes and value of research, hence promoting inquiry which can inform and enhance teacher educators' own professional practices in addition to making a broader contribution to the field. Practitioner research and self study would seem to have much potential in this respect.

We accept that, in many contexts, existing research traditions and practices may be challenged by such measures and that, therefore, their implementation would need to be sensitively handled. We also believe, however, that measures such as these can promote more productive research cultures which enhance university teacher educators' experience of research and contribute to the development of their institution more generally.

To conclude, we need to acknowledge that this study, while generating a range of insights, is based on responses provided by just over 20% of the 389 teacher educators who worked in the university studied here. The lack of time to read and do research cited by several respondents in this study was very plausibly one reason a higher response rate was not achieved (and we acknowledge that completing the instrument used did call for a certain level of application). We would have also valued the opportunity (as in Borg, 2009; Gao et al., 2011) to explore in more depth some of the issues highlighted here through follow-up interviews with selected participants; the resources available to support this study did not, however, enable us to pursue this option. Overall, though, we feel that the questionnaire used generated robust data on a range of issues central to understanding university teacher educators' research engagement; the work we have reported here, too, can also be both replicated, as well as extended through more qualitative work, both in the specific context examined here as well as in a range of research-oriented university teacher education settings internationally.

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Appendix. Questionnaire Section 4: Scenarios

The purpose of this section is to elicit your views on the kinds of activities which can be called educational research. There are no right or wrong answers.

Read each description below and tick **ONE** answer to say to what extent you feel the activity described is an example of research.

- 4.1. A lecturer noticed that an activity she used in class did not work well. She thought about this after the lesson and made some notes in her diary. She tried something different in her next lesson. This time the activity was more successful.

Definitely not research Probably not research Probably research Definitely research

[This scale was repeated after each statement below but is not repeated here in the interests of space].

- 4.2. A lecturer read about a new approach to teaching writing and decided to try it out in his class over a period of two weeks. He video recorded some of his lessons and collected samples of learners' written work. He analyzed this information then presented the results to his colleagues at a staff meeting.
- 4.3. A lecturer was doing a PhD. She read several books and articles about classroom management then wrote an essay of 6000 words in which she discussed the main points in those readings.
- 4.4. A university lecturer gave a questionnaire about the use of computers in language teaching to 500 teachers. Statistics were used to analyse the questionnaires. The lecturer wrote an article about the work in an academic journal.
- 4.5. Two teachers were both interested in discipline. They observed each other's lessons once a week for three months and made notes about how they controlled their classes. They discussed their notes and wrote a short article about what they learned for the newsletter of the national language teachers' association.
- 4.6. To find out which of two methods for teaching mathematics was more effective, a lecturer first tested two classes. Then for four weeks she taught a particular mathematics topic to each class using a different method. After that she tested both groups again and compared the results to the first test. She decided to use the method which worked best in her own teaching.
- 4.7. An official from the Ministry of Education met every teacher in a school individually and asked them for their views on a new textbook. The official made notes about the teachers' answers. He used his notes to write a report for the Ministry.
- 4.8. Mid-way through a course, a lecturer gave a class of 80 students a feedback form. The next day, ten students handed in their completed forms. The teacher read these and used the information to decide what to do in the second part of the course.
- 4.9. A lecturer interviewed a university student once a week for a whole semester in order to understand the learning strategies this learner was using to improve her English. The teacher analyzed the interviews and presented his findings at an education conference.
- 4.10. A teacher trainer observed a novice teacher for four weeks and made notes about the way the teacher taught history. She then wrote an article in which she compared this teacher's approach to teaching history with the advice given by methodology textbooks for teaching history effectively.

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