

Pre-service teachers' efficacy beliefs and concerns in Malaysia, England and New Zealand

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This study compared perceptions of teacher efficacy beliefs and concerns about teaching in pre-service teacher cohorts from New Zealand, Malaysia, and England. Participants were primary pre-service teachers from Malaysia (n = 53), New Zealand (n = 100), and England (n = 119), who completed the Teachers' Sense of Efficacy (long form) (Tschannen-Moran & Woolfolk Hoy, 2001) and the Concerns About Teaching Scale (Smith, Corkery, Buckley & Calvert, 2012) at the beginning of the second year of their teaching programs. Eight focus groups (n = 4 to 8 each) were conducted to further explore the issues. Results indicated that both culture and context are important in regard to pre-service teachers' concerns about teaching and their teacher efficacy beliefs. Differences by nation were most evident in the comparatively low efficacy beliefs reported by the Malaysian pre-service teachers, who also expressed concerns about teaching class sizes of 50 primary students, having subject-based rather than class-based contact with students, and dealing with high parental expectations of student success. Results are discussed in terms of practical applications when preparing pre-service teachers from the cultural contexts represented by the participants.

Pre-service teachers' efficacy beliefs and concerns

Globalisation has resulted in enormous changes in education as students, lecturers and ideas cross borders more than ever before (Harman, 2004). Teacher educators are increasingly likely to be responsible for supporting pre-service teachers from a range of cultures and settings. This research compared teacher efficacy beliefs and concerns about teaching of primary pre-service teachers from Malaysia, New Zealand and England. In doing so, it provides a cross-cultural examination of these two concepts with an aim toward improving teacher education provision for pre-service teachers from diverse contexts and cultures.

Teacher efficacy beliefs

Teacher efficacy beliefs are beliefs that teachers hold about their ability to bring about a range of positive outcomes in their classrooms. These beliefs have been associated with a wide range of positive outcomes for students, schools, teachers, and pre-service teachers (Tschannen-Moran, Hoy & Hoy, 1998). Over the last three decades, teacher efficacy has evolved from Rotter's (1966) locus of control theory (Goddard, Hoy, & Woolfolk Hoy, 2000; Tschannen-Moran et al., 1998; Wheatley, 2002). It is now generally seen to draw more heavily on Bandura's (1977) study of self-efficacy, evident in his social cognitive theory (Wheatley, 2002). According to Bandura (1997), "[p]erceived self-efficacy refers to beliefs in one's capabilities to organise and execute the courses of action required to produce given attainments" (p. 3). Goddard et al. (2000) argued that these two conceptual strands, drawing from Rotter (1966) and Bandura (1977), have resulted in confusion

surrounding the term 'teacher efficacy'. They pointed out that whereas some researchers have presumed Bandura's perceived self-efficacy corresponds largely to Rotter's internal locus of control, there are important differences. The former refers to belief about one's ability to bring about an outcome; the latter refers to beliefs about whether actions affect outcomes. Bandura (1997) has demonstrated empirically that there is at best a weak correlation between these two constructs. Furthermore, he argued that self-efficacy is a strong indicator of behaviour, whereas internal locus of control is not.

In response to this confusion Tschannen-Moran et al. (1998) developed a model of teacher efficacy that "reconciles the two competing conceptual strands found in the literature" (p. 202). They looked to Rotter's (1966) locus of control theory for context and task analysis. However, they assumed that the most significant influences on teacher efficacy beliefs are the attribution analysis and interpretation of Bandura's (1977, 1995) four sources of information about efficacy: mastery experience; physiological and emotional states; vicarious experience; and, social persuasion.

Concerns about teaching

Teacher efficacy beliefs are related to a similar construct: teachers' concerns about teaching (Boz & Boz, 2010; Dunn, Airola, Lo & Garrison, 2013). Like teacher efficacy, teachers' concerns about teaching are seen as being central to pre-service teacher education. Dunn and Rakes (2010) suggested that those responsible for the preparation and education of pre-service teachers should explore teacher concerns, as this construct is important in the development of new teachers. This is not a new call. As early as 1969 Fuller developed a model of teachers' concerns based on the premise that, "[t]eaching with the tide is at least easier on both the instructor and the teacher in preparation than breasting the waves" (p. 223).

In a review from 1969 to 2005 of the literature on teaching concerns, Cherubini (2009) concluded that despite 30 years of educational reforms in the United Kingdom, the United States, Canada, and Australia, "[n]ew teachers experienced many of the same initial concerns that have been documented about beginning teachers for over 35 years" (p. 83). This range of concerns about teaching has included: self-survival, pupil learning, teacher impact, and school improvement (Fuller, 1969; Fuller & Brown, 1975; Guillaume & Rudney, 1993; Pigge & Marso, 1997; Reeves & Kazelskis, 1985). Baum and McMurray-Schwartz (2004) reported that pre-service teachers expressed concerns about the quality of teacher- family relationships and the role of parents in education, and meeting children's needs. Similarly, Veenman (1984) synthesised the findings of research exploring the transition into teaching, and identified pupil motivation, teacher-parent relationships, classroom management, classroom organisation, resource concerns, and discipline as being major concerns for beginning teachers. No research was found that examined whether similar concerns are evident cross-culturally.

Cultural differences in teacher efficacy beliefs and concerns about teaching

Teacher efficacy research was first conceptualised in the United States. At the time of Tschannen-Moran et al.'s (1998) review little research was evident from elsewhere. They and others (e.g., Ho & Hau, 2004) called for more research internationally. In a review of teacher efficacy research from 1998-2009, Klassen et al. (2009) found that researchers had heeded this call, with studies conducted in Asia, Europe, and Oceania. However, a mere six studies involving multiple countries were identified. The literature pertaining to teachers' concerns comprises a limited number of studies from non-Western contexts including Çakmak (2008) in Turkey and Liaw (2009) in Taiwan. There was a notable absence of multiple country comparative studies.

Conceptual framework

As this review of the literature indicates, teacher efficacy beliefs and teacher concerns have considerable heuristic value. The conceptual framework for the current research is underpinned in particular by the model of teacher efficacy developed by Tschannen-Moran et al. (1998). This well established construct of teacher efficacy provides an extremely useful lens through which one can examine a pertinent issue for teacher educators: namely, how to recognise the potential impact of pre-service teachers' culture and context on their beliefs about themselves as emerging professionals and the nature of teaching.

More specifically this research sought to examine teacher efficacy and teacher concerns in three cohorts of pre-service teacher education students. Two of the countries (UK and New Zealand) bear similarities culturally, while the third (Malaysia) is very different (see Hofstede, 2001). Using the same set of instruments and procedures, this research allowed for the direct comparisons that are lacking in studies that are not cross-cultural in design.

Method

Participants

A total of 272 teacher education students participated from three groups (referred to as 'cohorts'), from England, Malaysia, and New Zealand. Additionally, 43 of these students participated in focus groups. All participants were in their second year of primary pre-service teacher education programs. The Malaysian participants ($n = 53$) were aged from 20-22, with a median age of 21; there were 38 females and 15 males. New Zealand participants ($n = 100$) were aged 19-54, with a median age of 19; there were 81 females and 19 males. UK participants ($n = 119$) were aged 19-39, with a median age of 19; there were 110 females and 9 males. Each of the cohorts was somewhat ethnically diverse: the Malaysian cohort reported their ethnicity as Malaysian $n = 36$, Chinese $n = 8$, Indian $n = 3$, and belonging to various indigenous groups (e.g., Iban, $n = 6$). The Malaysian participants were in a program for teaching English in primary schools and had strong English fluency. In the New Zealand cohort, five pre-service teachers reported their ethnicity as Maori and three pre-service teachers reported their ethnicity as Pacific Islander; the remainder

reported their ethnicity as NZ/European (Caucasian). Of the English cohort, the majority recorded their ethnicity as White British/Irish, with one participant reporting to be Afro-Caribbean and one as Pakistani.

For the focus groups, the Malaysian participants ($n = 16$) comprised 13 females and 3 males, reporting their ethnicity as Malay ($n = 11$), Chinese ($n = 2$), Indian ($n = 1$), and Iban ($n = 2$). The New Zealand participants ($n = 19$) comprised 13 females and 6 males. One interviewee reported her ethnicity as Maori; one reported her ethnicity as Samoan. One male and one female pre-service teacher were over 40 years of age, with the remainder of the participants reporting their ages as 19-25 years old. The English participants ($n = 8$), who participated in focus groups at their university in England, were comprised of six females and two males, six of whom were White British and two White Irish. Seven of participants were aged 19-25, and a eighth was 39. There were three groups each of Malaysian and New Zealand participants, and two groups of English participants. A third English focus group was cancelled due to the tragic death of a student on his way to university on the day of the interview. It should be noted that the Malaysian cohort participated in this research upon arrival in New Zealand for a study period of two years, before returning to Malaysia for the final year of their program.

Materials

The materials for this study consisted of a brief demographic questionnaire, The Concerns about Teaching Scale (CAT; Smith, Klein & Mobley, 2007; Smith, Corkery, Buckley & Calvert, 2012), The Teachers' Sense of Efficacy Scale (long form) (TSES; Tschannen-Moran & Woolfolk Hoy, 2001), and semi-structured focus group protocols based on the responses to surveys with opportunity for participants to add relevant information.

The Concerns about Teaching Scale

The Concerns about Teaching Scale (Smith et al., 2007; Smith et al., 2012) was selected as it has been used with success in conjunction with the TSES and focus groups in a New Zealand context. This instrument is unique among measures of teacher concerns in its break from Fuller's (1969) theoretical base, instead looking to the teacher efficacy literature for its conceptual underpinning. The CAT has 17 items assessed along a 6-point continuum (1-Strongly Disagree to 6-Strongly Agree).

Recent investigations using the CAT have resulted in factor structures that differed depending on how much practicum experience the respondents had (Smith et al., 2012). Data collected from New Zealand pre-service teachers prior to practicum experience yielded a one-factor solution, whereas after practicum experience, a three-factor structure was evident. These factors were labelled: classroom issues, personal issues of academic preparation and external support, and acceptance as a teacher/ professional. Similarly, Smith et al. (2007) found that data collected from pre-service teachers in the US prior to their first practicum yielded one factor; data collected after their practicum resulted in three clear factors identified as: personal issues, university/cooperating teacher support, and life balance/stress.

The Teachers' Sense of Efficacy Scale (long form)

The TSES is a widely accepted measure of teacher efficacy (see Klassen et al., 2009; Knobloch & Whittington, 2002; Cheung, 2008). The TSES uses 24 items assessed along a 9-point continuum (1-Nothing to 9-A Great Deal) to measure three dimensions: efficacy for student engagement, efficacy for instructional strategies, and classroom management. Reliabilities for the full scale range from .92 to .95, and for the subscales from .84 to .87 (Tschannen-Moran & Woolfolk Hoy, 2007). Tsigilis, Koustelious, and Grammatikopoulous (2010) argued that as these pertain to samples from the United States further testing outside of the United States is necessary.

Procedure

Ethics approval and Maori consultation in accordance with university requirements were obtained. Volunteers were invited to participate by faculty at their tertiary institutions. They completed consent documents, the CAT, and the TSES during the first weeks of the second year of their degree programs. The focus groups followed the quantitative data collection, lasting approximately 50 minutes each. Some focus group participants were given lunch (subject to time of interview) but no other compensation was made. The number of participants in each focus group was held to a minimum of four to ensure that they were, "small enough for everyone to have opportunity to share opinions and yet large enough to provide diversity of perceptions" (Krueger, 1988, p. 27). The interviews were recorded and then transcribed. All questionnaires and interviews were conducted in English.

Data analysis

The data were analysed using *SPSS Version 20* computer software and thematic data analysis. The qualitative data were transcribed and responses were coded by hand, and analysed thematically to determine distinct and recurring ideas via an emergent design with a general inductive approach (Thomas, 2006). Consistent with Strauss and Corbin's (1998) grounded theory approach, detailed, iterative readings were conducted, with constant comparisons made to responses. Interrater reliability was examined via comparison of the coding between the researchers.

Results

Factor analysis of the TSES and the CAT

Factor analyses of the TSES were conducted for each of the cohorts of pre-service teachers to investigate how context or culture might affect the factorial structure of teacher efficacy beliefs in each setting. An examination of the correlations among the variables for each of the measures indicated a moderate to strong set of intercorrelations, which suggested that factor analyses were justified. This was also in keeping with previous research on these measures as described above. Principal Components Analysis was used, with a direct oblimin rotation and using the criterion of Eigen values > 1.0. The Kaiser-

Meyer-Olkin Measure of Sampling Adequacy (0.82, NZ; 0.85, UK; 0.77, Malaysia) and the Bartlett's Test of Sphericity ($p < .001$ for all samples) were acceptable.

The eigenvalues from these analyses are presented in Table 1. For each of the samples the first eigenvalue is substantially higher than any of the remaining eigenvalues, suggesting a one-factor solution. This stands in contrast to the three-factor solution reported by Tschannen-Moran and Woolfolk Hoy (2001). A three-factor solution was theoretically problematic here, as items reflecting classroom management, student engagement, and instructional strategies were assigned to the same factor. Thus, following Fives and Buehl (2010), the one-factor solution was viewed as a better representation of the teacher efficacy beliefs of these pre-service teachers. Using coefficient alpha, the reliabilities for the full-scale TSES for the New Zealand, English, and Malaysian cohorts, respectively, were .95, .87, and .96.

Table 1: Factor analysis of TSES – Eigenvalues (first 10) by cohort

| Factor | New Zealand | England | Malaysia |
|--------|-------------|---------|----------|
| 1 | 11.25 | 11.85 | 12.14 |
| 2 | 1.41 | 1.83 | 1.59 |
| 3 | 1.29 | 1.32 | 1.40 |
| 4 | 1.17 | 1.09 | 1.23 |
| 5 | .98 | .86 | 1.08 |
| 6 | .93 | .84 | .83 |
| 7 | .77 | .74 | .74 |
| 8 | .74 | .69 | .66 |
| 9 | .66 | .55 | .60 |
| 10 | .55 | .50 | .54 |

Factor analyses of the CAT also were computed for each of the cohorts. The factor analysis results for the CAT were more complicated than for the TSES. To begin, the number of factors to retain for analysis differed by cohort. The eigenvalues for the factor analyses for the cohorts are presented in Table 2. Based on the eigenvalues and using the scree breaks for the cohorts, a two-factor solution for the New Zealand cohort, a four-factor solution for the English cohort, and a five-factor solution for the Malaysian cohort were considered. However, after examining the results across solutions and samples, two factors in common across the three cohorts were identified, and then uniqueness in how the factors loaded were explored.

Complete factor loadings are shown in Appendices A and B.

The first factor focused on issues related to anticipating being successful in taking over a classroom during student teaching; the second factor related to receiving support from families, friends, supervising and classroom teachers. Five items from the scale loaded on each of the two factors for each of the three cohorts. Using coefficient alpha, the reliabilities for the first factor for the New Zealand, English, and Malaysian cohorts were,

Table 2: Factor analysis of CAT – Eigenvalues (first 10) by cohort

| Factor | New Zealand | England | Malaysia |
|--------|-------------|---------|----------|
| 1 | 6.26 | 6.00 | 6.47 |
| 2 | 1.89 | 2.19 | 2.12 |
| 3 | 1.19 | 1.37 | 1.35 |
| 4 | 1.05 | 1.31 | 1.17 |
| 5 | .97 | .86 | 1.15 |
| 6 | .92 | .75 | .89 |
| 7 | .82 | .67 | .71 |
| 8 | .67 | .56 | .65 |
| 9 | .59 | .55 | .51 |
| 10 | .49 | .51 | .44 |

respectively, .83, .81, and .77. For the second factor, they were .74, .73, and .86. These two factors, which were labelled anticipation and support, can essentially be found in the work of Smith et al. (2012). The items that loaded on the anticipation factor were: I am academically prepared to teach my subject; I am emotionally prepared to be a teacher; I am confident my literacy skills are sufficient for planning lessons and preparing teaching materials; I will be able to balance my personal and professional demands; and, I will be effective at classroom management. The items that loaded on the support factor were: I will receive support from my associate teacher while I am on practicum; My lecturers will be supportive; My family will be supportive of my becoming a teacher; My friends will be supportive of my becoming a teacher; and, I will fit in with the other teachers in the classroom environment.

The results that did not come out consistently across the cohorts related to being accepted by students, fitting in with other teachers, and having values matching those of state schools. Two items (Academically prepared and Literacy skills are sufficient) formed a strong factor that pertained only to the Malaysian students. Given that the Malaysian students were preparing to teach in a language other than their first language, perhaps to students who spoke a completely different language from their own, this concern is not surprising. In the focus groups, the Malaysian students also expressed a stronger concern for being well prepared academically than did either of the other two groups.

Analysis of variance of the TSES and the CAT

As TSES produced a single factor score, a univariate analysis of variance (ANOVA) was used to examine cohort differences on that measure. The ANOVA yielded a significant difference among the three groups, $F(2, 251) = 5.534$, $p = .004$, partial eta squared = .042. A further examination of the mean differences using the LSD post hoc procedure at $\alpha = .05$ showed that the average for the Malaysian cohort ($M = 143.41$, $SD = 25.96$) was significantly lower than the averages of either the New Zealand ($M = 156.23$, $SD = 22.63$) or the English ($M = 156.80$, $SD = 26.90$) cohorts. Generally speaking, the Malaysian students were much less confident about their potential success as teachers, at roughly .50 standard deviations lower in mean score than the other cohorts.

Having obtained two factors (Anticipation and Support) on the CAT, a multivariate analysis of variance was run, and then a univariate follow up was conducted. For the multivariate analysis, the Anticipation and the Support factors were used as dependent variables, with group as the independent variable. The means and standard deviations for these analyses are presented in Table 3. Using Wilk's Lambda, the differences among groups were statistically significant, $F(4, 534) = 3.481, p = .008$. Examining each of the dependent variables in univariate ANOVAs, the results for Support were statistically significant, $F(2, 271) = 4.979, p = .008$, partial eta squared = .036; the results for Anticipation fell short of statistical significance, $F(2, 271) = 2.761, p = .065$. Again using the LSD post hoc procedure at $\alpha = .05$ for the Support variable, the New Zealand group had a higher mean than either the Malaysian or English groups.

Table 3: Descriptive statistics for the CAT factors by cohort

| Factor | Cohort | Mean | SD | N |
|------------|-------------|-------|------|-----|
| Support | New Zealand | 27.52 | 2.64 | 101 |
| | England | 26.36 | 2.71 | 118 |
| | Malaysia | 26.33 | 3.98 | 52 |
| | Total | 26.79 | 3.01 | 271 |
| Anticipate | New Zealand | 23.75 | 3.70 | 101 |
| | England | 23.43 | 3.44 | 118 |
| | Malaysia | 22.38 | 2.85 | 52 |
| | Total | 23.35 | 3.46 | 271 |

Qualitative results

Teacher efficacy beliefs

The results of the inductive analysis relating to the participants' perceptions of their teacher efficacy beliefs yielded four themes: experience, others, natural ability and learning.

Experience

This theme reflected beliefs that experiences were sources of teacher efficacy beliefs across all groups. Such experiences included: future teaching experience, practicum, and prior experiences such as coaching sports, leading youth camps, helping with children's groups, prior professional roles, and experience as parents. At least one participant in every group made explicit a belief that teacher efficacy beliefs changed as a result of experience: "I think they will change over time. Before this [experience], I think I can't teach, but once I get into a classroom... I come to believe that I can become a good teacher" (female, Malaysian Focus Group Three).

Participants in the two English focus groups, two of the New Zealand focus groups, and one of the Malaysian focus groups identified past experiences as a source of efficacy beliefs. For example, one stated, "I thought I'd do all right, because I have had to teach people before, including my own children, and at work prior to this" (male, mature student, New Zealand Focus Group One). Participants in all of the cohorts identified

practicum as a source of teacher efficacy beliefs: “Through experience during the practicum, I came to see I can do better” (female, Malaysian Focus Group Three). “A lot of it [efficacy belief] has come off placement” (male, English Focus Group One). Furthermore, participants in all of the focus groups suggested that more practicum experience would result in enhanced teacher efficacy beliefs: “I think that what the college should do is give more time for us with students in schools” (female, Malaysian Focus Group One), and “More time in schools, I think we need more... being with the children we are going to be with in the future is important” (mature female, English Focus Group One).

Others

The second theme: ‘others’, reflected the importance of key figures to whom the pre-service teachers attributed influence or the potential to influence teacher efficacy beliefs. These key figures included the pre-service teachers’ parents, other non-specific friends and family, associate teachers, lecturers, former schoolteachers, beginning teachers, and their own future students.

Although beliefs about the importance of other people were evident in the discussions from every focus group, differences arose across cohorts. For example, seven participants across all three of the Malaysian focus groups made statements that attributed the formation of teacher efficacy beliefs to parents. In contrast, only one New Zealand focus group member and one English focus group member acknowledged the influence of parents. Where parental influence was identified, parents were most often seen as role models. For example, “I fell in love with teaching because both my parents were teachers, and I used to follow them to their schools and observe how they taught” (female, Malaysian Focus Group Three).

Malaysian and English participants, but not New Zealand participants, cited former teachers as sources of efficacy beliefs: “I had a chemistry teacher who always helped me; I want to be like her” (female, Malaysian Focus Group One). Two English participants described the importance of their own observations of their teachers in primary school in the formation of their efficacy beliefs, but they were more ambiguous than their Malaysian peers.

I think they [teacher efficacy beliefs] come from your experience of school when you were a pupil, and you knew the teachers you liked and the teachers you didn’t like, and the teachers that pushed you to reach your potential (female, English Focus Group Two).

Associate teachers were seen as sources of efficacy beliefs for New Zealand and English participants, but not for Malaysian participants. Three New Zealand participants (one from each group) viewed associate teachers as role models. Similar responses were evident from the English participants. One participant described how his associate teacher responded to a violent incident in the classroom, which increased his own sense of personal efficacy.

... just how the teacher reacted, he seemed like so strong and in control of the situation, despite the fact that he had just had a chair thrown at him, but then talking to him in the classroom later, he said he was petrified, but you can't let them know that, because you have got to stay in charge of the situation (male, English Focus Group One).

Lecturers were viewed both positively and negatively. Two Malaysian participants viewed their lecturers as positive role models: "I feel inspired looking at the way she [my lecturer] conducts the class so I think I want to be like her" (Malaysian Focus Group Three). Discussion in all three New Zealand focus groups focused on how effectively lecturers prepare pre-service teachers for practicum and support them during it. There was no mention of lecturers in English Focus Group One, but in English Focus Group Two, one participant reported a negative response from a lecturer on a school visit. She shared that she had been "really set back" by the criticism she received (female, English Focus Group Two).

The importance of children's responses featured for seven participants: two New Zealanders, three Malaysians, and two from the English cohort. They cited being able to engage children and experiencing success with them as indicators of pre-service teacher ability. In response to the question, "What factors could cause your current teacher efficacy beliefs to change?" One participant answered, "There are several factors, such as the response that I get from my future students" (male, Malaysian Focus Group Two).

Natural ability

The third theme 'natural ability', reflected a belief that awareness of intrinsic abilities acted as an antecedent for teacher efficacy beliefs. Associated with this was the idea that teacher efficacy beliefs were to some extent fixed as a result of these intrinsic abilities. Eight of the 10 references to this theme originated in the New Zealand focus groups, with only one related statement occurring in each of the other cohorts. One participant noted, "I had that natural instinct to be a leader slash a teacher sort of thing. And then I've really loved coaching hockey and teaching children, yeah but, I think it is just who I am" (female, New Zealand Focus Group One). The statement from the Malaysian focus group was slightly different, as it identified the value of dispositions, "I think because I am people-orientated, it will help in doing this job as teaching is very much a people-orientated" (female, Malaysian Focus Group Two).

Academic learning

The final theme in this section 'learning', reflected how participants perceived the relationship between their academic studies and their teacher efficacy beliefs. It is of note that all of the New Zealanders who commented on the value of academic studies negated their value: "It doesn't seem practical, you can't just take it and use it" (female, New Zealand Focus Group One). In contrast, all statements from the Malaysians were positive, expressing the value of academic study: "Sometimes when I read about teaching, some of the ideas, straight away I think this is really good... it can really change your perception of teaching. Let's say if it's something positive, then your self-efficacy will change, as well (male, Malaysian Focus Group Three).

Concerns about teaching

Eight themes emerged regarding concerns about teaching. They were: parents, classroom management, subject knowledge, status of teachers, policy, false accusations, theory/practice, and support.

Parents

This theme reflected concerns about conflict with parents and not meeting parental expectations. Only one focus group (New Zealand Focus Group Two) failed to identify concerns about relationships with the parents of their students. Some of the Malaysian pre-service teachers lamented a change in the traditional teacher/parent relationship in Malaysian society, although they felt that in rural Malaysia where many of them expected to teach, traditional relations still existed. The Malaysian students were also concerned with high parental expectations: "In Malaysia we are too exam-orientated; they [parents] want children to all get As" (female, Malaysian Focus Group Two). The New Zealand cohort talked about conflict with parents, demanding parents, and teacher/parent conferences. One participant expressed concern about "An angry parent laying in [attacking verbally], especially if they were a bit intimidating" (male, mature student, Focus Group One); three others in that group agreed. All of the English participants expressed concern about escalating aggression from parents in schools: "I've seen parents storming into the classroom and starting shouting" (female, English Focus Group Two).

Classroom management

This theme was evident in all but New Zealand Focus Group Two. Four participants in the New Zealand focus groups, and six in the English groups raised this concern. A total of 16 statements reflecting this concern were made in the Malaysian groups. All of the Malaysian statements related to contextual difficulties, such as large class sizes: "It is quite hard to have 40 to 50 students. Those that sit at the back might be doing other things while you were teaching" (male, Malaysian Focus Group Three). Another suggested that this issue is compounded by limited time with classes: "In one week we are having to deal with five classrooms and each of the classrooms have 40 students" (Malaysian Focus Group Three).

Subject knowledge

This theme reflected concerns relating to subject or content knowledge. Six participants identified subject knowledge as a concern. Only one Malaysian participant identified subject knowledge as a concern, suggesting, "... it is a disaster if we teach the wrong grammar to students" (female Malaysian Focus Group Three). However, another member of the same focus group explained why this issue was not much of a concern, "We don't worry much about what we teach, because we are assigned one subject to teach" (female, Malaysian Focus Group Three).

Status of teachers

This theme reflected concerns relating to the status of teachers in society; however this was not evident in the English focus groups. In New Zealand Focus Group One, three female participants expressed concerns that teaching was seen as an easy job: "I think

another big issue is the value people put on teaching, and a lot of people just see teaching as an easy job. One of my good friends is always putting down teachers in front of me.”

Policy

This theme reflected concerns about government and school policy. One participant in each of the New Zealand focus groups expressed concern about the New Zealand government’s recent National Standards initiative. Policy related concerns for the English focus groups mostly pertained to government interventions in school, such as national curriculum assessments. The Malaysian focus groups identified a number of concerns about government policy, most commonly in reference to the placement of beginning teachers in remote or rural areas for which there were 10 references across all three groups. One student noted “For some of us, we are scared that we need to go to the rural area like Sarawak or Borneo islands” (female, Malaysian Focus Group One).

False accusations

This theme reflected concerns of being wrongfully accused of improper actions toward children. Four focus groups raised concerns related to this theme: one New Zealand, one Malaysian, and two English groups. The nature of the concerns was different across the groups. A Malaysian student described accusations as giving false information: “If the parents try to accuse us of giving false information. You are doing a good thing, but people don’t see” (female, Malaysian Focus Group One). In contrast, the New Zealand and English focus groups’ discussions centred on allegations of physical abuse: “It is always at the back of my mind” (male, New Zealand Focus Group Three). One commented: “They were lining up, and this girl was going past me and I just gently touched the top of her shoulder and she said ‘Miss, don’t push me’... I couldn’t believe she was actually saying, ‘Don’t push me,’ because I knew myself that I didn’t” (female, English Focus Group One).

Theory/practice

This theme reflected concerns about too much theory and too little practice in participants’ degree programs. Participants in all three New Zealand focus groups expressed this concern. Although such criticism was notably absent in the Malaysian groups, all three Malaysian groups agreed that more practicum experience would be welcomed. The participants in the English focus groups also called for more time to be spent in schools. One participant explained “I learn more on placement, because it’s in practice that I can see what’s happening” (female, English Focus Group One).

Support

The last theme reflected concerns about the quality of support offered to the pre-service teachers from key individuals such as associate teachers, university lecturers, and future colleagues. Concerns about a lack of support from university lecturers while on practicum emerged in New Zealand Focus Group One. However, the more general support offered by lecturers was discussed in the New Zealand and Malaysian groups. Three of the English pre-service teachers reported satisfaction with lecturer support as well. One stated

But really there is a lot of support there and you just need to find the right people to talk to, because like all the time whenever I was struggling I always got told 'you can do it' and that just spurs you on even more (female, English Focus Group Two).

Discussion

The findings presented here are somewhat consistent with the research on teacher efficacy and concerns from the literature, but with some important differences as well. The TSES appears to be more unidimensional in this research than has been previously reported, and the CAT shows two fairly strong factors. Previous research using the CAT (Smith et al., 2007; Smith et al., 2012) demonstrated a move from one factor (for students with little experience in schools) to three (for students with a lot of experience in schools) however, the current research was not a longitudinal study and so it is not possible to determine whether obtaining two factors at this point in time supports that research. A second key finding in this study is that the Malaysian students appeared to be rather distinct from the New Zealand and English cohorts.

Differences in teacher efficacy beliefs and concerns about teaching

A strong finding on both the TSES and the CAT was that the Malaysian pre-service teachers' mean scores were lower than their New Zealand and English peers. There are a number of potential cultural explanations for this difference in the literature. Hofstede (2001) argued that the responsibility accepted by teachers for their students' learning was greater in high power distance societies, such as Malaysia, as compared to low power distance countries such as New Zealand and Great Britain. Cheung (2006), Lin, Gorrell, and Taylor (2002), Ho and Hau (2004), and Tsui and Kennedy (2009) also highlighted different cultural understandings of the role of the teacher. Statements made by the Malaysian focus group members, however, challenged an overly simplistic application of the construct of power distance. Several of the Malaysian pre-service teachers expressed concerns about criticism from parents and disobedience from children, societal changes in Malaysia, and differences between the attitudes of parents in the urban areas in comparison to the rural areas. This serves as an important reminder that cultures are not fixed (Doherty & Singh, 2005), but are "diverse and dynamic" (Bandura, 2002, p. 269).

Important differences among the national cultures of these cohorts were also evident in Hofstede's (2001) Individualism/Collectivism dimension. Hofstede identified Great Britain as ranked third most individualist, New Zealand sixth, and Malaysia thirty-sixth. Hofstede stressed the importance of harmony in the collectivist classrooms. Indeed, there was some indication of higher expectations for student behaviour from the Malaysian groups than from the other groups. Additionally, in Ho and Hau's (2004) comparative study of Chinese and Australian teachers, Chinese teachers reported lower levels of teacher efficacy belief. Ho and Hau (2004) attributed this to both the culturally expected self-effacing tendencies of people from collectivist cultures and culturally grounded higher expectations of teachers evident in Chinese society. Thus, cultural preferences may explain

some of the differences identified among the groups' perceptions of the sources of their efficacy beliefs.

The focus group data suggest that contextual factors offer another explanation for the Malaysian pre-service teachers' lower teacher efficacy scores. All participants were beginning second-year pre-service teachers, however during their first year they had had differing exposure to schools. The Malaysian pre-service teachers had spent 10 days in school; the New Zealand pre-service teachers had spent 25 days; the English pre-service teachers had spent 40 days. The significance of the relationship between the amount of time allocated for practicum and pre-service teachers' efficacy beliefs warrants further study.

Perhaps more important is the nature of the teaching task as described by the Malaysian participants in the focus groups. Their class sizes are twice the size of those typically found in a New Zealand primary classroom and were considered to be an obstacle to effective teaching. Also, the Malaysian pre-service teachers were being prepared for subject-based primary teaching, unlike their New Zealand and English peers, who were most likely to be class-based. This was particularly evident in discussions relating to classroom management and student support.

In terms of the factor analysis of the TSES data, obtaining a one-factor solution would suggest that in keeping with Fives and Buehl (2010) and Duffin, French and Patrick (2012), the participants viewed teaching holistically and in a less sophisticated fashion than more experienced teachers. However, the rich discussion evident in the focus groups challenges this to some extent. The analysis of the focus groups resulted in a clear set of differentiated themes, possibly implying greater sophistication than the interpretation that the factor analysis provides. This will need to be explored in future research.

The similarities of the two-factor structure on the CAT data may reflect that all participants have been exposed to similar modern education systems and tertiary programs. However, within the factors the Malaysian students differed significantly from their Western counterparts, reinforcing the cultural and contextual factors discussed. Again, here the focus group data facilitated a rich exploration of the reasons for difference. Furthermore, it offered some support to the two-factor solution for the CAT. The factors 'anticipation' and 'support' were discussed as distinct. For the most part, participants expressed confidence in the support that was available to them from others, whereas they typically shared a greater degree of concerns relating to their anticipation of their ability to succeed in the classroom environment.

Conclusion

This research has identified significant differences in the teacher efficacy beliefs and concerns about teaching between Malaysian pre-service teachers and pre-service teachers from two Western nations. One size does not fit all. Those responsible for supporting the development of pre-service teachers should consider such differences and take into account cultural and contextual factors when seeking to build pre-service teachers' efficacy

beliefs and ameliorate their concerns. Nevertheless, the rich discussions from the focus groups suggest that similar concerns also exist cross-culturally. Indeed, concerns about managing classrooms and dealing with parents seem to be ubiquitous, crossing borders and time. It is of note that over 80 years ago Philips observed new teachers in the UK complaining, “about difficulties maintaining discipline... and the aggressive attitudes of parents towards teachers” (Fuller, 1969, p. 209).

Concerns are often addressed directly in teacher education programs as pre-service teachers are presented with strategies and asked to reflect on their practice. However, perhaps more could be done to address concerns by helping pre-service teachers develop robust teacher efficacy beliefs. This research suggests that teacher educators must acknowledge that pre-service teachers begin initial teacher education (ITE) programs with unique and potentially powerful beliefs about themselves and teaching. It seems appropriate that pre-service teacher education students are encouraged to engage with these beliefs to make them explicit and reflect on how they may influence their actions as teachers. In this, it is important to consider the impact that teacher educators can have by modelling good practice and providing support and carefully worded feedback.

It also appears that, in some contexts at least, work needs to be done to explain to pre-service teachers the importance of theory and research for building effective practice. In the Malaysian cohort, there was a general sense that academic study about teaching would enhance efficacy beliefs. This was not the case with the New Zealand and English cohorts. Careful consideration needs to be given about where pre-service teachers are placed for their school-based experiences to ensure that the best classroom teachers are provided as role models, and that the teaching experiences are scaffolded sufficiently so success is experienced and mastery developed. In this way, not only can the theory-practice nexus be reinforced, but also as Bandura (1977, 1995) suggested, mastery experience, vicarious experience, and social persuasion should contribute to building efficacy. It is argued here that increased efficacy will likely reduce concerns. The importance of building pre-service teachers’ teacher efficacy beliefs is underscored by the resilience of these beliefs once they are formed (Woolfolk Hoy & Spero, 2005). It seems prudent to help shape positive efficacy beliefs from the start, and by directing teacher education students in finding ways to work through their concerns, if not eliminate them completely.

This research has also revealed something of the complexity of comparing pre-service teachers from a variety of settings. Though, there is a caution against overly simplistic and naïve use of these comparative data. Each of the cohorts was made up of diverse individuals with differing experiences and varying opinions. This research has compared the central tendencies of these groups and does not purport to describe a typical Malaysian, New Zealand, or English pre-service teacher; such a person does not exist. The TSES and the CAT were shown to be suitable for use with pre-service teachers in a cross-cultural context. Their robust psychometrics held in this study, which is encouraging for the CAT, which had not previously been used in cross-cultural investigations.

There are, as might be expected, limitations to this study. As with many studies, there may be questions regarding the representativeness of convenience samples. Furthermore, in

this study, the Malaysian participants had been selected to spend the middle two years of their ITE at an overseas university. They may not represent the broader population of Malaysian primary pre-service teachers. Also, this study had limited numbers of participants in only three geographical locations.

Currently, data are being collected that will consider how these concerns and beliefs evolve over time for pre-service teachers. These data will also be used to consider the relationship between the concepts of teacher efficacy belief and teacher concerns. More than ever, there are discussions and political decisions regarding how to prepare teachers, appropriate qualification levels for beginning teachers, and how much of ITE programs should be school based. In these discussions, we should not lose sight of the varied backgrounds and diverse experiences of our aspiring teacher education students. Paying attention early on to efficacy beliefs and concerns about teaching may contribute to positive and lifelong effects for our teachers.

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Appendix A: Factor loadings by measure by cohort for TSES

Factorial structure of the one-factor solution of the teachers' Sense of Efficacy Scale (long form) (TSES; Tschannen-Moran & Woolfolk Hoy, 2001), (n = 272)

| Item | Cohort | | | Communality (h ²) | | |
|-------------------------------------|---|---------|----------|-------------------------------|---------|----------|
| | NZ | England | Malaysia | NZ | England | Malaysia |
| Get through-difficult students | .57 | .45 | .60 | .56 | .63 | .65 |
| Help students think critically | .39 | .34 | .38 | .75 | .66 | .73 |
| Control disruptive behaviour | .56 | .39 | .63 | .72 | .74 | .74 |
| Motivate students-low interest | .27 | .51 | .37 | .65 | .73 | .86 |
| Clear behaviour expectations | .76 | .21 | .28 | .62 | .68 | .76 |
| Get students to believe do well | .60 | .28 | .52 | .70 | .67 | .68 |
| Respond to difficult questions | .49 | .55 | .56 | .61 | .68 | .75 |
| Establish routines | .71 | .46 | .39 | .55 | .52 | .63 |
| Help students value learning | .58 | .55 | .53 | .72 | .72 | .75 |
| Gauge student comprehension | .39 | .59 | .59 | .58 | .76 | .78 |
| Craft good questions | .52 | .19 | .68 | .60 | .50 | .74 |
| Foster student creativity | .13 | .54 | .62 | .60 | .78 | .62 |
| Get children follow class rules | .72 | .53 | .63 | .59 | .55 | .67 |
| Improve understanding if failing | .44 | .56 | .45 | .59 | .61 | .81 |
| Calm a disruptive/noisy student | .44 | .66 | .81 | .73 | .64 | .78 |
| Classroom mgmt with group | .84 | .83 | .77 | .74 | .77 | .63 |
| Adjust for individual students | .62 | .71 | .67 | .54 | .68 | .60 |
| Variety of assessment strategies | .66 | .76 | .52 | .65 | .59 | .72 |
| Problem students-not ruin lesson | .58 | .87 | .82 | .56 | .78 | .70 |
| Provide alternative explanations | .39 | .84 | .76 | .49 | .74 | .80 |
| Respond to defiant students | .27 | .80 | .83 | .71 | .67 | .73 |
| Assist families to help children | .38 | .66 | .67 | .59 | .63 | .71 |
| Implement alternative strategies | .67 | .81 | .84 | .71 | .75 | .88 |
| Appropriate challenges-very capable | .61 | .75 | .73 | .56 | .62 | .74 |
| Eigenvalue | 11.25 | 11.85 | 12.14 | | | |
| % of Variance | 46.88 | 49.36 | 50.60 | | | |
| Factor | Pre-service teachers' perception of teaching efficacy | | | | | |

Appendix B: Factor loadings by measure by cohort for CAT

Factorial structure of the two-factor solution of the Concerns About Teaching Scale (Smith, Klein & Mobley, 2007; Modified with permission) (n = 272)

| Item | Factor 1 by cohort | | | Factor 2 by cohort | | | Factor 1 communality (h ²) | | |
|-----------------------------------|--------------------|-------|-------|--------------------|-------|-------|---|-----|-----|
| | NZ | Eng | Mal | NZ | Eng | Mal | NZ | Eng | Mal |
| Academically prepared | .81 | .39 | .08 | -.08 | .03 | -.01 | .72 | .55 | .87 |
| Emotionally prepared | .79 | .35 | .10 | .14 | .30 | .27 | .62 | .62 | .52 |
| Literacy skills sufficient | .61 | .10 | .28 | -.08 | .05 | .28 | .40 | .63 | .74 |
| Support from associate teachers | .37 | .24 | .49 | .35 | .32 | -.13 | .61 | .81 | .80 |
| Support from lecturers | .24 | .22 | .83 | .35 | .23 | -.20 | .66 | .80 | .74 |
| Support from family | .19 | .05 | .71 | .81 | .81 | -.43 | .67 | .68 | .86 |
| Support from friends | .28 | .11 | .73 | .72 | .79 | -.34 | .64 | .66 | .82 |
| Smooth transition-My authority | .70 | .70 | .34 | .12 | .07 | -.15 | .51 | .59 | .59 |
| Balance personal/professional | .70 | .50 | .32 | .47 | .35 | .21 | .63 | .62 | .72 |
| Effective-classroom mgmt. | .79 | .58 | .34 | .28 | .32 | .37 | .66 | .60 | .60 |
| Students accept me as teacher | .70 | .81 | .25 | .21 | .05 | .14 | .50 | .67 | .76 |
| Effective time mgmt./organisation | .63 | .57 | .52 | .45 | .35 | .40 | .57 | .57 | .62 |
| Teaching experiences stress free | .47 | .65 | .26 | .16 | -.06 | .82 | .66 | .61 | .79 |
| Accepted as teacher not student | .58 | .82 | .60 | -.02 | -.05 | .50 | .63 | .73 | .66 |
| Reliable, punctual, dependable | .21 | .25 | .89 | .11 | .78 | .13 | .61 | .63 | .82 |
| Fit in-staff room | .41 | .79 | .70 | .01 | .41 | .21 | .68 | .73 | .60 |
| Values-match state schools' | .17 | .54 | .85 | .42 | .30 | .19 | .62 | .37 | .77 |
| Eigenvalue | 6.26 | 6.00 | 6.47 | 1.89 | 2.19 | 2.12 | | | |
| % of Variance | 36.81 | 35.30 | 38.08 | 11.10 | 12.87 | 12.45 | | | |
| Factor | Anticipation | | | Support | | | | | |

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