

Journal of Research, Policy & Practice of Teachers &
Teacher Education (ISSN 2232-0458/ e-ISSN 2550-1771)
Vol. 10, No. 2, December 2020, 63-76

Filipino senior high school teachers' continuing professional development attitudes: Exploring the roles of perceived demand amid a national education reform

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To cite this article (APA): Bernardo, A. B. I., Wong-Fernandez, B., Macalaguang Jr, M. D., & Navarro, R. C. (2020). Filipino senior high school teachers' continuing professional development attitudes: Exploring the roles of perceived demand amid a national education reform. *Journal of Research, Policy & Practice of Teachers and Teacher Education*, 10(2), 63-76. <https://doi.org/10.37134/jrpptte.vol10.2.5.2020>

To link to this article: <https://doi.org/10.37134/jrpptte.vol10.2.5.2020>

Received: 17 September 2020; Accepted: 06 December 2020; Published: 07 December 2020

Abstract

The professional development of teachers is an important component of quality standards for any educational system, as teachers' engagement in continuing professional development (CPD) activities are related with aspects of professional commitment and satisfaction. In this study, we explore how perceived demands of a national educational reform in the Philippines are associated with different indicators of senior high school teachers' professional development. A survey of 289 teachers recruited to teach senior high school for the first time in the Philippines indicated that perceived demand was not associated with CPD participation intentions, but that perceived demand related to job requirement and to career planning had different associations with attitudes towards CPD. These different associations can be viewed as adaptive responding to the uncertainties in their changing work environment. The implications for conceptualizing the context of teachers' professional development, and the external factors that strengthen or weaken teachers' positive attitudes towards CPD are discussed.

Keywords: Continuing professional development, job satisfaction, commitment, career optimism, perceived demand, curriculum reform

Introduction

Personal growth and professional development comprise one of the seven domains defined in the Philippine Professional Standards for Teachers (Department of Education, 2017) that specifies the framework and evaluation of teaching performance in the Philippine basic

education sector. Beyond the knowledge, skills, and values that relate to the instructional tasks of Filipino teachers, this domain specifies that the teacher “values personal and professional reflection and learning to improve practice” and also “the importance of teachers’ assuming responsibility for personal growth and professional development for lifelong learning” (Department of Education, 2017, p. 22). Among the strands in this domain of professional standards are the demonstration of “professional reflection and learning to improve practice” and “professional development goals” (Department of Education, 2017, p. 24). In this regard, the Department of Education (or DepEd) creates opportunities for continuing professional development of teachers to support teachers in their commitment to pursue the standards set by the DepEd, which is the country’s largest employer of teachers.

There is widespread agreement about the importance of continuing professional development (henceforth, referred to as CPD) activities in the teaching profession in educational systems in different parts of the world (Day, 2017; Majid, Ean, & Leng, 2016; Parker, 2019). Participation in CPD activities is not only associated with job performance (Soodmand Afshar & Hooseini Yar, 2019), it is also positively associated with the teachers’ commitment to the profession and their organization (Bogler & Somech, 2004; Weng, McElroy, Morrow, & Liu, 2010). However, teachers’ engagement in such CPD activities cannot be assumed or guaranteed, with some studies noting somewhat ambivalent or even negative views about CPD programs (Kostoulas et al., 2019; McMillan, McConnel, & O’Sullivan, 2016). Many different factors may influence teachers’ attitudes towards and participation in CPD activities, and education researchers have attempted to understand the factors that influence teachers’ motivations and positive attitudes related to attending CPD activities (Sinyangwe, Billingsley, & Dimitriadi, 2016; Wyatt & Ončevska Ager, 2017)

There have not been many published studies on CPD of Filipino teachers, but some Philippine studies have noted similar trends among Filipino teachers. One study of a school-based CPD activity shows how it was effective in engaging teachers in greater reflective practice (Gutierrez, 2019). Another study found that teachers had a good understanding of the positive impact of CPD activities in their professional development, but that these teachers still did not agree that CPD activities should be a mandatory requirement for teachers as required by the country’s DepEd (Bautista et al., 2017).

In this study, we explore one possible factor that could affect Filipino senior high school teachers’ attitudes towards CPD. This factor is the everyday psychological experiences of teachers related to a major educational reform, which is referred to in the psychology literature as perceived demand and characterized as the microlevel effects of broad social changes (Pinquart & Silbereisen, 2008). In the following sections, we discuss this concept more deeply and how it might relate to the affected teachers’ attitudes toward professional development, commitment and job satisfaction.

Perceived demand and the 2016 Philippine education reform

Whenever any major social changes occur in a society, the effects are not only observed at the macro social levels. These effects of this social changes also cascade through different smaller social units and touches on the everyday psychological experiences of persons who are encompassed by the social change (Pinquart & Silbereisen, 2008). The everyday psychological experiences include how an individual perceives the effects of these changes in her/his own life. These perceptions are captured in the construct called *perceived demand*, which is defined as “novel obligations at the microlevel that result from new social conditions” (Tomasik, Silbereisen, Lechner, & Wasilewski, 2013, pp. 223-224). Perceived demand can be experienced in different domains of an individual’s life including in work, family, leisure, friendships, among others (Silbereisen et al., 2006), and the microlevel impacts or perceived

demands come in a variety of forms including, “increased uncertainty with respect to career planning, actual job loss, a decline in workplace conditions, and economic hardship” (Tomasik et al., 2013, pp. 224). In Europe, for example, large scale economic change created uncertainties and perceived demand related to work and professional plans that affected young people’s coping approaches (Lechner, Tomasik, & Silbereisen, 2016; Tomasik, Silbereisen, & Pinquart, 2010) and even experiences of depressive symptoms (Pinquart, Silbereisen, & Grüner, 2014).

We propose that the concept of perceived demand as the microlevel impact of social change can be applied to study CPD-related and work-related attitudes of Filipino teachers affected by a major reform in the Philippine education system. We briefly describe this education reform as an example of a major social change and refer in particular to one of its key components – the Senior High School Program. In 2016, the Philippines implemented a major curriculum reform of the basic education sector. Although it was primarily a curriculum reform, it was at a national scale that it had social change that had cascading effects through different contexts, affecting families, local governments, schools in the private and public sector, among others. Students, parents/guardians, teachers, principals or school heads experienced and negotiated with novel obligations amid the reforms. In this study, we focused on teachers, as they are central to any education reform effort, and are likely to be key individuals who are experiencing strong microlevel effects of the nation educational reform effort.

One of the key features of the 2016 Philippine education reform of the K-to-12 reforms was the establishment of the Senior High School (henceforth referred to as SHS) system and curriculum. The 2016 reform extended the basic education cycle to 12 years by adding two years of SHS, which was aimed to ensure that all Filipino high school graduates would acquire the skills required to productively participate in Philippine society either as workers/employees, entrepreneurs, or as future university students (Brillantes, Orbeta, Francisco-Abrigo, Capones, & Jovellanos, 2019). As there was no SHS program before 2016, the teachers of the SHS curriculum in 2016 were recruited to be the first batch to teach the new curriculum. Some of the new SHS were recruited from teachers in technical/vocational and higher education sectors. Other teachers were new graduates of teacher education programs, teachers from the existing high school programs, and professionals from different fields (e.g., engineers, accountants). These teachers were recruited in rather short notice. The first batch of SHS students were scheduled to start in June 2016, but there were difficulties in recruiting qualified teachers for these positions; which prompted the DepEd to issue an order revising recruitment requirements to allow hiring of non-licensed teachers (Brillantes et al., 2019).

Every SHS teacher in 2016 was a new or first-time teacher in the SHS, who had a relatively brief period to understand and prepare for the implementation of the SHS curriculum. Later evaluation studies indicate that the preparation of these teachers was perceived to be inadequate (Brillantes et al., 2019). The limitation of time required the SHS teachers to attend brief mass training sessions provided by the DepEd for SHS teachers in the public schools or school-based training for SHS teachers in the private schools. The trainings focused on orientations on the SHS curriculum, use of the new learning materials resources, and learner-centered instructional approaches mandated in the curriculum.

The confluence of the novel nature of the job, inadequate preparations for undertaking the job of implementing a completely new curriculum, and uncertainties associated with the job status of SHS teachers points to three microlevel effects of the education reform on the teachers: perceived demand on their job requirements, career plans, and economic status. First, as described earlier, SHS teachers were recruited to implement a new and untested curriculum and had very limited preparation for their new teaching tasks.

Later studies noted that SHS teachers' reported difficulties related the content and instructional resources for implementing the curriculum (Bernardo, Wong-Fernandez, Enteria, Macalaguin, & Magat, in press; Jaudinez, 2019), but also to the heavy work related additional assigned tasks that had nothing to do with teaching (Aranda et al., 2018). Second, the difficulties related to their new job requirements made SHS teachers wonder if they are fit for the job, are good enough to be retained by the school, and/or if they might be better off finding another job for which they are better suited. Surveys indicated that the teachers had worries related to their job security (Bringula, Balcoba, Alfaro, & Merritt, 2019), especially the mid-career teachers who were in effect re-starting their teaching careers in a new career path (Bernardo et al., in press). Third, the career insecurity is associated with financial insecurity; teachers also expressed worries about their financial stability (Bringula et al., 2019), as many reported that their salaries were reduced when they took on the new SHS teaching positions (Bernardo et al., in press).

Current study: Teachers' perceived demand and attitudes towards CPD

How would SHS teachers' perceived demand be associated with their CPD attitudes? Previous studies with young people who reported high perceived demand associated with employment uncertainties positively predict both engagement and disengagement coping strategies (Lechner et al., 2016; Tomasik et al., 2010; 2013). Engagement was characterized as investing more personal effort to improve one's career prospects, while disengagement involved coping strategies that protect one's self-esteem such as distancing from unattainable goals or lower expectations (Lechner et al., 2016). That perceived demand positively predicted both engagement and disengagement indicates how both approaches to coping are needed for adaptive development (Heckhausen, Wrosch, & Schulz, 2010). Indeed, having the flexibility to disengage oneself from career goals that seem unfeasible so that one can shift and engage alternate career goals that show more positive prospects should be seen as very adaptive (Dietrich, Parker, & Salmela-Alo, 2012; Heckhausen et al., 2010).

In this regard, we could assume that SHS teachers would also be coping adaptively to their perceived demand associated with the Philippine education reform. For example, SHS teachers' positive attitudes and intentions towards CPD might reflect engagement and the intention to enhance their potential to succeed in the new career path. Likewise, negative attitudes towards CPD might reflect disengagement, specifically, the intention to start moving away from the goal of being a good SHS teacher as a means of protecting their self-worth in the face of employment uncertainty, and more importantly, being open to shifting towards a more promising career option. However, we should note that the previous studies cited here were conducted in a different socioeconomic context; more importantly, the researchers note that social and institutional factors such as welfare state provisions and overall economic prosperity influence how individuals cope with employment uncertainty in their particular context (Fouad & Bynner, 2008; Lechner et al., 2016; Tomasik et al., 2013). Thus, it may not be safe to simply assume a similar pattern of relationships between perceived demand and adaptive responses as they relate to SHS teachers' CPD attitudes.

In this study, we explore the relationship between SHS teachers' perceived demand and attitudes towards CPD as the latter might reflect adaptive responding to their perceived demand. To study different aspects of the SHS teachers' perceived demand we focus on three aspects of perceived demand due to the education reform that we mentioned above: job requirements, career planning, and economic status. We adapted existing measures (see Methods below) related these dimensions to determine how heavy the perceived demand was for each of the three aspects.

More importantly, we explored the relationship between the three aspects of perceived demand and the SHS teachers' attitudes related to CPD. We considered the cognitive and behavioral aspects of attitudes to CPD, and for this we used subscales from existing measures (see Methods below). The cognitive measures involved statements about whether attending CPD leads to positive outcomes (i.e., positive subscale) or whether CPD is not relevant or needed (i.e., negative subscale). The behavioral aspect was measured in terms intentions to participate in CPD and indicated positive intentions to engage in CPD activities. We assume that the positive cognitive attitudes and behavioral intentions related to CPD indicate adapting to perceived demand by putting on effort to improve one's skills, knowledge, and standing in their new SHS position. On the other hand, we assume the negative cognitive attitudes related to CPD indicate adapting to perceived demand by detaching oneself from the need to better in the new position in order to protect the self from potential failure and to enable oneself to consider other career paths.

In this exploratory study, we do not propose any specific hypotheses; instead we seek to answer the research questions: How does each of the three aspects of perceived demand relate to the SHS teachers' positive and negative attitudes related to CPD? We do not assume a causal relationship between these two sets of concepts, as our research design (see below) does not allow us to test such causal relationships. Instead, our inquiry is primarily exploratory, although we hope that whatever associations we observe could provide insights that could inform policies and programs on CPD activities for teachers during a large-scale curriculum reform, and perhaps, the general preparation and training of teachers in the Philippines.

Methodology

Research design

A cross-sectional survey design was used to study the relationships among the teachers' continuing professional education attitudes and intentions, job commitment and satisfaction, and perceived demand arising from the changes associated with the new SHS program in the Philippines. The survey was administered during the first half of the first academic year of the implementation of the new SHS curriculum in the country.

Participants

The participants were 289 senior high school teachers from 11 schools in the National Capital Region of the Philippines. All participants were among the first batch of Grade 11 teachers in the country. Some of the characteristics of the participants are summarized in Table 1. Before recruiting the participants, permission was sought from the different school heads. Only teachers who gave their written informed consent to participate were given the questionnaire.

Table 1. Background and characteristics of participants.

Category	Description	Percentage
Gender	Female	50.52%
	Male	49.48%
Age	20-23 years	32.18%
	24-30 years	31.14%
	31-40 years	15.22%
	> 40 years	15.57%
Tenure	Permanent	19.03%
	Probationary	80.97%

Teaching Load	Regular full load	75.09%
	Regular half load	4.15%
	Part-time full load	13.84%
	Part-time half load	5.54%
Additional Assignments	Homeroom adviser	79.58%
	Student organization adviser	11.76%
	Administrative work	16.26%
Educational Attainment	Technical/vocational (TESDA) certificate	4.84%
	BS Elementary/Secondary Education	43.25%
	AB or BS (non-education)	29.41%
	Master's degree in education	18.69%
	Master's degree not in education	16.61%
	Doctoral degree	6.92%
Work engagement prior to SHS teaching	College or university	28.37%
	Industry	15.22%
	Basic education	35.99%
Attended in-service training in preparation for SHS teaching	Yes	53.29%
	No	43.94%

Research instrument

The research instrument was a survey questionnaire that first inquired about some background information, but more importantly included several scales described below.

Perceived demand in work scales. To measure the first two aspects of perceived demand (job requirements and career planning), we adapted the scales developed by Tomasik et al. (2013) to the work of teachers. The instructions were: “When considering the past one year, as the Senior High School program was being prepared and implemented...” Six items referred to changes related to career planning (e.g., “it has become more difficult to plan my career path”), six items referred to changes in their job requirements (“it has become more difficult to do my job well”). The teachers answered using a scale from 1 (*does not apply at all*) to 7 (*fully applies*).

Financial threat scale. To measure the third aspect of perceived demand (economic status), we used the five-item scale by Marjanovic et al. (2013). The instruction was: “Please indicate how you feel about your current financial situation by answering the following questions,” with a sample item: “How much do you feel at risk financially?” Responses used a scale where the endpoints are changed to reflect the item content (e.g., 1=*not at all*, to 5=*a great deal*).

Revised attitudes towards continuing education scale (RATCES). The RATCES is a nine-item scale measuring attitudes towards continuing education (Blunt & Yang, 2002). It had two subscales: positive attitudes (5 items, e.g., “Continuing education would make me feel better about myself”) and negative attitudes (4 items, “Successful people do not need continuing education.”) Responses were on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

Participation intentions for continuing education scale. Three items were adapted from the measure used by Lau and Chen (2012). A sample item was: “I want to participate in continuing education seminars/workshops for teachers.” Responses were also on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

Results and discussion

Descriptive statistics

Table 2. Basic statistics for perceived demand, professional development, and work variables.

Variables	α	Scale	<i>M</i>	<i>SD</i>
Perceived demand: job requirements	.88	1 to 7	3.98	1.45
Perceived demand: career planning	.88	1 to 7	3.11	1.53
Perceived demand: economic status	.95	1 to 5	3.24	1.09
CPD positive cognitive attitude	.88	1 to 5	4.61	0.54
CPD negative cognitive attitude	.59	1 to 5	1.98	0.72
CPD positive participation intention	.79	1 to 5	4.61	0.59

Note: CPD = Continuing professional development

The scale scores for each variable were obtained by computing the mean score for each participant, and the descriptive statistics are summarized in Table 2. The table also reports the internal consistency coefficients (Cronbach α) for each scale computed from the current data. Most scales have good internal consistency, except for the CPD negative attitudes subscale, which we nevertheless included in the analysis for completeness.

The means for the perceived demand were all near the midpoint, although the mean for job requirement and career planning were below the midpoint of the scale (i.e., 4.00), whereas the mean for economic status was above the midpoint (i.e., 3.00). We note the high variation (i.e., *SD*) for the perceived demand scales, which suggests that there is variability or unevenness in how the different senior high school teachers experience the microlevel effects of the new education reform, or the implementation of the new senior high school program. On the other hand, the positive factors related to CPD were both close to the upper limit of the scale, whereas the negative attitudes toward CPD was close to the lower limit; these suggests overall positive views related to CPD among the SHS teachers. To address the main research questions regarding how the three aspects of perceived demand relate to the teachers' CPD attitudes and professional commitment and satisfaction, we focus on the correlational analysis in the following section.

Correlational analysis

Table 3 summarizes the bivariate correlations between the three perceived demand variables and the CPD attitudes variables, and it shows that, overall, perceived demand has rather limited associations with CPD-related attitudes, as only two of the nine correlations were statistically significant. Notably, none of the three aspects of perceived demand were statistically significantly associated with either an increase or decrease in CPD participation intentions. We noted a trend towards statistical significance in the correlation between perceived demand related to career planning and CPD participation intentions, but this should not be interpreted as it did not reach the criterion for significance.

Table 3. Correlations (Pearson r) between perceived demand and CPD attitudes.

Variables	Perceived demand: Job requirements	Perceived demand: Career planning	Perceived demand: Economic status
CPD positive cognitive attitude	-.08	-.21*	-.06
CPD negative cognitive attitude	-.22*	-.01	-.01
CPD positive participation intention	-.08	-.16 [†]	.01

* $p < .05$, ** $p < .01$, [†] $p = .062$; Note: CPD = continuing professional development

But we see that heavier perceived demand related to one's teaching job requirements is significantly associated with lower negative attitudes on CPD. Stating this more concretely, SHS teachers who reported heavier perceived demand on their teaching requirements and less likely to see CPD as being unimportant. Note that that the positive counterpart correlations were not significant, so we cannot conclude that heavier perceived demand related to teaching requirement relates to more positive attitudes towards CPD. Later we discuss the possible reasons for this asymmetric result.

A similarly asymmetric result was observed as regards perceived demand related to one's teaching career planning, which was significantly associated with lower positive cognitive attitudes towards CPD. In this case, SHS teachers who reported heavier perceived demand related to their career planning tended to have less positive attitudes toward CPD, but there was no relationship with their negative attitudes towards CPD. The pressures on one's career as a professional teacher weakens the belief that CPD brings about positive outcomes to the teachers, which might reflect an adaptive shift in the teachers' views about what is good for them in their careers amid the uncertainty associated with the educational reform.

Finally, we note that although the means suggest that the SHS teachers on average reported heavy perceived demands related to their economic status, this factor was not related to the teachers' CPD attitudes in any systematic way.

Conclusions and recommendations

This study was conducted to explore the possible relationships between pioneering Filipino SHS teachers' perceived demand related to their job requirements, career planning, and economic status on the one hand, and their attitudes related to CPD on the other. In our survey of a sample of these pioneering SHS teachers, we found that perceived demand was unrelated to the teachers' intentions to participate in CPD activities, but there seemed to be some tension where perceived demand related to teaching skills was associated with lower negative attitudes towards CPD, but perceived demand related to the teaching career was associated with lower positive attitudes towards CPD. We discuss the possible meaning and implications of each of the findings in the following sections.

One important finding was that all the perceived demand factors were not correlated with the SHS teachers' intentions to participate in CPD. But before we interpret that perceived demand does not weigh on this behavioral aspect of positive attitudes towards CPD, we need to consider that the mean scores for intention to participate in CPD was actually rather high, and close to the upper limit of the scale (i.e., 4.61 in a scale of 1 to 5). The mean suggests that

most participants expressed clear intentions to continue participating in CPD, and this finding is a good sign for school head and education reformers. That is, regardless of the perceived demands that the SHS teachers may experience, they can be counted on to attend and engage in CPD activities, as the nonsignificant correlation and high mean scores indicate.

But behavioral intention is different from the cognitive aspects of their attitudes. As far as the SHS teachers' views about CPD, two forms of perceived demand seem to weigh on the teachers' views. Other studies found that SHS teachers reported being asked to teach subjects beyond their competence, to perform instructional and assessment tasks they were inadequately trained for, to complete processes that were unfamiliar to them, among others novel job requirements in their new teaching posts (Aranda et al., 2018; Bernardo et al., in press). Our results indicate that such perceived demand related to the job requirements was associated with less negative attitudes towards CPD, but not with stronger positive attitudes. Again, we should note that positive attitudes towards CPD were rather high (i.e., also 4.61 in a scale of 1 to 5), so perhaps we were observing a ceiling effect. But this result seems to indicate that this specific time of perceived demand is associated with less pronounced skepticism of the relevance of CPD activities; in other words, those who report heavy perceived demand related to the novel job requirements are less likely to dismiss the need for CPD. Overall, this particular set of results suggests an adaptive response to the educational reform that created unemployment uncertainty to the SHS teachers; that is, the results suggest that the SHS teachers who experienced perceived demand related to the novel teaching responsibilities understood the need to engage in CPD.

The results suggest an opposite response associated with perceived demand related to career planning. Other studies have noted SHS teachers' concerns about their job security (Bernardo et al., in press; Bringula et al., 2019) as the continuity of the positions for SHS teaching were not assured in many schools at the start of its implementation. Our results show that such perceived demand was associated with less positive attitudes towards CPD or being less convinced that attending CPD activities was good for them. We underscore that this a different aspect of perceived demand and that the microlevel effect relates to the continued viability of their careers. In this case, the perceived demand might be nudging SHS teachers to consider whether it is worth sticking to this SHS teaching career path or whether it might be better to consider other career options. If so, less positive attitude towards CPD might reflect the SHS teachers' disengagement from the goal of being a good SHS teacher, granting that the CPD activities may not be suited to other more promising careers.

The divergent directions of the relationship between the two types of perceived demand and cognitive attitudes towards CPD may seem like a contradiction, but they actually make sense from the point of view of motivational theories of development (Dietrich et al., 2012; Heckhausen et al., 2010), which proponents of the perceived demand construct believe is more relevant to how individuals cope with social change (Lechner et al., 2016; Tomasik et al., 2013). That is, when the social environment is disrupted and is fraught with uncertainty, it is actually adaptive to both be engaged and disengaged in one's work related goals. Applied to the experience of the SHS teachers, having positive views of CPD is adaptive in helping them address the novel demands of their teaching post, but having negative views of CPD also adaptively reflects their flexibility and ability to shift to alternative careers.

Limitations of the study

Related to the preceding point, we acknowledge that the results of the study do not actually measure the SHS teachers' intentions to find a new job or shift to a new career or any factor that indicates their frustration or pessimism regarding their jobs, and this is a limitation of our current study. There are other key limitations in our study that we also wish to acknowledge.

First, we sampled SHS teachers in private schools in the National Capital Region, so we cannot confidently claim generalizability of our results to the population of teachers to the other regions of the country or to the teachers in the public SHS sector. Second, we used a cross-sectional research design, so all the data were gathered during the early months of the teachers' involvement in the SHS program. It is possible that with more time, they would have coped with their new tasks, and that the perceived demand would have changed. Our results need to be interpreted reference to this specific time element in the cross-sectional design. And more importantly, the cross-sectional research design does not allow us to make causal claims about the effect of the perceived demand on the SHS teachers' attitudes toward CPD activities and aspects of their jobs in the new SHS program.

Our analysis was also limited by the small sample size. The background characteristics of our participants summarized in Table 1 suggest possible diversity in both the perceived demand and attitudes related to CPD and their jobs. For example, it is not unreasonable to expect that perceived demand related to teaching job requirements might be heavier among those who come from industry and colleges or universities compared to those who come from the basic education sector. Similarly, we could expect that the perceived demand on economic status might be heavier among those who are in probationary and part-time appointments. These differences in status and background experiences might have different effects on how perceived demand relates to CPD attitudes and other job-related factors. However, subdividing the sample would make the sample sizes too small to do proper correlational analyses. So we were unable to probe more deeply these possible variations.

Implication of the findings

The limitations notwithstanding, we believe that are some important policy-related lessons that can be learned from our correlational study. Recall that at the start of this paper, we referred to the personal growth and professional development as important domains in the Philippines' Department of Education's professional standards for teachers. But teachers' professional development does not occur in a social and personal vacuum. The results of the current study point to some challenges related to this domain if this professional standard is put in the context of a reforming educational system. We cannot assume that the environment within which the professional teacher is developing is stable or static; as the education system also evolves, the changes may create pressures on teachers and their intentions to grow in their professional careers. Psychological theories of social change assume that the effects of social change cascade through smaller social units through individual persons affected by the change (Pinquart & Silbereisen, 2008). Previous studies show that the education reform in the Philippines has microlevel effects on individual teachers who were involved in the curricular reform activities (Bernardo et al., in press), and our results show that one specific microlevel effects relate to shifting attitudes towards the personal importance of CPD activities. In a nutshell, this is both a practical and a theoretical implication of our research inquiry: Teachers' levels of commitment to CPD are not static, and they can be strengthened or weakened based on how changes in the environment affect the teachers at a personal level.

One specific and important implication of our findings is that the novel job requirements associated with the new SHS teaching position does not push away teachers from CPD instead, the perceived demand related to job requirements may even strengthen the teachers' understanding of the importance of CPD in their jobs. This pattern of results provides a positive foundation for bolstering the role of teachers in curriculum reform efforts. Heavier perceived demand related to job requirement does not dampen SHS teachers positive outlook about CPD, instead whatever skepticism there may be about it might even be weakened by this type of perceived demand. Thus, education and curriculum reformers should

take advantage of this mindset to provide and engage teachers in more opportunities for CPD. Even as their jobs might be getting more complex and demanding, teachers understand the need for them to continuously develop their professional skills. Perhaps the challenge to education reformers is to develop a better understanding of what teachers think they need to improve for implementing curriculum reform (see e.g., Paramasivam & Ratnavadivel, 2018).

However, our results point to the factors that education reform advocates should be careful about. The perceived demands that weighs negatively on teachers' attitudes towards CPD is the uncertainty regarding their career plans. Teachers become less convinced about the value of CPD activities when they are burdened by apprehensions about the sustainability of their teaching careers. Interestingly, the perceived uncertainty about the economic or financial status does not seem to have the same effect, but it is the insecurity about whether they can continue and aspire for upward mobility in their jobs. Thus, teachers will continue to be positively oriented towards CPD even if their jobs become more complicated, more demanding, and even more challenging for them, but this positive view of CPD will weaken when their career insecurity becomes an issue. Therefore, it important for major education reform efforts to also provide teachers clear, accurate, and trustworthy information about how the reform affects the career security and mobility of the teachers in the long-term. The more certainty and assurances that can be provided the teachers, the less likely that they will begin disengaging and doubting the relevance of CPD in their own professional development. Once teachers become skeptical about CPD, it would be quite difficult to ensure that teachers will acquire the necessary competencies needed to implement the desired educational reforms.

The theoretical point we wish to underscore is that the professional standards for teachers need to consider the dynamic environment within which teachers strive to grow professionally. The teachers' work environment sometimes undergoes drastic changes, like in the case of national educational reforms, that the professional development process is put on somewhat unstable grounds. Thus, policy documents such as the Philippine Professional Standards for Teachers (Department of Education, 2017) should not simply assume that the teachers can attend to professional development standards whatever their environmental context is. As mentioned earlier, changes in their environment have microlevel effects that are experienced as perceived demand in specific areas, some of which influence their views about professional development as teachers.

The nexus between the changing social environment of teachers' work and the teachers' continuing professional development is particularly crucial in curricular reform (Dagdag, 2020; Ferrer Ariza & Poole, 2018). A comprehensive review of education reform efforts in the Philippines has noted how the teachers have tended to be the focal targets and actors of such reform programs (Bautista, Bernardo, & Ocampo, 2010). For any curricular reform effort to be effective, teachers will need to learn, adapt, and upgrade, and the role of CPD activities for teachers who will be tasked to implement the curriculum reform is of utmost importance. The case of Filipino SHS teachers was particularly strained as evaluation studies now show that the preparation of the teachers who were pioneering in the SHS program was inadequate (Brillantes et al., 2019), which might partially explain the non-positive correlates with attitudes about CPD among our study participants. The implication of that earlier evaluation study was that CPD activities and general preparation of affected teachers need to be more extensive and sustained. Fortunately, our results suggest that the SHS teachers understand the positive significance of CPD, even as these SHS reforms creates heavy perceived demand on their job responsibilities. But once the teachers' start feeling that the security of their career is made uncertain because of the reform, the teachers' positive attitudes towards CPD might weaken accordingly, as they might be adaptively considering alternative career options. Indeed, all the good intentions of any national education reform effort would be undermined if the professional development motivations of the teachers who will

implement the reform are undermined by their perceived onerous effects of the reform on their own professional lives.

Acknowledgement

This research was supported by a grant from Research and Innovation for Success in Education (RISE) Program of the Private Education Assistance Committee (PEAC) with funding from the Department of Education which is gratefully acknowledged by the authors. The authors acknowledge the valuable support and assistance provided by Guia F. Constantino, Clarissa M. Enteria, Henry G. Magat, and Eleanor R. Robles as research associates of the study, and Mark Daniele Mabalay, Eloisa Ann J. Antinero, and Raine Danielle S. Delfin as student assistants in various phases of the project. The authors also thank the teachers and school heads of all the senior high schools who participated in our study.

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