Full Length Research Paper

Teachers' perceptions of supportive school arrangements and their work engagement: A qualitative approach

Dr. Maria Armaou[1] and *Assist. Prof. Alexandros-Stamatios Antoniou[2]

[1]Centre for Technology Enabled Health Research, Coventry University, UK

[2]Dept. of Primary Education, School of Education, National and Kapodistrian University of Athens, Greece

*Corresponding Author's Email: asantoni@hol.gr, Phone: --30210-3688541, Fax: --30210-3688535

Abstract

The present study explored secondary school teachers' perceptions of professional development resources based on the theory of job resources using a predominantly qualitative enquiry. Participants were asked about their perceptions of available professional development opportunities and what supports their engagement in their work. This research consisted of two surveys and two rounds of semi-structured interviews with a sample of secondary school teachers that were employed in secondary schools in a region of the Midlands in UK. This paper disucsses teachers' perceptions of supportive aspects of their work-environment and supportive school activities/arrangements in relation to their engagement in their work. Four different perspectives on perceived job resources (organisational, interpersonal work role perspective, and task perspective) emerged from the analysis of participants' responses in the study's questionnaire items and their interviews. The contribution of this study is that it shows that qualitative approaches to perceptions of job resources could be used as a means to identify and meet individual teachers' professional needs.

Keywords: teachers' perceptions, supportive school environments, , work engagement, theory of job resources.

Introduction

The growth of the positive psychology movement has spurred interest in research fields that examine in general human thriving, excellence and resilience and more specifically investigating those elements in positive organisations examining positive oriented constructs such as positive emotions, positive psychological states and processes.As far as the teaching profession is concerned, research in teachers' well-being and resilience has also been influenced by those developments as many researchers have developed and used terms describing positive-oriented constructs and concepts (Gu & Day, 2007, 2013; Hakanen, Bakker, & Schaufeli, 2006; Howard & Johnson, 2004; Pretsch, Flunger, & Schmitt, 2012).

The Theory of Job Resources

A term that has been used to examine positive-oriented aspects of teachers' work-environment has emerged from stress research is that of "job resources". Demerouti, Bakker, Nachreiner, & Schaufeli (2001)

defined job resources as those physical, psychological, social or organizational aspects of the job that may do any of the following: (a) are functional in achieving work-related goals; (b) reduce job demands and the associated physiological and/or psychological costs; (c) stimulate personal growth, learning, and development. Psychological research in job resources has focused on its interactions with job remands and personal resources as a means to describe psychological processes that explain the development of job-related srain and motivation that are related to desirable organisational outcomes and well-being at work (Bakker & Demerouti, 2007; Hakanen et al., 2008; Van de Broeck, Van Ruysseveldt, Vanbelle, & De Witte, 2013). Psychological research confirms the existence of a positive gain spiral between employees job resources and their work-engagement (Hakanen et al., 2008; Weigl et al., 2010).

Job resources are necessary for individuals to deal with the psychological demands of their job, fulfilling basic psychological needs (e.g. autonomy, relatedness, and competence (Bakker, 2011; Nahrgang, Morgeson, & Hofmann, 2011), and predicting employees' work-engagement, organisational commitment and low

turnover intentions (Bakker, Demerouti, & Schaufeli, 2003; Hakanen et al. 2006). Evers, van der Heijden, Kreijns, & Vermeulen (2015) found a positive relationship between teachers' job resources (learning climate, social support from one's immediate supervisor, social support from one's close colleauges, and the learning value of the job) and their professional development (keeping up to date: reading, keeping up to date: participation in training related to work, experimenting, reflecting, collaborating with colleagues to improve the lesson, and collaborating with colleagues to improve school development).

Schaufeli and Tarris (2014) in their review of the literature offer two reasons for the increasing popularity of the model. The first one is that contrary to other models it "*does not restrict itself to specific job demands or job resources assuming that any demand and any resource may affect employee health and well-being (p.44)*. The second reason, that is also extremely important for the present study on teachers' perceptions of job resources, is that "*the JD-R model is heuristic in nature and represents a way of thinking about how job (and recently also personal) characteristics may influence employee health, well-being, and motivation (p. 44)*".

Educational research in perceived sources of support in the teaching profession

Educational research has often examined different aspects of teachers' resources such as the effectivenes of their CPD opportunities (e.g. Day & Gu, 2007; Muijs & Lindsay, 2008), the importance of social spport, and teachers' perceptions of their work conditions (e.g. Gu & Day, 2013; Perrachione, Rosser, & Petersen, 2008). Hong (2012) provided an insight into novice teachers' needs and the challenges that they face by exploring the differences between seven leavers and seven stayers showing that leavers perceived and interpreted challenges differently than stayers. In particular, when leavers faced the challenges of managing the classroom and handling students' misbehaviours, they often experienced diminished self-efficacy beliefs and they attributed the difficulty to their own personality or characteristics and experienced emotional burnout. Stayers however, were able to maintain strong self-efficacy beliefs with the help and support of administrators.

Doney (2013) examined the resilience building process of four female novice secondary science teachers in the USA and its links to teacher retention in a qualitative 2-year study. The study's results suggest that the interaction between stressors (e.g. personal live vs. career, inexperience, control of decision, extra-curricular activities, control of time etc) and protective factors (e.g. creating support systems, using individual skills to problem solving, maintaining self-efficacy and a sense of humour, use palliative and control techniques)act as a primary force in the resilience process and stimulate responses to help counteract negative effects of resulting stress.

The VITAE research, 'Variations in teachers' Work, Lives and Effectiveness' was a mixed method, four-year (2001-2006) study conducted in England with 300 teachers in 100 schools across seven local authorities (Day & Gu, 2007) through twice yearly semi-structured, face-to-face interviews with teachers. It investigated factors contributing to variations in teachers' effectiveness in different phases of their professional lives showing that teachers' capacities to sustain their commitment and resilience were influenced by their professional life phases and their identities which in turn were mediated by the contexts in which they lived and worked. Day and Gu (2009) present the stories of three veteran teachers highlighting the significance of the provision of appropriate and responsive leadership support.

Due the complex challenges that teachers face throughout their careers, a lot of attnention has been directed towards their professional development. However, CPD research tends to focus primarily on the effectiveness of specific opportunities rather than individual teachers' perceptions of their needs and the degree to which they are met (Hodkinson, 2006; ICM, 2006). Researchers have often examined teachers' perceptions of CPD effectiveness but there is less systematic research around teachers' needs and their CPD opportunities. As Day and Gu (2007) highlight fundamental to the effectiveness of CPD is teachers' sense of commitment, which influences their capacities for and attitudes to professional learning. Similarly, Hopkins and Harris (2001) demonstrate that the effectiveness of CPD depends on the degree to which it is appropriately designed to match particular professional needs. For this, reason both individual and organisational goals need to be taken into consideration and their different needs should be equally assessed (Day, 1991).

Research associated with those early in their teaching career shows that large proportions are not having their needs met (Hodkinson, 2006; ICM, 2006), nor are they being prepared for tasks that require specific skills needed for new responsibilities (ICM 2006). Goodall, Day, Lindsay, Muijs, & Harris (2005) investigated in a 2 year project the evaluation of the impact of continuing professional development. Teachers and CPD Leaders in 1000 randomly selected schools were asked about their involvement in, use of and concerns about CPD, in terms of its impact and evaluation. Through *in depth interviews* across a wide range of schools they found that the most effective types of CPD were considered to be those that directly met individual needs, as well as responding to school based needs. Opfer and Pedder (2010) investigated issues pertaining teachers' access to continuous professional development in England highlighting that effective CPD varies significantly by individual and school contexts. Moreover, they showed that teachers' seniority can create perceptual barriers to CPD related to perceived school conditions, level individual interest and budget constraints.

Evers, Kreijns, Beatrice, van der Heigden, and Gerrichauzen (2011) present a conceptual model on the impact of organizational and task factors on teachers' professional development that was theoretically based on the theroretical proposition of the "job demands and job resources model". For this reason, they identify four levels of organisational factors: a) organisational

characteristics, b) structural factors, c) cultural factors, and d) factors referring to social-psychological relationships.

The purpose of this study was to examine how the theory of job resources may be useful to describe teachers' perceptions of available school activities/arrangements in relation to their perceptions of what supports their engagement in their work.

Literature review and synthesis

The first aim of this research was to explore teachers' perceptions of job resources focusing in particular in the third part of its generic definition "....aspects of the jobs that may stimulate personal growth, learning, and development". For this reason, the literature review had two purposes. A comprehensive literature review was permormed where different strings of literature in psychological and educational research in the teaching profession was synthesized through a formation of themes that described perspectives and approaches towatds teachers' perceptions of their sources of support in their perception that could meet conceptually this part of the definition of job resources. The main finding of this literature review was that educational research in aspects of teachers' work that support their personal growth, learning, and development involve their collaborative work with other teachers, and opportunities for their professional and leadership development. Psychological research in job resources in the teaching profession has scarcely addressed such aspects of teachers' work (Evers et al., 2015; Guglielmi et al., 2014), while educational researchers have done so in a great extent and depth of analysis (Cordingley, 2015) but without defining them as teachers' job resources (e.g. supportive school context), which is also reflected in discussions pertaining the evaluation of CPD programmes (Goodall et al., 2005).

Research emanating from stress models, such as psychological research in job resources, focuses on a limited pool of resources found in individuals' psychosocial work-environment and by doing so often fails to identify the value of perceived resources in a meaningful way for people's day-to-day lives at work (e.g. Kira & Eijnaten, 2009). For this reason, the present study accessed teachers' perceptions of those aspects of teachers' jobs using the definition of job resources but allowing participants to reflect on them in order to construct a definition based on their own perceived experiences.

Methodology

This is a theory-driven research that follows a deductive approach to its design whose purpose is to extend existing theory (Lee, Mitchell, & Sablynski, 1999). The research study follows a complementary research design in which a quantitative study is followed by qualitative research. Those two different methods were designed to take place separately but allow their findings to complement each other (Creswell, 1995; Greene, Caracelli, & Graham, 1989). The survey method addressed certain groups of participants' perceptions about how the teachers work in their schools and what

supports their engagement in their work, while the interviews partially addressed the same groups of perceptions but they, mostly, examined them further. Semi-structured interviews were selected to follow the survey method in order to extend in a greater depth the surveys' research findings as well as address specific facets of teachers' perceptions of their sources of support that were not addressed through the surveys. Overall, the surveys included previously validated scales such the School Success Profile Learning Organisation (SSPLO) scales (Bowen et al. 2006) and some questionnaire items that were developed for the purposes of this study. The present paper will focus on the analysis of those items, which were developed based on the findings of a literature review on the types of developmental acitivities/arrangements that are most frequently available for school staff members in UK and following a pilot of those items to a group of five secondary teachers where they were encouraged to note down any comments they had about the items. A screening test was also performed with five teachers before the second surveys as a few items had been re-organised following the analysis of the first survey.

Sampling

Participants in this research were teachers employed in secondary-schools in the Midlands in the UK. The researcher contacted the schools directly explaining the purpose of the research and what it is needed and volunteers were also recruited through a professional development course at the university as long as they were also employed by secondary schools in the same area of the Midlands.

All necessary information about this research-project was provided and participants were asked to sign a consent form if they were willing to participate in a follow-up interview and provide an e-mail address in order to be contacted to arrange a convenient date for an interview at their school premises. Overall, 193 teachers participated in this research project: N=10 for the screening test of the questionnaire, N=109 for the first survey-study, N=64 for the second survey-study, and N=10 for the interviews (F=6, M=4). Interviewees had to have completed the survey beforehand because the interview questions asked participants about the school activities/arrangements they selected in the survey, as well as reflect on their answers on survey's open-ended question "*what supports your engagement in your work*". Ten teachers employed in seven schools participated in the first round of interviews. Eight teachers, employed at the time in four state-schools and one Academy, volunteered to participate after the researcher's direct contact with their schools. Two teachers, employed at the time in two Academies, volunteered after researcher's invitation in their class at the university. Participants that agreed to participate in the interviews were contacted directly by the researcher after they had return their questionnaire and an appointment was set in their school premises and each interview lasted approximately 20 minutes.

Questionnaire items

A list of school activities/arrangements were presented to all participants and they were asked which of those they can find in their school. They were also asked if they thinkg that these activities/arrangements support their engagement in their work.

The first survey included a questionnaire which was comprised by nine items, two of which listed six collaborative school activities and six staff development activites. Questionnaire items were coded as nominal variables and crosstabs showed that there were several statistically significant relationships among the identified activities listed within these two group of activities. And between co-teaching and curriculum development teams (Fisher's exact test: p=.04), co-teaching and working with other schools (Fisher' exact test: p=0.01), peer review and parents' involvement provision (Fishers' exact test: 0.01); and funding for professional development courses and parents' involvement provision (p<0.01)

For this reason, the questionnaire was re-organised to present the items as one group of twelve activities/arrangement that participants could select from the ones they could ifnd in their schools; induction for newly qualified teachers and/or new staff members, mentoring/coaching, action research, co-teaching/team teaching, peer review practices, interdepartmental collaborations among teachers, participation in decision-making committees, curriculum development teams, work with other school or agencies/oranisations, workshops for leadership development skills, parents involvement provision, and funding for graduate or postgraduate courses.

In both questionnaires there was one item labelled "Other" where participants could add other activities that were not included in the list.

Finally, there was one open-ended question that asked participants "what supports your engagement in your work"?

Interview Questions

An aim of the interviews was to examine teachers' perceptions of resources focusing on their perceptions of school activities/arrangements available to them. For this reason, the second interview question was:

> *-Could you select the most important activities for you from those you ticked in the questionnaire that you can find in your school?*
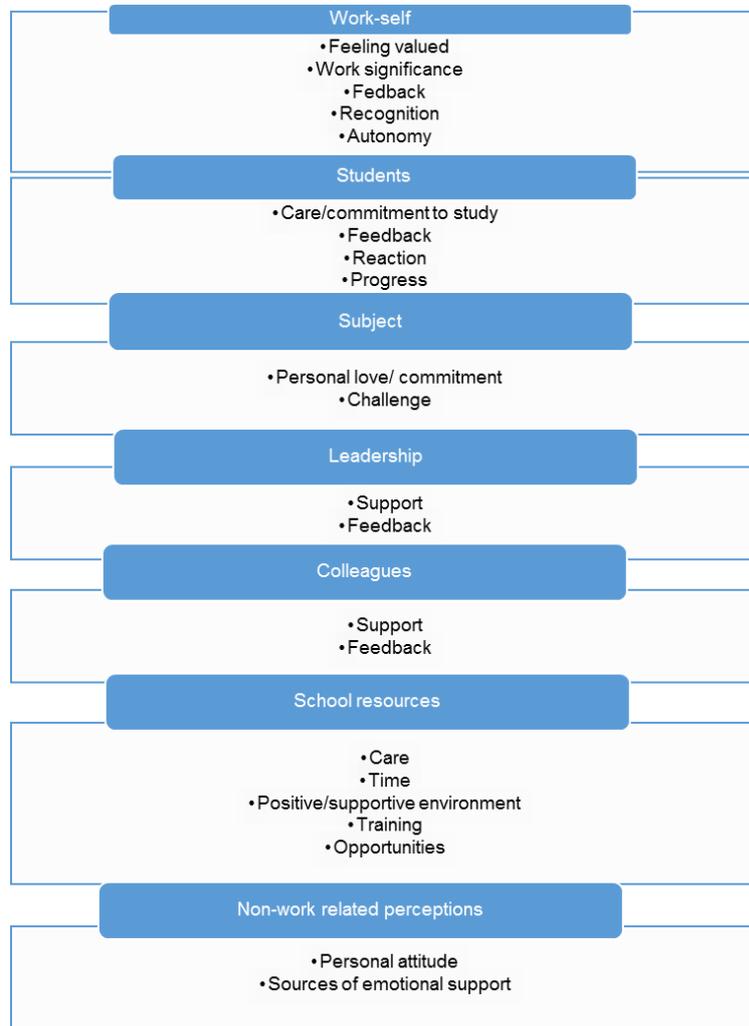
The other questions of the interview schedule were:

1) What supports your engagement in your work?
2) I'd like you to describe to me a change that you experienced recently in your current workplace. What did it involve and how did you experience it? - What helped you more to adjust?
3) Do you think that any of the previously discussed activities provided you with help at the time?
4) How would you define leadership support for you?

Findings

Open-ended question analysis:

1st survey:
Seven themes emerged through the analysis of participants' responses on the question what supports your engagement in your work?" in the first survey: "self", "students", "subject", "leadership", "colleagues", "school resources", "non-work related perceptions" but couldn't represent them in a way that would be an adequate description of teachers' job resources.

Work-self
• Feeling valued • Work significance • Fedback • Recognition • Autonomy

Students
• Care/commitment to study • Feedback • Reaction • Progress

Subject
• Personal love/ commitment • Challenge

Leadership
• Support • Feedback

Colleagues
• Support • Feedback

School resources
• Care • Time • Positive/supportive environment • Training • Opportunities

Non-work related perceptions
• Personal attitude • Sources of emotional support

2nd survey:

At the time of the analysis of the second survey all participants' responses in the question "what supports your engagement in your work" in both surveys were analysed together. Three themes emerged describing teachers' school-perceptions that support their engagement in their work:

- Supportive relationships with leadership
- Supportive relationships with colleagues
- School resources:

a) Supportive work-environment
b) Supportive school activities/arrangements

Themes'	Sub-themes	Sub-themes	Sub-themes	Sub-themes	Sub-themes
Self	Feeling valued	Work-signific.	Feedback	Recognition	Autonomy
Students	Care/ Commit. to study	Feedback	Reaction	Progress	
Subject	Personal love/ Commit.	Challenge			
Leadership	Support	Feedback			
Colleagues	Support	Feedback			
School resources	Care	Time	Positive/ Supp. environ.	Training	Opportunities
Non-work related percep.	Personal attitude/ health	Sources of emot. support			

Further analysis

Themes'	Sub-themes	
Work perc.	Work-significance	
	Positive feedback	
	Recognition	
	Goal-achievement	
	innovation	
School perc.	Supportive relationships with leadership	
	Supportive relationships with colleagues	
	School resources	Supportive environ.
		Supportive school activities/ arrang.
Non-work related perc.	Personal attitude/ heath	
	Sources of emotional support	
	Individual activities	

For the purposes of the present paper, this report focuses on the "school resources" sub-theme and its two sub-themes: supportive environment, supportive school activities/arrangements.

a) Supportive work-environment

The "supportive work-environment" sub-theme included participants' responses that identified the support they perceive they have from their work-environment, aside from their relationships with their leadership team and their colleagues, as supportive to their engagement in their work. It reflected the "care", "time", and "positive/supportive environment" sub-themes of the "school activities" category in the first survey (Table 1).

Table 1: Illustrative "Supportive work-environment" responses

1st survey	2nd survey
- If the school cares for me as a person (home/school balance, workload - A supportive department in conjunction with other departments who are willing to engage in cross-curricular links - Positive environment - Excellent departmental team and excellent pastoral team - Calm and positive environment	- Working in a supportive faculty/department - Clear direction - Peace and quiet in my classroom - Lack of interruptions - A supportive environment

b) Supportive school activities/arrangements

The "supportive school activities/arrangements" sub-theme included participants' responses that identified the support they perceive they have from their available school activities/arrangements as supportive to their engagement in their work (Table 2). It reflected the "time", "training" and "opportunities" "sub-themes of the "school activities" category in the first survey.

Table 2: Illustrative "Supportive school activities/arrangements" responses

1st survey	2nd survey
- Time to plan better lessons - Departmental meetings - Involvement in decision-making for large and small aspects of school's life - CPD opportunities - working with and learning from other schools - Opportunities to do extra-curricular projects or enrichment activities - Team-teaching - Working with peers on specific projects	- Staff involvement in my projects - Opportunities to succeed: - Training - Departmental meeting to share good practice - Collaborative work - Opportunities to develop - Sufficient training - Time to finish a job - Opportunities for progression

Interviewees' perceptions of school activities/arrangements: Perceived descriptions and importance

Interviewees' descriptions of school activities/arrangement refer to their perceptions of how those school activities/arrangements work in interviewees' schools. Overall, interviewees referred to eleven school activities/arrangements that were also able to tick in their survey-list and three activities/arrangements that were not in the list:

- Induction for newly qualified teachers and/or new staff members
- Working with other schools and organisations
- Mentoring/coaching
- Participation in decision making committees
- Interdepartmental collaboration
- Team teaching
- Parents' involvement provision

- Action research
- Peer review of teaching practices
- Workshops for leadership development
- Other activities: subject association for religious studies, performance management activities and CPD programmes.

The construction of interview themes used the themes' analysis that emerged from the surveys' analysis as a template and developed them further as analysis progressed. Overall, four sub-themes were constructed that were able to describe interviewees' reponses in both the first and the second interview question:

- Organisational perspective
- Interpersonal perspective
- Work-role perspective
- Task perspective

Perceptions of job resources			
Interviews' analysis	*Survey-question analysis*		
Organisational Perspective	*Positive school perceptions*	*Supportive relationships with leadership*	
Interpersonal Perspective		*Supportive relationship with colleagues*	
Work-role		*School resources*	*Supportive environment*
			Supportive activities/arrangements
Task-perspective	*Positive work perceptions*	*Work-significance*	
		Positive feedback	
		Recognition	
		Goal achievement	
		Innovation	
Non-work related perceptions	*Non-work related perspective*	*Personal attitude/health*	
		Sources of emotional support	
		Individual activities	

Description of school activities/arrangements

a) *Organisational perspective*
The "organisational perspective" refers to interviewees' description of how activities/arrangements are organised in their school. Five participants adopted an organisational perspective to describe six available school activities/arrangements.

Illustrative example about parental involvement:

"They [the parents] are very welcomed to criticize; they are welcomed to make constructive criticism. That we want them and we invite them for coffee mornings and for afternoon teas and even cheese and wine evenings on top of all the parents evenings…" (interviewee 6)

b) *Interpersonal perspective*

The "interpersonal perspective" theme refers to interviewees' description of how collaborative activities/arrangements are organized in their schools. One interviewee described how team-teaching works in his school:

"Often my colleagues would call me into their lesson... we can walk into any classroom" (interviewee 8)

c) *Work-role perspective*

The "work-role perspective" refers to interviewees' description of how

activities/arrangements are organized in relation to their work-role in the organization. Five interviewees adopted work-role perspective to describe six school activities/arrangements.

Illustrative example about involvement in decision-making:

"being involved in the decisions of the school, so we have a broad new performing arts centre when I was involved in decisions about… the building and the design and the play out with the architects I'm involved in decisions with the senior team about things happening in the curriculum" (interviewee 4)

d) *Task perspective*

The "task perspective" theme refers to the description of how school activities/arrangements are organized in relation to interviewees' classroom work. Two interviewees adopted a task perspective to describe two activities.

Illustrative example describing team teaching:

"I can sit next door for 10 minutes, see what D… is teaching and that won't be an issue here and he would probably involve me in some way in the lesson: "On that was great, I really enjoyed it, have you thought about this" especially as I'm his boss as well but he'd happily sit in one of my A-level lessons" (interviewee 8)

234

Importance of school activities/arrangements

This category of themes included interviewees' explanations on why those school activities/arrangements are important for them as well as some explanations on why the same school activities/arrangements are not supportive enough.

a) *Organisational perspective*

The "organizational perspective" refers to interviewees' perceived importance of those school activities/arrangements for their presence in the organization. Two interviewees mentioned that participation in decision-making supports their presence in the organization.

Illustrative example about participation in decision-making:

> "Personally I like to be the mover and shaker of...I think I have lots of ideas about staff so I think that this...if I think that I'm participating in some decision making that gives me a kind of purpose to be here than just coming in doing a job and going...You are actually making a difference by building a legacy as well so I think you enjoy you work more if you feel that you have some control over it. Otherwise, why are you doing it?" (interviewee 5)

b) *Interpersonal perspective*

The "interpersonal perspective" theme refers to the support interviewees' perceive that they have from their colleagues due to those school activities/arrangements. Nine interviewees adopted such a perspective to describe the importance of seven activities.

Illustrative example about working with other schools and agencies:

> "Working with other schools and agencies, collaborative work with them, that's always excellent in terms of getting new ideas and we had people that have come in and have given lectures and talks to us about different things...at the moment is teaching and learning which is the new massive area that's something that an outside agency came to talk about I think that definitely boosted people's opinions and ways of doing things" (interviewee 3)

c) *Work-role perspective*

The "work-role perspective" refers to the support that interviewees' perceive that they have in their work-role in the organization through those school activities. Three interviewees adopted such a perspective to describe the support of three activities.

Illustrative example about curriculum development teams:

> "In terms of curriculum development, again I've got an opportunity through citizenship programme for example to develop a whole new area of the curriculum at this school over the past eight years." (interviewee 10).

d) *Task perspective*

The "task perspective" theme refers to the support (or not) that interviewees' perceived they had for their classroom work through those activities/arrangements. Six interviewees referred to the support they perceived they had in their classroom work through seven such activities.

Illustrative example about team-teaching:

> "If I'm doing a revision class with students sometimes we want to do team-teaching because is better for the students to have two teachers, bouncing ideas, it can be more creative, it is more fun" (interviewee 1).

Discussion

The purpose of this study was to access teachers' perceptions of job resources by addressing their perceptions of available school activities/arrangements. The majority of research in job resources has examined teachers' job resources using psychological models (Bakker, Gierveld, & Van Rijswijk, 2006; Evers et al., 2015; Hakanen et al., 2006; Prieto, Sorial, Martinez, & Schaufeli, 2008). Their findings reveal that there are statistically significant positive relationships between teachers' job resources and teachers' work-related well-being, suggesting that teachers' professional development could be seen as a mediator of the relationship between teachers' job resources and their occupational expertise (Evers et al., 2015; Evers, Kreijns, van der Heijden, & Gerrichhauzen 2011).

Educational research into teachers' professional development have focused on similar aspects of teachers' jobs either using in-depth qualitative analyses or focusing on the influence of those aspects of teachers work on their learning. The two most widely researched and most often cited features of school contexts in educational research are teachers' involvement in school activities and teachers' collaboration (e.g. Harris & Muils, 2005; Harvreaves, 1994; Leithwood, Mascall, & Strauss, 2009; Louis & Kruse, 1995; Rosenholtz, 1989). Those features appeared repeatedly in this study as well. For example, participants' perceptions of departmental collaborations and participation in decision-making was a frequent perceived source of support in both our surveys and interviews. Furthermore, educational researchers focusing on issues pertaining teachers' retention and resilience have highlighted the significance of ascertaining individual teachers' needs, protective factors and overall perceptions of the

challenges they face in different stages of their careers (Day, 2008; Doney, 2013; Hong, 2012;)

The present study showed that the use of the definition of job resources can allow the examination of teachers' perceptions of aspects of their work such as their perceived presence in the organization, work-role, collaborations and classroom work. These perceptions signal the different areas in individuals' work-lives that keep them going while at the same time the individual themselves recognise those areas as developing them further as a professional. Day et al.'s (2007) presentation of longitudinal data on factors that affect teachers' development, learning and effectiveness showed that teachers in all professional life phases associated CPD with building their emotional, health and intellectual capacities.

The surveys gave the least opportunities to participants to discuss their perceptions of those activities but participants still mentioned some of them as supportive to their engagement in their work (e.g. *"departmental meetings", "sufficient training", "working with peers on specific projects").* In their interviews participants were asked directly to identify those school activities/arrangements that are most important for them and discuss why they believe so. Research findings about teachers' CPD among English teachers show that their effectiveness depends on the degree to which they are relevant to the specific needs of teachers within the contexts in which they are employed (e.g. Day et al., 2007; Goodall et al., 2005; Orfer & Pedder, 2010). This was prevalent in the present study, as well, and was clearly reflected in interviewees' responses regarding available sources of support (e.g.*" ...if I think that I am participating in some decision making that gives me a kind of purpose to be here than just coming in doing a job and going...", "...I think for me mentoring and coaching is important...that makes the day-to-day when you have school much easier..",*) or their shortage: *"...one issue is that things haven't changed dramatically for me personally at the school for quite some time..").*

Interviewees identified several school activities/arrangements in their schools but their perceived importance was a major issue throughout their descriptions. In particular, participants tended to focus on certain activities/arrangements more than others and although they agreed that they can support their engagement in their work they focused on a smaller amount of activities to describe this support. The interviewees' perspectives were in accordance with the literature regarding teachers' supportive school contexts (e.g. Harris & Muijs, 2005; Leithwood et al., 2009; Louis & Kruse, 1995) and the generic definition of job resources as physical, psychological, social or organizational aspects of the job that may stimulate personal growth, learning, and development. Interviewees adopted multiple perspectives to describe school activities/arrangements that were available and their importance for them (organisational perspectives, interpersonal perspectives, work-role perspectives, task perspectives).

Educational research into teachers' work-lives has often highlighted the importance of working in a supportive school context and the difference forms that this support can take. For example, learning experiences tailored to the day-to-day teachers' work (Hawley & Valli, 1999), participation in school improvement processes (Louis & Kruse, 1995), collaborative work (Hargreaves, 1994), and appropriate leadership initiatives (Harris & Muijs, 2005; Leithwood, Dart, Jantzi, & Steinbach, 1993) are among the most commonly cited supportive aspects of teachers' work.

The first sub-theme was the "organizational perspective" and included interviewees' descriptions of the way those activities/arrangements are organized within their schools and/or their perceived importance for interviewees' presence in the organization. A key characteristic of this theme is it reflects teachers' perceived sense of control over the developments in their school due to those activities as it includes interviewees' perceptions of the importance of certain school activities/arrangements for their presence and influence in the organisation. Day et al. (2007) discussing the value of the findings of the VITAE project regarding teachers' retention agree with arguments that environments for the professional learning of teachers should be characterised by conditions that offer opportunities for personal development that go beyond school or government priorities, out of school educational opportunities including time to stand back, reflect and think differently, and opportunities to integrate off the job training into everyday practice.

The second sub-theme was the "interpersonal perspective" theme and included interviewees' descriptions of the way collaborative activities/arrangements are organized and/or the support that teachers perceive that they have from their colleagues due to those school activities/arrangements". It refers to the interviewees' description of the way collaborative activities/arrangements are organized and/or the support that teachers perceive that they have from their colleagues due to those school activities/arrangements. Thus, it includes interviewees' perceptions of the importance of their interpersonal relationships through those available school activities/arrangements for their own development. The third sub-theme was the "work-role perspective" that included interviewees' descriptions of the way those activities/arrangements are organized as part of their work-role in the organization and/or their perceived importance for their work. Therefore, it links the support that interviewees perceived they had from their school activities/arrangements with their work-role in the organization.

Finally, the "task perspective" theme refers to the description of the ways school activities/arrangements are organized in relation to interviewees' classroom work and/or the perceived importance of those activities for their job performance. Goodall et al.'s (2005) evaluation of CPD programmes draws attention to the importance of examining teachers' perceptions of their school activities. Specifically, they note that the most important perceived feature of any type of CPD is to be practical and have direct application to individual's daily work. Those findings show that interviewees' perceptions of school activities/arrangements can be a significant source of information regarding their job resources and approach individual teachers as professionals acknowledging that they have diverse

individual needs that are not always linked to the overall performance of one specific context and its priorities.

Further research

Further research in the area of teachers' perceptions of job resources should involve both quantitative and qualitative research methods and different sampling methods in order to resolve the above mentioned limitations. In particular, a larger sample of teachers employed in secondary schools in many UK counties would be required in order to understand the relationship between teachers' perceptions of the support available in their schools and their work-related well-being. For example, a school-based sampling method would be required to examine in depth the relationships between teachers' perceptions of their school activities/arrangements and their resilience and desire to stay in the profession (Doney, 2013; Day, 2008).

The way teachers are exposed and involved to school arrangements for their professional and leadership development may differ from one school to another. For this reason, a closer examination is required of the relationships between how those arrangements are set, teachers' actual access to them and the actual support that teachers perceive they have from them (Day et al., 2007; Goodall et al., 2005; Orfer & Pedder, 2010). Finally, longitudinal research designs would could allow qualitative data collection in ways that draw safer conclusions regarding teachers' perceptions of job resources aiming to count for smaller or larger changes either within a school or district or the educational system.

References

Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science*, *20*, 265-269.

Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: state of the art. *Journal of Managerial Psychology*, 22, 309-328.

Bakker, A. B., & Demerouti, E. (2014). Job Demands-Resources Theory. In P.Y. Chen & C. L. Cooper (Eds)*, Wellbeing: A Complete Reference Guide, Vol. Three*: *Work and Wellbeing* (pp. 37-64). John Wiley & Sons, Ltd.

Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2003). Dual processes at work in a call centre: An application of the Job Demands-Resources model. *European Journal of Work and Organizational Psychology*, *12*, 393-417.

Bakker, A. B., Gierveld, J. H., & Van Rijswijk, K. (2006). Succesfactoren bij vrouwelijke schoolleiders in het primair onderwijs: Een onderzoek naar burnout, bevlogenheid en prestaties [*Success factors among female school principals in primary teaching: A study on burnout, work engagement, and performance*]. Diemen, The Netherlands: Right Management Consultants.

Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99(2), 274-284.

Bowen, G. L., Rose, R. A., & Ware, W. B. (2006). The reliability and validity of the School Success Profile Learning Qrganization measure. *Evaluation and Program Planning, 29,* 97-104.

Cordingley, P. (2015). The contribution of research to teachers' professional learning and development. *Oxford Review of Education*, 41, 2, 234-252

Day, C. (1991). Professional development and reflective practice: Purposes, processes and partnerships. *Pedagogy, Culture and Society, 7*(2), 195-220

Day, C. (2000). Teachers in the twenty–first century: Time to renew the vision. *Teachers and Teaching: Theory and Practice*, *6*(1), 101-115

Day, C. (2008). Committed for life? Variations in teachers' work, lives and effectiveness. *Journal of Educational Change, 9*, 243-260

Day, C., & Gu, Q. (2007). Variations in the conditions for teachers' professional learning and development: Sustaining commitment and effectiveness over a career. *Oxford Review of Education*, *33*(4), 423-443.

Day, C., & Gu, Q. (2009). Veteran teachers: commitment, resilience and quality retention. *Teachers and Teaching: Theory and Practice*, *15*(4), 441-457.

Day, C., Sammons, P., Stobart, G., Kington, A., & Gu, Q. (2007). *Teachers matter: connecting work, lives and effectiveness.* Maidenhead, Open University Press.

Demerouti, E., & Bakker, A. B. (2011). The Job Demands-Resources Model: Challenges for future research. *South African Journal of Industrial Psychology*, *37*, 1-9.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86, 499-512

Doney, P. A. (2013). Fostering resilience: A necessary skill for teacher retention. *Journal of Science Teacher Education, 24*, 645-664.

Evers, A. T., van der Heijden, B. I. J. M., Kreijns, K., & Vermeulen, M. (2015). Job demands, job resources, and flexible competence: The mediating role of teachers' professional development at work. *Journal of Career Development*, *43*(3), 1-17.

Evers, A. T., Kreijns, K., van der Heijden, B. I. J. M., & Gerrichhauzen, J. T. G. (2011). An organizational and task perspective model aimed at enhancing teachers' professional development and occupational expertise. *Human Resource Development Review*, 10, 151-179.

Federici, R. A., & Skaalvik, E. M. (2011). Principal self-efficacy and work engagement: Assessing a Norwegian principal self-efficacy scale. *Social Psychology of Education*, *14*(4), 575-600.

Goodall, J., Day, C., Lindsay, G., Muijs, D., & Harris, A. (2005). *Evaluating the impact of continuing professional development.* Research Report 659, Department for Education and Skills.

Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed method evaluation designs. *Educational Evaluation and Policy Analysis*, *11*(3), 255-274.

Harris, A., & Muijs, D. (2005). *Improving schools through teacher leadership.* Maidenhead: Open University Press.

Hopkins, D., & Harris, A. (2001). *Creating the conditions for teaching and learning: a handbook of staff development activities.* London: David Fulton Publishers.

Gu, Q., & Day, C. (2007). *Teachers' resilience: A necessary condition for effectiveness, Teaching and Teacher Education*, *23*, 1302-1316.

Gu, Q., & Day, C. (2013). Challenges to teacher resilience: conditions count. *British Educational Research Journal, 39*(1), 22-44.

Guglielmi, D., Panari, C., Simbula, S, & Mazzetti, G. (2014). Is it possible to motivate teachers? The role of organizational identification, 116, 1842-1847.

Hakanen, J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *The Journal of School Psychology*, *43*, 495-513.

Hakanen, J. J., Perhoniemi, R., & Toppinen-Tanner, S. (2008). Positive gain spirals at work: From job resources to work engagement, personal initiative and work-unit innovativeness. *Journal of Vocational Behavior*, *73*, 78-91.

Hodkinson, A. (2006). Career entry development profiles and the statutory induction arrangements in England: A model of effective practice for the professional development of newly qualified teachers? *Journal of In-service Education, 32*(3), 287-300.

Hargreaves, D. (1994). *Changing teachers, changing times.* London: Cassell.

Hargreaves, A., & Goodson, I. (1996). Teachers' professional lives: Aspirations and actualities. In I. Goodson & A. Hargreaves (Eds.), *Teachers' professional lives* (pp.1-27). London: Falmer.

Hawley,W., & Valli, L. (1999). The essentials of effective professional development: A new consensus. In L. Darling-Hammond and G. Sykes (Eds.), *Teaching as the Learning Profession. Handbook of Policy and Practice* (pp. 127-150). San Francisco: Jossey-Bass.

Hong, J. Y. (2012). Why do some beginning teacher leave the school, and others stay? Understanding teacher resilience through psychological lenses. *Teachers and Teaching: Theory and Practice*, *18*(4), 417-440.

ICM (Institute of Commercial Management) (2006). *The induction and training and development experiences of newly qualified teachers and teachers in the second and third year of their careers*. Confidential report, Training and Development Agency for Schools. London: ICM

Harris, A., & Muijs, D. (2005). *Improving schools through teacher leadership.* Maidenhead: Open University Press.

Howard, S. & Johnson, B. (2004). Resilient teachers: Resisting stress and burnout. *Social Psychology of Education*, *7*, 399-420.

Kira, M., and van Eijnaten, F. M. (2009). Sustained by work: Individual and social sustainability in work organizations, in Docherty, P., Kira, M., & Shani, A. B. (Rami) (eds), *Creating sustainable work systems: developing social sustainability*. Oxon: Routledge.

Lee, T. L., Mitchell, T.R., & Sablynski, C. J. (1999). Qualitative research in organisational and vocational psychology, 1979-1999. *Journal of Vocational Behaviour, 55*, 161-187.

Leithwood, K., Dart. B., Jantzi, D., & Steinbach, R. (1993). *Fostering Organizational Learning: A study in British Columbia's Intermediate Developmental Sites, 1990-1992.* Final report for year three of the research project 'Implementing the Year 2000 Policies', prepared for the British Columbia Ministry of Education.

Leithwood, K., Mascall, B., & Strauss, T. (Eds.). (2009). *Distributed leadership according to the evidence*. New York: Routledge.

Louis, K. S., & Kruse, S. D. (1995). *Professionalism and community: Perspectives on reforming urban schools.* Thousand Oaks, CA: Corwin Press.

Muijs, D., & Lindsay, G. (2008). Where are we at? An empirical study of the levels and methods of evaluating continuing professional development. *British Educational Research Journal, 34*(2), 195-211.

Nahrgang, J. D., Morgeson, F. P., & Hofmann, D. A. (2011). Safety at work: A meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes. *Journal of Applied Psychology*, *96*, 71–94.

Opfer, V. D., & Pedder, D. (2010). Access to continuous professional development by teachers in England. *The Curriculum Journal*, *21*(4), 453-471

Perrachione, B. A., Rosser, V. J., & Petersen, G. J. (2008). Why do they stay? Elementary teachers' perceptions of job satisfaction and retention. *The Professional Educator*, 32(2). Available at : www.theprofessionaleducator.org/articles/perrachione_final.pdf

Pretsch, J., Flunger, B., & Schmitt, M. (2012). Resilience predicts well-being in teachers, but not in non-teaching employees. *Social Psychology of Education*, *15*(3), 321-336.

Prieto, L. L., Sorial, M. S., Martinez, I. M., & Schaufeli, W. (2008). Extension of the Job-Demands Resources model in the prediction of burnout and engagement among teachers over time. *Psicothema*, *20*(3), 354-360

Rosenholtz, S. J. (1989). *Teachers' workplace: The social organization of schools.* New York : Longman.

Schaufeli, W. B., & Taris, T. W. (2014). A critical review of the Job Demands-Resources Model: Implications for Improving Work and Health. In G. F. Bauer and O. Hämmig (Eds.), *Bridging Occupational, Organizational and Public Health: A Transdisciplinary Approach* (pp. 43- 68). Berlin: Springer

Skaalvik, E. M., & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion, *Teaching and Teacher Education*, *27*, 1029-1038.

Van den Broeck, A., Van Ruysseveldt, J., Vanbelle, E., & De Witte, H. (2013). The Job-Demands Resources Model: Overview and suggestions for future research. In A., Bakker (Ed.), *Advances in Positive Organizational Psychology,* vol. 1*,* (pp. 83-105). Bimgley: Emerald Group Publishing Limited.

Weigl, M., Hornung, S., Parker, S. K., Petru, R., Glaser, J., & Angerer, P. (2010). Work engagement accumulation of task, social, personal resources: A three-wave structural equation model. *Journal of Vocational Behavior*, *77*, 140-153.