Omani Teachers' Professional Identity from Their Supervisors' Perspectives: Comparison Study between three School Subjects

Abdullah Ambusaidi [1], Abdullah Alhashmi[1] & Nasser Al-Rawahi[1]

[1]*Sultan Qaboos University, Faculty of Education,Umman*

Abstract

This study aims to investigate the Arabic, Science and Physical Education supervisors' perspectives regarding the level of professional identity features possessed by teachers of the aforementioned three subjects in the Omani context. The sample consisted of 225 supervisors who are working in the Arabic, Science or Physical Education sectors. Data was collected via a questionnaire comprising a list of professional identity features divided into four domains. The results demonstrated that supervisors in the three subjects indicated that teachers under their supervision possess a high level of professional identity features in the "school development" domain while they possess a moderate level of professional identity features in the three other domains: "teaching and learning", "student development" and "professional and personal growth". In addition, the results revealed no statistical significant differences according to supervisors' gender and experiences. However, the results showed that Physical Education teachers possessed more professional identity features than their counterparts across all domains. Recommendations for future research were proposed based on the study results.

Key Words: professional identity, supervisors, Omani teachers, science, Arabic language, physical education.

Introduction

The issue of teacher identity has a significant impact on the process of education. Gao (2012) points out that the development in teacher identity has been viewed as a conceptual tool that is critical to understanding teacher education. It is associated with many factors. The first factor is teacher commitment. Studies have drawn this conclusion (Ball & Goodson, 1985; Day *et al*., 2005) and shown that when teachers develop satisfaction from their commitment they derive a sense of pride in their profession (Cheung, 2008; Nias, 1981). In this case, the more committed that teachers are to their

---

[1] Corresponding author. Tel.: +96899451526
E-mail address: ambusaid@squ.edu.om (A. Ambusaidi)

practices, the more likely they are to identify themselves as professional teachers (Cheung, 2008). Teacher identity is also associated with how teachers view themselves and the roles they are expected to fulfil (Welmond, 2002). These dynamic beliefs are constructed within competing interests, ideologies, conceptions of rights and responsibilities. They are also ways of understanding teachers' success and effectiveness (Cheung, 2012).

Teacher identity has a great effect in changing the education policy environment (Robinson & McMillan, 2006). It affects the pedagogy and the teaching method (Agee, 2004; Korthagen, 2004). It also determines the way teachers teach, the way they develop as teachers and their attitudes towards education changes (Beijaard *et al.*, 2004).

The term "identity" as Beijaard *et al.* (2004) argue, is not something one has, but it is something that develops throughout one's whole life. It is a continuous and dynamic process (Mockler, 2011; Franzak, 2002). The identity development process requires both time and experience (Cheung, 2008). In other words, pre-service teachers bring their own preconceptions and experiences gained from their cultures, values and society concerning what it means to be a teacher to their studies during their education programme (Alsup, 2006). Identity is a dynamic attribute and can be changed and developed during the teacher education programme and during teaching in a real school environment (Vloet, 2009; Dowling, 2006; Britzman, 2003; Bryan, 2003). The preparation programme has a vital role in developing teacher identity through the experience pre-service teachers undergo in the programme. Then, when these teachers enter the world of work and practice their teaching in a real world situation, these identities develop and affect teachers' teaching processes. It also affects the curriculum implementation. As Cheung (2008) points out, identity cannot be considered as a fixed attribute of a person. Levine & Cote (2002) indicate that when the sense of teacher identity is strongly nurtured and reinforced in their lives, teachers will have a sense of continuity with the past, meaning in the present and direction in the future. In this regard, Cooper & Olson (1996) suggest that teacher identity is continually being formed and reformed as individuals develop over time and through interaction with others.

There are different views regarding identifying teachers' professional identity. Both Knowles (1992) and Nias (1989) believe that teachers' professional identities are related to teachers' conceptions or images of self. Conversely, Holland *et al.* (1998) and Tickle (2000) believe that teachers' professional identities should include the concepts and expectations of other people (for example, what society expects teachers should know and do), which teachers themselves find it important in their professional work to improve it. The third view, which brings the previous two views together, is the belief that identity can be understood as an interaction between the meanings that people attach to themselves and the meanings that are attributed by others through social practice (Cheung, 2008; Danielewicz, 2001). However, Wenger (1998) states that teacher identity can be understood in three modes of belonging. The first mode is "engagement" which refers to individuals establishing and maintaining joint enterprises and negotiating meanings. The second mode is "imagination" which refers to the creation of images about the world and our place within it across time and space by extrapolating beyond our own experience (Trent, 2011). The third mode is "alignment", which coordinates an individual's activities within broader structures and enterprises, allowing the identity of a larger group to become part of the identity of individual participants (Wenger, 1998). Enyedy *et al.* (2006) asserts that teachers' professional identities are seen in terms of teachers' professional practices or actions (what they do) and professional roles or states (who they are).

Teachers' professional identities are affected by three main sources which are titled as "orientations" (Hsieh, 2010). The first source termed "individually-oriented" is influenced by individual pre-professional experiences (Sutherland *et al.*, 2010; Gee, 2000). The second source is referred to as "classroom-oriented" and is based on practice factors (i.e. subject matter, instructional planning). The final source, "dialogically-oriented", is where external discourses are related to teaching and where learning is influential (i.e. professional decision making).

The question that arises in this context is "what are teachers supposed to do in order to make the teaching process professional?" In other words, what aspects or domains must be found in teachers' work to ensure their teaching process is professional. There is no consensus among educators about this. Different perspectives are found among educators who investigate the professional identity of teachers. Darling-Hammond & Bransford (2005), for example, indicate that to consider teaching as a

professional process, teachers must excel and have knowledge in the following areas: a) subject matter and curriculum goals (includes educational goals and purposes for skills, content and subject matter), b) teaching (includes content plus content pedagogy, teaching diverse learners, assessment and classroom management), and c) students' development in a social context (include learning, human development and language). In his study, Cheung (2008) divided the teachers' professional identity and practices into five domains: teaching and learning, professional relationships and services, school development, student development, and personal growth and development.

Several studies have been conducted to explore teachers' professional identity (Trent, 2011; Timostsuk & Ugaste, 2010; Cheung, 2008; Dowling, 2006, Enyedy *et al*., 2006). However, most of these studies used qualitative type research (Cheung, 2008). This study follows the approach used by Cheung (2008) who adopted quantitative type research based on a questionnaire. The advantages of such an approach are that it can cover a large number of targeted samples and it may lead to some indicators regarding the attributes under investigation of the target sample, which in our case refers to "teachers' professional identity".

Thus, the supervisors' perspectives about their teachers are very important to direct and improve the quality of teaching. Olsen (2008) states that teachers' professional identity as a pedagogical tool can be used by teacher educators and professional development specialists to make visible various holistic, situated framings of teacher development in practice. In this study we are investigating supervisors' perspectives regarding the teacher identity of their teachers working in three different subject areas (Arabic, Science and Physical Education). These subjects were chosen due to the differences in their nature. The Arabic language subject falls under the humanities, while Science deals with natural phenomena and physical education addresses sport and human fitness. Our claim is that these identities may vary in some domains from the supervisors of one subject to another due to the nature of each subject.

In the Sultanate of Oman, education supervision is considered an important device by the Ministry of Education which is responsible for following up on the professional practices of teachers. Therefore, the Ministry of Education adopts three levels of supervision (Al-Rasbi, *et al*., 2007). The first level is general supervision, where the Ministry serves as an umbrella organization for national supervision and is responsible for developing education supervision, providing supervisors with professional support, and following up on supervisors' reports. The second level is the supervision by the regional education authority which is responsible for enhancing the roles of supervisors and senior teachers, following up on their performance, and planning their professional development in addition to setting, implementing and evaluating training programmes for senior teachers and teachers. Moreover, supervision at this level monitors the outcomes of the instruction process and participates in arranging and implementing performance development plans. The third level of supervision is at the school, where the senior teacher in each subject acts as resident supervisor for his colleagues. His\ her tasks include following up on and developing teachers' performance through short workshops, assessing training effects, and organizing sessions for exchanging experiences and points of view.

This study targets subject matter supervisors at the regional level who are in direct relationship with teachers. Subject matter supervisors are responsible for providing teachers with support through assessing their needs, organizing specific training programmes, enhancing their professional development, and evaluating teaching and learning outcomes. Supervisors meet with their teachers in schools where they help the teachers regarding different aspects of the teaching and learning process. They visit the teachers during lessons and give them the necessary feedback. Supervisors participate in arranging and implementing discussions and workshops for their teachers. Furthermore, it is the task of supervisors to write evaluation reports on their teachers and submit a copy to them.

Based on the above considerations, supervisors have a good contact relationship with their teachers and are eligible for providing a clear perception concerning their teachers' professional identity.

Research Questions

This study aims to investigate the perspectives of supervisors of Arabic, Science and Physical Education teachers regarding the level to which their teachers possess the features of teachers' professional identity. Specifically, the study addresses the following questions:

1. To what level do the Arabic, Science and Physical Education teachers possess the professional identity features as perceived by their supervisors?
2. Do the perceived levels of professional identity features of Arabic, Science and Physical Education teachers differ according to supervisors' gender, specialization, supervision experience or the interaction between these three variables?

Method

Participants

A total of 225 supervisors of Arabic, Science and Physical Education teachers participated in this study, 135 males and 90 females. The participants were divided as follows: 94 Arabic supervisors (53 males and 41 females), 93 Science supervisors (62 males and 31 females) and 38 Physical Education supervisors (20 males and 18 females). Regarding the years of supervision experience, the sample consisted of 96 supervisors with less than 6 years experience, 63 with 6-10 years experience and 66 with more than 10 years experience in supervision.

Instrument

The study used a questionnaire to elicit the supervisors' perspectives regarding the degree to which teachers of Arabic, Science and Physical Education possessed the features of professional practices. The questionnaire was compiled from a list of 40 practices divided into five categories (domains) adopted by Cheung (2008). The researchers studied the list, translated it into Arabic, merged the similar items, excluded some vague items and compiled a first draft of a new list consisting of 34 items expressing different features that reflect teachers' commitments to the teaching profession. The items were classified into five categories: (1) teaching and learning, (2) student development, (3) school development, (4) professional relationships and services, and (5) personal growth and development. The inventory was then judged by specialists in the education sector in the College of Education at Sultan Qaboos University and supervisors of Arabic, Science and Physical Education teachers. The referees were asked to assess the items in terms of clarity, suitability for the study purposes and the appropriateness of the classification. The referees' comments and suggestions led to omitting some items, rephrasing others and merging some of them. After considering the new list, the researchers decided to merge categories 4 and 5 into one category named professional and personal growth.

Consequently, the final version of the questionnaire was composed of 29 statements relevant to the features of the teaching profession divided into four categories as follows:
1. Teaching and learning, 7 items;
2. Students' development, 9 items;
3. School development, 7 items; and
4. Professional and personal growth, 6 items.

The questionnaire was distributed to supervisors and they were requested to indicate the degree to which the teachers under their supervision possess each feature using a five-point Likert scale; (1) very high, (2) high, (3) moderate, (4) low, and (5) very low. The participants were also instructed to specify their gender and years of experience in supervision as these variables were required to answer the second question of the study.

The reliability of the questionnaire was assessed for internal consistency using the Cronbach Alpha reliability coefficient. The reliability values for the four domains were found to be 0.85, 0.81,

0.88, and 0.89 respectively, with an overall value of 0.95. These values indicate that the present questionnaire is consistent and reliable for the purposes of collecting the data needed for the current study.

Data analysis

Data were collected and then analysed using the Statistical Package for Social Sciences (SPSS). Means and standard deviations were used to answer the first question and a multivariate test was used to answer the second one. Details concerning the statistical analysis are given in the results section.

For data analysis purposes, means and standard deviations were utilized to report subjects' responses to the questionnaire. Means were grouped into three levels to determine the degree to which teachers possess the professional identity features as perceived by supervisors. These levels are as follows:

- 1.00 to 1.66 = low level;
- 1.67 to 3.33 = moderate level; and
- 3.34 – 5.00 = high level.

Results and Discussion

Results relevant to the first question

The first question that this study seeks to answer is: "To what level do their supervisors perceive the Arabic, Science and Physical Education teachers to possess the professional identity features?" In order to answer this question, means and standard deviations were calculated from the sample responses regarding the level of professional identity possessed by the teachers (Table 1). The overall results for the four domains are displayed first and are followed by the results for the items in each separate domain.

Table 1.
Means and standard deviations of teachers' professional identity domains from supervisors' perspectives

Domain	Arabic Language (94)		Science (93)		Physical Education (38)		Total	
	M	SD	M	SD	M	SD	M	SD
Teaching & Learning	3.21	0.59	3.20	0.63	3.49	0.55	3.25	0.61
Student Development	3.06	0.77	3.10	0.69	3.64	0.50	3.17	0.72
School Development	3.26	0.62	3.44	0.66	3.84	0.47	3.43	0.65
Professional and personal growth	3.21	0.75	3.30	0.68	3.72	0.59	3.33	0.72
Total	3.17	0.61	3.25	0.59	3.67	0.44	3.29	0.60

The descriptive statistics, listed in Table 1, show that the supervisors of the three subjects perceived that teachers generally possess a high degree of professional identity features in the "school development domain", with a mean score of 3.43, while the supervisors believe that their teachers possess these features to a moderate degree in the other three domains (i.e. teaching and learning, student development and professional and personal growth) , as the mean scores lie between 3.17 and 3.33. The supervisors' responses may reflect the level of attention given by the teachers to the features of each of the domains. Teachers' interest in the features included in the domain of "school development" may be attributed to their desire for promotion. When teachers demonstrate cooperation with colleagues and involvement in arranging activities, they try to show commitment to their profession and convince decision makers of their merit for promotion to administrative or supervisory positions.

The lowest total mean score (3.17) was given to the "student development" domain. This indicates that supervisors generally believe that their teachers are not doing well in this vital domain. Student development features ought to be at the heart of teachers' practice in the school. Teachers'

negligence of student development can occur when teachers limit their relationship with students in the classroom. Yet, teachers who are concerned with students' emotional and social, as well as academic, needs have been found to engender more student involvement in lessons (Muijs and Reynolds, 2001). Muijs and Reynolds (2001: 58) reported that "teachers who are perceived as being understanding, helpful and friendly and show leadership without being too strict have been found to enhance students' achievement and their affective outcomes".

The "professional and personal growth" domain, unfortunately, is not given much attention by teachers within schools, according to their supervisors. Supervisors generally perceive that teachers do not have the commitment to continual personal and professional growth for themselves and their colleagues. This can be attributed to teachers' dependence on development programs organized centrally by the responsible departments together with a lack of self-motivation in seeking professional development. Hargreaves (2003) asserts that professional identity development is an individual obligation as well as an institutional task. The following Tables (2-5) demonstrate detailed results in each domain of professional identity.

Table 2.
Means and standard deviations of teachers' professional identity in" teaching and learning" domain

No.	Statements	Arabic Language		Science		Physical Education		Total	
		M	SD	M	SD	M	SD	M	SD
1	Displaying solid and extensive subject matter knowledge	3.37	0.73	3.56	0.73	3.89	0.56	3.54	0.73
2	Demonstrating great flexibility and responsiveness in teaching	3.41	0.77	3.42	0.80	3.76	0.75	3.48	0.79
3	Initiating purposeful integration of content knowledge and other curriculum elements (Objectives, teaching strategies, learning activities, evaluation strategies)	3.41	0.65	3.40	0.74	3.63	0.82	3.44	0.72
4	Continually reviewing the assessment modes and aligning them with the current curriculum objectives	3.17	0.85	3.18	0.85	3.55	0.76	3.24	0.84
5	Successfully motivating student learning	3.13	0.85	3.06	0.91	3.55	0.89	3.17	0.89
6	Creating and maintaining a stimulating and harmonious learning atmosphere	3.16	0.75	3.12	0.87	3.29	0.84	3.16	0.82
7	Using assessment results consistently to develop programmes and plans that improve student learning	2.80	1.02	2.67	1.06	2.76	1.00	2.74	1.03

Table 2 shows supervisors' responses regarding their teachers' level of professional identity features in the (teaching and learning) domain. It appears from Table 2 that supervisors consider their teachers highly skilled in three features relevant to teaching. These features are connected to knowledge of the subject matter, flexibility and responsiveness, and integration of content knowledge and other curriculum elements. Two reasons may lie behind this result. The first reason is the importance accorded to teaching in the teachers' profession by stakeholders in the Ministry of Education. It considers this to be the main task teachers must accomplish. Supervisors follow teachers' performance in teaching through regular classroom visits. This is the technique most often employed by supervisors. Besides monitoring teachers' performance in the classroom, supervisors check on lesson plans, students' activity books and students' achievement records. Feedback is given to teachers on all these aspects and they are asked to adhere to the supervisors' instructions. The second reason is perhaps that supervisors desire to show that their teachers are following their guidance and benefitting from the school visits.

The lowest mean score in this domain was given to "Using assessment results consistently to develop programmes and plans that improve student learning". It may be inferred that supervisors are

unsatisfied with their teachers' performance in this vital feature. This reflects a problem in utilizing evaluation results to enhance student achievement, which is the core purpose of assessment. It seems that teachers use these results for collecting students' scores, but not as a means for appraising the teaching process and exploring strengths and weaknesses in their instructions. Muijs and Reynolds (2001) assert that assessment is a vital tool for teachers, as it allows them to better plan their lessons by taking into account the strengths and weaknesses of their students and adjust their teaching accordingly.

For the second domain (students' development), Table 3 shows the means and standard deviations for each item in that domain.

Table 3.
Means and standard deviations of teachers' professional identity features in students' development domain

No.	Statements	Arabic Language		Science		Physical Education		Total	
		M	SD	M	SD	M	SD	M	SD
1	Building positive and encouraging relationships with students	3.30	0.88	3.43	0.81	4.03	0.79	3.48	0.87
2	Respecting academic and social differences between students	3.15	0.99	3.37	0.80	3.82	0.69	3.35	0.90
3	Designing activities in the light of students' needs and differences	3.50	3.21	2.97	0.88	3.58	0.92	3.29	2.19
4	Play a leading role in promoting collaboration among colleagues in order to support the students' needs	3.10	0.97	3.17	0.93	3.84	0.72	3.25	0.95
5	Have the belief that all students can learn	3.01	1.04	3.16	1.02	4.03	0.86	3.24	1.04
6	Providing a role model of a responsible and contributory citizen for students	3.14	0.95	3.12	0.91	3.68	0.74	3.22	0.92
7	Helping students to apply what they have learned in their daily lives	2.87	0.86	3.09	0.87	3.29	0.73	3.03	0.85
8	Serving as a role model for students in showing keen concern for local/global issues and living out positive social values	2.85	0.89	2.84	0.97	3.45	0.89	2.95	0.95
9	Exploring social, economic and psychological factors that affect students' learning	2.63	0.94	2.77	1.02	3.03	0.82	2.76	0.96

Table 3 presents current study sample responses regarding the degree to which teachers possess professional identity features in the (students' development) domain. The total means scores indicate that the feature "Building positive and encouraging relationships with students" is present to a high degree in teachers. This feature is invaluable for creating a pleasant classroom environment and encouraging students to learn (Muijs and Reynolds, 2001).

However, most features in this domain obtained a moderate total mean score. These features are aspects of advancing students' characters that reflect the functional dimension of teaching. It is common sense that teachers are not merely purveyors of knowledge. They ought to have regard for their students' needs and differences and serve as good examples for them. Since students learn at different rates and in different ways, teachers are required to define and understand students' specific learning needs, which will aid in successfully adapting instruction in the classroom (D'Amico & Gallaway, 2010). The results here highlight that teachers limit their school efforts to formal instruction and do not give much attention to building students' personalities and serving as good role models for them. Table 4 shows means and standard deviations of teachers' professional identity features in the (school development) domain.

102

Table 4.
Means and standard deviations of teachers' professional identity features in "school development" domain

No.	Statements	Arabic Language		Science		Physical Education		Total	
		M	SD	M	SD	M	SD	M	SD
1	Helping and supporting colleagues, especially new teachers	3.53	0.71	3.77	0.72	4.26	0.60	3.76	0.74
2	Strengthening the links of harmony and cooperation between staff in the school	3.36	0.85	3.68	0.87	3.97	0.75	3.60	0.87
3	Providing positive efforts to support colleagues in the same field	3.41	0.88	3.58	0.89	3.95	0.84	3.57	0.89
4	Establishing a trustworthy relationship between teachers and students in the school	3.31	0.87	3.46	0.82	3.92	0.63	3.48	0.83
5	Striving towards achieving the school mission in society and life	3.16	0.87	3.19	0.86	3.66	0.85	3.26	0.84
6	Organizing a variety of activities that serve the school objectives and meet students' needs	3.15	0.72	3.16	0.82	3.71	0.77	3.25	0.80
7	Building a caring and inviting school climate through collaboration with colleagues, students and parents	2.90	0.87	3.25	0.95	3.42	0.86	3.13	0.92

The results in Table 4 demonstrate that supervisors believe that their teachers are committed to professional identity aspects pertinent to school development, as the seven items in this domain obtained total mean scores ranging from 3.76 to 3.13. The four features that supervisors regarded as highly present in teachers are relevant to building relationships with colleagues, school staff and students. This may be attributed to Omani personality characteristics. It is well-known that Omani people like to build warm and caring connections with the people they interact with regularly. The other three features scored moderately high. A possible reason for this is that these features are related to working outside the school with society in general, and parents in particular, and it seems that teachers are reluctant to practice outside the school doors. Table 5 presents the results related to supervisors' responses regarding items included in the (professional and personal growth) domain.

Table 5.
Means and standard deviations of teachers' professional identity features in "professional and personal growth" domain

No.	Statements	Arabic Language		Science		Physical Education		Total	
		M	SD	M	SD	M	SD	M	SD
1	Working to achieve cooperation and teamwork among administrative and teaching staff	3.28	0.91	3.55	0.87	4.03	0.54	3.52	0.88
2	Striving to promote the status of the teacher in society	3.27	0.91	3.37	0.83	3.84	0.86	3.40	0.89
3	Commitment and dedication to the profession	3.27	0.95	3.39	0.87	3.71	0.84	3.39	0.91
4	Striving for continual learning and excellence in performance	3.17	0.86	3.18	0.83	3.71	0.87	3.27	0.87
5	Working to accommodate and adhere to the new education policies	3.13	0.93	3.10	0.89	3.71	0.87	3.21	0.93
6	Demonstrating ability in continual personal and professional growth	3.13	0.85	3.20	0.85	3.34	0.67	3.20	0.82

The total mean scores in Table 5 demonstrate that, from the supervisors' point of view, their teachers possessed a high degree of professional identity in three features, while the remaining three features obtained moderate scores. The highest mean in this domain was given to the feature "Working to achieve cooperation and teamwork among administrative and teaching staff". This result corresponds with those mentioned above regarding teachers' willingness to create a collaborative working atmosphere while demonstrating their ability to build good relations with people in their environment, which may give them priority in promotion to administrative and supervisory positions.

The feature "Demonstrating ability in continual personal and professional growth" scored the lowest mean in this domain. Nevertheless, this is a significant aspect of teacher identity. It seems that the supervisors believe that the teachers under their supervision do not give enough attention to personal professional development. This may be attributed to teachers' overreliance on the development programmes designed and organized by the Ministry of Education or their district departments.

Results relevant to the second question

The second question of this study is "Do the perceived levels of professional identity features of Arabic, Science and Physical Education teachers differ according to supervisors' gender, specialization, supervision experience or the interaction between these three variables?" In order to answer this question, means and standard deviations of supervisors' responses regarding professional identity features were computed according to gender, specialization and supervision experience. Results are shown in Tables (6) and (7).

Table 6.
Means and standard deviations of professional identity features according to gender and specialization

Professional identity domains	Gender				Specialization					
	Male N=135		Female N=90		Arabic		Science		Physical Education	
	M	SD	M	SD	M	SD	M	SD	M	SD
Teaching & Learning	3.19	643	3.34	.550	3.21	0.59	3.20	0.63	3.49	0.55
Student Development	3.15	.699	3.20	.761	3.06	0.77	3.10	0.69	3.64	0.50
School Development	3.43	.684	3.42	.589	3.26	0.62	3.44	0.66	3.84	0.47
Professional and personal growth	3.29	.742	3.38	.677	3.21	0.75	3.30	0.68	3.72	0.59
Total	3.26	.626	3.33	.560	3.17	0.61	3.25	0.59	3.67	0.44

From Table 6 it can be seen that the mean values of the female supervisors' responses in three professional identity domains and in the total mean score are higher than the mean values of male supervisors' responses. It can be inferred that female supervisors consider that teachers possess professional identity features to a greater degree than male supervisors. This is perhaps because female supervisors work mostly with female teachers who are known for their commitment and dedication to teaching. Regarding specialization, the table shows that Physical Education teachers are given higher mean scores compared with their counterparts (Science and Arabic Language). Means values of Physical Education teachers in the four domains included in the questionnaire ranged from 3.49 to 3.84, while the mean values for Science and Arabic Language specializations did not exceed 3.44 in any of the domains.

Table 7.
Means and standard deviations of professional identity features according to supervision experience

Professional Identity Domains	Supervision Experience					
	Less than 6 years (N=96)		6-10 years (N= 63)		Above 10 years (N=66)	
	M	SD	M	SD	M	SD
Teaching & Learning	3.19	603.	3.43	631.	3.24	580.
Student Development	3.06	705.	3.29	.816	3.22	.637
School Development	3.38	652.	3.48	.672	3.45	.617
Professional and personal growth	3.28	.648	3.32	.853	3.41	.673
Total	3.21	.579	3.35	.671	3.32	.555

The results in Table 7 indicate that mean scores in the four domains and overall differ according to supervision experience. Supervisors with less than 6 years experience considered that teachers possessed moderate levels of the professional identity features in all domains. In contrast, those with 6-10 years experience believed that teachers possessed high levels of professional identity features in the (teaching and learning), (student development) and (school development) domains. However, supervisors with more than 10 years experience believed that teachers possessed higher levels of the professional identity features in the (school development) and (professional and personal growth) domains, but only moderate levels in the other two domains.

In order to test if the above differences in the mean scores are statistically significant, multivariate analysis was used the results are presented in Table 8.

Table 8.
Results of Multivariate Test

Source of Variance	Value of Wilks' Lambda	F	Hypothesis df	Error df	Sig.
Gender (A)	.985	.780	4.00	204.00	.539
Specialization (B)	.850	4.314	8.00	408.00	.001
Supervision Experience (C)	.954	1.217	8.00	408.00	.287
AXB	.987	.336	8.00	408.00	.952
AXC	.979	.546	8.00	408.00	.822
BXC	.913	1.177	16.00	623.868	.281
AXBXC	.939	.811	16.00	623.868	.674

The results of the multivariate test reproduced in Table 8 demonstrate that there is no statistical difference in the levels of professional identity features that can be attributed to gender or supervision experience. However, the results show that there is a statistical difference related to specialization. Moreover, no statistical differences were found in the interaction between the three sources of variance; gender, specialization and supervision experience.

In order to determine which specialization has functional impact on professional identity domains, the second step of multivariate analysis was calculation, as shown in Table 9 below.

Table 9.
Test of between –subjects Effects

Source of variance	Professional identity domains	Type111 Sum of Squares	df	Mean square	F	Sig.
Specializations	Teaching & Learning	2.44	2	1.22	3.38	.036
	Student Development	10.07	2	5.03	10.51	.001
	School Development	9.74	2	4.89	12.37	.001
	Professional and personal growth	7.69	2	3.84	7.76	.001
	Total	7.10	2	3.55	10.47	.001

Error	Teaching & Learning	74.81	207	.361
	Student Development	99.08	207	.479
	School Development	81.89	207	.396
	Professional and personal growth	102.59	207	.496
	Total	70.16	207	.339

It is obvious from the results in Table 9 that there are significant statistical differences between specializations in all professional identity domains. However, since there are three main categories at specialization level; Arabic language, Science and Physical Education, multiple comparisons tests were calculated to determine the direction of the differences in the mean scores between specializations in each professional identity domain using the LCD test for multiple comparisons (Table 10).

Table 10.
LCD test results for multiple comparisons

Domain	Specialization		
Teaching and Learning	Science		
Physical Education	**.2913***	**-.2843***	
Student Development	Specialization		
	Science	Arabic Language	Physical Education
Physical Education	**-.5359***	**-.5771***	
School Development	Specialization		
	Science	Arabic Language	Physical Education
Physical Education	**.3997***	**-.5807***	
Professional and personal growth	Specialization		
	Science	Arabic Language	Physical Education
Physical Education	**-.4263***	**-.5180***	
Total	Specialization		
	Science	Arabic Language	Physical Education
Physical Education	**-.4213***	**-.4951***	

* = Significant at α =0.05

From Table 10 it is obvious that the differences in the mean scores between the three specializations were found to be between Physical Education supervisors on one side and Arabic and Science supervisors on the other. The differences are in favour of the Physical Education specialization. This means that Physical Education supervisors believe that their teachers possess higher levels of professional identity features than supervisors of Arabic language and Science teachers. There is no obvious interpretation for this difference, but it could be attributed to the status of Physical Education as a subject matter, which has been given higher priority in the last number of years since the new education system was introduced. The education policy makers in Oman recognized the importance of Physical Education in schools and its contribution to students' overall growth (cognitively, physically and emotionally). This recognition led to planning and developing more professional training programmes in order to prepare well-qualified Physical Education teachers who are more suitable for Omani students and their context (Al-rawahi, 2008).

Limitations and recommendations for further research

The findings of the current study provide education policy makers and people in charge of developing teacher education programmes with some potential ideas for developing and improving teacher professional programmes in a number of ways, as outlined below.

The study revealed that Omani supervisors in the three subjects under consideration viewed teachers under their supervision as possessing a high degree of professional identity features in the (school development) domain and a moderate degree in the other three domains; namely, (teaching and learning), (student development) and (professional and personal growth). This implies a need for

well-structured education training programmes aimed at strengthening the professional identity features of teachers in these domains. Possessing a high degree of professional identity features may influence teachers' classroom practices in a positive way. Thus, it is important to ensure that teachers have ongoing opportunities for developing their professional identity.

The methodology adopted in this study can be viewed as a basis for future education research in terms of its methods and scope. However, implementation of a quantitative approach might not be enough for understanding underlying factors influencing teachers' professional identities. This implies a need for future investigations to implement qualitative approaches such as focus group discussion and observation.

Teachers' identity is related to the images and perceptions that teachers have of themselves and a deeper understanding is needed to clarify these perceptions. As Cheung (2008) and Danielewicz (2001) point out; to understand the teachers' professional identity in depth it should be taken from both the teachers' opinions of themselves and from those who interact with the teachers regularly. Another recommendation for future study is to explore pre-service teachers' professional identity and compare it with their in-service identity in order to establish how aspects of this identity are developed.

References

Agee, J. (2004). Negotiating a teaching identity: an African American teacher's struggle to teach in test-driven context. *Teachers College Record, 106*(4): 747-774.

Al-Rasbi, N., Al-Oraimi, M., Al-Ghafri, R. & Al-Mihrizi, R. (2007*). Educational Supervision in the Sultanate of Oman, Reality and Ways of Development*. Muscat: Ministry of Education.

Al-Rawahi, N. (2008). *The Beliefs and Practice of Omani Student Teachers and Teachers about Teaching and Learning in Physical Education: An Exploratory Study.* Unpublished PhD Thesis, University of Exeter, UK.

Alsup, J. (2003). *Teacher Identity Discourse. Negotiating Personal and Professional Space*. Mahwah, NJ: Erlbaum.

Ball, S. & Goodson, J. (1985). *Teachers' Lives & Careers*. Lewes: Falmer Press.

Beijaard, D, Meijer, P. & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education, 39*: 107-128.

Britzman, D. (2003). *Practice Makes Practice: A Critical Study of Learning to Teach*. Albany, NY. State University of New York Press.

Bryan, L. (2003). Nestedness of beliefs: examining a prospective elementary teacher's belief system about science teaching and learning. *Journal of Research in Science Teaching, 40*(9): 835-868.

Cheung, H. (2008). Measuring the professional identity of Hong Kong in-service teachers. *Journal of In-Service Education, 34*(3): 375-390.

Cooper, K. & Olson. M. (1996). The Multiple "I"s of teacher identity. In M. Rompf, D. Dworet & R. Boak (Eds.) *Changing Research and Practice* (pp. 78-89). London: Falmer Press.

D'Amico, J. & Gallaway, K. (2010). *Differentiated Instruction for the Middle School Science Teacher*. San Francisco, Jossey-Bass.

Danielewicz, L. (2001). *Teaching Selves. Identity, Pedagogy and Teacher Education*. Albany, NY. State University of New York Press.

Darling-Hammond, L. & Bransford, J. (2005). *Preparing Teachers for a Changing World*. San Francisco, Jossey-Bass Education.

Day, C., Elliot, B & Kington, A. (2005). Reform, standards and teacher identity: challenges of sustaining commitment. *Teaching and Teacher Education, 21*: 563-577.

Dowling, F. (2006). Physical education teacher educators' professional identities, continuing professional development and the issue of gender equality. *Physical Education & Sport Pedagogy, 11*(3): 247-263.

Enyedy, N., Goldberg, J. & Welsh, K. (2006). Complex dilemmas of identity and practice. *Science Education, 90*(1): 68-93.

Franzak, J. (July 2002). Developing a teacher identity: The impact of critical friends practice on the student teacher. *English Education*: 258-280.

Gao, F. (2012). Teacher identity, teaching vision, and Chinese language education for South Asia students in Hong Kong. *Teachers and Teaching: Theory and Practice, 18*(1): 89-99.

Gee, J. (2000). Identity as an analytic lens for research in education. *Review of Research in Education, 25*(1): 99-125.

Hargreaves, A. (2003). *Teaching in the Knowledge Society: Education in the Age of Insecurity.* Maidenhead, Open University Press.

Holland, D., Lachicotte, W., Skinner, D. & Cain, C. (1998). *Identity and Agency in Cultural Worlds.* Cambridge MA, Harvard University Press.

Hsieh, B. (2010). *Exploring the Complexity of Teacher Professional Identity*. Berkeley, University of California (http://www. ncate.org)

Knowles. G. (1992). Models for understanding pre-service and beginning teachers' biographies: illustration from case studies, In I. F. Goodson (Ed.) *Studying Teachers' Lives*. London, Routledge: 99-152.

Korthagen, F. (2004). In search of the essence of a good teacher: towards a more holistic approach in teacher education. *Teaching and Teacher Education, 20*: 77-97.

Levine, C. & Cote, J. (2002). *Identity Formation, Agency and Culture*. Mahwah, NJ: Erlbaum.

Mockler, D. (2011). Beyond "what works": understanding teacher identity as a practical and political tool. *Teachers and Teaching: Theory and Practice, 17*(5): 517-528.

Muijs, Daniel & Reynolds, David (2001). *Effective Teaching, Evidence and Practice*. Sage.

Nias, J. (1981). Commitment and motivation in primary school teachers. *Educational Review, 33*(3): 181-190.

Nias, J. (1989). Teaching the self. In M.L. Holly & C. S. McLoughlin (Eds.). *Perspectives on teacher Professional development, London, Falmer Press*: 151-171.

Olsen, B, (2008). Introducing teacher identity and this volume. *Teacher Education Quarterly, 35*(3): 3-6.

Robinson, M. & MacMillan, W. (2006). Who teaches the teacher? Identity, discourse and policy in teacher education. *Teaching and Teacher Education, 22*: 327-336.

Sutherland, L., Howard, S. & Markauskaite, L. (2010). Professional identity creation: examining the development of beginning preservice teachers' understanding of their work as teachers. *Teaching and Teacher Education, 26*: 455-465.

Tickle, L. (2000). *Teacher Induction: the Making of the Modern Identity*. Cambridge, MI: Cambridge University Press.

Timostsuk, I. & Ugaste, A. (2010). Student teachers' professional identity. *Teaching and Teacher Education, 26*: 1563-1570.

Trent, J. (2011). "Four years on, I' m ready to teach': teacher education and the construction of teacher identities. *Teachers and Teaching: Theory and Practice, 17*(5): 529-543.

Vloet, K. (2009) Career learning and teachers' professional identity: narratives in dialogue, in: M.Kuijpers & F. Meijers (Eds.) *Career Learning. Research and Practice in Education,* Hertogenbosch, The Netherlands, Euro-guidance: 69–84.

Welmond, M. (2002). Globalization viewed from the periphery: the dynamics of teacher identity in the Republic of Benin, *Comparative Education Review, 46*(1), 53-65.

Wenger, E. (1998). *Communities of Practice. Learning, Meaning and Identity*. Cambridge, MI: Cambridge University Press.