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Fostering voluntary informal health mentoring in primary school: what are the teachers' barriers?

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Abstract

This research article aims to explore to what extent primary schoolteachers foster health-mentoring in their routine education practice on an informal and voluntary basis. Also it aims to identify the barriers school teachers encounter in fostering informal voluntary health mentoring within routine educational practices in Greek public schools. A survey employing a structured questionnaire with a random sample of 240 teachers from 15 urban schools was conducted. Teachers' socioeconomic profile, three categories of teachers' barriers (namely *school structure*, *subjective difficulties*, *powerful others*), teachers' professional development and training in health education constitute the main instrument of the study. Multiple regression analysis was used to analyse the data. The main conclusion drawn from the study is that subjective difficulties and lack of previous training in health–related subjects inhibit teachers from adopting informal health mentoring. Overall though primary schoolteachers are willing to adopt a health-mentoring role despite any reported obstacles.

Key words: primary education, teachers, barriers, mentoring

Introduction

The literature shows that there is no clear consensus as to what defines mentoring. An operational definition is attempted below. Mentoring is viewed as an educational tool of empowerment, which irrespective of its formal or informal form, still entails a relationship of coaching, counseling and caring (Fresko & Wertheim 2006). Traditional mentor relationships are those intimate learning alliances that occur unnaturally and are in direct contrast to formally organized mentoring. Traditional mentoring, therefore, is an organic process which develops naturally and is a vital and fluid relationship between the mentor and the mentee (Bennetts, 2003). In this sense, mentoring does not necessarily take a mandatory, official character imposed from the State or other organizations on public schools. Quite the contrary, a mentoring programme can be structured or unstructured, optional or obligatory, with or without guidance, prolonged or brief, individual or group-based (Orly 2008). Also the focus of mentoring may take several forms depending on the context.

This paper is concerned with health-related mentoring in public primary schools on an informal and voluntary basis. Mentoring has a role to play in health promotion since both fields are imbued with a strong educational and empowerment element. However concerns have been raised regarding the appropriateness of mentoring methods in health promotion specialists' training (Aggleton et al. 1999). In the UK, for example, a series of policy initiatives have taken place aiming to incorporate mentoring within the health promotion agenda and health promotion specialists' professional agendas (Oliver &

Aggleton 2002). An analogous attempt has not yet been witnessed in Greece, where this empirical work takes place. However previous research showed that schoolteachers are to some extent willing to undertake informal health-related mentoring on a non-paid, voluntary basis (Tzamalouka et al. 2008). This research article explores teachers' barriers in this role.

Although there is no official mandate from the Ministry of Education to require teachers to take a health-mentor role, an opportunity for teachers to develop their own syllabus exists. At the same time, since health education is not fully established in public primary education, a gap is observed in relation to health literacy in this level of education. Within this context, a working hypothesis was formulated: we seek to explore whether teachers recognise the gap in health-related knowledge. If so, we sought to discover whether they take initiative of their own accord to incorporate an element of informal health-related mentoring and what impedes them from doing so.

In a wider perspective, public schooling in Greece has entered an era of modernization in educational practices (Zambeta 2002) after a long time of scholar, public, and political debate over proposed, withdrawn and partly enacted educational reforms (Georgiadis 2005). Two significant components of those modernizing educational policies are the initiative of the *All-Day* schools for primary education and the attempt to diffuse cross-curricularity in new school agendas. Within these frameworks teaching hours have been extended and teachers are being encouraged to develop their own syllabus and apply it during the 1/3 of their newly extended teaching hours (Alahiotis & Karatzia-Stavlioti 2006).

In parallel, the Ministry of Education is currently working towards school health education's inclusion as a cross-curricular subject in the national formal primary education curriculum aiming to advance health teaching. However there is strong evidence to suggest that the national formal curriculum has not succeeded in popularizing cross-curricular subjects and also in enhancing teachers' commitment to them (Chatzifotiou 2005). Under the circumstances, a gap regarding pupils' health literacy exists.
Reviewing policy documents we identified two basic problems against the enactment of mentorship in Greek public education. First, according to the official policy plan, mentorship is not considered as part of teachers' professional role. In this sense, mentoring can take only an informal form. In other words, the onus is on teachers to undertake of their own free will what entails a health mentor role.

Secondly, there is no permanent school-based health and social welfare service established in Greece, so that teachers are the only professionals who have the potential to play a health mentor role. Although the Ministry of Education makes steps towards the inclusion of school-based services we are still far from witnessing effects. In practical terms, the support, networking and partnerships that mentorship may require among professionals are missing from Greek educational policies. Under these conditions, it is assumed that schoolteachers might encounter barriers in taking informal and voluntary responsibility for health mentoring.

As a term, mentoring was hardly familiar to the population of our study so we needed to use it in a loose manner that practitioners could make sense of (see Methods section). We let teachers be creative in shaping an imagined mentor role, through individual interviews, in the first place. As a result complexity was added, by either portraying the mentor as a role model, indoors and outdoors, or taking the form of didactic instruction or counseling and so on. Health mentoring, on the other hand, was meant to involve aspects of the contemporary holistic nature of health, including dimensions of physical, mental, emotional health plus social wellbeing.

Third, the concept of barriers was divided into three broad categories:
1. *Organizational and structural characteristics*: This category consists of the school's features identified as obstacles in health mentoring. In particular, school size, the formal curriculum and social relations constituted this category.

2. *Professional orientations*: By this category we refer to teachers' self-reported professional orientations in relation to an informal voluntary health mentor role. More specifically, we wanted to find out whether teachers receive pre-service or in-service training in health-related matters, whether they can identify with a mentor, how social interactions in school influence their likeliness to assume a health mentor role. Finally we sought to see to what extent extrinsic motives (e.g. extra payment) have an impact on health mentorship.

3. *External non-organizational factors:* The last category of barriers comprises significant other factors that influence teachers' decision-making in relation to health mentorship but do not fit in the two categories above. For example, teachers pointed to pupils and/or parents as social agents interfering with their likeliness to assume voluntary health mentoring.

The above categories represent therefore three levels of barriers ranging from subjective individual to organizational obstacles and other associated difficulties in playing informally and voluntarily the role of health mentor.

Within this contextual framework, the main objectives of this study are:

- To explore whether schoolteachers foster informally and voluntarily into their routine a health-mentoring role in order to cover this gap.
- To identify what kind of barriers schoolteachers encounter in fostering an informal health-mentoring role voluntarily in their routine educational practice.

Methods

Study population

In the first place, a pilot study was conducted using individual semi-structured interviews recruiting a purposeful snowball sample of 25 in-service primary schoolteachers.

Background characteristics

Most of our participants are female teachers (67.5%), a fact explained from the over-representation of female teachers in primary education in Greece (Stylianidou, Bagakis, & Stamovlasis 2004a). The mean age of the sample is 40.4 years and the mean of participants teaching experience is 13 years.

The analysis of qualitative data formed to a large extent the subsequent questionnaire that was used as the main instrument of this study. The tape-recorded interviews were transcribed. Open coding was employed generating a number of concepts that were then categorized (Strauss & Corbin 1998) as organizational and structural characteristics, individual professional orientations and external non-organizational factors.

A probabilistic random sample was used in a prefecture of Crete, which includes 215 public primary schools that employ approximately 2000 schoolteachers. 21 schools employing 317 teachers were randomly selected out of the total population. The final sample size was 240 schoolteachers giving a response rate of 75%.

A survey was carried out and a structured questionnaire was administered in person to the participants by a small group of researchers. The respondents were asked to provide informed consent and measures have been taken for protecting their anonymity and confidentiality.

Measures

The first measurement was teachers' self-reported health mentoring of predetermined health-related topics (see Table 1), validated in previous research (Chliaoutakis et al. 2002;Kalatzi-Azizi 1996;Teegen 1983). Predictor measures included: Teachers' socio-demographic profile (Table 2).

Barriers included three indices related to health mentoring in primary education: a) *school structure* consists of 8 variables assessing the facilities, equipment of school, resources, time limitations and teaching resources. ii) 9 variables measured the *subjective difficulties* that teachers perceive as barriers to health mentoring specific health-related topics; and iii) 7 variables assessed *powerful others* who affect health mentoring (Table 3). All the items have been calculated on a Likert model with answers ranging from 0=absolutely disagree to 5=absolutely agree. The composite score of the variables that each index included constituted eventually the scales of *organizational and structural characteristics, professional orientations* and *external non-organizational factors.*

Table 1: The self reported rates of the health-related topics

* 1=never teach, 2=once per semester 3=once per trimester, 4=every month, 5=teach every week

	Health-related topics	**%**	**Mean***
1	Hand washing before every meal	93	4.1
2	Have the appropriate immunizations	84	2.8
3	Avoid using vehicles as a transportation means and prefer walking	81	3.0
4	Ascend stairs	83	3.3
5	Not consuming much sugar (either in sweeties or in drinks)	93	4.0
6	Avoid drinking carbonated drinks	95	4.0
7	Make sure to go to bed early	93	4.1
8	Pray daily	71	2.8
9	Derive satisfaction and happiness from school	91	3.9
10	Enjoy life despite difficulties	90	3.8

Table 2: Teachers' socio-demographic profile

Variables	**N**	**%**
Gender		
Male	78	32.8
Female	162	67.5
Marital Status		
Married	191	79.6
Others	49	20.4
Postgraduate studies	26	10.8
	Mean	S.D.
Age	40.4[a]	7.7[b]
Number of children	2.0[a]	4.7[b]
Years of previous experience	13.3[a]	10.0[b]

A Cronbach's alpha coefficient is calculated for the dependent variable of the current work that is the *health-related topics* scale that teachers address in health mentoring. Based on 236 responses, the alpha coefficient is at high value (α=. 852). Similarly, the three indices of the perceived barriers of the teachers to teach health-related topics in schools, as well as, the scale of *professional interests* were internally consistent and very well defined by the relevant items (Cronbach's α were 0.773; 0.714; 0.786; and 0.692 respectively for each scale). The subsequent main instrument of this investigation, i.e. a structured questionnaire, referred to "counseling"; "talk"; "advice"; "encourage"; "care" etc. so that the respondents could engage with the concept.

Statistical Analysis

Descriptive statistics were used to present the rates and the means for each item included in the scales. After proceeding with the appropriate statistical tests (T-tests, Analyses of Variances) it was decided to compile all our data in one model; therefore a multiple regression analysis, using the

stepwise technique, assessed the relationship between teachers' barriers to health mentoring, (independent variables) and the scale of the *health-related topics* used in mentoring (outcome/ dependent variable), after controlling for demographic and other background characteristics. The ordinary linear regression equation is selected because the outcome variable was continuous.

Additionally, the following variables entered the final stage of the stepwise multiple regression analysis as independent variables:

- Two demographic characteristics were used (gender and age).
- Teaching experience was used to form the participants' background profile.
- Finally, previous training in health-related matters/ health education as well as their likelihood to assume health mentoring in daily educational practice was included.

Outcomes

The rates of the health-related topics
Due to space limitations, Table 2 presents only the percentage of the cumulative rates and the mean value of the Likert scale for each of the 10 items included in the scale of the *health-related topics*. The results reveal that 95% of the participants report mentoring pupils to avoid drinking carbonated drinks, and 71% reported advising pupils to pray daily.

The rates of the teachers' barriers
Table 3 presents the percentage of the cumulative incidence that express an agreement, as well as the mean value of the Likert scale 0=strongly disagree to 5=strongly agree, for each of the 26 items included in the index of the perceived barriers reported by the teachers. The results show that 62.5% of the sample was concerned about the lack of relevant educational resources in schools (item 3- Table 3); 65.5% pointed to time limitations as a major problem (item 6) and 13% declined that health mentoring could be seen as part of teaching practice (item 9). 84% of the participants felt that health mentoring is family's duty (item 21).

In respect to teachers' extracurricular *"professional orientations"*, 80% of the population reported reading educational research articles, attending seminars, speeches or lectures outside teaching hours. 6 out of 10 reported participation in educational conferences at least once the last three years, and 22% reported that they delivered a speech, or had given a presentation during the same period of time.
Approximately, 45% reported attendance of a health education seminar. Regarding the commitment of teachers to the national curriculum, 80% reported that they usually take initiative to include topics irrelevant to the predetermined subjects of the formal curriculum.

Table 3: The self reported rates of teachers' barriers (each topic at least once per semester)
*0= strongly disagree, 1=moderately disagree, 2= disagree, 3=moderately agree, 4=agree, 5=strongly agree

	Items	**%**	**M***
	Organization and structural characteristics		
1	We do not have appropriate rooms for special interventions	62.5	2.9
2	The available eeducational material for specific presentations is not appropriate	67.0	3.1
3	We do not have access to educational material related to health mentoring	66.0	3.0
4	School environment cannot inspire us to such activities	21.0	1.6
5	Our time is very restricted for such activities	77.5	3.3
6	There is not time availability in the formal curriculum	65.5	3.6
7	The formal curriculum does not require us to address health topics	60.0	2.8
8	Any instruction apart from the core curriculum subjects would be a waste of time	7.0	1.5
9	Our relationships in the workplace act as an obstacle	26.0	3.5
10	There are not suitable incentives (benefits, promotions, leaves and the like)	66.0	2.9
	Individual professional orientations		
11	Health mentoring is not part of our duties	13.0	1.2
12	Health mentoring does not belong to our educational interests	22.0	1.5
13	The teachers' disposition towards health mentoring is minimal	33.0	1.7
14	There is not appropriate interest from teachers' perspective	27.0	1.7
15	Teachers are not specialized in health-related subjects	73.0	3.2
16	Health mentoring is not familiar to the teaching community	57.0	1.4
17	We are not the appropriate professionals for a health model role	35.0	1.5
	External non-organizational factors		
18	Our pupils are focused mostly on other school activities	72.0	3.2
19	Our pupils do not have time for other activities apart from formal curriculum subjects	54.0	2.7
20	Pupils have not shown much interest	36.5	2.0
21	Family should take care of health mentoring	84.0	3.8
22	The necessary encouragement from qualified scientific bodies (scientific companies and the like) is missing	83.0	2.7
23	Parents' association encouragement is missing	62.0	2.0
24	Pupils would not trust us in this role since other experts are more competent	15.0	1.3

Table 4 provides the stepwise multiple regression-derived results concerning the score of the *health-related topics*.

Table 4: Stepwise multiple regressions - derived regression coefficients of health-related topics

	b (se)	P value
Constant term	37.541 (4.015)	.000
Teachers' barriers		
Individual professional orientations	-.190 (.079)	.017
Possibilities of voluntary health mentoring		
Adherence to the formal curriculum	-3.085 (1.157)	.008
Training in health-related subjects		
Seminars, workshops etc	2.983 (1.250)	.018
Demographic variables		
Age (in years)	.164 (.074)	.027

$R=.383$ $R^2=0.15$, R^2 adj=0.13

The stepwise multiple regression analysis model with criterion-to-enter $P<0.05$ suggested that the *individual professional orientations* scale and the likelihood to include health –related elements in daily educational practice are negative highly significant predictors of the reported scores of the *health-related topics* (P= .017 and P=.008 respectively). Also the educational experience of teachers in health education and particularly the variable of personal reading constitute a positive predictor of informal health mentoring (P= .018). As for the socio- demographic variables, only age was included in the model as a positive predictor of addressing *health-related topics* (P= .027). The model explained 13% of the total variance.

Discussion

In brief, the results showed that Greek primary schoolteachers are, in general terms, willing to integrate informal health mentoring in their teaching routines, in accordance with previous research (Apostolidou & Fontana 2003). The barriers however that they report are prioritized as follows.

First, subjective barriers and professional choices appear at the top of the barriers list, whereas organizational and structural characteristics are viewed to a lesser extent as obstacles. External non-organizational factors are the least reported barriers in health mentoring. In greater detail, individual professional choices are placed higher on the hierarchical pyramid of barriers in relation to health mentoring. A twofold interpretation is suggested for this, pointing on the one hand to in-service and pre-service training and on the other hand to extrinsic motivation. First, teachers' self-reported inadequate pre-service (Maney, Monthley, & Carner 2000) or in-service (Peterson, Cooper, & Laird 2001) training in health-related matters is involved in what is called a "forgotten specialism" (Scriven 1995). Health education appeared only recently and sporadically as a subject in educational faculties' curricula, the only liable bodies for pre-service teacher training in Greece. In-service training has taken recently progressive steps but it is not well-organized and is still far from systematic. Also, mentoring does not constitute part of the formal teaching syllabus, and teachers are therefore not accountable for this. This fact enervates the possibility of fostering health mentoring, and if teachers chose to do so, this was of their own accord.

Second, the insufficient extrinsic motivation was ranked high on the individual professional orientations agenda. To explain this trend, one needs to shift to a closer consideration of the professional culture of the teaching profession in Greece. In broad lines, Greek schoolteachers are civil servants holding permanent positions with minimal professional development prospects earning remarkably low salaries (Kallen 1996;Stylianidou, Bagakis, & Stamovlasis 2004b). In this context, an additional non-paid requirement, such as voluntary health mentoring, does not seem a favorable prospect amongst the practitioners who took part in our research.

Another finding associates recognition of the existence of barriers with teachers' willingness to adopt health-mentoring practices. In other words, it was shown that teachers who tend to disregard the existence of objective or subjective barriers are more likely to enrich their educational practice with mentorship about health-related matters. This is a quite apparent association which, we think, needs no further elaboration.

An even more worthwhile finding though emerged in relation to teachers' adherence to the formal curriculum in relation to informal mentoring. It was found that the more commitment to the formal curriculum teachers report, the less they are prone to indulge into informal health mentoring. Although recently enacted educational policies in Greece do encourage teachers to develop their own syllabus, as we mentioned at an earlier point, this finding is an indication of quite the opposite. Teachers are not confident yet to deviate from the traditional teaching practice that required strict attachment to the national curriculum.

Surprisingly enough, the participants who reported less training in health-related subjects are more willing to assume informal health mentoring. Three perspectives are proposed for this interpretation. On the one hand, this finding may signal that teachers trained in health-related issues may find it difficult to translate theory into practice, hence the reluctance to adopt health mentoring. On the other hand, reluctance to do health mentoring may indicate that previous training in health-matters did not encompass an element of mentorship, so that mentorship is treated with scepticism as an unfamiliar concept. Finally we want to suggest that teachers who are less familiar with the concept of mentorship may view it as a positive challenge to their educational role, hence the enthusiasm to include it in their practice.

Finally, there is evidence that senior teachers hold more enthusiasm towards voluntary informal health mentoring. This is consistent with previous educational research in Greece. Older and thus more experienced teachers are more apt to include health-related teaching than their younger colleagues. Possibly this trend could be explained against evidence produced in Greece which shows on the one hand senior persons have an inclination to maintain a positive attitude towards health protection and on the other hand senior persons are more inclined to volunteer for peer-education in health education (Sourtzi, Amanatidou, & Velonakis 2003).

Conclusion

This article aspires to initiate research work on a poorly investigated field - health mentorship in Greek education and stimulate future research where relevant policies are concerned. This article also aims to provide policymakers with evidence in what needs further attention in the particular underdeveloped field. Despite teachers' overall positive attitudes towards health mentoring, certain problems were brought into sight through this study. The most important argument here points to teachers' in-service training in health-related content and innovative teaching methods to apply this content into practice. The expansion of the traditional authoritarian teaching profession deserves more support so that new elements, like health mentoring, could be effectively incorporated into shifting teaching practices.

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