Perceptions of Faculty Members Regarding Obsolescence Issues at a Turkish State University

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Abstract

The current study was carried out at a Turkish state university with a population of 262 full-time faculty members to investigate the obsolescence issues. The framework is mainly based on Kaufman's (1974) Direct Effects Model of Obsolescence using a 24-item survey, which questioned how frequent faculty faced obsolescence related with individual characteristics, work environment, organizational climate and whether these factors were related to faculty members' gender, age, academic rank and work area. The results suggest that the faculty felt almost no obsolescence regarding these areas which gives hope for the future activities of the institution. Although participant responses did not vary with regard to gender, age and academic title; significant differences among the fields of study were found suggesting that faculty members at Health Sciences were surpassing all other fields, particularly the fields of Science and Social Sciences refuting a recent study. Implications and suggestions for faculty development endeavors were provided.

Keywords: Professional obsolescence; organizational climate; faculty development; change readiness.

Introduction

In the current rapidly changing era, advances in science and technology continue to revolutionize every aspect of our lives at a faster speed than ever before. The rate of increase in the volume of information supply is staggering. The amount of information that has been produced in the past 30 years exceeds that of the previous 5000 years and is currently doubling every four to five years (Fattahi, 2003). As a result of this pace, it takes very little time for our skills and knowledge to be outdated. Contemporary organizations and workers have experienced rapid environmental change as evidenced by global economic markets, changing organizational structure and altered work roles with evolving skill requirement (Trimmer, Blanton, & Schambach, 1998). In the domain of work, people have to keep up with advances in their knowledge base, continuously learn new skills and constantly broaden their knowledge to new and different directions (Pazy, 1996). Higher education (henceforth, HE) institutions are among the organizations that face this speed-change effect a lot.

When a more functional product, technology, service or person supersedes the old, obsolescence occurs. According to Merriam-Webster Online Dictionary, obsolescence is the process of becoming obsolete, indistinct or imperfect as compared with a corresponding part in related organisms. Within the framework of organizational structure, obsolescence can be defined as follows:

> A person is obsolescent to the degree that, relative to other members of his profession, he is not familiar with, or is otherwise unfitted to apply, the knowledge, methods, and technologies that generally are considered to be important by members of his profession (Shearer & Steger, 1975, p.265).

Kaufman (1974) defines obsolescence as "the degree to which organizational professionals lack up to date knowledge or skills necessary to maintain effective performance in either their current or future work roles (p.23)". Kaufman states that there might be different definitions to obsolescence even sometimes limited to technology or management and adds that one point common to all definitions is that; "obsolescence occurs when the individual lacks new knowledge or skill." The current study is based on Kaufman's Direct Effects Model of Obsolescence illustrated in Figure 1 below:

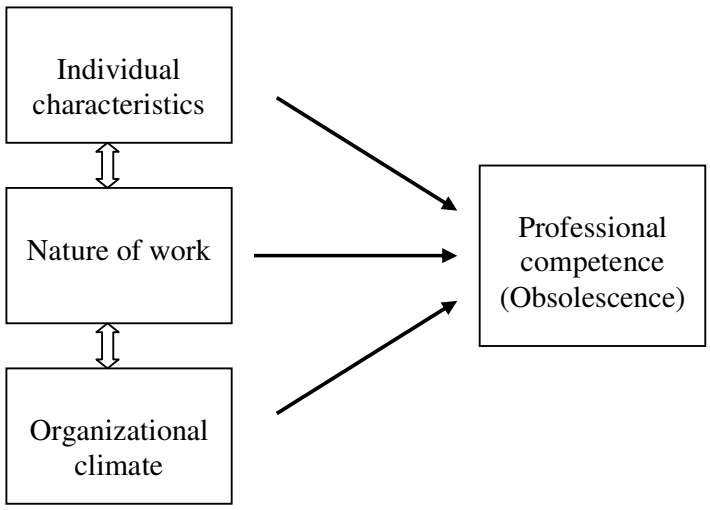

Figure 1. Kaufman's Direct Effects Model of Obsolescence

As can be seen in Figure 1, obsolescence may vary according to individual characteristics, organizational structure or work area; however, according to Kaufman (1974), one of the most important questions when dealing with obsolescence is "what are the consequences of the lack of the new knowledge and skills for the organizational professional and how these consequences relate to a concept of obsolescence?" (p. 21). Faced with the demands of accountability, high quality performance by the consumers of education and confronted with rapid changes in knowledge, technology, and even by the way academic work is being conducted, HE institutions must redefine their roles, which in essence means faculty must either face obsolescence or continuously be participating in developmental activities (Camplin & Steger, 2000).

Thus, this study investigated the related obsolescence issues in a HE institution to be able to determine the obsolescence areas and give feedback to the organization and faculty. The main initiative for the study has been the influence of primary challenges and forces of change described by Sorcinelli (2007), which are the changes in the profession, the changing nature of the student body, and the changing nature of teaching, learning, and scholarship. The next initiative is that in an era marked by rapid changes of scientific and technological developments, not much is known about the impact of the obsolescence threat on the people responsible for these developments (Pazy, 1996). As Smyth (1995) puts it, academics are rather reluctant to examine the organizational changes. Smyth (1995) attributes this reluctance to a lack of professional interest among academics about their own situation and the fact that governments would not be so much pleased with what they might view about their policies and practices in HE institutions. This issue of reluctance is neither different nor less important for Turkey. It is believed that this study would provide the necessary input to Anadolu University, by first providing an overall picture of obsolescence issues in the organization and secondly, indicating the pinpoints for the future faculty development activities.

A recent study by Akbulut et al. (2007) examined the degree of involvement in new teaching and learning methods, in-service training and research by Anadolu University academic staff with a particular emphasis on integrating information and communication technologies during instructional endeavors. The study indicated that much of the change readiness and skills for educational technology transformation is mostly present in the Open Education and Education Faculty. Kabakci and Odabasi (2008) conducted a comprehensive survey study with 1095 research assistants who worked in 54 education faculties of 44 state universities in Turkey. Findings revealed that research assistants in Turkish education faculties were highly in need of faculty development in view of; professional development, institutional development, instructional development and personal development, respectively. These recent studies revealed two things regarding the current study. First of all, education faculties seemed to be better equipped for change. Second, even the youngest members of the education faculties, research assistants, were highly in need of constant professional development endeavors. In this regard, conducting an analysis with professionals from a variety of faculties and from a variety of academic ranks might lead to interesting findings. The current study primarily focused on obsolescence issues in general rather than pinpointing a specific area like information technology related change readiness or instructional technology use.

Methods and Procedures

Participants

The study was carried out at Anadolu University, Turkey with a population of 317 full-time faculty members as assistant professors, associate professors and professors. The

pilot study for the intelligibility of survey items excluded 55 faculty members. Thus, the survey included 262 faculty members. Of all participants, 153 (58.4 %) were assistant professors, 41 (15.6 %) were associate professors, and 57 (21.8 %) were full professors. Eleven participants (4.2 %) did not indicate their titles in the survey. In terms of gender, 124 (47.3 %) were males and 110 (42 %) were females. Twenty-eight participants (10.7 %) did not mark their gender. The mean age was 43.28 with a standard deviation of 8.26, which showed a normal distribution.

Data Collection Tool

A survey was designed after a literature review on obsolescence, founded on the three components Kaufman stated effected the obsolescence (1974) as; personal characteristics, nature of work and organizational climate. The questionnaire items were collected in a pool after a vigorous seminar with PhD students. There were altogether 72 items which were related either one of the three components. After including an area expert, an assistant professor, into the working group, the number of items was reduced to 43, taking out the repeated or irrelevant items. After the pilot implementation, corrected item total correlations were taken into consideration; non-working or repetitive items were eliminated; and the number of items was reduced to 24, eight of which were negatively worded. Items were formed as 4-item Likert scale. The items were scored as 1, 2, 3, and 4 which referred to never, sometimes, usually and always respectively.

Procedure

The surveys were handed out to the faculty departments to be collected after a week. On recommendations from the pilot study, the title of the study was changed to "A Viewpoint from Faculty on Academic Life". This was due to the fact that obsolescence when translated into Turkish made a negative meaning as old, worn out. Therefore, it was preferred to leave the translation of the word "obsolescence" until the concept was familiarized with. 262 surveys were returned after a week making a final response rate of 47 percent of all faculty members at the university. Since this number surpassed the sample size shown by Krejcie and Morgan (1970), no second handing was needed. The Cronbach's Alpha of the 24 item-scale was .817.

Results

As can be seen in Table 1, individual characteristics covered in items 1 through 14 revealed that faculty members did not face much obsolescence due to individual characteristics. Faculty seemed to be open to changes, extrovert, field-independent, and used motivation as an intensifier. In addition, nobody considered the age as a barrier to development and change. The majority of the respondents maintained that they did work beyond their working hours as well. However, item 10 and 12 had marginally higher means than other negatively worded items, which suggested that instructors were likely to get weary of teaching the same course(s) every semester. In addition, they were about to think that most of their research was done merely to fulfill the standard requirements in the institution.

Responses on the nature of work presented in items 15 through 21 revealed that a positive attitude was presented for the work areas, indicating that faculty members found their areas rather active and dynamic. They thought there still remained much to be explored in their fields of study. They got stimulated by the vast number of available sources. In addition, they found it intriguing to do interdisciplinary studies.

Faculty's responses on organizational climate (items 22 through 24) revealed that faculty members were rather at ease with the organizational issues. This indicates that Anadolu University does not open a way for obsolescence as an organization. However, there are still cues for the organization to take a lesson from these results, like the importance of supporting research. Fortunately, participants would like to be among the first to participate in the activities concerning professional development in my institution. In addition, they maintained that the competitive atmosphere in their departments did not affect their studies negatively.

Table 1. Means and standard deviations of the questionnaire items

Item	N	Mean	SD
1. I regularly update myself on the developments in my field of study.	262	3.32	0.65
2. I am most willing to subscribe to academic journals.	261	3.18	0.81
3. I am a keen follower of the developments in my field of study.	260	3.18	0.68
4. Negative feedback on my research encourages me even more.	256	2.73	0.87
5. My age is a handicap for my studies.	262	1.40	0.68
6. I work on my research only within my working hours.	262	1.70	0.81
7. It is highly important for me to become an eminent scholar (an authority) in my field of study.	259	2.81	0.98
8. I take pride in the authenticity (originality) of my publications.	257	3.01	0.92
9. I know that I am competent in my field of study.	257	2.82	0.85
10. I think I get weary of teaching the same course(s) every semester.	257	1.96	0.86
11. Positive feedback on my research encourages me.	261	3.48	0.68
12. Most of my research is done merely to fulfill the standard requirements (in my institution).	260	1.94	0.86
13. Had I been equipped sooner with the kind of knowledge that I have now, my studies could be greater in quantity (I could produce more work).	251	2.87	0.93
14. I never miss activities concerning professional development.	260	2.75	0.65
15. My field of study is not prone to much change.	251	1.63	0.81
16. Standard methods and principles are used steadily in my field of study.	251	1.92	0.86
17. My field of study does not require team-work.	256	1.77	0.80
18. I think there still remains much to be explored in my field of study.	261	3.25	0.83
19. I get stimulated by the vast number of sources available in my field of study.	258	3.28	0.78

20. I am more inclined to do research studies.	256	2.96	0.81
21. I always find it intriguing to do interdisciplinary studies.	261	3.21	0.83
22. It is important that my research be supported by my institution.	262	3.45	0.79
23. I would like to be among the first to participate in the activities concerning professional development in my institution.	258	2.77	0.85
24. The competitive atmosphere in my department affects my studies negatively.	260	1.63	0.88

As mentioned beforehand, subcomponents of the 24-item data collection tool was determined according to the Kaufman (1974) study along with expert opinion. However, three subcomponents investigated within the scope of the current study had low internal consistency coefficients in comparison to the overall internal consistency coefficient of the whole questionnaire. In this regard, after investigating individual items given in Table 1, further analyses were conducted through using the overall average of the whole questionnaire as it had a high internal consistency coefficient (i.e. 0.82) which could lead to more salubrious findings. Further studies should incorporate additional items to increase the internal consistency of individual subcomponents so that in-depth analyses with individual components can be conducted.

In order to calculate the mean of the items, negative-worded items were reverse-coded so that analyses regarding gender, age, academic rank, and work area can be conducted. Average of female participants (3.14) was not significantly different from the average of male participants (3.15) (t_{232}=.298; p=.766). The correlation coefficient between the age and the mean of all items was .109 with a probability value of .080 suggesting that the relationship between the age and obsolescence scores was not significant. The one-way analysis of variance (ANOVA) comparing assistant professors, associate professors and full professors did not create a significant difference among the groups ($F_{2,248}$=.045; p=.956). Finally, obsolescence scores were compared according to the field of study. Descriptive statistics are provided in Table 2.

Table 2. Descriptive statistics according to the field of study

Field of study	N	Mean	SD
Education	31	3.16	0.29
Science	34	3.04	0.44
Health Sciences	21	3.40	0.32
Social Sciences	120	3.10	0.30
Fine Arts	29	3.17	0.27
Total	235	3.14	0.33

The one-way between-groups ANOVA revealed that participants differed in terms of their obsolescence scores with regard to their field of study ($F_{4, 230}$=4,673; p<.001). The mean of Health Sciences (3.40) was significantly higher than those of Science (3.04) and Social Sciences (3.10). That is, faculty members of Health Sciences had the most positive attitudes towards innovation and change superseding the field of Social Sciences (p<.006) and Science (p<.004).

Discussion

This research carried out in a Turkish university tried to show how frequent faculty faced obsolescence. The results revealed that the faculty in Anadolu University did not suffer from obsolescence regarding individual characteristics, work environment or organizational climate. Moreover, the personal resistance to change seemed to be quite low supporting previous literature (Sunal et al., 2001). This supported the university's image of being a dynamic and active HE organization in Turkey. However, as Kaufman (1974) stated, it is possible to identify specific behaviors that indicate obsolescence, and attitude surveys are an excellent source of information for organizations to provide effective response. Thus, this research was important to carry to give feedback to the organization.

The fact that participants did not suffer from obsolescence regarding the constructs mentioned in the current study should not either give hope to or drive practitioners into despair. Participants were assistant professors, associate professors and full professors in the current study. On the other hand, in the Kabakci and Odabasi (2008) study, participants who sought for professional development were research assistants in education faculties. Education faculties seemed to be among the bests regarding change readiness (Akbulut et al., 2007), and younger members of the academia are expected to be readier for change. Such an analysis among above studies might drive us into despair for those are not aware that they are obsolete are not expected to accept that they are suffering from obsolescence.

Responses did not differ with regard to gender, age and academic title. Particularly in terms of gender, the findings contradicted with those of a recent study by Robinson (2006) maintaining that gender emerged as a significant predictor of change readiness. Significant differences among the fields of study were found suggesting that faculty members at Health Sciences were surpassing all other fields, particularly the fields of Science and Social Sciences. This finding is somewhat different from the findings of the Akbulut et al (2007) study focusing on change readiness with regard to information and communication technologies, which found that Open Education Faculty and Education Faculty members were better in terms of readiness to change. That is, general obsolescence issues might be different from obsolescence components related to information and communication technologies. Items addressed in both studies might be considered to develop effective and unique professional development endeavors for each faculty, since such faculty development endeavors help educational institutions handle to overcome both professional and institutional obsolescence (Camblin & Steger, 2000; Odabasi, 2003). In addition, faculty development programs help HE institutions to respond to complex changes in expectations about the quality of undergraduate education, societal needs, technology and its educational influences, the diverse student bodies and instructional paradigms (Milles, 1994). Thus, faculty improvement is a necessity, not an option (Rouseff-Baker, 2002). Since all these changes are ongoing, faculty development programs should never remain static. However, one should bear in mind that such endeavors are slow and consistent activities based on small steps of change (Stigmar, 2008), which requires being patient and constructive persistently.

The obsolescence issue which reached a peak in western world in 1970's as much as the literature is concerned is a current issue for Turkey. Turkey on the verge of integration to EU will experience the most crucial change in HE. The assumption has long been that faculty would and could easily self educate to keep abreast of the developments and to maintain high skill levels. However, because of joint projects with EU, faculty and student mobility issues, accreditation and standardization; HE institutions in Turkey should revise their roles and structures. This is only possible through a sustained long term faculty development. As claimed by Knight (1998), development and review are not marginal but necessary activities for all universities trying to compete in a global economy. Knowing that faculty development is the cure for obsolescence; HE institutions should concentrate on faculty development issues. As maintained by Rouseff-Baker (2002), educational institutions need to address ongoing professional development programs, faculty leadership teams and supportive administration to thrive in the twenty-first century.

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