



ANALYSIS OF EDUCATIONAL PERFORMANCE AMONG AGRICULTURE FACULTY MEMBERS IN WESTERN OF IRAN

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ABSTRACT

Despite the importance of personal and professional characteristics in the educational performance, to date, there is no study to profound the effects of these characteristics on the educational performance among faculty members of Iran's universities and higher education instructions. Therefore, with focus on personal and professional characteristics, the present study aimed to compare the educational performance among faculty members of agricultural colleges in western of Iran. The statistical population of this study consisted of all faculty members in the agricultural colleges of universities of Ilam, Razi and Kurdistan at Iran, which 116 faculty members were selected as the sample using the proportionate stratified random sampling method. To gather required data, one questionnaire was designed. The data was analyzed using descriptive and inferential statistics with SPSS_{win20} software. Results showed that the present status of educational performance among faculty members of agricultural colleges in western part of Iran was weak. Results of mean comparisons showed that there was significant difference between educational performance based on age, work experience, academic degree, educational group and gender variables. Findings of this study can pave the way for formulating sound programs in higher agricultural education system to promote educational performance among faculty members of agricultural colleges.

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Keywords: Educational performance, Agriculture faculty members, Agricultural education.

Contribution/ Originality

This study contributes in the existing literature of factors affecting educational performance among faculty members in higher education, and also, findings of this study can pave the way for formulating sound programs in higher agricultural education system to promote educational performance among faculty members of agricultural colleges.

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1. INTRODUCTION

According to [Chen and Chen \(2010\)](#) higher education is the foundation for fostering high technology expert, the key factor in increasing national quality and the main way to upgrade a nation's competitive status. The deep reform of higher education such as large scale expansion of students' enrolment, vigorous promotion for educators and the existence of many new higher education institutions, on the other hand, had created many issues including the quality of teaching which is particularly prominent. Thus, it is of great importance to evaluate educational performance ([Ramli et al., 2010](#)). Because, in higher education system, the educational performance plays an important role in promotion, tenure and salary and also measured as the main indicator of success in universities ([Bloedel, 2001](#); [Kotrlik et al., 2002](#); [Wichian et al., 2009](#)). Due to increasing changes in response to various fields of agricultural science, the higher agricultural education system needs to maintain and enhance the educational and educational quality ([FAO, 1997](#)). FAO notes that, consistent with other educational, the agricultural sciences have undergone several changes. Therefore, aligning the universities' scientific members and agricultural higher education centers with new paradigms and exchange of ideas, scientific meetings and using educational findings can significantly develop agricultural higher education institutions and centers ([Movahedi et al., 2012](#)). Educational performance in universities and higher education institutions is a multidimensional concept that includes several indicators ([Tien, 2007](#)).

Despite the importance of personal and professional characteristics in the educational performance, to date, there is no study to profoundly study the effects of these characteristics on the educational performance among faculty members of Iran's universities and higher education institutions. Already, it is generally accepted that in the light of an effective and efficient system of higher education, holistic development is as possible as other fields. Given the importance of the educational problem and extant literature, in this study, the educational performance among faculty members of agricultural colleges in west part of Iran were studied according to their personal and professional characteristics. Therefore, with focus on personal and professional characteristics, the present study aimed to compare the educational performance among faculty members of agricultural colleges in western of Iran. The objectives of this paper are:

- Study of Personal and professional characteristics among faculty members of agricultural colleges in western of Iran;
- Comparison of the educational performance based on personal and professional characteristics among faculty members of agricultural colleges in western of Iran.

2. METHODOLOGY

This study categorizes in applied and descriptive-survey studies and used quantitative educational paradigm. The statistical population consisted of all agricultural faculty members of universities, Ilam (31), Razi (59) and Kurdistan (47) at Iran (N=137). Using the sampling table ([Patten, 2002](#)) 116 (26 Ilam University, 51 Razi University, 39 Kurdistan University), were selected via the proportionate stratified random sampling method (n=116). The main educational instrument for data collection was a questionnaire consisted of two parts, which first section includes personal and professional characteristics. Through a systematic review of the literature, in

the second section, we applied seven indicators (i.e., teaching, class management, innovation, supervisor, human relation, professional attitudes, and evaluation) to measure educational performance. SPSS_{win20} software was used to analyze the data in two parts of descriptive (Frequency, percentage, mean and standard deviation) and inferential (Tests of mean comparison) statistics.

3. RESULTS

3.1. Personal and Professional Characteristics

Based on the findings, the average age of faculty members was 40.5 years with a standard deviation of 8.19 years and with the age range 29 to 67 years, which most of them (45.7 %) categorized in the age stratum 39 to 48 years. Also, the average work experience of the faculty members was 10.16 years with a standard deviation of 7.47 years and with the age range 1 to 30 years, which, most of them (60.3%) categorized in the work experience stratum 10 years and less than 10 years. Furthermore, Based on the findings,, 25 percent of the faculty members with the most frequency (29 cases) were working in the Department of agronomy and plant breeding and 2.6 percent of them with the lowest frequency (n=3) were working in the department of science and food industry. Other personal and professional characteristics of faculty members were shown in Table 1.

Table-1. Descriptive statistics of respondents regarding their personal and professional characteristics

Variable	Category	Frequency	Percent
Gender	Male	108	93.1
	Female	8	6.9
Marital status	Married	96	82.8
	Single	20	17.2
Academic degree	Assistant	102	87.9
	Associate	8	6.9
	Professor	6	5.2
University	Ilam	26	22.4
	Razi	51	44.0
	Kurdistan	39	33.6

3.2. Comparison of the Educational Performance Based on Personal and Professional Characteristics

In order to compare the educational performance of faculty members based on age, work experience, university, academic degree and educational group variables, we applied Kruskal-Wallis test (Table 2). As findings show, there is significant difference in the educational performance of faculty members based on age, work experience, academic degree and educational group. According to ranking mean, faculty members who located in the age class of 59 years and more, have more educational performance than other faculty members. Faculty members with work experience class of 11 to 20 years, show higher educational performance than other faculty members. Faculty members, who possess an academic degree of associate professor, are more likely to show educational performance than other faculty members. Finally, faculty members who

were working in the department of agricultural extension and education, have more educational performance than their other counterparts.

To compare the educational performance of faculty members based on gender, marital status, and using studying opportunities variables, we applied Mann-Whitney Test (Table 3). Surprisingly, our findings indicate that there is no significant difference in the educational performance of faculty members based on their marital status and using studying opportunities. However, there was significant difference between faculty members on their gender with higher performance of male faculty members than their counterparts.

Finally, we include graduate university as independent variable into independent T-test in order to compare the educational performance of faculty members (Table 4). The results presented in Table 4, indicate that there is no significant difference in the educational performance of faculty members based on the grouping variable of graduate university.

Table-2. Comparison of educational performance of respondents related to their personal and professional characteristics

Independent variable	Category	Frequency	Ranking Mean	Kruskal-Wallis Test	Significant Level
Age	38 years and less	49	63.29	20.01**	0.000
	39-48	53	48.33		
	49-58	7	54.36		
	59 years and more	7	106.14		
Work experience	10 years and less	70	56.20	7.045*	0.016
	11-20	35	55.07		
	21 years and more	11	84.05		
University	Ilam	26	57.73	19.73**	0.000
	Razi	51	72.48		
	Kurdistan	39	40.73		
Academic degree	Assistant	102	55.29	13.217**	0.003
	Associate	8	63.56		
	Professor	6	106.25		
Educational group	Agri. Extension	7	64.36	21.49*	0.031
	Agronomy	29	69.48		
	Plant Protection	11	68.18		
	Irrigation	13	49.58		
	Animal Science	23	64.26		
	Agri. Mechanics	8	41.75		
	Soil Science	10	61.30		
	Horticulture	7	12.14		
	Agri. Economics	5	53.00		
	Food Science	3	50.33		

** Significant at P < 0.01, * Significant at P < 0.05.

Table-3. Comparison of educational performance of respondents related to their gender, marital status, and using studying opportunities

Independent Variable	Category	Frequency	Ranking Mean	Mann Whitney	Significant Level
Gender	Male	108	59.12	365.000*	0.002
	Female	8	50.13		
Marital status	Married	96	57.53	867.000	0.251
	Single	20	63.15		
Using studying opportunities	Yes	17	77.44	519.50	0.142
	No	99	55.25		

* Significant at P < 0.05.

Table-4. Comparison of educational performance of respondents related to their graduate university

Independent Variable	Category	Frequency	Mean	SD	T	Significant level
Graduate University	Interior	77	3.71	0.33	-1.70	0.124
	Abroad	39	4.03	0.48		

4. CONCLUSION AND RECOMMENDATION

Faculty members of Iranian higher agricultural education system have crucial role of accelerating the development process through knowledge production and its transfer to their clients. Therefore, understanding the factors that affect the academic success and performance are critically important. In this regard, the present study conducted to compare the educational performance among faculty members of agricultural colleges in western of Iran, based on their personal and professional characteristics. Findings of this study could increase our understanding of the personal and professional factors affecting the educational performance and would help planners of universities to develop coherent programs for promoting educational performance.

Findings showed that the age, as a personal factor, has a major role in the educational performance of faculty members. Older faculty members were more likely to show higher levels of educational performance. This finding is corresponds with previous studies, such as [Callcut *et al.* \(2004\)](#); [Castillo and Cano \(2004\)](#) and [Smeby and Try \(2005\)](#). Hence, as our findings show, we argue that one of the reasons for the poor educational performance among faculty members of agricultural colleges in west part of Iran is the effect of age on the educational performance. Therefore, this study encourages planners of Iranian agricultural higher education system to develop a systematic program in which younger faculty members can benefit from the experiences of older faculty members.

Results showed that the work experience, also, plays an important role in the educational performance of faculty members, so that faculty members with more work experience have more educational performance than their counterparts. This finding can be dovetailed with of the studies such as, [Callcut *et al.* \(2004\)](#); [Castillo and Cano \(2004\)](#) and [Jung \(2012\)](#). Hence, we can state that one of the other reasons for the poor performance among faculty members of agricultural colleges in west part of Iran is their weak work experience and, in this regard, we suggest that the participatory culture should be encouraged, in which, all experienced and less experienced faculty members will have more opportunities to work together and use and exchange their experiences.

Our findings indicated that the academic degree, as a professional factor, can significantly contribute to educational performance. Faculty members with an academic degree of associate professor were as being more educational performance than their counterparts. This finding is consistent with [Smeby and Try \(2005\)](#). Hence, given that most faculty members among agricultural colleges in west part of Iran were placed in assistant professor degree, we can say that one of the factors contributing to their poor performance is low academic degree (Assistant) in the majority of them. In this regard, having professor academic degree could be the most important incentive for faculty members with academic degree of associate professor in order to proceed to further promotions, however, faculty members with academic degree of assistant professor have a great distance from those faculty members, already, possesses an academic degree of professor, and, in

turn, have no incentive to conduct educational in order to be upgraded. Therefore, the planners of Iranian agricultural higher education system can take measures such as increase in salary and welfare facilities, if we would expect that assistant faculty members should be more active in the field of educational and knowledge production.

Results showed that the educational group of faculty members can have a major role in their educational performance. Faculty members who were working in the department of agricultural extension and education show more educational performance than their counterparts. This finding could be due to the nature of farming fields and the conditions and facilities for educational that they are primarily needed. Accordingly, education alerts who are working in the field of agricultural extension and education are more active and productive in poor laboratory facilities, due to they are often interested to the farming conditions of social, cultural and economic, and are mainly applied a non-experimental design. Therefore, it is recommended that planners of agricultural higher education system can improve the educational performance of all faculty members with providing educational equipment and facilities required for the knowledge production.

Finally, our results showed that the gender can significantly affect in the educational performance, in that, male faculty members were more likely to show higher educational performance than their counterparts, which is congruent with findings of [Castillo and Cano \(2004\)](#); [Jung \(2012\)](#) and [Ouimet \(2005\)](#). This finding may be because the female faculty members at Iran have been faced with two major obstacles for scientific work in universities, i.e., being as busy because of probably much work in the home and other motivational and cultural restrictions for work in social environments. Therefore, we suggest that planners of Iranian agricultural higher education system take necessary actions to eliminate the motivational and cultural barriers affecting the participation of female's faculty members in academic educational activities.

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REFERENCES

- Bloedel, J.R., 2001. Judging educational productivity on entrepreneurial campuses. *Evaluation Educational Productivity*, 105. Available from <http://merrill.ku.edu/publications/2001whitepaper/bloedel.html>.
- Callcut, R.A., L. Rikkers, B. Lewis and H. Chen, 2004. Dose academic advancement impact teaching performance of surgical faculty? *Surgery*, 136(2): 277-281.
- Castillo, J.X. and J. Cano, 2004. Factors explaining job satisfaction among faculty. *Journal of Agricultural Education*, 45(3): 65-74.
- Chen, J.K. and I.S. Chen, 2010. A pro-performance appraisal system for the university. *Expert Systems with Applications*, 37(3): 2108-2116.

- FAO, 1997. Issues and opportunities for agricultural education and training in the 1990s and beyond. Rome, Italy: FAO Publications.
- Jung, J., 2012. Faculty educational productivity in Hong Kong across academic discipline. Higher Education Studies, 2(4): 1-13.
- Kotrlik, J.W., J.E. Bartlett, C.C. Higgins and H.A. Williams, 2002. Factors associated with educational productivity of agricultural education faculty. Journal of Agricultural Education, 43(3). Available from <http://pubs.aged.tamu.edu/jae/pdf/Vol43/43-03-01.pdf>.
- Movahedi, R., N. Asgari and M. Chizari, 2012. Factors affecting teaching quality and educational performance of faculty members: The case of the agricultural faculty. BuAli University. Iranian Agricultural Extension and Education Journal, 7(2): 63- 74.
- Quimet, M., 2005. Factors associated with educational productivity and knowledge transfer in Canadian medical schools: A cross-sectional survey. Paper to be Presented at the Triplex Helix Conference, the Capitalization of Knowledge: Cognitive, Economic, Social and Cultural Aspects, Turin, Italy, 18-21 May.
- Patten, M.L., 2002. Proposing empirical educational. Los Angeles: Pyczak Publishing.
- Ramli, N., D. Mohammad and N.H. Sulaiman, 2010. Evaluation of teaching performance with outliers data using fuzzy approach. Procedia Social and Behavioral Sciences, 8(2010): 190-197.
- Smeby, J.C. and S. Try, 2005. Departmental contexts and faculty educational activity in Norway. Educational in Higher Education, 46(6): 593-619.
- Tien, F.F., 2007. Faculty educational behavior and career incentives: The case of Taiwan. International Journal of Educational Development, 27(1): 4- 17.
- Wichian, S.N., S. Wongwanich and S. Bowarnkitiwong, 2009. Factors affecting educational productivity of faculty members in government universities: Lisrel and neural network analyses. Journal of the Association of American Medical Colleges, 30(1): 67- 78.

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