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Recognition and Prioritization of the Curriculum Ideologies of Medical Science Professors in the Area of the Six Curriculum Components

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Abstract

Background & Objective: Identifying the curriculum ideology of professors can serve as a tool and a roadmap for education and curriculum planners. This study aimed to recognize and prioritize the ideology of medical science professors regarding the six curriculum components.

Materials and Methods: This descriptive and analytical research was conducted on all professors (N=94) of Baqiyatallah University of Medical Sciences in Tehran, Iran. Data were collected using the questionnaire of curriculum ideology of Schiro. In addition, data analysis was performed in SPSS version 16.

Results: In this study, the main priorities of medical science professors regarding curriculum ideology in the six components included the ideology of social construction in goal component, social efficiency ideology in components of teaching, knowledge, and student, and student-centered ideology in learning and evaluation components.

Conclusion: While professors considered all curriculum ideologies, they mainly prioritized the social efficiency ideology in all curriculum components. In other words, they mostly emphasized the empowering of students for effective performance.

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Introduction

The curriculum has always been introduced as the center of the educational system and has been used as a tool for achieving the goals of education (1). The importance of paying attention to the beliefs of individuals to strengthen the curriculum has created an undeniable concept to the extent that Red & Shainline focused on the need to recognize the beliefs of curriculum designers and emphasized the necessity of paying attention to the beliefs of professors in the process of designing educational content (2). In fact, the subject of curriculum ideas should be one of the most fundamental and sensitive topics in this area as it provides meaning and consciousness at different stages of design and development of curriculum (3). For instance, Shubert believes that the link between philosophy and education becomes evident when the curriculum stems from personal beliefs (4). These definitions indicate that the necessity of paying attention to the views and ideas of educational elements (e.g., instructors and teachers) has always been considered by curriculum experts and activists.

Generally, determining the curriculum ideology both affects the prediction of outcomes, whys, and how of education (3) and motivates professors and curriculum decision-makers to understand the beliefs and views of others regarding the curriculum goals by creating a clear perspective in these individuals (5). Given the fact that ideology is a set of ideas, a comprehensive view, and a way of looking at issues (6), curriculum ideologies can be considered as a set of views, beliefs, and values specific to curriculum, which has been inspired by the policies of the ruling community and show social preferences and attitudes toward educational goals and curriculum accordingly. In other words, curriculum ideologies determine the do's and don'ts of the curriculum system (5).

Due to the importance of the definitions of curriculum ideologies, different categorizations have been made since the beginning of developing theories in the curriculum field so far. Among these categories, we can refer to Schiro classification, which has a suitable condition in terms of attention to ideologies of the curriculum. This is mainly due to the fact that the mentioned classification has explicitly addressed six components of the curriculum, including the purpose of education, teaching, nature of childhood, nature of learning, nature of knowledge, and

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evaluation. Moreover, the Schiro classification explains about four ideologies of curriculum, including scholar academic ideology, social efficiency ideology, learner-centered ideology, and social reconstruction ideology (5).

The ideology of scientific scholars introduces learners as the recipient of knowledge and regards teaching as a tool for increasing the awareness of these individuals about the internal structure of the disciplines. In fact, these scholars believe that their duty is to transfer the nature of the field of study (6). In social productivity ideology, the set of behaviors manifested in the actions of an individual shape his knowledge, and education serves to change the behavior of learners (7). In this ideology, education is considered as a social process that is effective in rebuilding society. In this perspective, believing in the ability of education to educate people in line with the perception and understanding of the community is undeniable (6). The learner-centered ideology also emphasizes the learner's experiences and does not consider the transfer of information to a learner as an effective method (7).

Review of the literature revealed that the majority of foreign studies in the field of recognizing the ideology of curriculum had been conducted on school teachers and instructors and the student-teacher relationship. The results of these studies have shown that in most of the components, the learner-centered ideology is more prioritized, compared to other ideologies (8, 9). Despite this priority, it is noteworthy that, in general, all curricular ideologies have been valuated from the point of view of the research community, and none of the ideologies has been completely ruled out (8-12).

According to the studies conducted inside the country, while there has been a higher emphasis on instructors, the ideology of learner-centered (13) and scientific scholars (14) have been more prioritized in most components. Despite the fact that each of the evaluated communities prioritized one ideology over the other ideologies in each of the components, all ideologies have been valuated inside the country similar to foreign studies (13-15). Evaluation of the background of this issue showed that while attention has been paid to the ideology of the curriculum of instructors in recent years – with the exception of some cases – no specific efforts has been put into the evaluation and identification of the ideology of university professors and studies have been limited to the general education levels.

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Therefore, little research has been conducted on the recognition and valuation of the ideology of curriculum of professors in Iran. However, lack of attention and scientific activity in the field of curriculum ideology of medical science area add to this problem since the field of medical sciences is directly linked to health and life of community members as a large part of the education system. Therefore, evaluation of the prioritization of the curriculum ideologies of medical science professors is of paramount importance. Given the inadequate research conducted on the identification and prioritization of curriculum ideology of activists and professors of the educational system and with regard to the ministry of health education standards to improve the health of the people, the present study aimed to identify and prioritize the curriculum ideology of medical sciences professors in each six components of objective, teaching, learning, knowledge, student, and evaluation.

Materials and Methods

This applied, descriptive and analytical research was performed on all professors of Baqiyatallah University of Medical Sciences in Tehran, Iran using the equation presented by Levy and Lemeshow (16). In total, 94 subjects were selected using stratified probability proportionate to size sampling. First, the university was divided into five smaller units, including the schools of nursing, medicine, health, pharmacy, and research center. The number of samples in each unit was proportional to the percentage of professors of the same unit (or school). To collect data via convenience method, questionnaires were distributed among professors, and a total of 86 questionnaires were assessed as the final sample after eliminating the incomplete questionnaires. It is noteworthy that the researcher met with professors in their office and presented the relevant licenses, followed by explaining about the objective of the research and gaining the trust of these individuals to participate in the study. In addition, only full-time faculty members were entered into the research, and sessional instructors and assistant professors were excluded.

Data collection tool was the questionnaire of curriculum ideology of Schiro (6), which contains six components of goal, education, learning, knowledge, student, and evaluation each scored from one to four by professors based on their preferred priority. Finally, the typeof ideologyof professors was determined in the form of four types of ideology, includingscientificscholars, learner-centered,

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social reconstruction, and social efficiency by summing up the scores allocated to each component. (In the area of six components, the ideology of the desired curriculum has a lower mean, compared to the other components since in the scoring of this tool, the number one means the highest similarity while the score of four is interpreted as lowest similarity with opinions of people.)

The content validity of the mentioned questionnaire has been confirmed by five experts in the field of education and curriculum planning. After providing the questionnaires to these individuals, their corrective and confirmation feedbacks were attained and applied to the research tool. Moreover, the reliability of the questionnaire was confirmed at the Cronbach's alpha of 0.79. Data analysis was performed in SPSS version 16 showing the number, percentage, valid percentage, concentration percentage, and mean.

Results

In total, 65 participants (75.6%) were male, and 21 subjects (24.4%) were female. In terms of school, 33 subjects were studying in the school of medicine, whereas 26, 13, 10, and 4 participants were studying in the research center and schools of nursing, health, pharmacy, respectively. The majority of the professors (N=34) were within the age range of 36-41 years while some of them (N=24) were within the range of 42-46 years. Moreover, the lowest number of professors (N=5) were within the age range of 30-35 years. It is noteworthy that the individuals related to the research center were faculty members and had class and teaching time.

Table 1: Field information of people in the study

		Abundance	Percent
Gender			
	Male	65	75.6
	Female	21	24.4
	Total	86	100.0
Teaching Faculty	Nursing	13	15.1
	Medical	33	38.4
	Health	10	11.6
	Pharmacy	4	4.7
	Institute	26	30.2
	Total	86	100.0
Age	30- 35	5	5.8
	36- 41	34	39.5
	42- 46	24	27.9
	47- 52	15	17.4
	53 and higher	8	9.3
	Total	86	100.0

In terms of the ideology of the professors assessed, results presented in Table 2 demonstrated that in the goal component, social reconstruction was the first

prioritization of professors with a mean of 1.68. In components of teaching, knowledge, and learner, the ideology of social reconstruction was the first priority of medical science professors with means of 1.86, 2.06, and 1.84, respectively. In addition, other results of the study showed that the components of learning and evaluation with means of 1.69 and 1.82, respectively were the priority of professors in the student-centered ideology.

Table 2: Ideology of Professors based on the Curriculum Sixth Component

Curriculum components	Ideology of Medical Science Professors	Standard deviation ± average	Lowest score	Highest score
Purpose	Scholar academic	2.37 ± 0.958	2.16	2.57
	Learner centered	2.19 ± 1.13	1.95	2.44
	Social reconstruction	1.68 ± 0.997	1.47	1.89
	Social efficiency	1.68 ± 0.815	1.51	1.86
Teaching	Scholar academic	2.53 ± 1.12	2.293	2.77
	Learner centered	1.94 ± 1.03	1.720	2.16
	Social reconstruction	2.04 ± 0.89	1.855	2.23
	Social efficiency	1.86 ± 0.92	1.662	2.05
Learning	Scholar academic	2.27 ± 1.01	2.06	2.49
	Learner centered	1.69 ± 0.970	1.48	1.90
	Social reconstruction	2.48 ± 1.03	2.26	2.71
	Social efficiency	2.08 ± 0.935	1.88	2.28
Knowledge	Scholar academic	2.23 ± 1.00	2.12	2.55
	Learner centered	2.30 ± 0.88	2.11	2.49
	Social reconstruction	2.46 ± 1.04	2.24	2.68
	Social efficiency	2.06 ± 1.13	1.82	2.31
Learner	Scholar academic	2.48 ± 1.15	1.82	2.27
	Learner centered	1.82 ± 0.88	2.03	2.50
	Social reconstruction	2.66 ± 1.05	2.31	2.78
	Social efficiency	1.84 ± 0.93	1.67	2.02
Evaluation	Scholar academic	2.04 ± 1.05	2.23	2.73
	Learner centered	2.26 ± 1.09	1.63	2.01
	Social reconstruction	2.54 ± 1.10	2.43	2.88
	Social efficiency	1.84 ± 0.80	1.64	2.05

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Table 3: Prioritizing the Ideology of Professors based on the Curriculum Sixth Component

Curriculum Components / Prioritizing Ideologies	Purpose Component	Teaching Component	Learning Component	Knowledge Component	Evaluation Component	Learner Component
First priority	Social reconstruction	Social efficiency	Learner centered	Learner centered	Learner centered	Social efficiency
Second priority	Social efficiency	Learner centered	Social efficiency	Social efficiency	Social efficiency	Scholar academic
Third priority	Learner centered	Social reconstruction	Scholar academic	Scholar academic	Scholar academic	Learner centered
Fourth priority	Scholar academic	Scholar academic	Social reconstruction	Social reconstruction	Social reconstruction	Social reconstruction

Discussion

According to the results of the study, the professors prioritized the ideology of social efficiency and social reconstruction in the goal component, followed by the ideologies of student-centered and scientific scholars. In this regard, our findings are in line with the results obtained by Cochran (8), Maleki et al. (13), and Dorani et al. (15) since the latter concluded that the social efficiency ideology had the highest priority based on the goal component. In addition, Cochran marked that individuals tend to focus on the learner-centered and social efficiency ideologies. Finally, results obtained by Maleki et al. were indicative of the tendency of individuals toward social reconstruction ideology in the goal component. Therefore, the consistency between our findings and the mentioned studies was demonstrated in the goal component.

Since the goal of training in social productivity ideology is the transfer of skills and instructions to learners in the workplace (6), it seems logical that the selected ideology of medical science professors in the component of the goal of education is the ideology of social efficacy. This is mainly due to the fact that medical students must learn the nature of their field of knowledge and must understand the necessary practical skills in the work environment. In terms of the teaching components, results demonstrated the higher

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tendency of professors toward the ideology of social efficiency, which is in congruence with the results obtained by Dorani et al. (15), who also reported that their subjects prioritized the ideology of social efficiency in teaching component. This valuating priority seems logical because in medical sciences, not only the goal but also the major teaching process ultimately focuses on the teaching of applied skills.

In terms of learning components, results indicated that the ideology of student-centered was prioritized by professors, which is in line with the results obtained by Cochran (8) and Maleki et al. (13). Given the emphasis of student-centered ideology on providing a set of experiences for the growth of students (7), which has led to the provision of the conditions for active participation of learners so that they are not merely a passive receiver in the learning environment, prioritization of this ideology by medical science professors seems logical. In this field of science, the opportunity for active participation and practical and clinical experiences of learners is provided by providing conditions for students to attend educational classes, hospitals, and laboratories. Therefore, it seems that the prioritization of student-centered ideology in the learning component is emerged from this learning process in medical sciences.

In the knowledge and student components, medical science professors prioritized the social efficiency ideology, where it is believed that valuable knowledge is one that allows the activity of students by providing practical skills and abilities. In addition, students are recognized as a raw material in this ideology that must be turned into a final product and achieve constructive abilities and behaviors (8, 13). Therefore, it could be stated that since firstly, medical science develops practical skills in learners, therefore, it is considered as a valuable knowledge according to the ideology of social efficacy. Secondly, students learn skills in the medical sciences that did not have before. As such, it seems logical to prioritize the ideology of social efficiency in components of knowledge and student. However, results related to the prioritization of ideologies in components of knowledge and students are inconsistent with the results of all previous studies. Since former studies have often been carried out in non-medical areas, this issue distinguishes the current research from studies performed in non-medical fields. In other words, it can be stated that the main difference in the priority of curriculum ideologies between medical sciences and non-medical areas is that in

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medical sciences, knowledge that develops the practical skills of learners and is able to train learners in a way that they could be capable and efficient in the community environment is more prioritized, compared to non-medical areas. In addition to the knowledge and student components, the medical science professors prioritized the ideology of social efficiency in all components. This result has been obtained in none of the former studies, which have been mainly in non-medical fields and generally prioritize the ideologies of student-centered and scientific scholars. Therefore, it is regarded as a distinguished finding.

In terms of the evaluation components, our findings were indicative of the prioritization of student-centered ideology, which is consistent with the results obtained by Cochran (8), Mnguni (9), and Maleki et al. (13). In the student-centered ideology, the interactions of individuals have been considered and their possible errors and mistakes are pointed out so that their individual performance could be improved and the goals of the curriculum could be achieved (6, 8). In other words, evaluation is considered as a tool for development of the performance of students in this ideology. Therefore, the professors consider the evaluation stage as an opportunity for empowering learners through improving their performance. It means that evaluation is not the end of education but a means of receiving feedback and improving the performance of learners. This type of perspective in the curriculum design by experts is very important in a way that it regards evaluation as the circle of completion and revival of the learning process. Since evaluation is a tool for reducing errors and developing the performance of learners through recognizing their mistakes and errors in medical sciences, prioritization of this ideology by medical science professors seems logical.

With regard to the prioritizations mentioned for each component, it was realized that in spite of a tendency towards one or often two other ideologies in each component, professors generally considered other ideologies but their overall tendency was less than the prioritized components. In this respect, our findings are in congruence with the results obtained by Reding (10), Foil (11), and Hon Ng & Cheung (12), who also reported considering all ideologies along with focusing on the importance of prioritization. In other words, while ideology is valuated and prioritized by a professor, the professor will use other

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ideologies in the educational process and information transfer depending on the class requirements. It is worth noting that several confounding variables (e.g., psychological and philosophical views of professors and the dominant type of curriculum during the periods of being a student and professor) can affect the prioritization of a specific ideology over other ideologies, which can be further assessed in future studies. Therefore, information about these variables must be attained from medical science professors in future studies applying semi-structured in-depth interviews. The important issue in the current study was recognizing and prioritizing these ideologies, which will serve as a basis for future research.

Conclusion

In spite of paying attention to all ideologies, the medical science professors prioritized the ideology of social efficiency in the majority of components, meaning that they valuated learning skills and practical abilities in clinical conditions. In other words, from the targeting process to the teaching and transfer of knowledge and education to learners, these individuals mainly emphasized empowering and increasing the skills of students so that they could have a profound performance in the clinical field. In addition to emphasizing the empowerment of students, the professors in the current study expressed that active participation of students in the empowerment process is of paramount importance, regarding learners as an important element in the education process, who are not merely recipients of information. In fact, the dynamism of students is guaranteed (valuating the student-centered ideology) by providing the condition for experience. This procedure has always been taken into account in the medical science curriculum because it is necessary for these sciences to develop the practical and clinical capabilities that are effective for the community. The development of these abilities is achieved when the foundation is laid for dynamism and active participation of learners in the teaching-learning process. Considering the necessity of awareness of curriculum ideology in realization of educational goals (4) and given the necessity of evaluation of higher education curriculum due to its importance in the development and excellence of the community (17), implementation of programs to maintain and develop the alignment of professors' ideology with features of medical science curriculum seems necessary to improve the

implementation of curriculum by professors.

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