Issues and Challenges to Socialization of Academic Norms in Scientific Communities in Iran

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Abstract: Academic culture generation and socialization of academic and professional norms are important prerequisites of knowledge production. Considering that science production without normative, social and cultural structures cannot be achieved, academic norms are regarded as a part of scientific knowledge. In this article, the issues and challenges faced in academic socialization of norms in scientific communities in Iran are studied. The findings of the current study are based on brainstorming sessions along with deep interviews by domain experts (20 Experts) involved in issues in higher education systems and with the help of documentary studies of previous researches on the subject (15 Researches). Results and findings of 15 researches have shown that the challenges and issues of higher education of Iran can be discussed in four basic categories: a) Foundation of scientific communities, b) Efficiency of academic culture, c) Scientism and commitment to academic norms, d) Formation of effective processes of academic socialization. Strengthening the scientific community and the flow of socialization of scientific norms in higher education system can be effective to train homo academicus, university scientists, professors and future professionals to be able to expand the boundaries of knowledge in the form of national and global networks of scientific role in the successful development and growth of its academic fields.

Keywords: Academic socialization; scientific community; Academic norms; Higher education

Introduction

One of the prerequisites of science Production is production of academic culture and professional norms. Without creating this software and transmitting that, its socialization and internalization cannot be talked of as rigid science. Science without the social structures and cultural norms on its own cannot produce, since scientific and academic norms are parts of scientific and academic knowledge (Abazary, 2003).

University environments and scientific communities act as social institutions and agents of socialization. On the other hand, scientific culture of societies play a major role in the transmission of culture, internalization of norms and values of academic and professional and development of social self concept. (Mohseni Tabrizi, 2001)

Several studies in various countries show that graduate students during their practice of scientific and academic roles (and also non-academic roles) are not fully prepared and their academic socialization and internalization of norms are not desirable. (Austin, 2002; Wulff et al. 2004). The purpose of this article is to review the issues and challenges of socialization of norms in scientific communities with an emphasis on Iran experience.

Review of the Literature

Theoretical approaches to socialization of academic norms

Merton’s works about academic norms is introduced (Merton 1957, Merton - Reader and Kendal 1957), and it is the fundamental basis for many texts in this field. "Robert K. Merton" - contemporary American sociologist in trying to put in the concept of “ethos of science ” and " institutional imperatives " for the first time in 1942-

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intended to demonstrate the image of definite manners of scientists in academic and scientific researches. According to Merton, science institution has met distinctive set of norms and values based on the main purpose of science i.e. development of knowledge, those to be confirmed, validated and through reward and punishment system, be strengthened or weakened. Such norms and values are transferred through socialization by education departments. Merton’s point of view is that the ethoses of science are harmonious combinations of the emotional and sentimental values and norms that create commitment for the scientist. Norms appearing as forms of commands, prohibitions, preferences and permits acquire legitimacy based on Institutional Imperatives. (Merton, 1957, p. 551)

Norms constituting the scientific conscience of scientists are expression of super ego. The important point is that the norms are not to be bound by law; therefore these have no assurance in implementation. If we accept this point to follow this way, what kind of assurance is there to enforce the norms among scientists? Internalization of norms and values are largely done through socialization.

Weidman, Twale and Stein (2001) provide literatures that especially focus on the doctoral students’ socialization, the most accurate analysis of the theory of socialization, so that it is connected to doctors and professional students in higher education. Weidman and Stein (2003), in an article titled "socialization of doctoral students to academic norms", introduce the separation factors and determinants in different fields and contexts in socialization of students to academic norms: 1) Participation in academic activities, 2) Student – college interaction, 3) Students’ interaction with classmates, 4) Faculty support environment, 5) Department climate, 6) Scientific encouragement and Interests of students.

Austin (2002) during his research work among 79 students, conducted in a longitudinal study during 4 years, came to the conclusion that the following factors affected the experience of students' socialization: 1) Age, 2) Previous students experience in education, especially in later courses, 3) Teacher experience, especially in family context (including spouse, children and parents), 4) Previous students' work experience, especially in the teaching position, 5) Perception of self efficacy among students, 6) Competence and capabilities for better communication with others, 7) Relationships between professors and students, 8) Experience of research team, 9) Experience for teaching and research assistants, 10) Sense of positive course identity and academic values and norms, 11) Positivity in academic career and work, 12) The most important aspects of the process of socialization include observation, listening and interaction with the following: 1) Group of friends, 2) Family, 3) Faculty members through: a) Informal discussion with supervisor; b) Educational and research assistant experience; c) Interaction with students through the education assistant at the time of students' training, 13) Having opportunities for professional activity: 1) Research, 2) Assistant, 3) Designing research, 4) Publishing articles and books, 14) Opportunities to direct the reflective interactions and thoughts/ finding ways to pass the challenges of the course and maintain their interests about values and field study emphasis and supervisor and consultants.

Social structures of science impact on knowledge production and transfer of academic norms

Kuhn’s (1970) most important ideas assert on dependence of scientific knowledge on scientific community. He expressed that general scientific knowledge uses the concept model or paradigm that is composed of 4 major elements including generalized symbolic, metaphysical paradigm, values, and patterns. Paradigms constitute the group commitments (Ibid 187-181) and therefore such languages are common domain of a group, and to understand the scientific knowledge ought to know the specific characteristics of its creator groups. His viewpoint to the study of science in the first stage should be to know "social structure of science".

Hagstrom (1975) puts emphasis on the role of scientific communities, as a control agency in scientific activity. Respect or recognition of scientists is the motivator and the regulator of their behavior. Scientific consensus through identification of its members leads to compatibility with their field goals. Institutional recognition through official communications and the initial identification through informal communication are applied. Quoting from the articles of others and Honoring of the scientists in meeting the Association of scientists and scientific research institutions and granting awards of medals are the institutional practices of identification. Informal meetings with the official conference are different types of initial identification.

Randall Collins (2000) discusses the importance of “Interaction Ritual “not only in everyday life, but also relations among scientists. The interaction ritual is a reciprocal action that people make in a community bound by moral and raises the symbols through which their members observe their world. People who participate in the interaction ritual with respect to the severity of the emotional energy are filled with emotional passion and
enthusiasm to move away to find the symbolic goals. This energy drawn from participating in rituals leads to individual motivation to be effective in the absence of the group.

Pierre Bourdieu explains that production of "identity" of faculties with the concept of Academic "habitués". Bourdieu points of view of “Homo Academicus” or any member of "academic community" is one who has "habitués and manners and mental structure", taste, and social agent. This provides the spirit of rules, principles, directions, trends, values and other affairs an appropriate area to "academic action" and academic life formed inside him to be accepted and effective. Like other habitués, social habitués are products of certain "social structure", therefore "academic habitués" vary in different communities (Bourdieu, 1998).

But the basic point is that the entire world today is trying according to western principles and methods, to transfer, production and proliferation to science. This is not effective since the academic culture is not the same in all countries, where their culture is incompatible with the western academic culture. Galtung (1981) has shown in his classic and famous study that these differences occur in the way of brief classification. Galtung believes that each society has a specific academic culture and some "intellectual styles" to suit their social system.

The most considered dilemma in this study is the issues and challenges of academic socialization with emphasis on social structures of academic environment impact on knowledge production and transfer of academic norms.

**Methodology**

The findings of the current study were based on brainstorming sessions along with completing the questionnaire by domain experts involved in issues in higher education systems and with the help of documentary studies of previous researches on the subject (15 Researches). The initial stage has been based on the results and findings of the research already done in the universities of Iran. In these studies, the challenges and issues influencing the university had been extracted and analyzed. Then the second stage was based on collecting the comments of the experts involved in higher education with using a questionnaire to evaluate the effect of each of these factors to academic socialization and to follow the students from academic norms. In this study information was collected by using the online questionnaire.

**Findings**

Results and findings of 15 researches indicated that the challenges and issues of higher education of Iran can be discussed in four basic categories: a) Foundation of scientific communities, b) Efficiency of academic culture, c) Scientism and commitment to academic norms, and d) Formation of effective processes of academic socialization.

**Formation of scientific communities**

Currently, new science production systems have formed based on principles and mechanisms of scientific networks, cooperation amongst scientists, exchange of information and research findings, scientific communities and universities as points of reference. But with regard to the fact that in many countries “university” is considered as an imported entity, which is not integrated with the history of growth and development of those countries; therefore, scientific communities formation in developing countries is always faced with particular issues and challenges. Out of 15 studies, which have been reviewed in this paper two of them are explicitly dealing with issues and challenges of scientific communities in Iran.

The research “The scientific community and its relationship with scientific development” which has been conducted amongst 200 students and 300 university faculties in Iran indicate that scientific communities in Iran lack the minimum required formative elements and factors and do not comprise the pluralistic structure. These two are main weaknesses of the scientific communities, which miraculous development of science in Iran is rectifying (Tavakol & Ibrahimi, 1992). “Regarding the scientific norms, since the super visionary and supportive institutions in scientific communities have not been formed well, full observation of scientific norms and standards do not exist within scientific communities of Iran” (Tavakol & Ibrahimi, 1992, p. 175).

With respect to the circumstances of the above study, which has been conducted slightly after the Iran-Iraq war and due to war related conditions of Iran, economic, social, and cultural development plans and social development had a quite time-consuming trend. Therefore, during that period the trend of growth of science and formation of necessities of science production such as scientific communities were facing more declination and difficulties. So, to some extent, Tavakol and Ebrahimi’s research, 18 years ago, showed problems and obstacles
during scientific development after the war. However, reports of deficiencies and weaknesses in the system of higher education, especially in connection with the formation of weak scientific and social institutions shape the supervision and support of the scientific community two decades ago. Including recent researches in this regard can be studied from "the perspective of social scientific researchers’ elites" (Khosrocavar, 2005). Based on these findings, there are 3 perspectives in connection with the formation of vision or lack of formation of scientific communities. "Many thought that there was no scientific community in the country: there were only individual scientists, each one working according to his own ideals. A second group thought that there was already a small scientific community in some fields, like theoretical physics, mathematics, chemistry and some branches of biology, but not in other fields, particularly in the applied ones. A third group thought that this scientific community was in its birth pangs "(Khosrocavar et al., 1994, p.189).

In the Summary of findings from interviews in this research, barriers and reinforcing scientific community in Iran have been expressed as follows. a) Barriers factors: Political university, political tensions, lack of scientific ideals, negative individualism in research works, lack of cooperation of industries, credentialism, selecting average-minded people, jealousy, economic and financial problems and lack of sufficient income, Lack of scientific aristocracy, the sense of alienation of scientists, heavy costs of urban life, especially for young scientists. b) Strengthening factors: Positive individualism, training young researchers and development of higher education, critical attitude dignity of scientists, communication between industry and university. (Khosrocavar, 2005)

Therefore, it seems Iran's universities are faced with many challenges regarding the formation of scientific communities including deformity or the weak formation of scientific community in some fields of science, lack of factors shaping scientific community and norms, low social cohesion in scientific community and the lack of necessary strengthening. As the findings express, there are many cultural and social factors that are effective to form the scientific community in an Iranian society. It shows that social context of Iran is challengeable to institutionalize the scientific community. If we know the scientific community as one of the important factors in formation of the process of academic socialization, it seems that systematization of this process depends on the structural factors affecting the formation of scientific community. As extensive experimental study of Anderson and colleagues (1994) in academic socialization among 2000 students has shown, initial origin and basis of scientific manners and customs should be more precise and every normative orientation is due to experiences of people in the scientific community.

Efficiency of academic culture

Galtung argues that every society generates its own "academic culture" because academic culture emerges within the social, political, economical and cultural structures and relations in the society. Therefore, "society" identifies the patterns, methods and standards of education and research which are effective on the process of learning and knowledge transfer (Galtung, 1981).

Academic culture, like other forms of culture, is transferred through the process of "academic socialization to students. This process starts at school and later evolves at university. Also academic culture is important in facilitating the formation of the process of academic socialization. Out of 15 studies, which have been reviewed in this paper, two of them are explicitly dealing with issues and challenges of academic and research culture in Iran.

The research "comparative reviews in academic culture of Iran and Great Britain" has shown clear differences between educational cultures in two countries. Ph.D. Education in Great Britain is "research focused" while in Iran, education and research, both have been included in the structure of doctoral training. In other words, the system practically has no pillars. In Great Britain, training process generally and Ph.D. course especially is "student-centred", while in Iran it is "teacher-centred". Education and Research in Great Britain is "Public – Society Focused", and policies and educational programs including courses, subjects and researches are based on "social demand" and growth and development of supply and demand has formed "bottom-up" in organic process, while the education and Research in Iran is "Elite-State Focused", and branches and courses are determined "top-down" in mechanical methods and are based on centralized planning of government and elites. In Great Britain, education is "participatory", democratic, pluralistic, dialogistic, based on active learning and reflective, but in Iran education is authoritarian, non-participatory, monologue, and passive learning, static and non-reflective. Education in Great Britain is based on preservation and consideration of autonomy, individuality and self-based method of students. Professors and education systems have only a facilitator role and advisor and guidance,
while in Iran academic education lacks all these characters, and students, their interests and their individuality have secondary role in training. Western Universities know the science as a "process", "social category" and "interactive", while in Iranian universities epistemological system, the science is considered as a "product" and "cognitive subject" that can be imported as goods and exchanged and consumed as goods. Higher education and scientific thought in Great Britain is "critical" and "analytical", while the scientific thinking in Iran mainly is "descriptive" and "conserving" and the higher education system in Iran does not permit to raise the critical and analytical thought of the scientific and academic community members. Higher education and universities in Great Britain have "institutional autonomy", while still in Iran "institutional differentiation" is not clear among policy, government, culture, education and university" (Fazeli, 2003, pp.114, 115).

The research of “scientific-Research culture in Iran” mentioned some weak points in a scientific-research culture: Tendency to imitate, to avoid the critical approach and curiosity, overcome some stereotype ideas, isolation and distrust between the academics to each other, reservation and secrecy, to disregard scientific and moral norms such as plagiarism, lack of interest to serious effort in the way of scientific production, increase of tendency to money in researches, ambiguity in valuation system of scientific activity, dominate the degenerate and static organizational culture in research centers, less attention to the aristocracy, weak inquiry spirit and ethics, less creativity, weakness in cooperation and collective spirit, informed and uninformed bias in research, weakness in scientific logic and organized skepticism in researchers' thought and weakness in diffusion of organized attitude or system-oriented in researches. (Taify, 1999)

Scientism, commitment to academic values and norms

Scientism shows the degree of individual’s commitment to science, academic life values, having scientific urge, belief in functionality of scientific methods to determine unknown phenomena and empiricism, determination, and belief in the value of reason and rationalism. Commitment to academic norms is a result of foundation of scientific communities and functionality of academic culture in a society. Appearance of challenges in structural factors of academic and cultural organizations of a society can affect scientism and commitment of students and faculties to the academic norms. In the current paper, the status of these components has been followed by over-viewing two studies conducted in scientific communities of Iran.

The research "Social pathology of youth -A review on isolation of values and cultural contribution in academic environment- state universities of Tehran" shows that most of observed university students and school students had a poor tendency toward the variables of scientism and academic values. (Mohseni Tabrizi, 2001)

Another survey research is “normative bias in science and academic researches of Iran” among 372 graduate students in Iran. This study emphasized that graduate students of Iran were affected by sociological ambivalence. Researchers in their conclusion of study wrote that “from the view point of graduate students, faculties in their actual behavior at department and in their relationship with students were mostly acting according to counter-norms and were less committed to norms. Academic departmental and individual factors which were affecting and regulating normative bias of students demonstrated a tendency toward counter-norms instead of norms. In other words, academic and departmental elements like department environment, structure of department, and mentoring experiences etc indicated higher degrees of commitment to counter norms rather than scientific norms. Therefore, it can be claimed that academic elements and attributes of Iran are more likely to encourage counter-norms rather than norms. (Ghazitabatabai, & Vidadhir, 1999).

It seems that lower tendency toward scientism among students, poor commitment to the academic values and norms among them, poor development of academic norms and its weak crystallization in behavior of academicians, vague understanding of scientific values and norms and committing counter-norms instead of norms are some of fundamental challenges of scientific community in Iran.

Formation of effective processes of academic socialization

Internalization of norms and values are mainly done through socialization. Academic socialization system is under influence of the social-cultural structure of scientific environment. Out of 15 studies, which have been reviewed in this paper nine of them show useful information within different aspects of effective process of socialization in the Iranian universities.

The research “Study of Academic efficacy among master and Ph.D. students of University of Tehran” has been done among the 369 graduate students. In this research, the situation of social-science structure, particularly the relationship between professors, professors-students interaction, performance of the professors, the status of teaching and research equipment, professional supervision of professors to the students’ activities
and ultimately university efficacy have been evaluated in low level from the postgraduate students’ point of view. Collective cooperation spirit and academic interactions scales among students have been reported to be in the medium level, that these scales are considered as mechanisms of academic socialization and to low down these indexes will definitely have an undesirable effect to the academic quality of Ph.D. graduates, wave of professional values and norms internalization and process of socialization. (Ghazi Tabatabaei, & Marjaei, 2001)

The research "Study of social capital among university students” was done among 1,155 college students in the universities of Tehran. In this study, the rate of interaction between students-professors and students, academic interactions between students, the collective spirit of the students, students’ communication with faculty and structure of the academic environment have lower estimation. As a result of general consideration, three practical dimensions of social capital such as membership in civic institutions, social, political-social participation and social trust among students are estimated to be in the medium level. Composition of the items of the cultural capital in the form of a scale showed that the students rated down stage in their cultural capital. Totally, the research results showed that the social-cultural capital and social-scientific structure among students did not have a desirable status (Marjaei, 2004).

The research “Evaluation and measurement of career decision–making self efficacy (CDMSE) among the college students” was done among 801 students in Tehran universities. The students in "evaluation of their personal abilities in career decision making", "gathering career information ”, "choose the job goals,” and "planning for their future job" estimated their self-efficacy in medium and low level. The results showed that more than half of the students had helpless feeling in their career orientation in the medium level and a few percentage of the students had estimated “the effect of university on their career success” in the high level. Therefore, it was necessary to develop the functional plans, found the required organizations and activate the socialization system to improve this situation among the students to support them. (Marjaei, 2006)

The research "attitudes and behavior of students” in 20 universities undertaken by the ministry of sciences, researches and technology in Iran shows that more than half of students have estimated the professors performance in the low and medium levels. Also the interest and ability of academic staff involved in research are valued very low between different abilities. (Serajzade & Jawaheri, 2003)

The research "interaction and communication in the scientific community - case study in the field of social sciences” was done on 361 students and 49 professors of social science in Tehran universities. It showed that the rate of social interaction and educational interaction between students did not increase with increasing the students' experiences; also assessment of students from professors’ interaction had no correlation with their experiences. The students, who had more experiences than other students, did not have more emotional energy. The rate of interaction between faculty staff in assessed universities was low. About half of the respondents performed their scientific activities completely individually, thus they were without any research link with colleagues. (Ganaierad, 2006)

The research titled “the prestige and job satisfaction of faculty members” was carried out and indicated that despite the community in terms of faculty job importance and a high credit rating classification, more than half the professors desirability of working conditions and income were not satisfied because of major problems including: poor management of the higher education centers, lack of supporting research and researchers, the loss of or decrease in job motivations for providing better education and research by faculty members, politicalization of academic atmosphere, shortage of academic freedom, lack of aristocracy perspective to attract faculty members, lack of higher education worthy salary, more students' population in classes, and growing credential oriented students complaints. All these factors can function effectively with the quality of faculty members, especially during the transfer of scientific values and norms and interaction with students and academic quality of socialization process. (Bagherian, 2004)

The research "barriers to scientific growth of Iran and its solutions” studied pathological factors of the higher education system in Iran. From this perspective, political tyranny, domination of a certain religious attitude, abnormal action, conflict in behavior, emotional action, glaring ambition and excellence and individualism were factors preventing the development of science in Iran. (Rafi Poor, 2002)

Other studies based on quantity and quality crisis, lack of faculty and staff training and dominance the education system over the research system in universities (Tavassoli 2007), and problem in human agency in academic structures of science (Towfighi, & Farasatkhah, 2002) are other basic challenges of academic system
and higher education in connection with the development of science and formation of scientific communities and 
socialization of academic norms.

The results indicate that effective processes of socialization in universities has impressionable components 
such as weakness in group cooperation, weak interactions between professor and students in academic 
environment, conflict and inconsistency in discussion and negotiation processes, unreliable communication 
between professors and students, problem in human agency in academic structures of science, low satisfaction of 
professors from career position, negative sense of course identity and lack of sufficient professional 
opportunities for research, assistance, designing research, publishing articles and books and participate in 
scientific seminars.

Prospect of higher education experts on barriers to academic socialization in Iran

In this section we come to report barriers sorted by higher education experts in Iran. The method of study is 
extracting issues and challenges of research literature and 15 reviewed studies in the frame of evaluable 
concepts. Then information was collected by using the online questionnaire. The main question is that to what 
extent will each challenge of higher education system affect the academic socialization of graduated students? 
Level of measurement consisted of 5 ranges from very low (1) to very high (5).This questionnaire was sent for 
Iranian higher education experts and 20 of them fully responded. This section reviews the result evaluation and 
prioritizes 30 components based on assessment of higher education experts rated from the highest to lowest 
mean measured by descriptive analysis. Table: 1 shows the descriptive analysis of academic socialization 
barriers in Iran that was sorted based on Iranian higher education experts’ assessment.

Table: 1 Descriptive analysis of academic socialization barriers in Iran- Sorted based on Iranian higher 
education experts’ assessment

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Mean</th>
<th>Std. Deviation</th>
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<tbody>
<tr>
<td>1. Deformity or the weak foundation of scientific community in Iran</td>
<td>4.13</td>
<td>.806</td>
</tr>
<tr>
<td>2. Lack of required facilities and context for acquiring experience in</td>
<td>4.00</td>
<td>.632</td>
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<tr>
<td>education and research assistantship for graduate students</td>
<td></td>
<td></td>
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<tr>
<td>3. Poor development of academic norms and its weak crystallization in</td>
<td>4.00</td>
<td>.966</td>
</tr>
<tr>
<td>behavior of academicians</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Lack of factors shaping scientific community and norms</td>
<td>4.00</td>
<td>.816</td>
</tr>
<tr>
<td>5. Weakness in group cooperation and interaction between professors and</td>
<td>4.00</td>
<td>.966</td>
</tr>
<tr>
<td>scientific interaction among faculties</td>
<td></td>
<td></td>
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<tr>
<td>6. Poor communication and discrete interaction between education and</td>
<td>3.81</td>
<td>.981</td>
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<tr>
<td>research, like the relationship of university and industry</td>
<td></td>
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<tr>
<td>7. Deficiency of academic environment to create and develop academic</td>
<td>3.75</td>
<td>1.000</td>
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<tr>
<td>norms</td>
<td></td>
<td></td>
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<tr>
<td>8. Students’ vague and weak perception of scientific values and norms</td>
<td>3.75</td>
<td>.931</td>
</tr>
<tr>
<td>9. Weakness in scientific culture and research spirit of professors</td>
<td>3.75</td>
<td>.856</td>
</tr>
<tr>
<td>10. Inconsistency in dialogue and negotiation processes</td>
<td>3.75</td>
<td>.931</td>
</tr>
<tr>
<td>11. Weak interaction between academic staff and students in the campus</td>
<td>3.75</td>
<td>1.065</td>
</tr>
<tr>
<td>12. Lack of effective socialization processes at universities</td>
<td>3.69</td>
<td>.704</td>
</tr>
<tr>
<td>13. Deficiency of academic culture in training of homo academicus</td>
<td>3.63</td>
<td>.957</td>
</tr>
<tr>
<td>14. Disregard to moral and ethical principles in scientific communities</td>
<td>3.63</td>
<td>.885</td>
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<tr>
<td>of Iran</td>
<td></td>
<td></td>
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<tr>
<td>15. Problem in the agency of homo academicus in scientific structures</td>
<td>3.63</td>
<td>.719</td>
</tr>
<tr>
<td>16. Low social cohesion in scientific community</td>
<td>3.63</td>
<td>.806</td>
</tr>
<tr>
<td>17. Lack of sufficient contexts and opportunity to do the researches</td>
<td>3.50</td>
<td>.816</td>
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<tr>
<td>in team structure with student participation</td>
<td></td>
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<tr>
<td>18. lack of sufficient professional opportunities for research,</td>
<td>3.50</td>
<td>.816</td>
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<tr>
<td>assistance, research designing, publishing articles and books and</td>
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<td>participation in scientific seminars</td>
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<td>19. Sense of not belonging, and low course identity amongst</td>
<td>3.50</td>
<td>.966</td>
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<tr>
<td>uninterested students</td>
<td></td>
<td></td>
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<tr>
<td>20. Weak participation of professors in scientific communities</td>
<td>3.50</td>
<td>.816</td>
</tr>
<tr>
<td>21. Low job satisfaction of university faculties</td>
<td>3.50</td>
<td>1.211</td>
</tr>
<tr>
<td>22. Tension in educational departments</td>
<td>3.44</td>
<td>.814</td>
</tr>
<tr>
<td>23. Lack of mores and sufficient opportunity to informal discussion</td>
<td>3.38</td>
<td>1.025</td>
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<td>with supervisor</td>
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</table>
24. Following the scientific counter norms rather than scientific norms  
25. Lack of tendency to academic values and norms  
26. Lack of support from supervisor side to find ways to help students to pass the challenges of the academic program  
27. Unreliable communication between professors and students  
28. Weak communication skills  
29. Lack of tendency to scientism among students  
30. Denial of the hierarchy by students and young graduate staffs and lack of training in students' character of professor acceptance  

Table 1 shows that deformity or the weak foundation of scientific community, lack of required facilities and context for acquiring experience in education and research assistantship for graduate students, poor development of academic norms and its weak crystallization in behavior of academicians, lack of factors shaping scientific community and norms and weakness in group cooperation and interaction between professors and scientific interaction among faculties are the main barriers of academic socialization in Iran. While denial of the hierarchy by students and young graduate staff members and lack of training in students' character of professor acceptance, lack of tendency to scientism among students, weak communication skills, unreliable communication between professors and students, no support from supervisor side to find ways to help students to pass the challenges of the academic program have the lowest effect to academic socialization. Generally, in explanation of these results, we can say that the most important barriers are institutional factors and the lowest ones have personal nature.

**Conclusion**

One of the factors of scientific development is the foundation of scientific communities. Academic and professional norms have interactive relation with various elements and components of scientific communities. Considering that science without social structures and cultural norms cannot be produced and system of higher education has problems to produce the science and academic norms simultaneously and internalize them. Lack of factors shaping scientific community makes it difficult for higher education system to train the homo academicus and future professionals. Results indicate that the system of academic culture and academic research face numerous challenges, such as the inefficiency of academic culture in training the homo academicus and weakness in scientific culture and research spirit in Iran. Because of that, the university system is imported to Iran, the short established history, lack of connection to the traditional education system, lack of common context, method and subject matter are related with religious educational system (Hozie Elmiee), the tendency toward modern and liberal nature of thought in western societies and universities and also its contrast to the Iranian native and religious culture, therefore, the institutionalization of scientific community, academic culture and socialization of scientific norms suffer from numerous challenges. Reviewing these problems necessitates more academic research and field study from various layers of subject.

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