Hidden Curriculum in Selection of Thesis’ Supervisor: A Case Study

Saeed Movahed, Mohammad Attaran, Saedah Siraj & Norlidah Alias

Hidden curriculum in higher education can be defined as unwritten rules. Authoring the thesis is one of the most important stages of higher education, which entails specific dynamics and plays a significant role in shaping the hidden curriculum. In the current study, we tried to explore the criteria that Mathematics M.A students of a state-run university in Iran take into account when selecting a research supervisor. The study was conducted within qualitative research framework. To collect the necessary data, we conducted semi-structured interviews and gathered other data from informal conversations and communication. For this, 9 M.A students of the Mathematics faculty were selected using purposeful sampling method and data were analyzed and categorized via coding method. Based on the research findings, the main criteria for selecting a research supervisor can be listed as follows: research supervision style, instructors’ scientific trends, instructors’ personality traits, non-academic criteria, and limitations.

Key words: hidden curriculum, postgraduate students, supervisor, thesis

Introduction

Selecting a research supervisor is probably the most important step taken in a postgraduate program (Phillips and Pugh 2000 in Ives and Rowley 2005). Postgraduate student’s supervision is different from other activities in the university (Grant 2010). Some supervisors consider supervision as an informal, negotiable activity; which relies on academic interests (Smeby 2000 in Ives and Rowley 2005). While some researchers argue that the process of postgraduate supervision is rational (Manathunga 2009), others, including feminist and postmodernist scholars, hold that the process entails irrational and emotional aspects, neglecting which implies misperceptions about the human nature (Firth and Martens 2008). Their argument falls within the larger frame of belief that irrational aspects have a great influence over all facets of university life. This irrational and unplanned influence is called
hidden curriculum and some scholars hold that in disciplines such as medicine, educational values are mostly transferred through hidden curriculum (Thiedke et al. 2004)

Hidden curriculum is one of the valuable concepts originated in the field of curriculum development and is considered as one of its “conceptual capitals” (Mehrmohammadi 2007). Phillip Jackson introduced the concept of hidden curriculum for the first time in a book titled “Life in the Classroom” (Margolis et al. 2001). Jackson argued that students learn the hidden curriculum in the classroom through non-academic aspects of schooling including the elements of power, population and motivation. In other words, students learn the norms through the teacher’s power, the class population and the system of motivation. Jackson referred to these acquired norms as the hidden curriculum. Following Jackson, many other experts of the field such as Michael Apple, Henry Giroux, and Eisner tried to explain the nature and essence of this concept. Dutton (1987 in Pitts 2003) defines the hidden curriculum as “those unstated values, attitudes, and norms, which stem tacitly from the social relations of the school and classroom as well as the content of the course”.

Ladyshewsky (2003, in Devenish et al. 2008) “describes learning that results from processes as forming the hidden curriculum”. He considers hidden curriculum a phenomenon which goes on outside the formal setting and is an important adjunct to learning.

Throughout the history of this field, the term ‘curriculum’ has not been merely considered as a written, purposeful document. In fact, in the school of Progressivism every chunk of knowledge acquired by learners through their presence in the educational environment can be referred to as curriculum. In this paper, the nature of hidden curriculum is investigated within the framework of Progressivism.
In higher education, curriculum has multiple layers, the first of which includes the explicit and legal requirements of university education while the hidden layers include elements such as the disciplinary culture and the customs and the implicit criteria of a good student. The oft-quoted iceberg analogy can be of help here: the tip consists of the explicit requirements of the official curriculum, while the larger part of the iceberg hidden below the surface corresponds to the hidden curriculum in the university, which includes implicit norms and values of the discipline, university, and the department. Only the sharper observers who possess adequate tools and means are able to detect these implicit elements (Acker 2001).

Even though hidden curriculum has been a common subject of investigation in education, its role in higher education has not received due attention (Acker 1994; Townsend 1995). In their study of a hidden curriculum in higher education Peterson and Peters (1987; quoted by Townsend 1995) revealed that this type of curriculum can be considered as the informal expectations, unwanted learning outcomes, implicit outcomes, or the curriculum created by students.

Curriculum in higher education has certain features. At this level of education, curriculum enjoys more flexibility; the students carry out their research in the form of a dissertation and therefore, face new dynamisms, conditions and obsessions. One of these obsessions is selecting the correct supervisor for one’s thesis. In Iran, the Ministry of Science, Research and Technology in charge of higher education has codified and provided certain rules and regulations for selecting the supervisor. Nevertheless, it seems that these requirements play the role of the iceberg tip and there exists a big gap between what goes on in faculties and departments and these requirements.

The presence of implicit norms and values that play a more effective role than the rules and regulations is likely. Under such circumstances, only the students who are
perceptive enough to spot those unwritten norms and values can select a suitable supervisor and ultimately succeed.

Even though the issue of research supervision may seem to be simple and tangible, a closer look reveals it to be to a great extent affected by culture, power relations, and social and organizational status of the actors involved (Attaran et al. 2007). Using a qualitative approach, the present study aims to identify and explain the norms and values, which the postgraduate students at the Faculty of Mathematics of a state-run university in Tehran take into account when selecting their supervisors.

In a research carried out by Mahram et al. (2007), the effect of various dimensions of hidden curriculum on the academic identity of students is investigated. According to the results of this study, rules and the regulations, content, evaluation, methodology, physical environment, students and instructors are all elements that can result in acquisition of anti-educational experiences. Among all these factors, outdated knowledge and multiple occupations of the instructors on the one hand, and students’ unawareness of their responsibilities lead to acquisition of anti-educational experiences (or hidden curriculum in its negative form).

Margolis et al. (2001) have carried out one of the largest research projects on hidden curriculum in higher education, which examines the role of academic counseling, research supervision and professional training in reproducing social inequality. As one of the main parts of this research, the hidden curriculum in supervision relationship (between the supervisor and the student) was studied by Sandra Acker, with cases selected from the US, Canada, Australia and New Zealand. The results of this research suggested that supervision relationship is to a great extent affected by disciplinary culture, department culture, student admission regulations, gender and the discrepancy between the supervisor’s and the student’s status in the university’s organizational hierarchy.
Bergenhenegouwen (1987) has also carried out studies on hidden curriculum in higher education. In a research carried out in the Faculty of Social Studies of The University of Amsterdam, he studied the nature of hidden curriculum, the role of motivation and the academic attitude in its formation. According to the findings of the research, the students at this faculty believe that their success in exams mostly depends on the application of the instructors’ favorite technical terms and pivotal concepts. Arguing with the instructors can have a negative effect on their scores; in spite of the informal pressure on the students in this university to gain their certificate, they believe that knowledge and understanding of the subject matter is more important for them than getting the score. Of course, in this research, it is not paid attention to the supervision relationship as one of the most important factors in the formation of hidden curriculum in higher education.

Ahola (2000) has also conducted research in order to tease out the hidden curriculum in the University of Turku in Finland. This research was carried out with participation of the students of Medical Sciences, Sociology and Education. The results show that the students with educated parents (that is, those who enjoy a high cultural capital) were more familiar with survival techniques in academic environments such as the universities and knew the necessary habitus from the start. On the other hand, students from underprivileged families had a feeling of academic alienation and isolation. Ahola recounts the outcomes of studying in an academic environment. His research showed that all of students learned about professional power, necessity of self-control and the development of scientific disposition. In addition, they learned a tactical disposition, the importance of social relations and a school-like study orientation. Also sociology female students found that there is a male dominance in the university.
The study: context and methodology

The main purpose of this research is to identify the implicit criteria that postgraduate students in the Faculty of Mathematics in one of the state-run universities of Tehran take into account while selecting their supervisors. To achieve this aim, the following question is examined:

What are the criteria that postgraduate students in the Faculty of Mathematics in the University of X take into account while selecting their supervisors?

The current study was conducted qualitatively using a phenomenological method. Mohammadi (2008, 18) defines qualitative approach as:

an effort to non-quantitatively define situations, events, and small social groups by considering the details. Also, an effort is made to present an interpretation of the meanings that people attach to events and their lives in natural and typical situations, and there is an assumption that social interaction is an integrated whole of relationships which can be understood through induction.

In the qualitative approach, there is a certain emic look at phenomena. In this case, the mental categories of the research group are endorsed for their attitude and behaviors. Phenomenological methods aim at understanding a phenomenon through describing the experience, the circumstances in which the experience occurs, and the people who live in those circumstances. Paying attention to an experience and describing it is one of the pivotal features of studies that apply phenomenological methods.

In our view, hidden curriculum is one of the phenomena, which, more naturally, as well as realistically are represented by narrative data rather than numeric data. A look at relevant research carried out in the field of hidden curriculum shows that most of the studies in this field are done using the qualitative approach (Gordon 1995). The present research was carried out using the qualitative approach and the necessary data were collected using semi-

---

1 - Due to ethical issues, the title of the university is not mentioned in this paper.
structured interviews. Semi-structured interview is the main method for collecting data in qualitative studies and in some studies (such as those in which the previous experiences of the participants are being investigated (Adib Haj Bagheri 2006)) it is the only way to collect data. The process of analysis in the current study uses the coding method described as follows:

- conducting interviews with the informants (these interviews were recorded using voice recorders).
- transcribing the interviews.
- open coding (including reading the data line by line, extracting the concepts and the main sentences, setting primary categories)
- Axial coding (including categorization of data, determining the sub-categories, forming the final categories)

Postgraduate students at the Faculty of Mathematics of the University of X who are at the supervisor selection stage constitute the research population. The study employs purposeful sampling using the qualitative approach. In this research, three sampling methods were applied:

- Convenience sampling: in this method, the available or volunteer individuals are selected. This method is normally used to start sampling as well as to select the key informants.
- Stratified purposeful sampling: the aim in this method is to identify the experiences of all the participants.
- Snowball sampling: the researcher asks the initial informants (who were selected using convenience sampling) to introduce other individuals who have similar experiences and views in the field (Adib Haj Bagheri, Parvizi and Salsali 2007).
Even though phenomenology can be conducted using only one study case or even using a single evaluation of the researcher's own experience, phenomenologists tend to select 5 to 10 individuals in their studies (Patton 1995, quoted by Aliahmadi and Nahaei 2006). In the present study, the collected data reached the saturation point after interview with the sixth informant. Nevertheless, three more informants were interviewed to ensure that additional data would make no difference in the process of study.

Credibility of the data. To assure the credibility of the data and the results, the following steps were taken: To assess the data, reliability criteria and the data credibility (which are very similar to the concepts reliability and validity in quantitative studies) were used (Patton, 2003 quoted by Parvizi and Nikbakht 2004).

Reliability. Reliability means admissibility of the data, which requires the collection of real data. In order to increase the reliability of the data, the following methods were used:

- Constant investigation and interviews, allocation of adequate time, good relationship with the informants;
- Sustained relationship and time triangulation (constant investigation and the possibility to provide data feedback);
- Peer check, applying peer debriefing, reviewing member check;

Credibility. Credibility and objectivity of the data imply that different researchers get the same results from the same notes and reports. Good behavior and productive relationship, constant investigation and engagement, accuracy in all research stages, and clarity of the research methods increase the objectivity of the data.
Findings

The data collected from the interviews with the informants majoring in Mathematics reveal that the criteria affecting supervisor selection can be classified into five general categories and a number of sub-categories:

Instructors' scientific trends

The term “scientific trends” in this research refers to those features, which are related to expertise in a certain scientific field. Instructors’ scientific trends in the research can be classified into following sub-categories.

Academic status and fame

Phillips and Pough (2010) suggest that the students should find out about the instructors’ research activities and published papers before selecting them as their supervisor. Noruzi, student of Analytical Mathematics, says: “Everyone knows Dr. Rajabian for his great academic background. I myself was an undergraduate student in another university and everyone there knew Dr. Rajabian. In other words, if you want to single out a person in this field, it is him. Everyone wants to choose Dr. Rajabian as their supervisor.”

Expertise in the field

Thompson et al. (2005) believe that supervisors should not only have expertise in the field but also enjoy the skills and the experiences to supervise, support and direct the students. Nuri, postgraduate student of Numeric Analysis says: “although it is important who our supervisor is, the more important thing is our instructor’s expertise in the field … my supervisor was too busy, but for me his knowledge was more important”.

Practical experience in the field

Attaran et al. (2007) believe the fact that some instructors are not researchers and are unable to help the students is one of the main problems in the supervision process. Ghorbani, who

2 - All the names in this article are pseudonyms.
studies Numeric Analysis, says: “in our field, usually all students prefer the more experienced instructors … even though Dr. Suhanian is young and well-motivated, I chose Dr. Afrasiab. He is more experienced and is a full professor”.

*Being up-to-date*

Ahmadizadeh (2007) believes that a good instructor is one who not only observes the rules and regulations of education, but also tries to keep pace with the latest scientific advances. Most of the informants in this research believed that being up-to-date is one of the main criteria for choosing a supervisor. Nuri, a postgraduate student says: “even though Dr. Shakeri is old, he always attends seminars and conferences. He always has papers to present, and this means he works hard and he is always up-to-date. Even his workbooks are always updated. He has kept pace with the scientific advances”.

*Instructors’ personality traits*

From the students’ point of view, personality traits affecting supervisor selection can be classified into four categories.

*High motivation for academic working*

Faeili et al. (2005) hold that instructors have an important motivational role in students’ activities. This of course depends on instructors who improve their knowledge and expertise in line with the students' knowledge and skill needs. Instructors should improve their interactional skills besides applying teaching methods that can lead to confidence and motivation in students in doing their research activities. Regarding her supervisor, Ghafrani says: “My supervisor is Dr. Molaee. He is a young and motivated instructor and I am satisfied with working with him … he was very self-motivated and he also motivated others.”
Allocating enough time to the task

Thomson et al. (2005) view accessibility one of the main characters of the supervisor. All students who participated in this research attached a lot of importance to the fact that supervisors need to be accessible and allocate the necessary time to the task. About Dr. Afrasiab, Bigdalou says: “he really spent time on the job and he would never say that he didn’t have time. Whenever I had a question, I could call him and he would always answer the phone”.

Recognition in academic circles

Recognition of the supervisor in academic circles can have several benefits for the students. There are students who feel proud to remain under whose supervision they accomplished their theses. To explain his reasons for choosing Dr. Sohanian, Nuri, a postgraduate student of Numeric Analysis says: "for me it was important to have his name on my dissertation. Now saying who my supervisor was acts as my winning card, I mean I am sort of proud of having this instructor as my supervisor".

Willingness to produce quality work

Attaran et al. (2007) believe that an instructor's ability and potential to manage a project affects students’ maturity and academic abilities and can have a positive effect on their research quality. In case the supervisor provides appropriate guidance and directs the dissertation process effectively, there will be positive outcomes including on-time course completion, the emergence of a research-savvy student, finding new research areas, accumulation of personal knowledge, presentation of papers in seminars and conferences, and so forth. Mohammadi, a postgraduate student in Operational Research holds that "if a person has an academic mentality, will try to work well in order to prepare a good dissertation....I
myself am going to stay at the university day and night during summer and call off all of my activities in order to do a good job”.

Non-academic criteria

In this research, non-academic criteria refer to those criteria not directly related to the dissertation and mostly focus on marginal issues. These criteria have not academic characteristic but sometimes, for postgraduate students are more important than other criteria. These criteria can be classified into the two following categories:

Foresightedness

The extent to which the supervisor can help the student succeed in the PhD entrance examination, or get a scholarship in the future is one of the fundamental criteria for the students. Ghafrani says: “the name of my supervisor is very important. For instance, one of my friends attended a PhD admission interview and they asked her who her supervisor had been. She had replied "Dr. Rajabian" and this worked against her. The fact is Dr. Afrasiab is well-known but Dr. Rajabian is not …”

Emotional attachment to certain instructors

Sometimes, certain factors lead some students to feel emotionally attached to certain instructors and consequently select them as their supervisor. About his indescribable affection for his supervisor, Saeedavi says: "Because of my love and affection for Dr. Ahmad Beigi, I did not try to find out about other instructors; and I automatically went for him and his field, . Now I am still interested in him. There is nothing that makes me feel sorry about my choice. It was not a logical decision and it was more based on my affection, as he is one of the greatest instructors. I think this affection can lead to my success in higher levels".
**Research supervision style**

Bazargan (2004, quoted by Mohebbat 2009) defines research supervision as an activity which is carried out during the research project in order to guarantee the accuracy of the method and the compatibility of the research results with the approved research questionnaire completed by the research council and in particular the supervisor. To supervise students’ research, various models and methods have been offered which can be aligned with a directing-facilitating vector. The data collected by the participants in the research can endorse this vector too.

**Directing supervision style**

Nuri, postgraduate student of Numeric Analysis says: "I would like my supervisor to tell me exactly which parts to study and when to consult him. I would like him to lead me through step by step". About his favorite research method, Bigdello says: “if everything is organized, I mean if there was a specific timetable, it would be better. The instructor should not leave the student alone while he is doing his research, and criticize him for what he has done once he has finished the research alone”.

**Facilitating supervision style**

Ghorbani, a postgraduate student in Numeric Analysis says: “I would like to be free in what I do and I would like to have the support of my supervisor. I mean the research area should not be imposed on me and during the research project. I should have freedom of choice”.

**Limitations**

There are different limitations in different departments, which can limit students’ choices.

The limitations, which the students at this faculty are facing, are as follows:

**The number of available instructors**

In the faculty of math, there are five departments, which have 2 to 6 members. Naturally, the limited number of instructors turns the selection process actually into a matter of...
‘appointment’ of supervisor. Noruzi says: “in our department, there were only two instructors, and we were 12 students. Therefore, we handed in our names and our choices to the department and they appointed an instructor as our supervisor. Naturally, more talented students would get Dr. Afrasiabi who was a more experienced instructor and the weaker students would get Dr. Rajabian who was a young newcomer”.

Unlawful limitations

The regulations of graduate studies at the X University states: "The students can choose their supervisor from one of the universities in Tehran". But is this possible in practice? Hossein Bigdelou, a graduate student in Statistical Mathematics says: “the instructors at our faculty are self-satisfied and do not accept anyone else. You can never dare ask to choose an instructor from another university even as your reader let alone your supervisor”.

Lack of awareness of the rules

As mentioned earlier, according to the regulations, the students can select their supervisor from one of the universities in Tehran. However, to what extent are the students aware of this rule? When asked about this rule, Pourhadi says: “I don’t think you are allowed to do so according to the regulations. That is what they tell us so.” Out of the nine students at the Faculty of Mathematics, only one was aware of this legal right.

Conclusion


Internalization of the disciplinary culture requires the acquisition of norms, values and most important of all, the methods and the research requirements in a certain scientific field so that they could become a member of the scientific society in that field. In graduate studies, this is realized through conducting a research project called the dissertation. In case the project is
carried out under effective research supervision, it can lead to positive results including the emergence of a researcher (Attaran et al., 2007).

Appropriate selection of the supervisor is one of the most important factors for research supervision process effectiveness. Various researchers and the experts have proposed different criteria and standards for an effective choice. For instance, Phillips and Pough (2010) hold that the students should pose the following questions while selecting their supervisor:

Does she/he enjoy a recognized research experience and does she/he continue her/his research projects or not?

- Has she/he published any papers recently?
- Has she/he ever been invited to make a speech in national or international conferences?
- Has she/he ever been granted with sabbaticals or research contracts?

However, these criteria and similar factors are only ideal standards and conditions. It seems what is happening in faculties is to a great extent affected by the organizational culture, the unequal relationship between the students and the instructors, non-democratic organizational structures, university games, and in general, the hidden curriculum of a faculty. The research done in Iran does not show favorable conditions in universities (Attaran et al., 2007; Mahram et al., 2007; Mohebbat 2009) and even some have stated that university departments mostly promote academic anti-norms (Ghazi Tabatabaei and Vedadhir 2000).

References


