A Study of Research Assistants’ Perceptions about Academic Adviser and Academic Life through Metaphors

Deniz Gulmez  Hatice Irem Ozteke Kozan*
Ahmet Kelesoglu Educational Faculty, Necmettin Erbakan University, 42090, Turkey

Abstract
In current study research assistants’ perceptions about the concepts of ‘Academic adviser’ and ‘Academic life’ via metaphors were aimed which is conducted with qualitative research method. Participants of study consist of 82 research assistant (45 of them women) work in Educational Faculties in Turkey. In data collection, for academic advisers each participant is asked to complete the prompt “An academic adviser is like . . . because . . .” or “An academic adviser is analogous to . . . because . . .” For academic life each of them is asked to complete the prompt “An academic life is like . . . because . . .” or “An academic life is analogous to . . . because . . .”. In analyzing data content analysis was used. Perceptions of research assistant for their academic advisers 7 categories is determined such that supervisor as loadstar/enlightening, supporter/protector, productive, director, neutral, colonist and changeable respectively. In academic life theme, seven categories were created as well as academic advisor theme. Considering academic life metaphor, hopeless period, rocky road, a period of development, fund of knowledge process, Deadweight, labor process and uncertainty process categories were created. Results were discussed and suggestions were given in line with findings.

Keywords: Research assistant, metaphor, advisor, academic life

1. Introduction
As being one of the core elements in the literature of higher education, graduate assistantship which could be conducted in research or teaching by financing graduate students for their academic career (http://www.kent.edu/graduatetudies/assistantships) has been subject to numerous studies for decades (e.g. Brown-Wright, Dubick, & Newman, 1997; Feazel & Myers, 1997; Flora, 2007; Hepnher, 2010; Volkmann & Zgagacz, 2004). Graduate assistantship is defined as a position in graduate schools which provide professional experiences of graduate students both in research or teaching environment by several universities in U.S. (e.g.http://www.kent.edu/graduatetudies/assistantships,https://www.gvsu.edu/gs/what-is-graduate-assistantship-12.htm, http://gradschool.cornell.edu/costs-funding/assistantships).When considered Turkey, graduate assistantship includes the “research” experience that is defined by Higher Education Law (2001) as “Assistants that help academic staff in the areas of research, examining and experiments and officiate other duties given by authorized bodies”. Because in Turkey the graduate assistantship generally involves the research area rather than teaching and our participants consist of graduate assistant in research part of the universities we use the term “Research assistant” in current paper.

The role of graduate assistantship have a long history in the literature (e.g. Brown-Wright, Dubick, & Newman, 1997; Flora, 2007; Hobson, Jones, & Deane, 2005; Kendall & Schussler, 2012; Stringer, 1977) and studies in general pointed out the status (e.g. Finkelstein, 1984; Flora, 2007) and work satisfaction (e.g. Abouserie, 1996; Giallonardo, Wong, & Iwasiw, 2010; Rosser, 2004) but graduate assistants as being both academic staff and graduate student has not been studied within the context of their metaphors about academic advisor and academic life concept before. Studies considering research assistants perceptions are commonly related with job definition (e.g. Bayar & Bayar, 2012) and grad students’ views about academic life (e.g. Bieber & Worley, 2007) rather than metaphors of grad assistants about their supervisors and academic life which are very important determinants of assistants both in their work and academic life. Thus, current study will bring a unique contribution to the literature in terms of their perception related their supervisor and academic life. Since, as being both staff and grad students in universities, graduate students perception about their supervisor and academic life may be affected by their academic position in universities.

In the literature of higher education, the role of supervisor has long been come up (e.g. Barnes & Austin, 2009; Curtin, Stewart, & Ostrove, 2012; Ives & Rowley, 2005) which is very important of good quality academic and personal development of grad students (Ender, Winston, & Miller, 1982; Lyons, Scroggins, & Rule, 2006). As not being a new phenomenon (Barnes & Austin, 2009) academic advising is an important process both in the completion of thesis and satisfaction of student (Ives & Rowley, 2005). Ender et al. (1982) proposed that new students in higher education attach importance to support and guidance of academic advisor and they argued that to increase the quality of academic advising program it needs to create a supporting and caring environment for students. Crookston (1994) in his paper argued the developmental advising which focus on not only the teaching aspect of advisors but also supporting students in their decision-making processes and contacting with them. He also differentiates prescriptive and developmental advising in terms of some aspects such as, evaluation, relationship, motivation and rewarding. For example in his argument, whereas prescriptive...
advising focuses on limitations, developmental advising focuses on potentials of student. Moreover, in prescriptive advising control is established by advisor and low trust occur in contrast to developmental advising in which control is negotiated and high trust exists. Frost (1991) also mentions the shared responsibility between student and advisor in learning process similar to Lyons et al. (2006) argue that emphasize a two-way relationship between advisor and student. Petress (1996) indicated that academic advisors need to improve their interpersonal skills and learn their duties in process. Moreover he added that students’ perception about advisor is effected by advisor’s personality, ability, interest and availability. In sum, academic advisors are the ones who helps students to plan their study and earn degree and evaluate the process (Lyons et al., 2006) have a magnificent role in grad students’ academic life.

Academic life also is an important period in student’s career. It may be affected by several factors. Hendel and Horn (2008) discussed some of stress factors that may be related to academic life. Bieber and Worley (2006) investigated the graduate students perspectives regarding their academic life and reached that students’ positive perception about faculty life were shaped during their undergraduate years and continue during the grad school. In general, studies focus on the job definition in the literature (e.g. Bayar & Bayar, 2012; Kisa, 2013; Basarir and Sari, 2015). So, the academic life is an important phenomenon in the literature of education. It is an irreplaceable factor in the system of education. Thus, in current study we aim to reveal the metaphors of research assistants’ considering their academic advisor and academic life.

2. Method

Current study was conducted via multi-case study and Creswell (2016) indicated that in this design, the researcher can choose more than one case to exemplify the situation. To reveal different views, researchers determine multiple cases purposefully. In current study, the case is limited with research assistants’ “Academic advisor” and “Academic life” metaphors. Regarding this case, the views of research assistants were given.

2.1 Participants

At the beginning, 104 research assistants who work in several Educational Faculties in Turkey in the period of 2014-15 participated into study by using maximum variation sampling method. But missing and inappropriate answers were eliminated and 82 (45 of them female) answers were included into the analysis. In current study, research assistants were included to study because they are both graduate students and staff in universities. Below, demographical results were given.

Table 1. Demographical Features of Participants

<table>
<thead>
<tr>
<th>Features</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course stage of master</td>
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<td>3.7</td>
</tr>
<tr>
<td>Master’s dissertation stage</td>
<td>22</td>
<td>26.8</td>
</tr>
<tr>
<td>Doctorate course stage</td>
<td>16</td>
<td>19.5</td>
</tr>
<tr>
<td>Doctorate dissertation stage</td>
<td>37</td>
<td>45.1</td>
</tr>
<tr>
<td>Doctorate proficiency exam stage</td>
<td>4</td>
<td>4.9</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>100</td>
</tr>
<tr>
<td>Mean score of age</td>
<td>28.28</td>
<td></td>
</tr>
<tr>
<td>Year of work mean</td>
<td>3.4 year</td>
<td></td>
</tr>
</tbody>
</table>

2.2 Data Collection

In data collection process, to determine research assistants’ perceptions considering their academic life and advisors we used metaphors. Metaphors are one of the most mental tools that constitute, direct and control our thoughts about development and functions of events. Metaphor is an explanation of a notion, phenomenon or case by assimilating it to another notion or phenomenon (Oxford et al., 1998). When metaphors are used to describe, the case is described as it is. In data collection via metaphors, various metaphors are achieved by asking one or more open-ended questions (Yildirim and Simsek, 2013).

An open-ended questions form was prepared. The participants were filled the questions such that “My advisor/my academic life is like......; because........” or “My advisor/my academic life is similar to......; because........”. Explanations were given that assimilations could be concrete, abstract, live or lifeless entities and the statement of “because” needs to be the reason of this assimilation. Moreover, gender, age, work year and the stage of academic life were asked to participants.

2.3. Data Analysis

At the beginning, data of 104 participants were collected. Metaphors created by research assistant were transferred to computer. But, more than one assimilations, missing data and metaphors without explanations were removed. Then the study continued with 82 answers. In coding process, gender (M for males, F for females), age, year of work, and the stage of academic life (MC for course stage in master, MD for dissertation
stage in master, DC for course stage in doctorate, DPE for doctorate proficiency exam stage, DD for dissertation stage in doctorate) were stated respectively. Moreover, these variables were presented in findings section between parentheses. Content analysis was used in analyzing data. In content analysis, firstly understandable and notable metaphors were separated. In determining supervisor and academic life phenomenon logical basis were taken into consideration. Then metaphors with common features were categorized together.

3. Findings
3.1 Academic Advisor Metaphors
Findings of study revealed that participants produced 82 metaphors considering their academic advisor (see Table 2). Those metaphors were categorized based on the reasons of their answers.

<table>
<thead>
<tr>
<th>Code</th>
<th>Metaphor Name</th>
<th>F</th>
<th>%</th>
<th>Code</th>
<th>Metaphor name</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Guide</td>
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<td>9.75</td>
<td>22.</td>
<td>Human</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>2.</td>
<td>Candle</td>
<td>3</td>
<td>3.65</td>
<td>23.</td>
<td>Water</td>
<td>2</td>
<td>2.43</td>
</tr>
<tr>
<td>3.</td>
<td>Lighthouse</td>
<td>3</td>
<td>3.65</td>
<td>24.</td>
<td>Bee</td>
<td>4</td>
<td>4.87</td>
</tr>
<tr>
<td>4.</td>
<td>Torch</td>
<td>2</td>
<td>2.43</td>
<td>25.</td>
<td>Factory</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>5.</td>
<td>Compass</td>
<td>4</td>
<td>4.87</td>
<td>26.</td>
<td>Energy drink</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>6.</td>
<td>Sun</td>
<td>1</td>
<td>1.21</td>
<td>27.</td>
<td>King</td>
<td>2</td>
<td>2.43</td>
</tr>
<tr>
<td>7.</td>
<td>Light</td>
<td>1</td>
<td>1.21</td>
<td>28.</td>
<td>Sultan</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>8.</td>
<td>Captain</td>
<td>1</td>
<td>1.21</td>
<td>29.</td>
<td>Lion</td>
<td>2</td>
<td>2.43</td>
</tr>
<tr>
<td>9.</td>
<td>Steering wheel</td>
<td>1</td>
<td>1.21</td>
<td>30.</td>
<td>Alarm clock</td>
<td>2</td>
<td>2.43</td>
</tr>
<tr>
<td>10.</td>
<td>Switchboard</td>
<td>1</td>
<td>1.21</td>
<td>31.</td>
<td>Civil servant</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>11.</td>
<td>Fox</td>
<td>1</td>
<td>1.21</td>
<td>32.</td>
<td>Neutral element</td>
<td>3</td>
<td>3.65</td>
</tr>
<tr>
<td>12.</td>
<td>Google</td>
<td>1</td>
<td>1.21</td>
<td>33.</td>
<td>Owl</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>13.</td>
<td>Father/brother</td>
<td>12</td>
<td>14.63</td>
<td>34.</td>
<td>Yellow traffic light</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>14.</td>
<td>Mother</td>
<td>5</td>
<td>6.09</td>
<td>35.</td>
<td>Telescope</td>
<td>1</td>
<td>1.21</td>
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<td>15.</td>
<td>Mountain</td>
<td>1</td>
<td>1.21</td>
<td>36.</td>
<td>Self-seeker friend</td>
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<tr>
<td>16.</td>
<td>Tree</td>
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<td>2.43</td>
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<td>Umbrella</td>
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<td>patch</td>
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<td>39.</td>
<td>Parasite</td>
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<td>1.21</td>
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<tr>
<td>19.</td>
<td>Dolphin</td>
<td>1</td>
<td>1.21</td>
<td>40.</td>
<td>Hammer</td>
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<td>1.21</td>
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<tr>
<td>20.</td>
<td>Door</td>
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<td>1.21</td>
<td>41.</td>
<td>Rubik’s cube</td>
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<td>1.21</td>
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<tr>
<td>21.</td>
<td>Psychologist</td>
<td>1</td>
<td>1.21</td>
<td>42.</td>
<td>Sea</td>
<td>1</td>
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</tr>
<tr>
<td></td>
<td>Total</td>
<td>82</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Considering academic advisor metaphors, seven categories were created such that supervisor as loadstar/enlightening, supporter/protector, productive, director, neutral, colonist and changeable respectively.

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>F</th>
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<td>Fox</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>12.</td>
<td>Google</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>27</td>
<td>32.82</td>
</tr>
</tbody>
</table>

27 metaphors were representing this category (32.82%). Outstanding metaphors were found as guide (F=8), compass (F=4), candle (F=3), lighthouse (F=3) and torch (F=2), respectively. Samples regarding this category were given as “My supervisor is like a candle. He always lights my way. He helps me to find my way” (F3, 27,5, DD). Another participant told that “My advisor is like a compass because he/she always leads my way whenever i lost my way or do not know what to do. (F18, 29,7,DD). One of the other participants indicated that
“My supervisor looks like a guide. She always shares her experiences with me and leads my way.” (F1, 26, 4, DC)

Table 4. Academic advisor metaphors as a “Supporter/Protector” and frequencies/percent

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.</td>
<td>Father/brother</td>
<td>12</td>
<td>14.63</td>
</tr>
<tr>
<td>14.</td>
<td>Mother</td>
<td>5</td>
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<td>16.</td>
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<td>2</td>
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<tr>
<td>17.</td>
<td>Patch</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>18.</td>
<td>Angel</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>19.</td>
<td>Dolphin</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>20.</td>
<td>Door</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>21.</td>
<td>Psychologist</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>22.</td>
<td>Human</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>23.</td>
<td>Water</td>
<td>2</td>
<td>2.43</td>
</tr>
</tbody>
</table>

| Total | 28 | %34.05 |

28 metaphors (34.05%) were found in this category and father/brother (f=12), mother (f=5), tree (f=2) and water (f=2) metaphors came to the forefront. In this category supervisor is similar to one of the member of a family and support participants whenever they need. Sample statements were “My supervisor is like brother because he try to solve my problems (M16, 24, 1, MD), “My supervisor is like my mother. Because she always helps me when i need some help (F28, 26, 2, MD)” and “My supervisor is look like a psychologist. Because in every meeting he gave me feedbacks and refresh me” (M19, 25, 3, MD).

Table 5. Academic advisor metaphors as “Producer” and frequencies/percent

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.</td>
<td>Bee</td>
<td>4</td>
<td>4.87</td>
</tr>
<tr>
<td>25.</td>
<td>Factory</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>26.</td>
<td>Energy drink</td>
<td>1</td>
<td>1.21</td>
</tr>
</tbody>
</table>

| Total | 6 | 7.29 |

Totally six metaphors represent this category (%7.29). Primary metaphor in this category was found as bee (f=4). Participants indicate their supervisor as a very productive and hardworking. One of the participants propounded that “My supervisor is like a bee because he or she always works well-disciplined” (M20, 28, 2, MD). Another participant described his or her supervisor as “He is like an energy drink by giving me more energy and willingness to work” (F33, 25, 1, DC). “My supervisor is like a bee because she is both hardworking and sympathetic” said another student (F40, 31, 8, DD).

Table 6. Academic advisor metaphors as a “Director” and frequencies/percent

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.</td>
<td>King</td>
<td>2</td>
<td>2.43</td>
</tr>
<tr>
<td>28.</td>
<td>Sultan</td>
<td>2</td>
<td>2.43</td>
</tr>
<tr>
<td>29.</td>
<td>Lion</td>
<td>2</td>
<td>2.43</td>
</tr>
<tr>
<td>30.</td>
<td>Alarm clock</td>
<td>2</td>
<td>2.43</td>
</tr>
<tr>
<td>31.</td>
<td>Civil servant</td>
<td>1</td>
<td>1.21</td>
</tr>
</tbody>
</table>

| Total | 8 | 9.71 |

Eight metaphors were created in the category of “Director” (%9.71). King (f=2), lion (f=2) and alarm clock (f=2) became prominent in this category. For example, a participant said that “My supervisor looks like king. He behave like he is coming a royal house” (M29, 28, 3, MD). One of the other participant indicated that “He is like an alarm clock. Whenever i hear his voice i feel like i have to be ready for a new duty” (F22, 28, 4, DD). A women participant reported that “My advisor is like a lion. He listens every idea but at the end he goes his own way” (F29, 31, 1, DC).
Table 7. Academic advisor metaphors as a “Neutral element” and frequencies/percent

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>32.</td>
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<td>33.</td>
<td>Owl</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>34.</td>
<td>Yellow traffic light</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>5</strong></td>
<td><strong>6.07</strong></td>
</tr>
</tbody>
</table>

Five metaphors represented this category in total (%6.07). The basic metaphor was found as neutral element (f=3). Participants categorize their supervisor as neutral element, define them irrelevant and do not contribute their work. A participant in the study group defines his supervisor as “My supervisor is like a yellow traffic light. Because neither he stopped me or guide me to improve” (M26,26,4,DD). Another participant indicated that “She is like a neutral element because he is just useless” (F39,27,3,DD). “And one of the participant reported that “He is like an owl just watching me not anything else” (M15,27,2,DPE).

Table 8. Academic advisor metaphors as “Colonist” and frequencies/percent

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.</td>
<td>Telescope</td>
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</tr>
<tr>
<td>36.</td>
<td>Self-seeker friend</td>
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<td>1.21</td>
</tr>
<tr>
<td>37.</td>
<td>Umbrella</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>38.</td>
<td>Border</td>
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<td>1.21</td>
</tr>
<tr>
<td>39.</td>
<td>Parasite</td>
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<td>1.21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<td><strong>5</strong></td>
<td><strong>6.05</strong></td>
</tr>
</tbody>
</table>

Five metaphors represented this category in total (%6.05). The basic feature of this category is that participants emphasized the self-interest of their supervisors. For instance, in this category F4 indicated that “We are like a border on with my supervisor. Because his personal borders and responsibilities are very certain in contrast to mine which are very flexible” (F4,26,2,MD). Another participant reported that “My supervisor is like a kind of parasite because he presumes on my effort” (M34,25,3,DC). “My supervisor is like a self-seeker friend because he calls me when he needs my help” (M8,36,3,MD) told another participant.

Table 9. Academic advisor metaphors as “Changeable” and frequencies/percent

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.</td>
<td>Hammer</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>41.</td>
<td>Rubik’s cube</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>42.</td>
<td>Sea</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>3</strong></td>
<td><strong>3.63</strong></td>
</tr>
</tbody>
</table>

Three metaphors were created in this category (%3.63) and supervisors described as inconsistent. M36 indicated that “My supervisor is like Rubik cube with his complicated character” (M36,29,1,MC). Another student told that “My supervisor is like a hammer. When he studies sometimes he nail finger and sometimes to the wall (M2,32,8,DD)

3.2. Academic Life Metaphors

In current study, 82 metaphors were created considering the academic life of research assistants (see table 10). Those metaphors were categorized based on the reasons of their answers.
Table 10. Metaphors related to “Academic Life” and frequencies/percent of research assistants (Alphabetically)

<table>
<thead>
<tr>
<th>Code</th>
<th>Metaphor name</th>
<th>F</th>
<th>%</th>
<th>Code</th>
<th>Metaphor name</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Stair</td>
<td>6</td>
<td>7.3</td>
<td>33.</td>
<td>Self-discovery</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>2.</td>
<td>Second meaning of life</td>
<td>1</td>
<td>1.21</td>
<td>34.</td>
<td>Long journey</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>3.</td>
<td>Job</td>
<td>1</td>
<td>1.21</td>
<td>35.</td>
<td>Work camp</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>4.</td>
<td>Asphalt road</td>
<td>1</td>
<td>1.21</td>
<td>36.</td>
<td>Desert</td>
<td>2</td>
<td>2.43</td>
</tr>
<tr>
<td>5.</td>
<td>Slope road</td>
<td>2</td>
<td>2.43</td>
<td>37.</td>
<td>Dead</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>6.</td>
<td>Gangrene organ</td>
<td>1</td>
<td>1.21</td>
<td>38.</td>
<td>Train</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>7.</td>
<td>Parallel universe</td>
<td>1</td>
<td>1.21</td>
<td>39.</td>
<td>Pilgrim’s journey of ant</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>8.</td>
<td>Swirl</td>
<td>2</td>
<td>2.43</td>
<td>40.</td>
<td>Old and broken tv</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>9.</td>
<td>Road work</td>
<td>2</td>
<td>2.43</td>
<td>41.</td>
<td>Rabbit</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>10.</td>
<td>Penny bank</td>
<td>1</td>
<td>1.21</td>
<td>42.</td>
<td>Bamboo tree</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>11.</td>
<td>Rock carve</td>
<td>1</td>
<td>1.21</td>
<td>43.</td>
<td>Camel hunch</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>12.</td>
<td>Tree</td>
<td>1</td>
<td>1.21</td>
<td>44.</td>
<td>Exam paper</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>13.</td>
<td>Factory</td>
<td>1</td>
<td>1.21</td>
<td>45.</td>
<td>Highway</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>14.</td>
<td>Potholed road</td>
<td>1</td>
<td>1.21</td>
<td>46.</td>
<td>Donkey</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>15.</td>
<td>Fruit</td>
<td>2</td>
<td>2.43</td>
<td>47.</td>
<td>Turtle</td>
<td>3</td>
<td>3.65</td>
</tr>
<tr>
<td>16.</td>
<td>Mineral</td>
<td>1</td>
<td>1.21</td>
<td>48.</td>
<td>Light</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>17.</td>
<td>Long distance runner</td>
<td>1</td>
<td>1.21</td>
<td>49.</td>
<td>Baby</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>18.</td>
<td>Labyrinth</td>
<td>3</td>
<td>3.65</td>
<td>50.</td>
<td>Being patient</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>19.</td>
<td>Facebook</td>
<td>1</td>
<td>1.21</td>
<td>51.</td>
<td>Being Aerialist</td>
<td>2</td>
<td>2.43</td>
</tr>
<tr>
<td>20.</td>
<td>Scenic road</td>
<td>1</td>
<td>1.21</td>
<td>52.</td>
<td>Swing</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>21.</td>
<td>Railway</td>
<td>1</td>
<td>1.21</td>
<td>53.</td>
<td>İstanbul</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>22.</td>
<td>First page of book</td>
<td>1</td>
<td>1.21</td>
<td>54.</td>
<td>Helix</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>23.</td>
<td>Life of a crocodile</td>
<td>1</td>
<td>1.21</td>
<td>55.</td>
<td>Leech</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>24.</td>
<td>Ice mass</td>
<td>1</td>
<td>1.21</td>
<td>56.</td>
<td>Water</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>25.</td>
<td>Tunnel</td>
<td>3</td>
<td>3.65</td>
<td>57.</td>
<td>Caterpillar</td>
<td>2</td>
<td>2.43</td>
</tr>
<tr>
<td>26.</td>
<td>Sea</td>
<td>1</td>
<td>1.21</td>
<td>58.</td>
<td>Teacher</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>27.</td>
<td>Movie</td>
<td>1</td>
<td>1.21</td>
<td>59.</td>
<td>Candle</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>28.</td>
<td>Rally track</td>
<td>1</td>
<td>1.21</td>
<td>60.</td>
<td>Prison</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>29.</td>
<td>Studentship</td>
<td>1</td>
<td>1.21</td>
<td>61.</td>
<td>Sword</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>30.</td>
<td>Being a worker</td>
<td>1</td>
<td>1.21</td>
<td>62.</td>
<td>Sculptor</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>31.</td>
<td>Season</td>
<td>1</td>
<td>1.21</td>
<td>63.</td>
<td>River</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>32.</td>
<td>Child</td>
<td>1</td>
<td>1.21</td>
<td>64.</td>
<td>Boomerang</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>82</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 11. Academic life metaphor as “A hopeless period” and frequencies/percent

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td>Swirls</td>
<td>2</td>
<td>2.43</td>
</tr>
<tr>
<td>7.</td>
<td>Parallel universe</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>6.</td>
<td>Gangrene organ</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>18.</td>
<td>Labyrinth</td>
<td>3</td>
<td>3.65</td>
</tr>
<tr>
<td>36.</td>
<td>Desert</td>
<td>2</td>
<td>2.43</td>
</tr>
<tr>
<td>37.</td>
<td>Dead</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>41.</td>
<td>Rabbit</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>55.</td>
<td>Leech</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>24.</td>
<td>Ice mass</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>60.</td>
<td>Prison</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>64.</td>
<td>Boomerang</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>9.</td>
<td>Road work</td>
<td>2</td>
<td>2.43</td>
</tr>
<tr>
<td>59.</td>
<td>Candle</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>54.</td>
<td>Helix</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>21.</td>
<td>Railway</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>3.</td>
<td>Job</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>21</td>
<td>25.46</td>
</tr>
</tbody>
</table>
Totally 21 metaphor were created in this category. Labyrinth (f=3), swirl (f=2), desert (f=2) and roadwork (f=2) were found as a prominent metaphors. Academic life was handled as a hopeless and unfinished process in this category. K6 indicated that “Academic life is a swirl that tries to take you. There are lots of people in this period but few of them can success” (F6,27,5,DD). F7 reported that “Academic life is like a roadwork. Because always there exists problems and they never finish” (F7,29,4,DD). Another participant said that “My academic life is like a labyrinth. Because i choose this job to be happy but i get rid of fight with these obstacles” (M29,28,3,MD).

Table 12. Academic life metaphors as “A Rocky road” and frequencies/percent

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td>Asphalt road</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>5.</td>
<td>Slope road</td>
<td>2</td>
<td>2.43</td>
</tr>
<tr>
<td>13.</td>
<td>Factory</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>38.</td>
<td>Train</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>39.</td>
<td>Pilgrim’s journey of ant</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>42.</td>
<td>Bamboo tree</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>50.</td>
<td>Being patient</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>25.</td>
<td>Tunnel</td>
<td>3</td>
<td>3.65</td>
</tr>
<tr>
<td>28.</td>
<td>Rally track</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>35.</td>
<td>Work camp</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>47.</td>
<td>Turtle</td>
<td>3</td>
<td>3.65</td>
</tr>
<tr>
<td>20.</td>
<td>Scenic road</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>57.</td>
<td>Caterpillar</td>
<td>2</td>
<td>2.43</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>19</td>
<td>23.05</td>
</tr>
</tbody>
</table>

Totally 19 metaphors were created in this category and prominent ones are tunnel (f=3), turtle (f=3), slope road (f=2) and caterpillar (f=2). In this category academic life is associated with long and toilsome journey. For instance, in this category F4 reported that “My academic life is like a slope road. Because becoming successful is not very easy in academic life. I always have to demonstrate myself” (F4,26,2,MD). Another research assistant indicated that “It is a black and long tunnel and i cannot see the light at the end. But the hope always exists. But i do not know it is worth or not to effort” (M21,28,5,DC). E30 told that “It is like a turtle. Academic life is very slow for me because i always had to be done everything myself and others blocked me. My supervisor did not support me.” (M30,30,7,DD)

Table 13. Academic life metaphors as a period of “Development” and frequencies/percent

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Stair</td>
<td>6</td>
<td>7.3</td>
</tr>
<tr>
<td>12.</td>
<td>Tree</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>48.</td>
<td>Light</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>29.</td>
<td>Studentship</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>32.</td>
<td>Child</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>34.</td>
<td>Long journey</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>11</td>
<td>13.35</td>
</tr>
</tbody>
</table>

Totally 11 metaphors exist in the category of developmental process. The leading metaphor of this category is stair (f=6). Academic life is handled as a developmental and advancement process. F1 indicated that “Academic life is like a stair because i am rising and improving in every step of it” (F1,26,4,DC). Similar to F1, F27 reported that “It is like a stair. Because when you are climbing up it is difficult. But when you improve yourself the scene will be beautiful” (F27,30,9,DD). Another participant told that “My academic life is like a long journey. Because it will continue throughout my life” (F15,30,5,DD)

Table 14. Academic life as a “Fund of knowledge process” and frequencies/percent

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.</td>
<td>Fruit</td>
<td>2</td>
<td>2.43</td>
</tr>
<tr>
<td>22.</td>
<td>First page of book</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>44.</td>
<td>Exam paper</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>10.</td>
<td>Penny bank</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>33.</td>
<td>Self-discovery</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>6</td>
<td>7.27</td>
</tr>
</tbody>
</table>

6 metaphors were created in this category and fruit metaphor (f=2) became prominent. Academic life
Table 15. Academic life metaphors as “Deadweight” and frequencies/percent

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>43.</td>
<td>Camel hunch</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>46.</td>
<td>Donkey</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>23.</td>
<td>Life of a crocodile</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>30.</td>
<td>Being a worker</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>4</strong></td>
<td><strong>4.84</strong></td>
</tr>
</tbody>
</table>

Totally 4 metaphors represent this category. Academic life was conceptualized as mental and physical employment. For instance, one of the participants indicated that “Academic life is like a life of crocodile. I am falling through the floor with notes” (M19,25,3,YLT). Another metaphor was handled by F38 as “It is like being a worker because i am always doing other’s works” (F38,24,2,MD). M15 told that “It is like a donkey. You cannot find your way. You always do one’s work” (M15,27,2,DPE). F22 indicated that “My academic life is like a camel hunch. Because wherever i go somewhere it is always with me like a deadweight. Even i try to sleep or wake up in the morning i am thinking about my academic life. My mind is always with it” (F22,28,4,DD).

Table 16. Academic life metaphors as “Labor process” and frequencies/percent

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>49.</td>
<td>Baby</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>17.</td>
<td>Long distance runner</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>58.</td>
<td>Teacher</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>16.</td>
<td>Mineral</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>62.</td>
<td>Sculptor</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>11.</td>
<td>Rock carve</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>2.</td>
<td>Second meaning of life</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>7</strong></td>
<td><strong>8.47</strong></td>
</tr>
</tbody>
</table>

7 metaphors were created in this category and academic life was described as sacrificing and effortful process. For instance F8 indicated that “My academic life is carving a rock. Because when you get rid of surplus you reach the core” (F8,30,5,DD). F25 described that “My academic life is similar to baby. Because you love babies and never neglect their needs” (F25,24,2,MD). M23 indicated that “It is like a teacher. It teaches me lots of things. I noticed my mistakes and it showed me these mistakes” (M23,25,2,MD).

Table 17. Academic life metaphors as “Uncertainty process” and frequencies/percent

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>52.</td>
<td>Swing</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>56.</td>
<td>Water</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>26.</td>
<td>Sea</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>27.</td>
<td>Movie</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>61.</td>
<td>Sword</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>19.</td>
<td>Facebook</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>31.</td>
<td>Season</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>53.</td>
<td>Istanbul</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>40.</td>
<td>Old and broken tv</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>51.</td>
<td>Being Aerialist</td>
<td>2</td>
<td>2.43</td>
</tr>
<tr>
<td>63.</td>
<td>River</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>45.</td>
<td>Highway</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td>14.</td>
<td>Potholed road</td>
<td>1</td>
<td>1.21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>14</strong></td>
<td><strong>16.95</strong></td>
</tr>
</tbody>
</table>

Totally 14 metaphors represent the category of “Uncertainty process” and being aerialist (f=2) became prominent. In this category, F37 reported that “My academic life is like being aerialist. Because when you try to cross over, you may fall from rope” (F37,29,2,MC). Another participant indicated that “My academic life is similar to season. Sometimes it is like spring and sometimes fall. Sometimes it blossoms and sometimes trees shed their leaves” (M35,28,4,DD). Moreover, F13 told that “My academic life is like Facebook. In general it takes your time and entertains you. Sometimes it excites you and make sensation” (F13,33,9,DD).
4. Discussion

In current study, research assistants’ metaphors were examined regarding their supervisor and academic life. Totally fourteen categories were created in this study. Considering supervisor, several metaphors were created such that loadstar/enlightening, supporter/protector, productive, director, neutral, colonist and changeable. Both positive and negative attributions were found regarding supervisor metaphors. In their study, Mansson and Myers (2012) revealed that supervisors use appreciation, kindness, protection and humor to maintain supervisor-supervisee relationships which support our research findings in the category of supervisor as supporter/protector. Similarly, Bristol, Adams and Johannessen (2014) found that reciprocality, collaboration, support, respect, flexibility and clarity are the important themes in formal and informal supervisor practices. We concluded in current study support was a prominent category similar to Bristol et al. (2014).

Some studies revealed that students have a positive attitude toward their supervisor’s abilities (Arabaci & Ersozlu, 2010; Wilder, 1981). Wilder (1981) argued that thoughtful and helpful supervisors affect students’ positive perceptions not only toward them but also to university. These positive attitudes provide meaningful contributions to their education life and sense of belonging. Positive relationship between student and supervisor has a significant impact on learning and contribute to favorable attitude toward universities. According to Isiksolugu (1994) supervision is an effective notion that direct the research in terms of qualification and improve instructors. Even in the literature, supervisor has an important person for supervisee’s academic life some examples revealed that is not the case. Bakioglu and Gurdal (2001) indicated not all the academic member of universities have supervisor ability. Similarly, Egmir, Odemis and Kayir (2014) conducted a study with graduate students and found both positive and negative attributions toward supervisor. In positive manner graduate students describe their supervisors as “A good guide”, “Motivate me”, “Good communication skills”, “Successful”, “Accessible”, “Supporter”, and “Friendly”. Otherwise, negative features of supervisors were found as “Not democratic”, “Not a leader”, “Unreachable”, “Not a good guide”, “With high expectancy”, “Not support me”. In their study, Sezgin, Kilinc, and Kavgaci (2012) revealed that students’ expectations toward their supervisors were categorized as research process, communication and education/training. Study findings indicated supervisor has a significant role in training of students. Correspondingly, in current study, supervisor metaphors as a guide and compass were distinguished in the category of loadstar/enlightening.

Considering academic life metaphor, different assimilations were created such as hopeless period, rocky road, a period of development, fund of knowledge process, deadweight, labor process and uncertainty process. Bayar and Bayar (2012) conducted a study regarding research assistant and found that negative metaphors were created specifically focusing on unclear job definition. Similarly, Kisa (2013) studied with research assistant and participants liken their job to apprenticeship and secretarial. The reasons were identified as unclear job definition, superior relationships, and bureaucratic extra duties. Moreover, Korkut, Yalcinkaya and Mustan (1999) stated that there exist a confusion related to research assistants’ unclear right and responsibilities. They found that approximately 40% of the participants deal with works which are not determined by legislations and these tasks include attending class without earning money. In a study of Ocak, Ocak, Yamac and Yazicioglu (2013) academicians created metaphors such that studying, journey, risk, progress related to their academic life which are similar to our study findings that academic life was handled as a process of development and fund of knowledge. Basarir and Sari (2015) in a new study aimed to reveal the metaphors related to women-academicians. Created metaphors were given as “Having many tasks and responsibilities”, “Producer”, “hardworking”, “Strong person under difficulties”, “Self-sacrificing”, “miraculous creature”, “primarily housewife”, “equilibrator”. Yilmaz, Yilmaz and Gocen (2015) conducted a study among teacher candidates to reveal the metaphors related to research assistant and participants associate them to “student”, “teacher”, “worker”, “researcher” and “Hamal” in general. These metaphors were collected in the categories of “Research assistant as slave”, “Scientist”, “Guide”, “Learner/developing” and “Narcist”. In general, research assistantship was defined as negative attributions. Conversely, the focal point of academic life must be evaluated as a period of development, progress and learning.

Considering research findings, we recommend that feedbacks need to be taken from both supervisor and supervisee. Communication between supervisor and students must be based on consciousness, trust and assistance. Moreover, mentor education programs that include how to help students, communication skills and guidance must be provided to supervisors.

Academic life includes the process of self-development for research assistants. The main task for research assistants must be conducting research and projects, attending conferences and seminars. That will also decrease the unclear job definitions for research assistants. The job definition must be revised and enlighten by institutions and universities.

References


Higher Education Law. (2001). http://www.yok.gov.tr/documents/10279/29816/2547+say%C4%B1%C4%B1+20Y%C3%BCksek%C3%B6%Fretin%C4%B1+Kanunu+Retrieved+from. 03.01.17


http://www.kent.edu/graduatestudies/assistantships Retrieved from 12.01.17

https://www.gvsu.edu/gs/what-is-graduate-assistantship-12.htm Retrieved from 12.01.17

http://gradschool.cornell.edu/costs-funding/assistantships Retrieved from 12.01.17

**Notes**

Note 1. This study was presented in 14th INTERNATIONAL JTEFS/BBCC CONFERENCE SUSTAINABLE DEVELOPMENT, CULTURE, EDUCATION. Innovations and Challenges of Teacher Education for Sustainable Development in Konya-Turkey as an oral presentation