e-mentor

An evaluation of reverse mentoring: A case study of research assistants and advisors

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Abstract

Reverse mentoring, which refers to the relationship between a young employee in the role of the mentor and a more senior and experienced employee in the role of the mentee, is gaining popularity in the business world. This study aims to discuss the relationship between research assistants, who are just starting at the academy and are thought to have traces of reverse mentoring, and advisors with more experience in the academy, in the context of the functions and sub-functions of reverse mentoring. In this exploratory study, in which a qualitative research method was adopted, data was obtained as a result of semi-structured interviews with 17 research assistants working in different faculties and departments at a state university in Turkey. The data obtained after the interviews with the research assistants was analysed using content analysis. The findings of the research suggested that the career, psycho-social, and role model functions of reverse mentoring in the relationship between research assistants and their advisors have sub-functions of knowledge sharing, challenging ideas, networking, friendship, and new perspectives. It was also concluded that other functions were at a limited level or non-existent.

Keywords: mentoring, reverse mentoring, research assistant, advisor, academy

Introduction

Nowadays, mentoring is a popular topic and is frequently discussed in research, but it is common knowledge that despite the popularity of this topic today it is not a new concept, with the Greek poet Homer having used the word "mentor" in The Odyssey 3500 years ago (Stone, 2002). Since it became the subject of epics, the concept of mentoring has been interpreted and used in different ways by various geographical regions, cultures, and disciplines. Thanks to this we know that mentoring is not a single expression, but has more than 50 definitions (Crisp & Cruz, 2009). Mentoring usually emerges as a generational relationship and can be expressed as a mentoring process in which an experienced mentor advises a young employee and shows different development directions (Kram, 1985). Considered both as a career management tool and a training development practice, mentoring emerges as a much more important and common practice. From past to present, mentoring has continued its existence over time, with various practices and techniques. Reverse mentoring, which is one of it's new types, refers to a mentoring relationship where the mentor is at a lower hierarchical level than the mentee. In today's fast-paced age of informatics and telecommunication, mentors may actually be younger in age than the mentee but with considerably more experience in a given area (Busen & Engebretson, 1999). Reverse mentoring is a type of relationship that is formulated in the opposite direction of traditional mentoring, and where the roles of the mentor and the mentee change.

This study aims to evaluate reverse mentoring, the theoretical framework of which was determined by Murphy (2012), within the scope of the relationship between research assistants and their supervisors, which was encountered in a limited number of previous studies (e.g. Clarke et al., 2019; Leh, 2005; Zauschner-Studnicka, 2017). Since both parties, who have a close academic relationship, are from different generations,

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their expectations, demands, and perspectives on work, academia and life will be different. Throughout the advising process in PhD programmes a mentoring relationship can be referred to as one in which faculty members can be considered as mentors and doctoral students as mentees, and this relationship is a good example of traditional mentoring. However, since this study examines reverse mentoring rather than traditional mentoring, this relationship does not occur between the parties in every doctoral process. In this respect reverse mentoring can occur informally, and this relationship can be an appropriate example for understanding reverse mentoring. Mentoring, or specifically reverse mentoring, can be formal or informal (Gadomska-Lila, 2020). Informal mentoring is a more personal relationship between mentors and mentees, and these relationships develop naturally without the intervention of the organisation (Clutterbuck, 2014). Inzer and Crawford (2005) even claim that informal mentoring is much more effective than formal mentoring. In this research, the advisor-research assistant relationship will be evaluated in terms of reverse mentoring, and we will seek to answer the research question. The article provides a brief explanation of mentoring and reverse mentoring, respectively, followed by a presentation of a sample, design, findings, and results of the research.

Mentoring and reverse mentoring

Mentoring is a "voluntary, deep, dedicated, comprehensive, dynamic, supportive, trust-based" relationship between an experienced person and someone inexperienced, based on the principle of "reciprocity" (Hayes, 2005, p. 442), and can be defined as a process that serves to bridge the gap between education and real-life experience (Barker, 2006, p. 56). The mentioned process relates to a relationship between two employees, one experienced and the other inexperienced. The more experienced and instructive party in the relationship is called the mentor, and the less experienced and student one is called the mentee (Kram, 1985). Even though there is an asymmetrical relationship, mentors do not dominate mentees but inspire mentees to better understand themselves and choose the best development path (Bakiera, 2016). As a matter of fact both the process and reciprocal relationship are important points that are repeated many times in the definitions of mentoring.

In the last decade academics and professionals working in mentoring have focused on a specific type of reversed mentoring that refers to learning from current or former mentees (Damnjanovic et al., 2021, p. 156). Reverse mentoring is a formal or informal business relationship created between an experienced employee and a young inexperienced employee to grasp rapidly changing technology (Hays & Swanson, 2012, p. 1). In 1999 Jack Welch, the CEO of General Electric, appointed young employees and organised a programme for 500 senior executives to help them use the internet more actively and learn new applica-

tions. This application is considered to be the first official use of the reverse mentoring programme (Chaudhuri & Ghosh, 2012, p. 56).

Reverse mentoring, which became popular after the initial practice and with the accompanying curiosity and adoption, has been used in many countries, companies, and organisations (Eaves, 2018). This increased interest has been attributed to many factors, such as growth in the knowledge-based business world, the speed of knowledge distribution across companies and borders, and intergenerational diversity in the workplace (Browne, 2021). The origins of reverse mentoring lie in its emergence as a practical approach to bridging the technological gap between generations (Clarke et al., 2019), which makes it likely that more organisations will adopt reverse mentoring programmes in the next few years (Hieker & Rushby, 2020, p. 206). The aim of reverse mentoring is to enable young or junior employees to mentor senior employees by sharing the perspectives, trends, and technological developments of the next generation. In this respect it reverses the traditional, more popular mentoring relationship, and contradicts the norm of a senior mentor and a younger mentee (Chaudhuri, 2019). Reverse mentoring encourages new and former employees to share and communicate core concepts and beliefs with each other, thereby promoting departmental and organisational competitiveness (Chen, 2021, p. 10). In fact the idea behind reverse mentoring is to share expertise and skills with older people who need such capabilities, and to build a community whose members support each other (Gadomska-Lila, 2020, p. 1318). Reverse mentoring works best when younger, newer, and junior employees in the organisation specialise in a field (e.g., technological skills, social media skills, subject matter advances, diversity and inclusion issues, openness to work-life balance, etc.) and are willing to share that knowledge with more experienced and senior colleagues.

When reverse mentoring is considered a practice, reaching its goals is directly related to its functions providing productive results. While mentoring is mostly evaluated within the scope of functions and sub-functions developed by Kram (1985) (Allen et al., 2004), the reverse mentoring relationship includes three main functions, including many sub-functions that are common with traditional mentoring relationships. These functions are career, psycho-social, and role model functions, respectively (Murphy, 2012).

Regarding the career function; knowledge sharing, coaching, exposure and visibility, skill development, challenging ideas and networking are sub-functions. To explain briefly:

Knowledge sharing: This is recognised as one of the main goals of reverse mentoring. It refers to the mentors sharing their expertise on technology, generational trends, diversity, risk-taking, and perceiving events from a global perspective (Harvey et al., 2009). However, since reverse mentoring is also a reciprocal relationship, the mentees can present their competencies in

many areas, such as organisational issues, work-related responsibilities, or career planning and development (Kram, 1985).

Coaching: This is defined as the process of equipping the mentor, who is involved in the reverse mentoring process, with the tools, knowledge, and opportunities needed for the mentees to develop themselves and become more effective (Peterson, 1996). In this route, development and progress, which both purpose in reverse mentoring, can be achieved through coaching.

Exposure and visibility: Both the teaching and learning side of the relationship establish a regular working relationship within the organisation. In this relationship they can provide visibility and recognition in each other's own business circles (McCoy, 2015).

Skill development: One of the most important purposes of the relationship in reverse mentoring is to pave the way for talent development between the more talented mentor, in various aspects, and the mentee, who is considered to be less talented in these matters (Murphy, 2012)

Challenging ideas: Since the mentor and mentee will carry the basic characteristics, attitudes, and values of their generation, the possibility of conflict between these two arises. While the mentors and mentees will present their ideas, they are likely to challenge each other due to their unique identities (Hays & Swanson, 2012, p. 3).

Networking: The mentor's comfort in using technology and the social environments they creates online can be an opportunity to create a communication network for the mentee. In addition, it can pave the way for mentees to establish a dialogue with senior employees who are already working in the organisation with the mentors (Murphy, 2012, p. 559).

The psychosocial function refers to support and feedback, acceptance and confirmation, friendship and affirmation encouragement. These sub-functions can be briefly explained as follows:

Support and feedback: In general, mentors are people who teach, advise, direct and provide feedback on the employee's interpersonal relations and development, as well as career planning (Noe, 1988, pp. 457–478). In reverse mentoring, mentors provide support for learning and feedback on acquiring new knowledge and skills (Murphy, 2012, p. 556).

Acceptance and confirmation: The acceptance and confirmation of each other by the parties in a relationship are very important for the continuation of that relationship. It is clear that in reverse mentoring there is a need for acceptance and confirmation between the young mentor and the mentee. The mentee should start the relationship with the mentor without any prejudice, accepting that the mentor is younger (Murphy, 2012).

Friendship: One of the important sources of motivation for millennial employees is friendship (Trunk, 2007). This function is defined by social interaction that results in mutual enjoyment, understanding, and informal exchanges of work and non-work-related fun (Allen, 2003, p. 135).

Affirmation and encouragement: Mentoring is not only the process of giving advice, but also a process that includes mutual communication, sensitivity, encouragement, and development of skills (Galbraith, 2003, p. 3).

The role model function is another important function of reverse mentoring; it is explained as a new perspective, behaviour to emulate, and identifying with values, which are as follows:

New perspective: The reverse mentoring relationship is expressed as a study aimed at contributing to the development of the mentee, guiding them based on their own life experiences, and providing a different perspective on business life and general issues, as in traditional mentoring (Murphy, 2012).

Behaviours to emulate: The mentor's attitudes, value judgements, and behaviour create a model that the mentee may want to emulate (Shea, 2002, p. 27). Mentors serve interrelated functions such as enabling learning, providing motivation and inspiration, and helping individuals to define their self-concept (Gibson, 2004).

Identifying with values: A developed strong relationship will enable both the mentor and the mentee to explain each other, and it will make it easier for them to find positive aspects that they will benefit from in shaping their future behaviours (Murphy, 2012).

The popularity of reverse mentoring, the basic features of which have been explained above, has made the practice more visible. According to Chaudhuri et al. (2021), reverse mentoring literature is fed by two different streams contributed by both practitioners and academics. In addition to the giants of this world (General Electric, P&G, GM, Unilever, IBM, United, Dell, etc.), reverse mentoring has also been the subject of many academic studies, with the number increasing day by day. Reverse mentoring, diversity, minority, and inclusion (Madison, 2019; McCoy, 2015); business life (Biss & DuFrene, 2006; Chaudhuri & Ghosh, 2012; Gabriel et al., 2020; Gadomska-Lila, 2020), public relations (Hays & Swanson, 2012), banking (Güğerçin, 2017; Tayşir & Ülgen, 2017), motivation (Kaše et al., 2019), tourism (Cismaru & Iunius, 2020), education (Damnjanovic et al., 2021; Leedahl et al., 2019; Porras et al., 2018; Zauschner-Studnicka, 2017), health (Clarke et al., 2019; Hernandez et al., 2018; Profili et al., 2019; Wilson, 2014) has been studied many times in the field. In addition it seems that some research has also been done on higher education. There are also reverse mentoring studies (eg. Cotugna & Vickery, 1998; Gündüz & Akşit, 2018; Leh, 2005) concerning undergraduate, master's, and doctoral students.

However, in literature no reverse mentoring study was found that centered the relationship between research assistants and their supervisors on Murphy's (2012) theoretical framework.

The research carried out in Turkey evaluated the relationship between research assistants at a state university and the faculty member who supervised them in the postgraduate education process in the context of reverse mentoring. In the context of Higher Education Law in Turkey (1981: 2547), this relationship is regulated by various articles. Law (1981: 2547/33) defines research assistants as teaching assistants who assist in research, examination and experiments carried out in their institutions and perform other related duties given by authorised bodies. On the other hand the advisor is stated to be a faculty member appointed by the relevant institution, to guide each graduate student registered in various institutes during course selection, and both course and thesis work periods, such as master and doctoral theses. From this perspective it seems that every research assistant working in Turkey has a advisor in postgraduate education and has a close relationship with their supervisor in many activities, such as conducting research, publishing, preparing course materials, and writing a thesis. For this reason the relationship is considered a suitable ground for reverse mentoring. In the remainder of the study the mentioned relationship will be evaluated in terms of reverse mentoring.

Method of research

In this research we were looking for an answer to the question "According to PhD students/research assistants, can elements of reverse mentoring be detected in their relationships with their advisors during the supervising process?". Based on these evaluations we aim to determine to what extent the relationship between them and their counselors overlaps with reverse mentoring, and, if there is a reverse mentoring relationship, which functions come to the fore, and what kind of support they contain.

For this exploratory study a qualitative research method was adopted. The use of qualitative research methods enables analysis of organisational processes, and especially examining the relationships between structures and behaviours (Patton, 2014). It was decided that the case study design would be more appropriate with the idea that the research could achieve its goals. Case study is an empirical research method that studies a current phenomenon within its real-life framework, and is used in situations where the boundaries between the phenomenon and its content are not clearly defined and there is more than one source of evidence or data (Yin, 1984, p. 23). In this method the interviewer directs the structured or semi-structured questions to the participant and performs the analysis in line with the answers received (Cohen et al., 2000, p. 181).

Purposive sampling was used in the research. The sample of the study consisted of 17 research assistants at different stages of their academic careers, working in a total of six faculties at a state university. After a point in the research, since the new interviews started to present data similar to the sample presented in the previous parts of the research (Morgan & Morgan, 2009), the interviews were stopped when the theoretical saturation point of the data was reached. While determining the sample the intention was to reach research assistants working at different stages and in different faculties to ensure diversity of the data.

The data obtained through the interviews was analysed using the qualitative content analysis method. In terms of data analysis, content analysis can generally be defined as "the systematic coding of qualitative or quantitative data based on certain themes or categories" (Cohen et al., 2000). Hsieh and Shannon (2005) state that there are three different approaches to qualitative content analysis: conventional, directed and summative. For this study the directed approach was adopted. This approach is used especially in cases where previous studies on a phenomenon or existing theory are insufficient. Researchers who adopt this approach use an existing theoretical framework or previous research on the phenomenon under investigation. They start by identifying themes, key concepts or indicators to guide the basic coding, and the framework then guides the collection and analysis of data, respectively (Hsieh & Shannon, 2005, pp. 1281–1282). These, in turn, facilitate the organisation of research within a specific focus and boundaries. This also facilitates the systematic collection and analysis of data. In this study the authors evaluated and used Murphy's (2012) theoretical framework of reverse mentoring sub-functions as themes.

For the interview questions a pool of such questions was created based on literature review. However, Murphy's research in 2012 to create a theoretical framework and model of reverse mentoring had a significant impact on the formation of questions. At least one question was prepared for each sub-function of reverse mentoring, along with demographic questions about the research (Appendix 1).

Before the interview the participants were informed about the research, and the interviews were carried out over a period of approximately two months. The participants were informed about a request to use a voice recorder during the interviews, with 11 participants accepting this and six participants rejecting it due to the sensitivity of the information provided. The interviews of the participants who had not agreed to this request were recorded manually by the researcher. The shortest interview lasted 28 minutes, the longest interview took 53 minutes, and the average was around 45 minutes. All audio recordings were transcribed by the researcher. The parts of the interview transcripts that were suitable for the topic and research content were shared within the framework of the research, with the remaining parts archived. It should be noted here that the study does not claim generalisability, although it does give important clues about the analysed topic.

Research findings

The data obtained as a result of the interviews was examined over the reverse mentoring themes (functions) mentioned in literature, and important and remarkable parts were shared in the relevant sections.

Participant information

The participants included in the study were asked questions about their demographic characteristics, education, and profession. All the obtained information has been explained in Table 1 below. Eight female and nine male research assistants were selected for the study, with an average age of 28.6.

Research assistants work in the fields of Management and Organisation, Accounting and Finance, Production Management and Marketing, Tourism Management, Health Management, Turkish Language and Literature, Psychological Services in Education, Chemistry, Economics, and Human Resources Management.

Under the research, assistants are those who have completed their doctorate, who are at the stage of their doctoral thesis, qualification, doctoral course, or master thesis. The advisor of two research assistants is a doctoral faculty member, the advisor of five research assistants is an associate professor, and the advisor of 10 research assistants is a Ph.D. professor. Two of the aforementioned advisors are women. The average counseling time that research assistants spent with their advisors was around 3 years.

Findings with regard to the reverse mentoring career function

In this section we share the findings obtained within the scope of questions asked for knowledge

Table 1

Information of research assistants participating in the study

No	Gender	Age	Worked Area	Graduate Level	Advisor Title	Advisor Gender	Duration of Advising (Years)
P1	Female	31	Production Management and Marketing	PhD Qualification	Associate Professor PhD	Male	2.5
P2	Female	34	Accounting and Finance	PhD Course	Associate Professor PhD	Male	2
P3	Male	30	Management and Organisation	PhD Completed	Professor PhD	Male	5.5
P4	Male	30	Management and Organisation	PhD Thesis	Professor PhD	Female	6
P5	Male	27	Accounting and Finance	PhD Course	Professor PhD	Male	2
P6	Female	33	Healthcare Management	PhD Course	Associate Professor PhD	Male	1
P7	Female	26	International trade	Master Thesis	PhD Lecturer	Male	1.5
P8	Female	26	Electrical electronics Engineering	PhD Thesis	Professor PhD	Male	1
P9	Male	27	Tourism Management	PhD Qualification	Associate Professor PhD	Male	3
P10	Male	29	Management and Organisation	PhD Thesis	Professor PhD	Male	1
P11	Male	30	Management and Organization	PhD Thesis	Professor PhD	Male	4.5
P12	Female	29	Turkish Language and Literature	PhD Thesis	Professor PhD	Male	5
P13	Male	26	Psychological Services in Education	PhD Qualification	Associate Professor PhD	Female	3.5
P14	Male	30	Chemical	PhD Thesis	Professor PhD	Male	4.5
P15	Female	27	Economics	PhD Thesis	Professor PhD	Male	3
P16	Female	26	Tourism Management	PhD Qualification	PhD Lecturer	Male	2
P17	Male	26	Human Resources Management	Master Thesis	Professor PhD	Male	2.5

Source: authors' own work.

sharing, coaching, exposure and visibility, skill development, challenging ideas, and networking, which are sub-functions of reverse mentoring career function.

The answers given to the question asked in the interview regarding the knowledge-sharing sub-function are examined, and some remarkable parts of the interview are shared below: "Theses, lectures, students supervised by teachers, academic exchanges, and very rarely private affairs are discussed" (P10). "The interviews generally refer to the course content. Determination of students' homework, determination of course topics, etc. In some cases the sharing is mutual" (P12).

Considering all the duties in a research assistantship, it is inevitable that information sharing will be of good quality due to the closeness of working with the advisor. The course load, administrative duties, and other responsibilities of the advisor, as well as the research assistant, can also reveal the result of nourishment from this source.

The existence of the coaching sub-function can be evaluated based on the following responses: "I usually provide technical assistance to my teacher, including communicating with students. We share things in an academic context, and I think I contribute to the development of my teacher" (P7).

> I think I contributed to the development of my teacher. When I find new information in a newspaper, on the internet, or when I read a new paper, article, or thesis about our field, I send it to my teacher. When a topic I am talking about is interesting, they start researching directly. I am encouraging my teacher to take action on that subject. (P2)

The support given by the research assistants to the advisors varies according to the expectations and demands of the advisor. For an important function of both mentoring and reverse mentoring to emerge and develop, such as coaching, both sides must be ready and willing. Although research assistants have various levels of support and assistance from their professors, this situation may not be considered coaching most of the time.

The following answers for the exposure and visibility sub-function were evaluated as significant for the research: "After the thesis, we published a project and sent it to the chamber of commerce and industry, which was our joint effort. There is also another person/institution included in our work. I'm also included in the work of others" (P2).

> I achieved a pass in research design and the review of literature depending on the nature of the topic. I am mostly involved in data collection and analysis. Recently I also turned to sectoral activities, in which my teacher has a strong background. We aim to mobilise this. (P3)

It could be said that the function of exposure and visibility isn't really comprehended in the reverse mentoring relationship, as it is believed that the advisor contributes more to the research assistant in this field due to reasons such as position and age.

Skill development is considered one of the most important sub-functions of reverse mentoring and the most relevant parts of the responses are given below: "Because we clearly value students, we often meet in terms of how we can do things better regarding the lessons and materials. I am also able to guide my teacher in this regard" (P1).

> I think I am a little better in terms of foreign languages. In terms of technology, I can be helpful for my teacher. Technology is key in many fields such as document sharing, student affairs, and I can help and show him how to do things. (P11)

Research assistants can be better in areas such as foreign languages, literature review, technological knowledge, and research methods compared to their advisors. They tend to convey information to their advisors in areas such as newly emerging research method programmes, academic social networking sites, course materials, etc.

The following answers were given by the participants for the sub-function of challenging ideas:

> I mean, when there is something I don't like, for example if there is a subject that we think is not that beneficial for the students and that I think will confuse the students, I say so. Whether the teacher accepts it or not. (P13)

> I definitely speak out when I see something wrong. We discuss it and when he sees that I am persistent and determined, I manage to convince him. When I see that there is a better way, I always try to convince him. Although sometimes the opposite happens. (P9)

Research assistants engage in academic discussions and as a result try to persuade their advisors. In cases where discussions are perceived as personal, the relationship-enhancing feature of the discussions is known.

Below are some of the highlights from the responses of the participants for the networking sub-function: "Although we're not very active on social media, we use it in a positive way. I am more active than my teacher and I advised him to use it. Finally, the teacher showed improvement in this subject" (P3). "We also use a social platform called ResearchGate. If material related to our field is released, then since our teacher is a member of that platform he can send us an e-mail in case we didn't see the articles" (P8).

Most research assistants see social media as an important tool for announcements, research, and environmental acquisition, although there are also

research assistants who think otherwise: "I do not actively use social media. I don't think it has or will affect my work. My teacher is not engaged with social media either" (P15).

Research assistants usually try to encourage them by explaining the good aspects of social media at this point.

Findings regarding the reverse mentoring psycho-social function

In this section the findings related to support and feedback, acceptance and confirmation, friendship, affirmation and encouragement, which are sub-functions of reverse mentoring's the psycho-social function, will be shared.

Support and feedback can be exemplified by the following statements from the interviews: "She is not aware of all of my work. I'm not aware of all the work done by my teacher either" (P14). "I'm following a lecture by my teacher. At the end of the lesson, my teacher asks me for my ideas. I then see that the teacher has taken my ideas into consideration in the next lesson. This makes me very happy" (P17).

Since research assistants have as much knowledge as conveyed to them by their advisors, they can express their opinions on many issues if there is a request for advice. Based on the responses received it can be seen that this sub-function of reverse mentoring does not emerge very often in the relationship between research assistants and their advisors.

The following expressions were obtained for the acceptance and confirmation sub-function: "I have no idea what he thinks of me, as he hasn't said anything good or bad. He likes my administrative work, but I feel that he doesn't think so in an academic sense" (P11).

> I think it is positive. I think so as he sends me to the classroom eagerly, gives me lecture opportunities, and provides me with a heavy workload related to the lessons. I did not make any efforts to improve my teacher's perception of me because I think the teacher knows me well enough. (P5)

When a regular business relationship is established within the organization on both sides, visibility and recognition among each other's peers increase. Research assistants represent their professors in the classroom and at the congress and fulfill their teacher's duties.

The friendship sub-function can be summarised as follows according to the data obtained from the interviews: "I also talk to my teacher on subjects other than academic. I got married last year, so we talk about the wedding and marriage in general. He gives me advice and asks about various issues" (P10). "I talk to my teacher about our family lives outside of work. I get on with his wife very well, and we often visit each other. He even says that he wants us to buy a house and move there" (P12).

Sometimes I express sadness when the time comes, and I share the same with my teacher in a humanitarian sense. I'll take walks with my teacher, and although our conversations usually begin academically, we end up talking about every-day issues. When he's near my house we often comes over for some tea. I fee that there is a special relationship between us. (P3)

In general, the relationship with the advisors is limited and sometimes intense. In addition, talking about non-work-related issues in a business environment, it is generally expected that ideas can be exchanged on issues such as family, health, and the future by moving away from business topics.

The following considerations stand out for the affirmation and encouragement sub-function: "I tend to positively motivate my teacher. I think this is good in terms of academics and consultancy. I vividly express that I appreciate this aspect" (P2). "The most important deficiency that I see in the teacher and that I think he should improve is time management. He could be more sensitive… but of course, I can't tell him that" (P10).

Many of the research assistants stated that there are aspects that need improvement with regard to their professors. However, they prefer to express the good aspects rather than the bad ones. Topics such as time management or counseling are aspects they should develop.

Findings regarding the reverse mentoring role model function

In this part of the research the findings related to the new perspective, behaviour to emulate, and identifying with values, which are sub-functions of the role model function, are shared.

The new perspective is an important sub-function of reverse mentoring, and the findings related to this function are summarised below: "If the topic is academic, I try to be supportive, and express myself boldly. There are things that the teacher is unaware of. Viewing through an outside eye, I try to help the teacher where there is a problem and how to solve it" (P3). „There are different approaches to a teacher's problems. For example, I tell my teacher if I think that exams should not be evaluated, that I think the evaluation is wrong. I'm try to persuade my teacher" (P9).

Research assistants stated that they do not hesitate to take responsibility when a solution is needed. This is especially so if they are asked for their opinion on subjects such as coursework, determining new assignments, or in which direction the field is going. They try to show new perspectives to teachers by participating in these processes to showcase them.

The behaviour to emulate sub-function can be expressed as follows: "I watch a lot of lectures on YouTube, such as case studies, business games, and methods that appeal to visual intelligence. I think we should use them too. However, these issues are never discussed with the teacher" (P11).

For example, my teacher shares anecdotes about his experiences abroad. He talks about meetings with professors at other universities. He reads The Economist magazine and shares the articles that he finds important with me. I also share newly acquired knowledge with my teacher. But sharing is usually done by the teacher. (P7)

Research assistants stated that they did experience sharing of information regarding other universities and foreign practices during their meetings with their advisors. However, the sharing is mostly done by advisors who are faculty members.

Findings for identifying with values are given below: "My teacher's attitude is generally encouraging in certain areas. In others it is restrictive" (P4). "We have an unstable relationship. Sometimes we are in constant communication, sometimes there is no communication at all, and there is even a disconnection. Therefore, I cannot predict how the relationship will proceed" (P11).

Despite negative characteristics of advisors, some opinions suggest a will to maintain the relationship in general.

Conclusions

This study aims to evaluate the relationship between research assistants and their advisors in terms of reverse mentoring functions. It is based on a qualitative method and the evaluations of the research assistants are consulted. According to the findings, information sharing, challenging ideas, networking, friendship, and new perspective sub-functions are effective in the context of research assistantship. It can be said that the functions of coaching, skills development, support and feedback, acceptance and confirmation, affirmation and encouragement, and identifying with values are partially present. It is also concluded that the sub-functions of exposure and visibility, as well as behaviour to emulate, do not exist in the mentioned relationship.

All the research assistants within the scope of the research are Y Generation individuals in terms of the distinctions mentioned in literature. The research was conducted with a study group of a mean age of 28.6. Apart from the age factor, the gender of the mentor and the mentee can be considered an important factor. In cross-matches, that is male mentor and female mentee, or vice versa, reverse mentoring functions such as friendship and challenging ideas occur less frequently. However, apart from the functions mentioned in the relationship between a male lecturer and a male research assistant, other functions such as social networks, encouragement, and identification with values become more effective.

Based on the findings of this research it can be seen that reverse mentoring is felt more at a higher level, especially Ph.D. qualifications. Research assistants who pass the qualification, feel as if they are turning into colleagues for their advisors. The feeling of collegiality draws the student-teacher relationship between the advisor and the research assistant into a suitable ground for reverse mentoring. Again, as the duration of counseling increases, factors such as trust and being on the same frequency emerge in parallel with the feeling of togetherness. One of the most frequently used terms used by research assistants is the bridge. They try to support their advisors by acting as a bridge in communication between advisors and students.

One of the important limitations of the research is that it only focuses on the mentor side of the mentioned relationship. In the field of reverse mentoring, the research could be deepened by using the opinions of the faculty members in future studies. In addition, the imbalance in the gender distribution of advisors reveals an important constraint regarding the interpretations to be made regarding gender. Research can be designed by establishing a relationship between reverse mentoring and personal characteristics. However, the emergence of reverse mentoring, which emerged as a practice especially in the USA, may be different in every society and culture. Cultural dimensions and reverse mentoring are considered another research topic to be explored.

Despite these findings, Baily (2009) suggested that reverse mentoring is not a common phenomenon and the focus is primarily on the transfer of technical competencies. There are also opinions that oppose the reverse mentoring structure, arguing that a young mentor will lack the necessary confidence and experience, especially in areas such as health and education (Clarke et al., 2019). There are also studies suggesting that reverse mentoring will confront newly developed and adopted online self-learning techniques (Singh et al., 2021).

Despite this criticism, as long as there are digital innovations and relevant developments in globalisation, equality, and justice issues, the new generation entering the workplace will be equipped with newer insights, advanced skills, and fresh perspectives that the previous generation did not have (Chaudhuri et al., 2021). This situation will lead to a search that will mobilise the authorities to close the gap. It can therefore be said that reverse mentoring will maintain its popularity.

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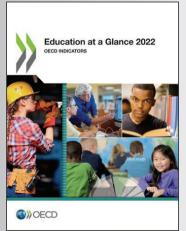
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Appendix 1 is available in the online version of the journal.

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WE RECOMMEND

OECD, *Education at a Glance 2022: OECD Indicators*

Education at a Glance is the authoritative source for data on the state of education around the world. It provides information on the structure, finances and performance of education systems across OECD countries and partner economies. More than 100 charts and tables in this publication – as well as much more data available online – provide key information on the output of educational institutions; the impact of learning across countries; access, participation and progression in education; the financial resources invested in education; and teachers, the learning environment and the organisation of schools. The 2022 edition focuses on tertiary education, looking at the rise of tertiary attainment and the associated benefits for individuals and for societies.
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