·ORIGINAL ARTICLE-

Volume 12 Issue 2 2020

DOI: 10.21315/eimj2020.12.2.4

ARTICLE INFO

Submitted: 3-4-2020 Accepted: 15-5-2020 Online: 30-6-2020

The Ideal Mentors from the Universiti Sains Malaysia Medical Students' Perspective: A Case Study

Mohd Zarawi Mat Nor, Nik Mohd Rizal Mohd Fakri

Medical Education Department, School of Medical Sciences, Universiti Sains Malaysia, Kelantan, MALAYSIA

To cite this article: Nor MZ, Mohd Fakri NMR. The ideal mentors from the Universiti Sains Malaysia medical students' perspective: a case study. Education in Medicine Journal. 2020;12(2): 37–47. https://doi.org/10.21315/eimj2020.12.2.4

To link to this article: https://doi.org/10.21315/eimj2020.12.2.4

ABSTRACT__

Having good characteristics from their mentees' perspective are aimed by mentors in educational setting including the school of medical sciences. This study aimed at exploring a septate of ideal mentors' attractor from the medical students' perspectives. The maximum variation purposive sampling type has been applied in this study. There were nine first year medical students participated in the study. Face to face interviews have been conducted for the data collection process. The duration is three months, from 1 January until 30 March 2019. Interview transcripts were transcribed in verbatim and later analysed manually based on the N-Vivo programme procedure using open coding, axil coding and selective coding techniques. The results have shown that two themes and six categories were emerged. The themes were internal and external characteristics. The categories were (i) intention, (ii) empathy, (iii) integrity, (iv) friendly and understandable, (v) knowledgeably and experienced, and (vi) accessibility. In order to address validity and reliability of the data, member check, audit trail, Cohen kappa index, and peer checking methods were utilised. The study on areas of mentoring relationship is significant as it has contributed a rich data regarding the field. These data are crucial to formulate a greater programme for its effectiveness. Thus, the present study is one of the important areas that should be focused in the medical education.

Keywords: Mentoring programme, Ideal mentor, Medical school, Medical student perspectives

CORRESPONDING AUTHOR

Mohd Zarawi Mat Nor, Medical Education Department, School of Medical Sciences, Universiti Sains Malaysia, 16150 Kubang Kerian, Kelantan, Malaysia | Email: zarawi@usm.my

INTRODUCTION

Studying in higher education is a challenging phase to students world-wide including medical students. The existence of the challengers is prominent especially among the early years of the study (1). Academic and psychosocial problems have been identified as sources of the students' well-being issues (2). The current data

has shown that stress, workload, anxiety, even mental disorder is among the obvious issues faced by them (3–4). The existences of these issues, have directly signalled that the medical students need a structured and comprehensive programme to help them in coping those problems. Therefore, implementing mentoring activities are strongly recommended. This is consistent with the statement that the programme is

important and common part of graduate education and have received considerable attention in the literature review (1).

Generally, mentoring can be considered as a process by which junior faculty can develop professional academic skills including career management, knowledge about academic medicine and other fields (1). Mentoring is also defined as a dynamic, reciprocal relationship in a work environment between and advanced career incumbent (mentor) and a beginner (mentee), aimed at promoting the development of both. It consists of seven components:

- 1. Mentor training and preparation
- 2. Management committee
- 3. Contracts or mission statements
- 4. Pairing mentors and mentees
- 5. Designing formal curricula for mentees (covering career development, research, teaching and clinical practice)
- 6. Monitoring programme activities and evaluation
- 7. Funding programme including compensation for mentors and protected time for mentees (4)

Mentoring programmes is regarded as an important mechanism for personal development (5–7), career guidance, and career choice and research productivity (8).

Since long times ago, mentoring activities are increasingly applied in many fields including companies and education institutions. This is parallel with its strengths which among them are to foster employee learning and environment. Consistent with its roles and contributions to the students personal and professional development, examining the factors that contribute to its effectiveness is a necessity. One of the aspects that is significant to be studied is about the ideal mentors. Thus, the aim of the present study which is to explore the ideal mentors from the mentees' perspective is timely. In addition, as far the specific study on this aspect is still lacking.

There are many factors that contribute to the successfully of mentoring sessions. Besides the readiness and cooperation of mentees itself, good personal features of mentors in mentees' perspective are also crucial. The ideal mentor's concept is considered as a set of positive and advance mentors' characteristics which are able to proceed a mentoring process smoothly. In a study on the field, reciprocity, mutual respect, clear expectations, personal connection, and shared values contribute to the successful of the exercise (9). While its failure contributed by the factors: poor communication, lack of commitment, personality differences, perceived (or real) competition, conflicts of interest, and the mentor's lack of experience. In a previous study, it was found that charateristics of an ideal mentor were self-awareness, focus, mutual respect, and explicit communication about the relationship (10).

Based on the discussion above, characteristics of ideal mentor can be summarised as follows: (i) having positive attitude that is appreciated by their mentees and (ii) having professional behaviour in conducting mentoring relationships. literature reviews highlighted Many mentoring programme issues including the characteristics of a good mentor. In a study done by Rose, Gail L, three components have contributed to the effective mentors: integrity, guidance and relationship. Among them, guidance and relationship were significantly related to student satisfaction with their mentor. In similar study, she has found socio-cultural factors and individual differences factors influence the mentees' perception to their mentor (11).

In a pilot test on the qualities of a mentor, the results show that: dynamic (evaluative support), professional/ specialist (informational support), involved (instrumental support), rigorous (evaluative support), pedagogical tact and model integrity (instrumental support), reasonable (evaluative support), sensitive (emotional support), passionate/enthusiastic

(instrumental support), appreciative (evaluative support) and non-aggressive (emotional support) were important components for being a quality mentor. Besides, communication skill and provision of feedback were also significant in defining the ideal mentor (12).

Based on the discussion above, the ideal mentor is among the popular topics that has taken place in the literature reviews. Many researches have been conducted in examining the ideal mentor from various perspective. The variety of the study done, show that the study about this area are always significant. Although the literature reviews do not specifically focus on the ideal mentor of the medical students in the Malaysia context, it has contributed solid ideas in order to formulate the best approach in completing the present study.

USM medical school has been practising the mentoring programme since its first intake of the students. At the initially stage, this activity assigned as mentor-mentee whereby the activities were structured, and all the academic staff were compulsory to be a mentor. Next in the second stage, the mentor mentee programme changed to peer mentor, in which the senior students were assigned to be a mentor through interview sessions. In 2009, mentor mentee programme again changed when mentors were the lecturer who volunteered to be the mentor. This approach is being practised until now. The mentors served for one vear for a group of students. Each group normally consists of 10 students. The responsibilities of the mentor are to organise meeting with the mentees at least twice per semester. They have to discuss any topic that is relevant and agreed by its mentees. Usually the discussions focus on academic, personal and social issues. Besides, mentors are also responsible to get the mentees examination results.

In USM, lecturers are volunteered to be mentors. At one time, 20 lectures from various discipline are involved as mentors. Although mentoring programme has been utilised for long time ago, no studies have been conducted regarding ideal mentors from mentees' perspective. This has resulted less effective practice in the mentoring programme, in which the mentors have conducted the mentoring programmes understanding whether have features as their mentees dreamed. This gap has resulted a less effective mentoring sessions and if its continually occurred, the objectives of the mentoring relationships in medical school cannot be fully achieved. Thus, this research was carried out with the purpose to have indepth exploration concerning the ideal of mentors from mentees' perspective is timely and significant. Generally, the purpose of the present study is to explore the ideal mentor from the USM medical students' perspective. Specifically, the objective is to understand the characteristics of ideal mentors from the USM medical students' perspective.

METHOD

Study Design

A multiple case study technique has been utilised in this research. The unit analysis is the characteristics of ideal mentor from the medical students' perspective. A total of nine first year students participated in series of in-depth interviews that have been conducted to generate the meaningful data. Participants have been chosen by using purposive sampling method. Purposive sampling method is a selection of research participants based on the researcher's judgement in choosing the best and most useful participants which fulfil the research requirement. Such selection is important in giving extensive related information (13-15).

Participants of the Study

In this technique, the researcher has used his mind, opportunities and time as criteria in determining the selection of the research

39

participants. Three criteria are assigned in selecting the study participants:

- 1. Participants are the first-year medical students in USM.
- 2. Participants are from different education background before entering USM namely, matriculation and Malaysia Education Higher Certificate (MEHC) programme.
- 3. Participants having experiences joining mentoring sessions for at least two times (16).

Data Collection Process

In-depth interviews were utilised for the data collection. After joining one semester of the study and mentoring sessions, a series of in-depth interviews has been carried out in Medical Education Department, School of Medical Sciences in USM. This time is chosen as they have already some information about the mentoring relationships and also the characteristics of their mentors. The data collection process took place in the duration of three months from January to March 2019. In-depth interview technique has its strengths:

- 1. It is able to collect the data deeper compared to the other approaches.
- 2. This technique is useful in exploring people's knowledge and experiences and can be used to examine not only what people think but how they think in such a way.
- 3. This technique also help the researcher who wants to explore participants' views and experiences using a series of openended questions (17).

Based on these strengths, in-depth interviews were utilised in the present study as it is able to answer the research objective which is to explore the ideal mentor from the mentees' perspective.

Data Analysis

To analyse the data, the researcher has planned and managed the data in three steps which are data management, understanding and analysing the data. Analysis on the interview data has started once the first interview was carried out. Each interview was recorded. The obtained data from the audio recording was transcribed in verbatim. The completed interview transcription was sent to the participants to be reviewed. Each transcription is given a code. For instance, the code P(1)-2/2/2019 means P(1) = first interview and 2/2/2019 refers to the date of interview conducted which was on 2 March 2019.

A qualitative approach to data analysis entails identifying themes and constructing ideas as they emerge in an attempt to reduce the data into codes or categories (17). Interview transcripts were analysed using a grounded theory approach (18). Grounded theory data analysis comprises the reduction of data into three procedures; open coding, axial coding, and selective coding. The analysis was completed using Vivo programme 10 version software. N.Vivo 10 allows the researcher to manage narrative data by coding, indexing passages of text, labelling categories of text, and retrieving the labelled passages across all cases. Open coding is the process of reducing the collected data into initial themes or categories (17). This step in the coding process occurs through a close examination of the data to produce concepts, themes, and ideas that correspond to the data (18). During open coding, the data were sorted into emerging themes and compared them for similarities and differences. From there, categories of information to search for the phenomenon being studied were developed.

Once initial themes were discovered and categorised, the researcher begins the next phase of data analysis, axial coding. In axial coding, similar concepts or themes were linked together to identify a single category based on their homogeneous conditions within similar contexts. Axial coding

consists of the researcher breaking one category into subcategories and comparing the interrelationship of that category. In this phase, researcher asked questions about the meaning of the data and emerging concepts and continuously made comparisons to differentiate data and concepts throughout the study (18). The last phase in the coding process consists of identifying specific core categories from the categories discovered in the axial coding phase. Selective coding is the phase of selecting the core category, systematically comparing it to other categories, and conforming those connections. During selective coding, a story that connects the subcategories and categories around the core category is built. So those relationships against the collected data were validated.

Validity and Reliability

Validity in the qualitative research was obtained from the triangulation, awareness to the researcher bias and review by the participants. In this research, researcher has used nine in-depth-interviews as sources of the data. Furthermore, by using many different data collection sources, it has made the data more valid and reliable. To minimise the bias, researcher has asked three colleagues to review and to verify the obtained themes and categories. Researcher has asked the participants to scrutinise the raw data and asks for comments for its accuracy. Besides, participants are required to give comments on the themes and categories accuracy and suitability by using enough evidence whether it is realistic or not. All the given responses and comments were included in the final report. This will increase the research credibility. Reliability refers to how far a research can be repeated. Based on the qualitative research, reliability can be obtained by using audit trail, peer checking and using Cohen Kappa Index.

To ensure data reliability, the researcher has used audit trail method. Audit trail is conducted by asking individual outside the research to check the narrative or research report to determine its credibility. In this context, researcher has asked a reader to check the report and all documents which are related to the data collection activity for verification. The researcher has reported clearly in the audit trail concerning a few aspects such as the reason why this research was carried out which is as a result of having inquiry and in-depth interest towards the need of mentoring. Finished grouped data has been referred to the specialist panels for reviewing and verification. Such process is called peer checking. For this purpose, the researcher has asked two lecturers who are experts in the medical mentoring in USM. They are also the experts in qualitative methodology research. The researcher has considered all the responses made by the panels.

Finally, the researcher can measure the reliability by determining Cohen-Kappa Index method where the researcher does the coding agreement degree level and the coding was conducted by the field experts. This was done by matching the list of themes and sub-themes with the operating definition to measure its reliability. For this purpose, the researcher has named three expert panels and their functions were to review and access the coefficient agreement towards the themes in the need of mentoring. After they have done the review, the researcher measures the agreement points in the form from the experts (19, 20). The value given by the Cohen-Kappa Index is 0.88. Such value is considered as a very good reliability. The value of 0.75 marks a strong agreement meanwhile 0.4 to 0.75 value is considered as an average value and any value which is lower than 0.4 is marked as a low agreement value (21). This means that the analysis unit made by the researcher correlates with the suggested themes.

RESULTS

A total of nine first-year medical students at School of Medical Sciences, Universiti Sains Malaysia, Kelantan participated in this study. They were four Malay, three Chinese, and one Indian. A total of five students were

from Matriculation programme and four were Malaysia Higher School Certificate (HSC) leavers. In terms of gender, a total of five were male and four were female (Table 1). The results have shown that two themes and six categories were emerged. These themes were internal characteristics and external characteristics. Categories were intention, empathy, integrity, friendly and understandable (Table 2). Internal characteristics are considered as set of natural features that individual should have. Its role is important in guiding, controlling and directing the ways of communicating, thinking and behavioural in the human life. Among the components of internal characteristics are interest, passion, dedication and willingness to help others. The theme of internal characteristics consists of four categories which are intention, empathy, integrity and friendly and understandable.

In the present study context, intention is considered as justifications of being mentor. For some mentors it is an opportunity to share ideas with others. Besides, seeking job satisfactions is also a reason of becoming a mentor. This category was addressed by the participants' number, 1, 3 and 5. For instance, Participant 1 has addressed the following idea;

...to me, to be a good mentor is not an easy task. He/she need to have high interest for that...how can a lecturer be a good one (as mentor) if she/he is not really interested. In addition, as we all are informed that the lecturers are voluntarily to hold the post... [P(1)-2/2/2019]

...whatever we do, intention is important, if mentors are really preferred to be a volunteer mentor, it is better for us (mentee)... [P(3)-20/2/2019]

It is because he/she will initiate their ideas by themselves...so if this exists, definitely it benefit us... [P(5)-1/3/2019]

Table 1: Profile of study participants (n = 9)

Variables	Frequency = n (%)
Gender	
Male	5 (55)
Female	4 (45)
Ethnic	
Malay	5 (55)
Chinese	3 (33)
Indian	1 (12)
Qualification	
Matriculation	5 (55)
High School Certificate	4 (45)

Table 2: Findings of the study

Theme	Category
Internal characteristics	Intention
	Integrity
	Empathy
	Friendly
	Understandable
External characteristics	Skill
	Knowledge
	Accessibility

Empathy is the capacity to understand or feel what another person is experiencing from within the other being's frame of reference. It also refers as the capacity to place oneself in another's position. The result shows that empathy is a crucial element in becoming a good mentor. For instance, Participants 7 and 9 have stated as follows:

...yes. Because when went we see our lecturers, they said "You have to study like this.." and then we were scolded and when we were in our room, we were thinking about how we were scolded and we didn't have the mood to study anymore. Usually, it happened because we also get scolded in lectures sometimes. We want someone that can say "It's okay". Someone with knowledge in medical school but can feel our emotion too. [P(7)-20/3/2019]

In my opinion, the best mentor it will be of course, owning a characteristic of being caring and concern. That is a mentor job. That is a main purpose of them placing you as a mentor, to care and guide your mentees. Basically, the part where you have to be more concern on your mentees is the main one. They are actually depending on you. You could actually you should show them a guideline. [P(9)-23/3/2019]

Integrity is the quality of being honest and having strong moral principles; moral uprightness. It is generally a personal choice to hold oneself to consistent moral and ethical standards. In the context of the study, integrity is regarded as the mentors' commitment to their mentoring relationships. The result has shown that integrity is significant to be a good mentor. This finding has been supported by the following ideas:

Friendly and easy to talk. Good listener, good advisor and every good moral value (laugh). He's like someone who will understand us; the youngsters. Like ... (given a name of mentor), he understands. We are very lucky to have he as our mentor. [P(9)-18/2/2019]

I really agree with what all said just now. Like I said, every up and down that we have in our lives, the mentor will be the person who will be there for us no matter what happen. He's like someone that should be or must be there for us. [P(9)-8/3/2019)]

As the earlier components, friendly and understandable are also contributing factors in being an ideal mentor. This is consistent with the statement by participants 1 and 2:

I will find my friend first. So, for ideal medical doctor, I want someone that can be my friend so I will be comfortable with him. [P(2)-18/2/2019]

...a good mentor should be understandable where he or she could understand what the problems are faced by the students. He or she should be able to give a proper advice. They should actually put themselves into what the students are facing and come out with a good solution. [P(1)-2/2/2019]

In context of the present study, the external characteristics of mentors were defined as skills, knowledges and accessibility that mentors should have. It includes information of the subjects discussed with their mentees. Both components have been identified as important elements in order to be an ideal mentor. The following ideas fully supported the above statement.

If possible, we want a mentor that has a lot of experience with students or our mentor that used to be medical student. We want a mentor with such experience because he/she will know that student will be having the same problem. So he/she will know how to tackle and solve that problem. [P(4)-1/3/2019]

Yes. If possible, know everything about us like you know almost everything about your child. Especially for first year, we need more guidance. [P(7)-20/3/2019]

In context of the study, accessibility is referred as how mentees will be able to communicate with their mentors. This component is important in defining a good mentor. Participants 3 and 8 have proven this statement.

If possible, we want a doctor that can be approached easily and easy to spend time with. Sometimes, doctors are busy so we want someone that we can meet anytime [P(8)-12/3/2019]

...for sure I am able to meet my mentor. When I really need him/ her... maybe via the phone, etc, I need to share on what in my head and mind at that time... [P(3)-20/2/2019]

Mentor's background is not considered a criterion for a good mentor. This data has been addressed by Participants 3 and 5 as follows:

...no need. We don't really mind the background. If the mentor is from medical also can help, mentor not from medical also can help but in different perspectives. But it is okay either one. [P(3)-20/2/2019]

I think the background is not that important. What more important is that the mentor is willing to help his or her mentee or not. Even if you are medical based or not medical based, but you are not willing to help the mentees, no matter how pro are you in your background, the mentor still don't get anything right [P(5)-5/3/2019]

DISCUSSION

Mentoring sessions are essential mechanism to medical students to develop their competencies in various aspects so that the dream of becoming a good physician as stated by the government can be easily realised. Mentors and mentees themselves, that embarking concern characteristics in personal and professional components are necessary. As medical students who are still in professional training, these elements are significant to educate them so that they are not only competent in knowledge and skills but also excellent in soft skills. As primary factors in determining the success of mentoring activities, positive personality and high professionalism of mentors are strongly demanded. These components consist of positive attitude, volunteerism, commitment and integrity. By embarking those characteristics, mentoring programme becomes more meaningful, interesting and more importantly it is able to achieve the purposes of the mentoring programme This is consistent with a previous itself. whereby enthusiasm, compassion study and self-lenses are among the prominent elements for becoming an ideal mentor from the mentees' perspective (22). This finding also supported a previous study in which relationships, reciprocity and mutual respect are the items which have been contributing the effectiveness of the mentoring process. Also, other elements of the personal characteristics are also influencing the failure of mentoring (23). These are characterised by the lack of commitment and difference of personalities (5). Integrity is one of the personal feature components that significant for becoming the ideal mentor. This statement has been supported by Allen et al. (24) who have asserted that integrity is important component that the mentors should have. This is also similar with the study done by Propescu-Mitroni Maria-Monica and Mazilescu Cristina Alina (12) in which two of 11 of ideal mentor have been identified as significantly important factors in shaping the ideal mentors. As part of that, interpersonal warmth and ethical are important in becoming an ideal mentor (25). Empathy, understandable and friendly characteristics also play important role in order to produce an ideal mentor. Mentors who empathise their mentees are creatively initiated to understand their mentees' issues. They not only able become an academic mentor but also cover a broader aspect of mentees' spectrum of life. So, the mentoring programme will become a meaningful and professional relationship exercise.

External characteristics becomes a complementary for internal characteristics of becoming the ideal mentors. As found in the present study, knowledgably, experiences and accessibility are the obvious components that characterise the external features. These data are parallel with the previously study conducted by Bell-Ellison and Deidrick (26) which were found that knowledge in communication skills and

provision of feedback are crucial in defining the ideal mentor. Besides that, this data is also supported by statement that conducting mentoring ethically is a necessity. Those features are important in order to create a conducive environment of mentoring as it provides a comfortable zone to encourage a positive mentoring relationship.

This study provides a pool of characteristics of good mentors from mentees' perspective. It will be a guide for such group in order to become an excellent mentor. Therefore, school management should adopt these features to enhance personal and professional attribute of a mentor through staff development programmes. Meanwhile, at individual level, mentors are encouraged to use this guide to enhance their personal features when conducting mentoring relationship. In enhance the medical students mentoring organisation the following suggestion should be seriously considered; (i) The potential mentors must be carefully identified. High impact in internal and external characteristics are the main criteria in the mentors' selection process, and (ii) a specific professional training which focuses on the both components should be exposed to the selected mentors and mentees should be exposed on how to be a good protégé. Hopefully, the good mentees will create the good mentors.

CONCLUSION

In conclusion, the study on areas of mentoring relationship is significant as it has contributed a rich data regarding the field. These data are crucial to formulate a greater programme for its effectiveness. The present study is one of the important areas that should be focused by the researchers. Although the study has revealed a good information about the ideal mentors, it has few weaknesses. Since the study just targeted the first-year medical students, it is recommended to conduct another study for exploring the ideal mentors from clinical years' students' perspectives. Then,

the results can be compared among the constructs between two different group of the study but in the similar school.

A quantitative study that focuses the similar area is also suggested. The results of the quantitative study will be a completer to the qualitative finding. Besides that, the study of the ideal mentor from their perspectives are also preliminary considered. The results of the research can be designed in term of profile of the ideal mentors from mentees and mentors' perspectives. By doing so, they will be a meaningful framework in order to plan a professional programme to both parties. Also recommended is a further study to examine the effect of constructs of the ideal mentor to the mentees' satisfactions. As part of that, a correlation study between two variables is also recommended.

REFERENCES

- 1. Mat Nor ZM, Yusoff SBM, Abdul Rahim FA. Characteristics of mentoring programmes in the early phase of medical training at the Universiti Sains, Malaysia. J Taibah Univ Med Sci. 2017;12(4):343–8. https://doi.org/10.1016/j.jtumed.2017.01.003
- Mazurkiewicz R, Korenstein D, Fallar R, Ripp J. The prevalence and correlations of medical student burnout in the pre-clinical years: a cross-sectional study. Psychology, Health and Medicine. 2012;17(2):188–95. https://doi.org/10.1080/13548506.2011.597 770
- 3. Yusoff MSB, Abdul Rahim AF, Baba AA, Ismail SB, Mat Pa MN, Esa AR. Prevalence and associated factors of stress, anxiety and depression among prospective medical students. Asian J Psychiatr. 2013;6(2):128–33. https://doi.org/10.1016/j.ajp.2012.09.012
- 4. Seeto E-M. Professional mentoring in student affairs: evaluation of a global programme. J Student Aff Africa. 2017; 4(2):47–51.

- Kendricks KD, Nedunuri KV, Arment AR. Minority student perceptions of the impact of mentoring to enhance academic performance in STEM disciplines. J STEM Educ. 2013;14(2):38.
- Leggat SG, Balding C, Schiftan D. Developing clinical leaders: the impact of an action learning mentoring programme for advanced practice nurses. J Clin Nurs. 2015;24(11–12). https://doi.org/10.1111/ jocn.12757
- Cornelius V, Wood L, Lai J. Implementation and evaluation of a formal academic-peermentoring programme in higher education. Act Learn High Educ. 2016;17(3):193–205. https://doi.org/10.1177/1469787416654796
- Haeger H, Fresquez C. Mentoring for inclusion: the impact of mentoring on undergraduate researchers in the sciences.
 CBE Life Sci Educ. 2016;15(3):Article no. 36. https://doi.org/10.1187/cbe.16-01-0016
- Vladimirovna Sharapova N, Mikhailovna Sharapova V, Borisov IA. Mentoring as a method of staff training. In: Proceedings of the 31st International Business Information Management Association Conference, IBIMA 2018: Innovation Management and Education Excellence through Vision 2020; 2018
- Gisbert-Trejo N, Landeta J, Albizu E, Fernández-Ferrín P. Determining effective mentor characteristics in inter-organizational mentoring for managers: an approach based on academics' and practitioners' perspectives. Ind Commer Train. 2019;51(2):85–103. https://doi.org/10.1108/ ICT-06-2018-0051
- 11. Rose GL. Enhancement of mentor selection using the ideal mentor scale. Res High Educ. 2003;44(4):473–94.
- 12. Maria-Monica P-M, Alina MC. Students-teacher perspectives on the qualities of mentor-teachers. Procedia Soc Behav Sci. 2014;116:3559–63. https://doi.org/10.1016/j.sbspro.2014.01.802

- 13. Ashley Crossman. Purposive sampling: definition and types. Thoughtco.com; 2019.
- 14. Crossman A. Purposive sampling: definition and types. Thoughtco; 2017.
- 15. Guarte JM, Barrios EB. Estimation under purposive sampling. Commun Stat Simul Comput. 2006;35(2). https://doi.org/10.1080/03610910600591610
- Silverman D. (ed.). Qualitative research: theory, method and practice. London, Thousand Oaks, New Delhi: Sage Publication; 2004.
- Cresswell J. Research design: qualitative, quantitative, and mixed methods approaches. 4th ed. Los Angeles: Sage Publication; 2013.
- 18. Strauss AL, Corbin JM. Basic of qualitative research: grounded theory procedures and techniques. Sage Publication; 1990.
- Mahamod Z, Ishak NHM. Analisis Cohen Kappa dalam penyelidikan bahasa: satu pengalaman. Seminar Penyelidikan Pendidikan Guru Peringkat Kebangsaan Jan 2003; p. 1–7.
- 20. Mohd Ishak N, Abu Bakar AY. Developing sampling frame for case study: challenges and conditions. World J Educ. 2014;4(3):29–35. https://doi.org/10.5430/wje.v4n3p29
- 21. Landis JR, Koch GG. The measurement of observer agreement for categorical data. Biometrics. 1977;33(1):159–74. https://doi.org/10.2307/2529310
- 22. Cho CS, Ramanan RA, Feldman MD. Defining the ideal qualities of mentorship: a qualitative analysis of the characteristics of outstanding mentors. American Journal of Medicine. 2011;124(5):453–8. https://doi.org/10.1016/j.amjmed.2010.12.007

- 23. Straus SE, Johnson MO, Marquez C, Feldman MD. Characteristics of successful and failed mentoring relationships: a qualitative study across two academic health centers. Acad Med. 2013;88(1):82-9. https://doi.org/10.1097/ ACM.0b013e31827647a0
- 24. Allen TD, Eby LT, Poteet ML, Lentz E, Lima L. Career benefits associated with mentoring for proteges. J Appl Psychol. 2004;89(1):127–36. https://doi.org/10.1037/0021-9010.89.1.127
- 25. Bailey SF, Voyles EC, Finkelstein L, Matarazzo K. Who is your ideal mentor? An exploratory study of mentor prototypes. Career Dev Int. 2016;21(2):160–75. https://doi.org/10.1108/CDI-08-2014-0116
- 26. Bell-Ellison BA, Dedrick RF. What do doctoral students value in their ideal mentor? Res High Educ. 2008;49:Article no. 555. https://doi.org/10.1007/s11162-008-9085-8