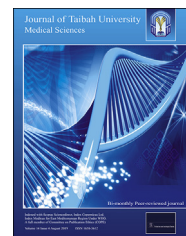




Taibah University
Journal of Taibah University Medical Sciences

www.sciencedirect.com



Original Article

Contribution of faculty development programmes to professional identity development of medical educators in Malaysia: A phenomenological study

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Received 15 April 2019; revised 1 June 2019; accepted 3 June 2019; Available online 5 July 2019



المخلص

أهداف البحث: يتم تطوير الهوية المهنية للأكاديميين من خلال العديد من المكونات، منها برامج تطوير أعضاء هيئة التدريس. تهدف هذه الدراسة إلى استكشاف كيف تساهم برامج تطوير أعضاء هيئة التدريس في تطوير الهوية المهنية بين اختصاصيي التعليم الطبي حديثي السن.

طرق البحث: أجريت دراسة الظواهر النوعية في ست كليات الطب العامة في ماليزيا خلال الفترة من ١٥ مارس إلى ١٥ إبريل ٢٠١٩. اشترك ١٠ من اختصاصيي تعليم طبي حديثي السن في هذه الدراسة. كما تم استخدام تقنية أخذ العينات الهادفة لتحديد المشاركين المؤهلين. وأجريت سلسلة من المقابلات شبه المنظمة لجمع المعلومات باستخدام بروتوكول مقابلة محدد مسبقاً. ثم تم تحليل البيانات التي تم جمعها باستخدام طرق الترميز المفتوحة، المحورية والانتقائية بمساعدة برمجيات.

النتائج: ثلاثة مواضيع (مثل النمو الشخصي، والنمو المهني والممارسة العاكسة الذاتية) وتسعة مواضيع فرعية (مثل الوعي الذاتي، والهدف، والرضا الداخلي، والمسيرة المهنية، والحفاظ على المهارات المهنية، واكتساب معرفة جديدة، وتحديد نقاط القوة، ونقاط الضعف، ومناطق التحسين) انتبقت من تحليل البيانات.

الاستنتاجات: أظهرت الدراسة أن تطوير الهوية المهنية يمكن تطويرها من خلال النمو الشخصي، والنمو المهني والممارسة العاكسة الذاتية. ينبغي لصانعي السياسات التركيز على هذه المميزات أثناء الحصص التدريبية المصممة للتطوير المهني لأعضاء هيئة التدريس.

الكلمات المفتاحية: برامج تطوير أعضاء هيئة التدريس؛ تطوير الهوية المهنية؛ اختصاصيي التعليم الطبي حديثي السن؛ كليات الطب العامة؛ دراسة الظواهر

Abstract

Objective: Professional identity development (PID) of academicians is triggered by numerous elements, including faculty development programmes (FDP). The study aims at exploring how FDPs contribute to PID among junior medical educationists.

Methods: A qualitative phenomenological study was carried out in six Malaysian public medical schools from 15th March to 15th April 2019. A total of 10 junior medical educationists participated in the study. A purposive sampling technique was utilised to select eligible participants. A series of semi-structured interviews was conducted to collect the data using a pre-determined interview protocol. The collected data were then analysed using open, axial, and selective coding methods assisted by ATLAS.ti software.

Results: Three themes (i.e. personal growth, professional growth, and self-reflective practice) and nine sub-themes (i.e. self-awareness, intention, internal satisfaction, career pathway, maintaining professional skills, acquiring new knowledge, identifying strengths and weaknesses, and areas for improvement) emerged from the data analysis.

Conclusion: The study showed that PID could be developed through personal growth, professional growth, and self-reflective practice. Policymakers should focus on these characteristics during training sessions designed for the professional development of their medical faculty staff.

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Peer review under responsibility of Taibah University.



Production and hosting by Elsevier

Keywords: Faculty development programmes; Junior medical educationists; Phenomenological study; Professional identity development; Public medical schools

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Introduction

A faculty development programme (FDP) is regarded as a coherent sum of activities targeted at strengthening and extending the knowledge, skills, and conceptions of teachers in a way that will change their way of thinking and actual educational behaviour.¹ From another standpoint, FDP focuses on the enhancement of an individual instructor's teaching skills, instructional development on students' learning, and organisational advance on the interrelationship and effectiveness of units within the institution.^{2,3} Likewise, FDP is also considered an effective instrument for facilitating university change⁴ and improving students' performance. Therefore, FDP can be summarised as a structured activity that encompasses an extensive range of events steered by both the faculty and the organisation³ in order to cultivate the professional development (PD) of its academic members in teaching, research, leadership, motivation, and administration.^{5–8} In this respect, academicians' professional identity is regarded as an ongoing process, and the negotiation of personal experiences is integral to this process. Thus, medical education must be provided to students in the context of training and professional practice in both clinical and non-clinical domains.^{9,10}

In the context of medical educators PD, unlike for other teachers, operates across a broader spectrum since its intention is to provide high quality service in patient welfare.¹¹ Thus, PD for such a group is specifically known as a gradual process of enhancing clinical competencies and non-clinical knowledge and skills. It will promote a future imminent physician who is tailored by the explicit goals of the medical education curriculum.^{12,13} Professional identity may be characterised in terms of: (1) personal identity, which is comprised of features such as an individual's history, experience, personalities, feelings, goals, and values; (2) role identity, which refers to one's assumed social or professional functions, activities, and responsibility; and (3) social identity, which is perceived as the commitment to the values and goals of specific groups. For medical teachers, professional identity encompasses all three dimensions. However, in the context of the present study, personal and role identity were emphasised as the central issues.

Currently, nine public medical schools are operating and subsidised by the government of Malaysia, seven of which operate in Peninsular Malaysia while Sabah and Sarawak host one in each state. In highlighting the FDP, these medical schools have employed a specific department or unit known as medical education that exclusively works to maximise clinician and non-clinician teachers' potential in various domains. The unit undertakes the planning, implementing,

and evaluating of the FDP in their respective schools. Consistent with its role as the backbone in managing FDP, such department or unit is headed by a senior lecturer and assisted by a few medical or/and non-medical educationists. The minimum qualification for these appointees is a second degree, or professional certificates in medical education. There are typically two categories of medical educationists in universities. Unlike their senior counterparts, junior medical educationists are associated with inclusive challenges in managing the FDP properly. In some situations they are uncertain whether to focus on their professionalism or manage the FDP. Thus, it will be interesting to examine the relation between FDPs and the formation of PID.

In the context of the present study junior medical educationists refers to individuals or a group of novice medical educationists who are less experienced and have had a shorter duration of service compared to experienced individuals or a group of lecturers who are yet to be promoted to associate professorship. They enter such a department with high motivation, perfect ideals, and a determination to be effective facilitators of their students' learning¹⁴ at the beginning of their career. However, motivation alone cannot eliminate some difficulties for newly-initiated teachers; lack of skills in teaching pedagogy and lack of peer support contribute to such a scenario. Thus, promoting knowledge and skills in teaching, research, and administration competencies through FDPs are crucial to them.^{15–22} In spite of the importance of the data, no study has been carried out to explore this aspect.

Apart from that, FDP is equally capable of cultivating motivation as well as the self-confidence of being a role model among medical teachers.^{23–25} At the same time, it also improves their academic leadership skills,²⁶ critical reflection,²³ knowledge and pedagogy skills,²⁷ abilities in designing curriculum, and competence in conducting research.²⁴ A study conducted to examine the effects of staff development programmes showed that the programmes had increased participants' knowledge and skills in collaborative learning and group discussion.²⁸

Despite emerging reports on the impacts of FDP on PID, little knowledge is available about the manner in which FDP contributes to the PID of such a group. Various prior studies have focused more on the impact of FDP on the personal and role identities of medical teachers rather than the ways in which it contributes to the process of PID. For these reasons, the objective of the study was to explore how FDP contributes to PID among junior medical educationists. The justification for conducting this study therefore stemmed from efforts to bridge the gap due to the dearth in studies exploring the contributions of FDP to the PID among medical educationists. It is also significant to examine such an area in order to provide a guide to planning an effective FDP for the target group.

Materials and Methods

A qualitative phenomenological study was utilised in this study. This type of design was chosen based on the following justifications: (i) using a small sample size; (ii) exploring how people experience a particular situation in the context of the study (i.e. FDP); (iii) using in-depth interviews to collect the

data; and (iv) practising open-ended questions to allow the participants to fully describe their own viewpoints.²⁹ Although the accurate number sample in qualitative study is still hotly debated, recruiting anywhere from five to 50 participants is seen as adequate.³⁰ A total of 10 full-time junior medical educationists from six Malaysian medical schools were recruited for the study. These were eight from four universities with the others providing one participant each. The selection of universities was made based on the maximal variation method.³¹ The variations can be seen in terms of year of establishment, facilities provided and academicians background.³¹

The participants of the study were chosen by using a purposive sampling technique method. This method is a selection of study participants based on the researcher's judgement in choosing the best and most useful sample to fulfil the research requirements.^{32,33} Based on these aspects, the inclusive criteria for the eligibility of participants in the study were that they must be full-time academicians in a school of medical science and have one to five years' experience teaching in such a school. They must also once involve in the FDP. Justifications for the choice were due to their involvement and having a rich data on FDP.^{34–36} In-depth interviews were used to collect the data³⁷ and these were conducted separately at the school of medical sciences in their respective universities after agreement between the researcher and the participants. The data collection process was conducted based on a guide developed previously, namely, the interview protocol. The interview protocol consists of four components: the introduction, main questions, probing questions, and the conclusion.³⁶ The first component functioned as the "warm up" questions before further conversation was initiated. The second and third components focused on the main and probing questions. Probing questions could be realised by using open-ended questions, for instance, "could you tell me how e-learning workshops can enhance teaching and learning processes" and finally, the fourth component contained the conclusion. Participants were requested to share input that had not been included in the previous conversation.

Throughout the sessions, tape recorders were used to ensure that all information gained from the interviews was recorded. The interviews continued until a saturation point was achieved. The data collection process lasted for over a month, from 15th March to 15th April 2019. A total of 10 interview scripts were gained, which were later analysed using ATLAS.ti software. Before commencing with the interview, each participant was briefed about their informed consent.

The collected data were then analysed through three steps: data management, understanding, and analysis of the data.³⁸ Management of data consisted of transcribing data from the tapes into verbatim output. Each transcript was given a code index. For instance; P-1, 15/3/2019; P-2, 15/3/2019; and P-3, 16/3/2019, which means P-1 = Participant number 1; with 15/3/2019 referring to the date the interview was conducted, which in this example would have been the 15th March 2019. Understanding of the data refers to reading the verbatim texts line by line and sentence by sentence to discover the concepts, ideas, and terminologies related to the research objectives. Lastly, data analysis was performed by using open, axial, and

selective coding techniques applied in the grounded theory method.^{39,40} Through these coding processes, a story that connected the sub-themes and themes around the core category was built, after which those relationships against the collected data were validated.

There are four aspects of trustworthiness in qualitative study, namely, credibility, transferability, dependability and confirmability.^{41,42} In order to ensure the credibility of the data, two measures were taken: triangulation, and awareness of researcher bias. First, triangulation. This study used environmental triangulation.⁴³ Since it was collected from different locations and settings, at different times on different days, the data obtained was more credible, which increases the credibility of the study as a whole. Second, researcher bias. To minimise the bias, the researcher asked three colleagues to review and verify the themes and sub-themes which had been obtained.

Transferability was obtained by thick description method.⁴⁴ In this research a thorough explanation of the data was presented concerning how FDPs impacted PID. An in-depth explanation provided by the researcher enabled the readers to draw their own personal conclusions concerning the outcomes of different settings or any similar context.⁴⁴

Dependability of the findings was confirmed through Cohen's kappa coefficient of agreement method. The researcher sets the degree level of the coding agreement after which coding is conducted by field experts.⁴⁵ This was performed by matching the list of themes and sub-themes with the operating definition to measure its dependability. For this purpose, the researcher named three expert panels whose task was to review and access the coefficient agreement of the themes in the contribution of the PID of junior medical educationists. After the review was complete, the researcher measured the agreement points in the form provided by the experts. The value given was 0.88, which is considered good (a value of around 0.75 marks strong agreement, 0.4 to 0.75 is average, while a value lower than 0.4 indicates low agreement).⁴⁶

Confirmability was found through the audit trail method, which involves establishing that the findings are based on participants' responses instead of the researcher's own preconceptions and bias. This method was conducted by asking individuals outside the research to check the narrative to determine its credibility.⁴⁷ The researcher has clearly reported in the audit trail his concerns regarding some aspects such as the justification of the present study, which was as a result of being inquisitive and an in-depth interest relating to PID among junior medical educationists.

Results

The objective of the study was to explore how FDPs contribute to the PID of junior medical educationists. A total of 10 medical educationists from six public Malaysian medical schools were interviewed to gain the required data, consisting of seven male and three female respondents, the majority of whom had three to five years' experience, while only two participants had worked for less than three years. They were seven non-clinicians and three clinicians and all participants were actively involved in teaching undergraduate and post-graduate students. Further information about the profile of the participants can be found in [Table 1](#).

Interestingly, the results show that the three themes which emerged from the data analysis indicate that the features which might contribute to PID among junior medical educationists are personal growth, professional growth, and self-reflective practice. The features of personal growth consist of three sub-themes: self-awareness, intention, and internal satisfaction. Professional growth features were characterised by three sub-themes: career pathway, maintaining professional skills, and acquiring new knowledge. Meanwhile, self-reflector features consisted of three sub-themes: identifying strengths, weaknesses, and areas for improvement (Figure 1).

Theme 1: personal growth

Personal growth features were characterised by three sub-themes as follows:

Sub-theme 1: self-awareness

In the context of medical educationists, self-awareness is their insight into how their emotional makeup influences their professionalism as an academician. All participants admitted that their self-awareness had become a catalyst in developing their personal and role identities as a medical educationist. For instance, participants 3 and 2 shared the statements below:

[...yes, I know who I am, I mean in terms of motivation, after joining such programmes, my motivation and spirit of becoming a good medical educationist is highly increased] P-3, 17/3/2019

[... so far very meaningful... activities (workshop) were well organised and impactful for my interest of being a medical educationist... after this, insha-Allah (god willing) I shall be more aware of my jobs] P-2, 13/3/2019

Sub-theme 2: intention

According to the theory of reasoned action, intentions are the proximal predictors of behaviour and mediate the influence of both the theory's predictors (attitudes and subjective norms) and extraneous variables (e.g. personality) on behaviour.⁴⁸ In this regard, some participants agreed that intention was important to boost their PID. The evidence is as follows:

Table 1: Profile of participants (n = 10).

Variables	Frequency (%)
Gender (n = 10)	
Male	7 (70)
Female	3 (30)
Background of field (n = 10)	
Clinician	3 (30)
Non-clinician	7 (70)
Year of teaching in the university (n = 10)	
3–5	8 (80)
<3	2 (20)
Engagement in FDPs (Session) (n = 10)	
10–15	3 (30)
5–10	5 (50)
1–5	2 (20)

[My intention is to be a good medical educationist and medical teacher in many things... for example, we taught students how to produce a good MCQ question last week, so I understood better about this] P-1, 15/3/2019

[...of course, my competency in teaching is also okay at the moment, however I still need help from my senior colleagues...] P-4, 19/3/2019

Sub-theme 3: internal satisfaction

Satisfaction is the act of fulfilling a need, desire, or appetite, or the feeling gained from such fulfilment. When asked about this aspect, the participants' responses were as follows:

[...I felt positive | satisfied after I joined a series of workshop, seminar, and other modes of FDP which were organised by the school ...it led me to work harder and in a systematic manner...] P-7, 26/3/2019

[Yes, yes, good performance, satisfied with the speakers and facilitators, they (were) able to make me feel comfortable in clinical teaching] P-3, 17/3/2019

Theme 2: professional growth

Sub-theme 4: career pathway

The study found that career pathway was a significant factor that contributed to PID. For example, participant 10 confirmed this fact in his statement as follows:

[...regarding the question, to me, we need high motivation and always practise a high interest in doing our jobs; as a junior lecturer and medical educationist...we need to plan for our bright future... we do not know our faith, it is possible to be a professor in our field...so this opportunity is an important platform for my future ...] P10-15/4/2019

Sub-theme 5: maintaining professional skills

Professional skills include the career competencies needed by an academician, such as leadership, mentoring, and programme management. In this regard one participant admitted that FDP had become a good platform for maintaining prior skills in teaching. The statement is as follows:

[before this (joining the medical education department) here, I was a temporary teacher... I have a little knowledge in teaching the biology subject ...through a two-day workshop, which was focused on the basic pedagogy skills and principles of adult learners, I become more confident to handle the lecture...I felt that I was receiving a continual professional development during the workshop.] P-9, 13/4/2019

Sub-theme 6: acquiring new knowledge

Knowledge is a familiarity, awareness, or understanding of someone or something, such as the facts, information, descriptions, or skills, which are acquired through experience or education via perceiving, discovering, or learning.

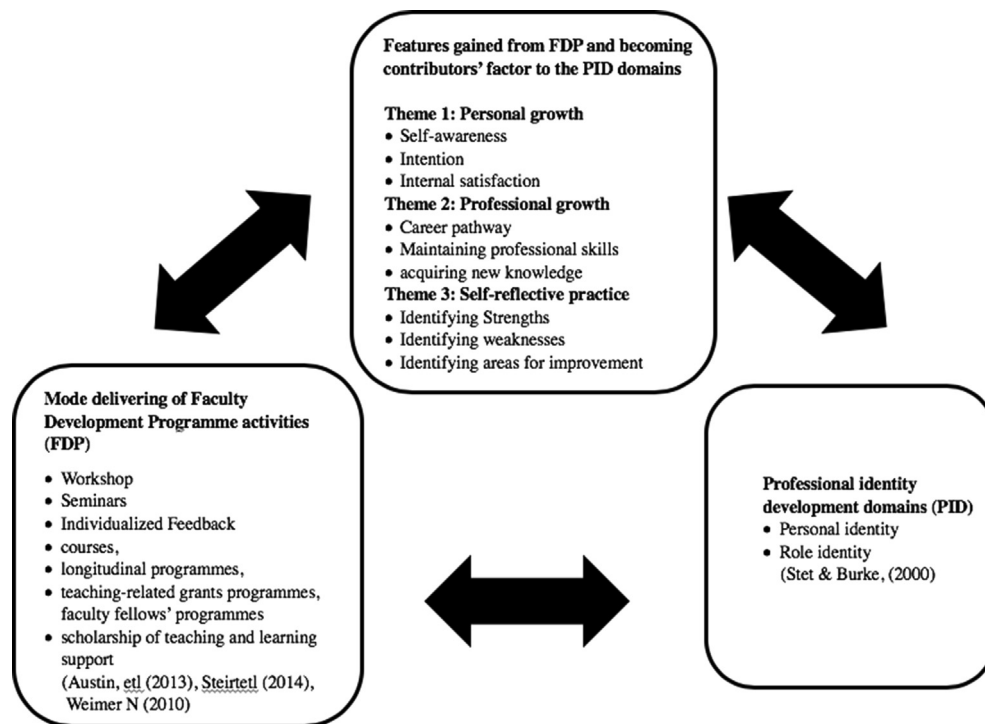


Figure 1: Connection between FDP, its features and PID.

When asked about the possible connection between knowledge and FDP, all participants admitted that there were strong connections between acquiring new knowledge and FDP. For instance, participants 1 and 8 shared their thoughts as follows:

[...ha, ha, ha ... really appreciate it...I've got new knowledge and skills in e-learning process from the last month's workshop on e-learning portal...] P-1, 15/3/2019

[...very nice programmes, through this (FDP), enabling me to capture the new knowledge. For example, in terms of clinical assessments, as a non-clinical lecturer, I know nothing about this. Now, alhamdulillah (praise to god) ...I have a little knowledge in assessing medical training; I knew and understood the meanings of SBQ, MCQ, short case and long case exam, and OSCE, ...I became motivated to be here... (in the medical education unit).] P-8, 10/4/2019

Theme 3: self-reflective practice

A self-reflector is someone who, at regular intervals, engages in a process of continuous learning with the view of changing him or herself, and also has a view on the change itself.⁴⁹ The study found that all participants of the study practised the act of self-reflection. According to their statements, self-reflection was important in order to gain a better understanding of their emotions, strengths, weaknesses, and areas for improvement in their routine. These themes emerged as three sub-themes as follows:

Sub-theme 7: identifying strengths

In this regard, two participants explained as follows:

[...I need to know my strengths and weaknesses of my practices, by understanding these advantages...I knew what I should do in the future, which is to enhance my clinical or non-clinical teaching skills...] P-7, 26/3/2019

[In terms of clinical knowledge, it is not a big issue for me, just continuing it in the new environment (teaching and learning environment)] P-5, 18/3/2019

Sub-theme 8: identifying weaknesses

When asked to share their ideas, all participants agreed that FDP was the best platform to identify their weaknesses. This statement was consistent with participants 10 and 7's thoughts as follows:

[I am concerned about this (weakness)... because I am new in the teaching profession, I... accept my shortcoming(s). Importantly, I knew what are the aspects that I need to upgrade...] P-10, 15/4/2019

[Very clear, through seminars, workshops and other activities I attended ...I knew many aspects that I need to upgrade/polish (laugh...)...especially utilising a quality PowerPoint slide during lectures...my knowledge on this aspect is poor...hence, I need to look at a specific activity on how to enhance this skill...apart from that emmm... e-learning portal... this is also new for me] P-7, 26/3/2019

Sub-theme 9: identifying areas for improvement

The study supported that the FDP contributed to the efforts to enhance the skills and knowledge in medical education. This concept aligned with the ideas below:

[I have around 30 years more of service ...meaning that I have a long journey for my career, so I do the best by optimising my talent from time to time ... enhancing the knowledge and skills in teaching experience is my target. One of the ways is to involve myself in FDP organised by the school (medical sciences)] P-9, 13/4/2019

[As I have mentioned before, technical matters are areas that I need to learn more (about)... from the previous workshops I understood that... (I had) low knowledge in the student-centred approach, so next time (in the coming workshops) I must join such activities] P-10, 15/4/2019

Discussion

The emergence of three themes and nine sub-themes to describe the role of FDP in boosting PID among junior medical educationists has differentiated the present study from others as similar research has previously not been conducted. Generally, the results of the study are consistent with the current challenges to produce eminent medical educationists, as required by medical schools.⁵⁰ Those who are well-schooled in self-awareness, and who have the right intention and internal satisfaction are definitely linked with having a solid professional identity. The evidence here supports the findings of Ten Cate²¹ whereby self-awareness is significant in developing respectable medical educationists and medical teachers through best practices in planning, implementing and evaluating educational matters properly.^{28,51} As a result, they gradually master the domains of teaching, administration, and research. These findings are also aligned with previous studies.^{23,28}

High motivation and skilful strategic planning are important factors to determine the success of these workers. A similar principle is also applied in medical education, whereby

junior medical educationists need to plan their 'bright future' in the long-term journeys of their service. This evidence supports the study conducted by Behar-Horenstein LS.²³

Professional identity development is also tailored by the intention to maintain one's prior professional skills. As was echoed by the participants, the aim is to keep up with their skills in order to understand with sufficient depth: (i) the principles of adult learning; and (ii) a student-centred learning approach. Apart from that, excellence in conducting research is also part of the professional skills on which medical educationists need to focus. This finding is consistent with the findings by Davis²⁴ and Lim.²⁸

It is expected and necessary that newcomers (i.e. medical teachers) master certain knowledge and skills. The latest knowledge in teaching skills is important in order to produce professional medical educationists or medical teachers, who will then steer their PID by constructing their capabilities for classroom management, teaching aids, and maximised e-learning competency. The importance of these skills has been admitted by medical teachers as was found in previous studies.^{22,28,51}

Unlike the first two themes, the self-reflective practice feature indirectly contributes to the PID of junior medical educationists. It acts as a checking mechanism in redefining a further need for FDP in their journey towards becoming a successful medical educationist. This finding is consistent with a study which found the reflective thinking component to be a part of the medical teacher development framework.⁴⁹ Through reflection, teachers, especially juniors, can create a constructive platform in order to assess the strengths and weaknesses of their teaching skills, which will then compel them to aim for quality improvement in classroom management.⁵² In response to the discoveries of the study, a circle of three constructs that connects each has been developed (see Figure 2). The constructs are FDP, its contributors, and the domains of PID.

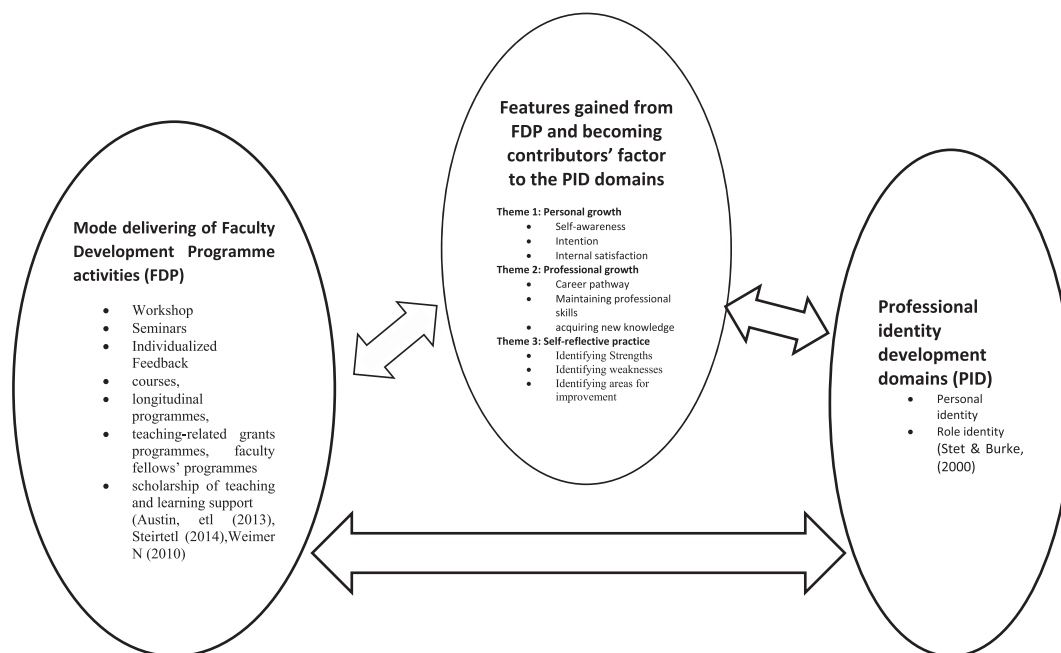


Figure 2: Connection between FDP, its features and PID.

Despite the emergence of the findings, this study is not without its limitations. First, since it is a qualitative study, its outcome cannot be generalised to all medical educationists in Malaysian medical schools. Second, the study only focused on junior medical educationists. In consideration of these limitations, it is recommended that the following ideas be materialised in future studies: (i) quantitatively studying all employees involved as medical educationists in public and private medical schools in Malaysia; and (ii) approaching senior medical educationists to participate in the study. These studies will be significant to compare the similarities and differences between the potential findings.

Conclusion

It can be concluded that the results of this study properly answered the research objective in which the development process of professional identity among junior medical educationists was contributed to by three features (i.e. personal growth, professional growth, and self-reflective practice features), and nine sub-themes (i.e. self-awareness, intention, internal satisfaction, career pathway, maintaining professional skills, acquiring new knowledge, identifying strengths and weaknesses, and areas for improvement). For this reason, the body of authority related to staff development programmes should seriously consider the inclusion of these features when planning for FDPs, especially for junior medical educationists and medical educators. It is important to empower medical educationist competencies so that this group of professionals is able to serve effectively.

Source of funding

This study did not receive any financial support.

Conflict of interest

The author have no conflict of interest to declare.

Ethical approval

This study was approved by the USM ethic committee (USM/JEPeM/18120790) and all participants voluntarily participated in this study by signing consent forms prior to the start of the study.

Acknowledgment

The author would like to thank the head of department of medical education for his continued support in completing this study.

References

1. Newman M, Reeves S, Fletcher S. Critical analysis of evidence about the impacts of faculty development in systematic reviews: a systematic rapid evidence assessment. *J Continuing Educ Health Prof* 2018; 38: 137–144.
2. Austin AE, Sorcinelli MD. The future of faculty development: where are we going? *N Dir Teach Learn* 2013; 2013: 85–97.
3. Steinert Y, Naismith L, Mann K. Faculty development initiatives designed to promote leadership in medical education. A BEME systematic review: BEME Guide No. 19. *Med Teach* 2012; 34: 483–503.
4. Jolly B. *Faculty development for organizational change. Faculty Development in the Health Professions*. Springer; 2014. pp. 119–137.
5. Guraya SY, Chen S. The impact and effectiveness of faculty development program in fostering the faculty's knowledge, skills, and professional competence: a systematic review and meta-analysis. *Saudi J Biol Sci* 2017; 26(4): 688–697.
6. Mukhtar F, Chaudhry AM. Faculty development in medical institutions: where do we stand in Pakistan? *J Ayub Med Coll Abbottabad* 2010; 22: 210–213.
7. Kwan D, Barker K, Richardson D, Wagner S, Austin Z. Effectiveness of a faculty development program in fostering interprofessional education competencies. *J Res Interprofessional Prac Educ* 2009; 1.
8. Kwan D, Barker KK, Austin Z, et al. Effectiveness of a faculty development program on interprofessional education: a randomized controlled trial. *J Interprofessional Care* 2006; 20: 314–316.
9. Chow CJ, Byington CL, Olson LM, Ramirez KPG, Zeng S, López AM. A conceptual model for understanding academic physicians' performances of identity: findings from the university of Utah. *Acad Med* 2018; 93: 1539–1549.
10. Wald HS. Professional identity (trans) formation in medical education: reflection, relationship, resilience. *Acad Med* 2015; 90: 701–706.
11. Singh T, Bansal P, Sharma M. A need and necessity for faculty development: the role of medical education units in the Indian context. *South East Asian J Med Educ* 2008; 2: 2–6.
12. Goldie J. The formation of professional identity in medical students: considerations for educators. *Med Teach* 2012; 34: e641–e648.
13. Kalet A, Buckvar-Keltz L, Monson V, et al. Professional Identity Formation in medical school: one measure reflects changes during pre-clerkship training. *MedEdPublish* 2018; 7.
14. Scherer M. *A better beginning: supporting and mentoring new teachers*. ASCD; 1999.
15. Leslie K, Baker L, Egan-Lee E, Esdaile M, Reeves S. Advancing faculty development in medical education: a systematic review. *Acad Med* 2013; 88: 1038–1045.
16. Chou CL, Hirschmann K, Fortin AH, Lichstein PR. The impact of a faculty learning community on professional and personal development: the facilitator training program of the American Academy on Communication in Healthcare. *Acad Med* 2014; 89: 1051–1056.
17. Fleming GM, Simmons JH, Xu M, et al. A facilitated peer mentoring program for junior faculty to promote professional development and peer networking. *Acad Med* 2015; 90: 819.
18. Frantz JM, Bezuidenhout J, Burch VC, et al. The impact of a faculty development programme for health professions educators in sub-Saharan Africa: an archival study. *BMC Med Educ* 2015; 15: 28.
19. Jones M, Schuer KM, Ballard JA, Taylor SA, Zephyr D, Jones MD. Outcomes of an immersive pilot faculty development program for interprofessional facilitation: a mixed methods study. *J Interprofessional Educ Prac* 2015; 1: 83–89.
20. Scarbez M, Russell CK, Shreve RG, Robinson MM, Scheid CR. Faculty development to improve teaching at a health sciences center: a needs assessment. *J Dent Educ* 2011; 75: 145–159.
21. ten Cate O, Mann K, McCrorie P, Ponzer S, Snell L, Steinert Y. Faculty development through international exchange: the IMEX initiative. *Med Teach* 2014; 36: 591–595.

22. Gjerde CL, Hla KM, Kokotailo PK, Anderson B. Long-term outcomes of a primary care faculty development program at the University of Wisconsin. **Fam Med** 2008; 40: 579–584.
23. Behar-Horenstein LS, Childs GS, Graff RA. Observation and assessment of faculty development learning outcomes. **J Dent Educ** 2010; 74: 1245–1254.
24. Davis BP, Clevenger CK, Posnock S, Robertson BD, Ander DS. Teaching the teachers: faculty development in inter-professional education. **Appl Nurs Res** 2015; 28: 31–35.
25. Thompson BM, Searle NS, Gruppen LD, Hatem CJ, Nelson E. A national survey of medical education fellowships. **Med Educ Online** 2011; 16: 5642.
26. Zheng M, Bender D, Nadershahi N. Faculty professional development in emergent pedagogies for instructional innovation in dental education. **Eur J Dent Educ** 2017; 21: 67–78.
27. Sarikaya O, Kalaca S, Yeğen BÇ, Cali S. The impact of a faculty development program: evaluation based on the self-assessment of medical educators from preclinical and clinical disciplines. **Adv Physiol Educ** 2010; 34: 35–40.
28. Lim L, Choy L. Preparing staff for problem-based learning: outcomes of a comprehensive faculty development program. **Int J Res Stud Educ** 2014; 3: 53–68.
29. Giorgi A. The descriptive phenomenological psychological method. **J Phenomenol Psychol** 2012; 43: 3–12.
30. Mason M. *Sample size and saturation in PhD studies using qualitative interviews*. Forum qualitative Sozialforschung/ Forum: qualitative social research; 2010.
31. Patton M. *Qualitative research and evaluation methods*. Thousand Oaks: CAL: Sage; 2015. 2002.
32. Babbie ER. *The basic of social research*; 2002.
33. Silverman D. *Doing qualitative research: a practical handbook*. SAGE publications limited; 2013.
34. Marshall T, Rapp CA, Becker DR, Bond GR. Key factors for implementing supported employment. **Psychiatr Serv** 2008; 59: 886–892.
35. Patton MQ. Qualitative interviewing. **Qual Res Eval Meth** 2002; 3: 344–347.
36. Creswell J, Plano Clark V. *Designing and conducting mixed method research*. Thousand Oaks, CA: 2nd Sage; 2011.
37. Bowen GA. Document analysis as a qualitative research method. **Qual Res J** 2009; 9: 27–40.
38. Nor MZM. The process of practicum supervision on guidance and counselling teachers in primary school: a case study. **Educare** 2016; 9.
39. Creswell JW, Plano Clark VL, Gutmann ML, Hanson WE. *Advanced mixed methods research designs*In **Handbook of mixed methods in social and behavioral research**, vol. 209; 2003. p. 240.
40. Harrell MC, Bradley MA. *Data collection methods. Semi-structured interviews and focus groups*. Rand National Defense Research Inst santa monica ca; 2009.
41. Given LM. *The Sage encyclopedia of qualitative research methods*. Sage publications; 2008.
42. Shenton AK. Strategies for ensuring trustworthiness in qualitative research projects. **Educ Inf** 2004; 22: 63–75.
43. Guion L. *Triangulation: establishing the validity of qualitative studies*; 2002 <http://edisifasedu>.
44. Lincoln YS, Guba EG. Establishing trustworthiness. **Nat Inq** 1985; 289: 331.
45. Ishak N. *Kajian Kes dalam Penyelidikan Pendidikan*. Kuala Lumpur: McGraw Hill Education; 2010.
46. Landis J, Koch G. The measurement of observer agreement for categorical data *Biometrics*. 1977; 33: 159–174. **Public Health Genom** 2016; 19: 342–351.
47. Nor MZM. Supervisors' practice in conducting supervision on guidance and counselling teachers in primary school. **ATIKAN** 2014; 4.
48. Sheeran P. Intention—behavior relations: a conceptual and empirical review. **Eur Rev Soc Psychol** 2002; 12: 1–36.
49. Nguyen QD, Fernandez N, Karsenti T, Charlin B. What is reflection? A conceptual analysis of major definitions and a proposal of a five-component model. **Med Educ** 2014; 48: 1176–1189.
50. Phuong TT, Cole SC, Zarestky J. A systematic literature review of faculty development for teacher educators. **High Educ Res Dev** 2018; 37: 373–389.
51. Rahal B, Mansour N, Zaatari G. Towards developing a sustainable faculty development program. **Leban Med J** 2015; 63: 213.
52. Jamil FM, Hamre BK. Teacher reflection in the context of an online professional development course: applying principles of cognitive science to promote teacher learning. **Action Teach Educ** 2018; 40: 220–236.

How to cite this article: Nor MZM. Contribution of faculty developmental programmes to professional identity development of medical educators in Malaysia: A phenomenological study. *J Taibah Univ Med Sc* 2019;14(4):324–331.