AMERICAN UNIVERSITY OF BEIRUT

A SYSTEMATIC APPROACH FOR ESTABLISHING A COMPETENCY-BASED MENTORSHIP PROGRAM FOR ACADEMIC PHYSICIANS

by
NABIL MAHMOUD MANSOUR

A project
submitted in partial fulfillment of the requirements
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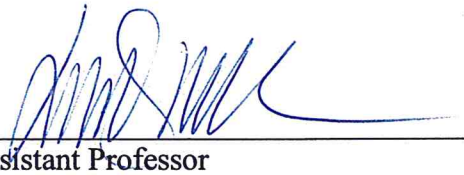

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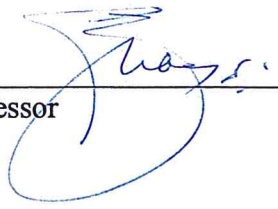

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DEDICATION

To my parents, "وقل ربيّ ارحمهما كما ربّياني صغيرا"

To Itimad…without your love, dedication, and encouragement, this project wouldn't have been possible; and so is my life…simply, I love you.

To Luna and Mahmoud…you are the joy of my life, and the ones who provided me with the opportunity to be an utterly proud dad. I love you guys no matter what!

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AN ABSTRACT OF THE PROJECT OF

Nabil Mansour for Master of Human Resource Management

Major: Human Resource Management

Title: A Systematic Approach for Establishing a Competency-Based Mentorship Program for Academic Physicians

Developing academic physicians is one of the challenging goals for academic healthcare centers and physicians, especially in the absence of mentoring program and institutional support. Research findings reported that medical doctors who choose a career in academic medicine face challenges in fulfilling their new roles, mainly because they were trained on how to treat patients, but not on how to fulfill academic roles in teaching and research.

The findings of this research illuminated the importance of defining a competency model for academic physicians, and suggested stratifying the activities into supporting activities and function-specific ones. It is proposed to establish a value chain model for a mentoring academy for academic physicians "MAAP", as a business model targeting to develop the essential knowledge, skills and behaviors for academic physicians to fulfill their roles successfully; it also aims to provide the institution with return on its investment in such a program. For successful implementation of "MAAP", it is suggested to: 1) provide institutional resources, protected time and funding (Milner et al., 2011); 2) have the commitment of the leadership through direct participation and involvement in the program; 3) have the willingness and acceptance of junior academic physicians to join this program (Milner); 4) have the tools and ability to measure the program outcomes, through career progression of junior academic physicians, patients' satisfaction, research productivity measured through quantitative and qualitative indicators; and finally, 5) holding junior academic physicians accountable for fulfilling the requirements of the program.

Following are the prospective incentives for junior academic physicians to join the suggested mentoring academy: 1) integrating the program with an academic degree; 2) full sponsoring of this program by the institution; 3) link the outcomes of the program to professional development and career advancement.

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CHAPTER I

INTRODUCTION

Ever since the Greek king Odysseus chose “Mentor”, his trusted friend, to educate and tutor his son when he left for the Trojan War 2600 years ago (Berk, Berg, Mortimer, Walton-Moss, & Yeo, 2005), the term “Mentor” has been commonly used to describe a person who “may act as a facilitator, coach, counselor, sounding board, critical friend, networker, or role model” (Steele, Fisman & Davidson, 2013, p. e1130). Although the term has been broadly used in academic medicine, “Mentor” itself still has neither clear common definition, nor clear outcomes of its relationships (Berk et al.).

Developing academic physicians is one of the challenging goals for academic healthcare centers, which facilitates career management and preventing career overturn (Bickel & Brown, 2005). Thorndyke, Gusic, George, Quillen, and Milner (2006) reported that for medical centers to grow, junior faculty should be nurtured, mentored, and retained. Additionally, while academic physicians are typically trained on developing strong clinical skills, the roles they end up assuming in healthcare organization are multi-faceted (i.e. education, research, clinical and administrative services). The pre-graduate clinical years and post-graduate training programs provide students and trainees with the opportunity to learn from their role models through what can be referred to as “hidden curriculum”, which arose as an effective model in medical education (Lempp & Seale, 2004). This provides an informal opportunity to guide and teach junior trainees the main focus of medical schools and post-graduate training

curricula necessary for developing the clinical skills of their graduates. Harris, Krause, Parish, and Smith (2007) stated that medical doctors who choose a career in academic medicine face challenges in fulfilling their new roles, mainly because they were trained on how to treat patients, but not on how to fulfill academic roles in teaching and research.

Evidence from the literature supports the importance of mentoring junior academic physicians (Kashiwagi, Varkey, & Cook, 2013), although the form and purpose, type, and mentoring relationship differ from one center to another (Gray & Armstrong, 2003; DeAngelis, 2004). Pursuing a career in academic medicine as such, proved to be challenging, especially in the absence of mentoring program and institutional support (Borges, Navarro, Grover, & Hoban, 2010; Milner, Maryellen, & Thorndyke, 2011). While it could be argued that mentorship plays a vital role in filling the gap in academic physicians' professional development (Sambunjak, Straus, & Marusic, 2006), finding a mentor and maintaining a productive mentoring relationship can be challenging (Chew, Watanabe, Buchwald, & Lessler, 2003; Jackson et al. (2003). Sambunjak, Straus, and Marusic, 2010 documented that successful mentoring entails a nourishing and supportive environment at the institutional level, as well as the pledge and skills of both mentors and mentees at the same time. In order to overcome this challenge, DeCastro, Sambuco, Ubel, Stewart, and Jagsi, 2013 emphasized the critical role of creating a network of mentors on career development, rather than focusing on identifying a mentor for every junior faculty.

In this study, the following steps were systematically followed in developing this model of a mentorship program for academic physician: 1) Developing a competency model for academic physicians; 2) Assessing the gaps and needs for junior academic physicians to fulfill their multifaceted roles; 3) Establishing a framework for the mentorship program.

In light of the above, the objective of this study revolves around finding the best answers to the following two questions:

1. What characterizes the best academic physicians?
2. What is the most suitable framework of a mentorship program for junior academic physicians that take into consideration their needs at each career stage?

CHAPTER II

LITERATURE REVIEW

I. What is the importance of developing a competency model for academic physicians?

Mentoring in academic medicine exclusively involves adults in its processes, and thus embarking on adult learning principles in developing mentoring programs is highly recommended. Teaching adults is not only about designing and teaching relevant materials, but rather adults should be managed with extreme caution, considering the rich personal and work experience that they bring to the classroom (Phillips, 2011). It may be argued that adult learners have clear objectives and expectations in mind about what they would be learning, and more specifically, they are well aware of the applicability of the learned material in their work settings (Phillips). However, including adragological principles alone is not enough for maximizing adult learning. Conducting a thorough needs assessment before designing the material is crucial for solving or improving performance, because problems might not necessarily stem from lack of knowledge and skills (Chevalier, 2011).

Junior faculty members' knowledge and skills are shaped by pre-graduate clinical and post-graduate training programs; however, the main objectives of these programs remain in preparing qualified physicians, and not necessarily academic ones. Stigler, Duvivier, Weggemans, and Salzer (2010) in this regard, illuminated that "based on the understanding that the ultimate goal of health professionals' education is to

improve the health of society." Iobst et al. (2010) on the other hand, reported that "at the core of competency-based medical education in post-graduate medical education is the requirement that learners demonstrate competence in the application of their learning to patient care. Abrahams and Bacon (2011) mentioned that "While most medical schools have a social mission and recognize their responsibility to prepare physicians to improve patient health, there continue to be gaps between the aspirations of students who enter PGME, workplace opportunities for them and population health needs". Milner et al. (2011) proposed defining a competency model for academic physicians that could provide faculty with clear expectations, and respond to their needs at different career stages. They added that, academic physicians face many challenges for seeking career guidance. As such, there is gap between the knowledge and skills that physicians acquired by training, and the multifaceted future roles that they are expected to fulfill.

To tackle this dilemma, it is essential to define the competencies required by the academic physicians to fulfill their multifaceted roles. This can in turn be used as the building blocks of a mentorship framework that focuses on the career progression and development of academic physicians. This will help bridging the gaps in knowledge, skills and behaviors, help physicians achieve their personal and professional goals, and help healthcare centers to maintain their competitive advantages in retaining their healthcare providers and providing the best healthcare services. The competency model in this sense can provide a solid base for assessing the needs, developing mentoring and training programs, conducting performance evaluation, and monitoring career progression.

The competency-based approach is derived from a systematic analysis of professional roles and conversion of these roles into key-anchored behaviors helps in recruitment, performance assessment, as well as training and development (Leung, 2002). This approach has the potential to lead into a more individualized and tailored training and provide transparency and accountability in assessing performance. However, if applied inappropriately, it might lead to demotivation since it focuses on standardized behaviors and increase administrative bureaucracy (Leung). Several authors have ventured into exploring competencies for physicians and some similarities can be found among their findings; yet, this area still requires a lot of development before concretely and accurately generalizing across contexts. For example, Harris et al. (2007) identified eight competencies for family medicine faculty members: leadership, administrative, teaching, curriculum development, research, medical informatics, care management, and multiculturalism. On the other hand, Fleming et al. (2013) defined a competency model for research mentors, with the following competencies emerged: communication, expectations, understanding, independence, diversity, and professional development. Fleming et al. also identified 26-item skills to evaluate the above six competencies of the research mentors. Patterson et al. (2000) identified a competency model for general practitioners using a triangulation method. The model consists of eleven competencies: empathy and sensitivity, communication skills, clinical knowledge and expertise, conceptual thinking and problem solving, personal attributes, personal organization and administrative skills, professional integrity, coping with pressure, managing others and team involvement, legal-ethical-and political awareness, learning and personal development. The reliance on a competency model can

potentially allow for the proper assessment of training and development needs of general practitioners, and works as guidance for personnel management activities.

Though several attempts to define the competencies of academic physicians in their different roles have been conducted; to our knowledge, none of them were conducted in contexts outside North America and Europe. Considering the cultural differences between the USA and the Middle East, exploring the competencies that define the role of academic physicians in a teaching institution in the Middle East has the potential of uncovering some underlying cultural differences. More importantly however, the literature around competency modeling and focusing on soft as well as hard skills among academic physicians can be described as underexplored and requires further attention.

II. What are the most common forms of mentorship programs in academic medicine?

In their systematic review, Kashiwagi et al. (2013) documented seven mentoring models in academic medicine described in literature, namely: dyad, peer, facilitated peer, speed, functional, group, and distance mentoring.

a. Dyad mentoring: is the traditional hierarchical and most common form of mentoring relationship between the senior and expert mentor, and the novice and less experienced mentee, where a power distance relationship exists, or “a relationship in which a senior individual works to promote the career of a more junior individual” as defined by Jackson et al. (2003, p. 329).

b. Peer mentoring: Bussey-Jones et al. (2006, p. 675) described peer mentoring model as “a group of individuals who are essentially equal in age, experience, and rank mentor each other. Because of inherent equality among group members, relationships are more mutual, and ideally, each participant has something of value to contribute and gain.”

c. Facilitated peer mentoring: or collaborative mentoring program was described by Pololi and Knight, 2005, p. 868 as a model where “participants come to recognize, value, and ultimately rely upon the wisdom and diverse expertise of their peers”, and where the group is coordinated by a facilitator whose role is to ensure “a safe and respectful learning environment, foster peer collaboration, and redirect the group to draw upon their own experiences and reactions to address each other’s needs and concerns.”

d. Speed mentoring: is mainly used to help mentors and mentees dating for a short period of time that helps mentees efficiently try out interpersonal relationships and ultimately initiate mentoring relationships, as suggested by (Cook, Bahn, & Menaker, 2010). This form of mentorship promotes building networks in absolutely no considerable time.

e. Group mentoring: Research argued replacing a dyad mentoring with a group mentoring form, where mentee learn from a group of mentors based on the competencies that they want to build, and depending on their career stage and career progression, rather than depending on one single mentor. They also argued that considering the rapid changes in technology, shifting organizational structures, and global market, mentoring process extends beyond the services of a single mentor (DeCastro, Sambuco, Ubel, Stewart & Jagsi, 2013; De Janasz, Sullivan, & Whiting,

2003). Another research literature found that a group peer collaborative mentoring model that entrench the basis of adult learning, would yield to measurable mentoring outcomes, both for women and men in academic medicine (Pololi and Knight, 2005).

f. Distance mentoring: is the situation, where mentor or group of mentors is located in a different geographical location, country, or institution than the location of the mentee.

g. Functional mentoring: is the pairing of a mentee with a mentor who has specific expertise for guidance on a defined project (Thorndyke, Gusic, & Milner, 2008)

III. Why developing a mentorship program for junior academic physicians?

Many research studies highlighted the importance of mentoring in career and personal development of mentees; however, with little evidence about the implication of not providing junior faculty with mentoring. For example, Jackson et al. (2003) reported many disadvantages for not having a mentor, of which, having lower salaries, less publications, and having harder times learning the “rules of the game”, and that by the time they learn these rules it would be too late for them. They also described mentoring as an “academic parenting” when mentors support the personal and professional growth of their mentees and provide them with an academic coaching, guidance, motivation, and strategic advice.

Garand et al. (2010) stressed the importance for academicians to maintain continuous professional growth and productivity at all career stages, despite the fact that they are challenged to keep the right balance between their multifaceted roles in research, scholarly activities, teaching and service responsibilities. ”. Similarly, Borges

et al. (2010) argued that considering the current environment of practicing medicine, starting from the funding structure and ending with the burden on physicians to earn their own income, the three customary organizational values and academic physicians' roles in teaching, research, and clinical activities are competing with each other. On one hand they questioned whether academic physicians can still play the triple roles oriented to patient care, teaching, and research successfully in the current environment. On the other hand they emphasized the crucial role that the structured mentoring programs play in supporting and developing the future physicians who choose a career in academic medicine.

CHAPTER III

METHOD

The purpose of this qualitative study is to define a competency model for academic physicians operating in the Middle East area, in an attempt to establish a framework for a competency-based mentorship program for academic physicians. The competency model can be used as a basis for selection, development and training, mentoring, and evaluation of academic physicians. For the purpose of this study, data was collected from 25 academic physicians who currently hold leadership positions. Interviews were conducted to collect data; whereas semi-structured questions and critical incident technique have been used for data triangulation. The participants consented to the study in writing and voluntarily agreed to participate in the study, to tape the interview, and to be quoted anonymously. A copy of the written and signed consent, shown in Appendix IV, was given to each participant, and another copy was coded and kept for records pertaining to this study. Interviews were taped and transcribed; main themes were identified, classified, and then grouped into broad categories. Template analysis techniques were used to explain the data and define the competency model for each of the different roles of academic physicians. A framework for a competency-based of a mentorship program was then developed, taking into consideration the needs of academic physicians at each career stage.

I. Sampling Strategy and Data Collection

A list of 86 assistant professors and academic and clinical administrators (17 females, and 69 males), who were employed at the Faculty of Medicine and Medical Center of the American University of Beirut between December 2013 and February 2014, age range 28-64 years, was provided to an honest broker, who randomly selected the targeted participants, and based on the following inclusion criteria:

i. 28 randomly selected academic physicians who hold the rank of assistant professor, 14 females, and 14 males.

ii. 25 randomly selected academic and clinical administrators who were serving in the capacity of dean, associate deans, chairpersons of academic departments, medical center director, and chief of medical staff, represented by 3 females and 22 males.

The characteristics of the participants are shown in Table 1.

Table 1: The characteristics of the selected participants

Category	Total Population	Average Years in Academic Rank	Average Age	Invited to Participate	Interviewed	Response Rate
Assistant Professor	**57**	**3**	**40**	**28**	**13**	**46%**
Female	14	4	41	14	5	36%
Male	43	2	40	14	8	57%
Administrator	**29**	**8**	**55**	**25**	**12**	**48%**
Female	3	2	47	3	3	100%
Male	26	8	56	22	9	41%
Grand Total	**86**	**4**	**45**	**53**	**25**	**47%**

All 53 selected participants were contacted through an email sent by the student on behalf of the principle investigator. The email stated clearly the research nature of the project, the voluntary type of participation, the mechanism of conducting 30-40

minute interviews, the confidentiality of collected data, and the assurance of disguising the identities of the participants and to remove any identifiers that could be linked in any way to the participants. After one week from sending the first email, a reminder email was sent to selected participants who have not responded to the first email. The script of the email is shown in Appendix I, and the script of the reminder email is shown in Appendix II.

Of the 53 participants, 25 responded (response rate = 47%) represented by 32% female respondents (5 assistant professors and 3 administrators), and 68% male respondents (8 assistant professors and 9 administrators). The average age of female participants was 42 years old, and the average age of the male participants was 50 years old.

II. Semi-Structured Open-Ended Questions Interview

The interview was designed to collect data using the semi-structured open-ended questions and the critical incident technique, shown in Appendix III, for the sake of data triangulation. The questions and the interviews were available and conducted in English language only, as this is the language of instruction in the program.

The interview targeted collecting data on each of the four themes and roles of an academic physician: teaching, clinical, research, and administrative activities. The purpose of using semi-structured open-ended questions, and critical incident technique was to triangulate the source of data.

The interview questions covered each of the four themes independently. For each theme, the participants were asked the following questions:

Question # 1 (Semi-Structured Open-Ended Questions):

a. In your opinion, what are the behaviors that should be exhibited in an excellent teacher, clinician, researcher, or administrator?

b. In your opinion, what are the behaviors that should not be exhibited in a teacher, clinician, researcher, or administrator?

Question # 2 (Critical Incident Technique):

a. Could you please describe a specific incident where a teacher, clinician, researcher, or administrator's behavior made you believe that his/her performance as teacher, clinician, researcher, or administrator was excellent?

b. Could you please describe an incident where a teacher, clinician, researcher, or administrator's behavior made you believe that his/her performance as teacher, clinician, researcher, or administrator was poor?

III. Data Management and Analysis Method

The interviews with participants were taped by using a digital taping machine, and the sound digital files were saved and coded. The recorded materials were transcribed using a trial version of InqScribe software; after which, the transcribed materials were copied into a Microsoft Excel file. The answers for each question were classified into themes using the framework approach suggested by Pope, Ziebland and Mays, 2000, p. 116, which involves five stages of data analysis in the framework approach as below:

a. Familiarization with the raw data in order to list key ideas and recurrent themes.
b. Identifying a thematic framework and come up with detailed index of the data.
c. Indexing or applying the thematic framework or index systematically to all the data in textual form.
d. Charting or rearranging the data according to the appropriate part of the thematic framework to which they relate, this involves a considerable amount of abstraction and synthesis.
e. Mapping and interpretation using the charts to define concepts and find associations between themes.

After mapping and defining concepts, themes emerged, compared, and their related behavioral descriptions were determined from both the semi-structured interviews and the critical incident technique. Disagreement in mapping the behavioral descriptions and interpretation of themes were thoroughly discussed, deliberated on, and resolved by agreement.

CHAPTER IV

RESULTS

The semi-structured open-ended questions interviews and the critical incident technique were conducted with the 25 participants, described in the method section. Transcribing and analyzing the data produced a total of 918 behavioral descriptions; of which, 512 from the semi-structured open-ended questions interviews, and 406 from the critical incident technique. The behavioral descriptions were distributed according to their main themes as shown in Table 2:

Table 2: Count of Behavioral Descriptions

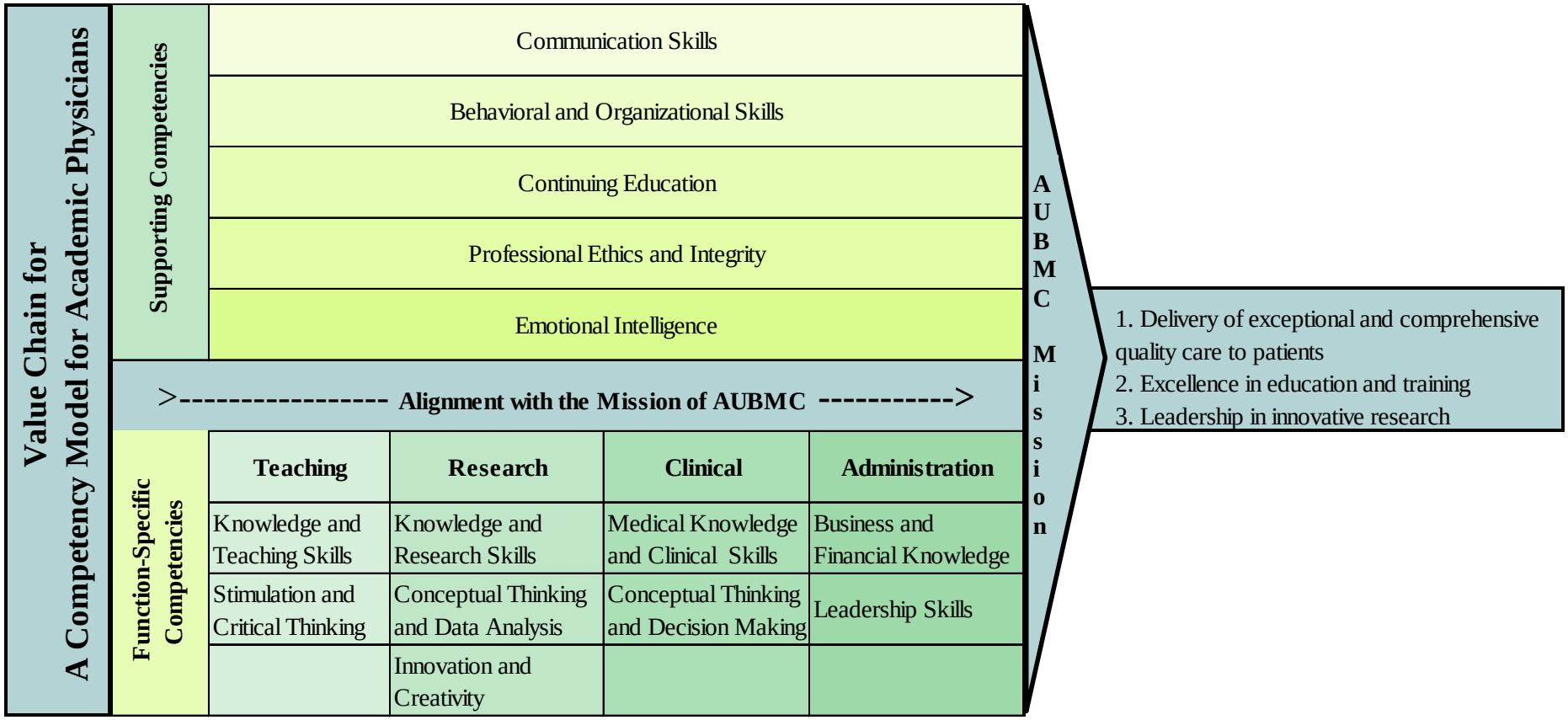
Main Theme	Semi-structured Interviews	Critical Incident Technique	Total
Teaching	131	77	208
Research	89	59	148
Clinical	123	121	244
Administrative	169	149	318
Total	512	406	918

These behavioral descriptions were arranged systematically according to its appropriate part of the thematic framework, and for each of the four roles of academic physicians independently.

The thematic framework, the key-anchored behaviors related to each theme, and the behavioral descriptions elicited from each technique, are presented in Appendix V in details, and for each different role.

The behavioral descriptions, elicited from the open-ended questions interviews and from the critical incident technique, were clustered into 14 categories or competencies. Of the 14 competencies, 5 were found to be common for all four roles of academic physicians, which we labelled as “Supporting Competencies”, and 9 were found and labelled as “Function-Specific Competencies”, as shown in Table 2.

Figure 1: Value chain for a competency model for academic physicians



The 5 common supporting competencies are: “Communication Skills”, “Behavioral and Organizational Skills”, “Continuing Education”, “Professional Ethics and Integrity”, and “Emotional Intelligence”. The function-specific competencies are for: 1) Teaching role: “Knowledge and Teaching Skills”, and “Stimulation and Critical Thinking”; 2) Research role: “Knowledge and Research Skills”, “Conceptual Thinking and Data Analysis”, and “Innovation and Creativity”; 3) Clinical role: “Medical Knowledge and Clinical Skills”, and “Conceptual Thinking & Decision Making”; and 4) Administrative role: “Business and Financial Knowledge”, and “Leadership Skills”.

I. Supporting Competencies

1. Communication Skills

Communication skills appeared as a common competency for the four mentioned roles of academic physicians, as portrayed by both the open-ended questions interviews and the critical incident technique. Below quotations exemplify the participants responses to the question related to the behaviors that should be exhibited in all four roles:

“I would say for me there is only one and there is no second to it, and that is the art of listening, and the art of listening that I use it is not as simple as it is loaded, very complex, small sentence, the art of listening starts with respect to the patient and their families, it starts with giving the patient and the families time, it means that you go in the room and you sit down with the patient, you are not standing at the door and raising your hands and asking questions, and showing them that do not make me late. It is all of these elements, several things, taking the time to answer questions, taking the time to

explain, 10 million things, so I summarize them with the art of listening. For me, this is it, if you ask me the practice of medicine for any clinician, let alone the good clinician, it is the person who masters the art of listening".

"It is a skill and that the ability to deliver information in an effective manner and for me, both are equally important. The delivery of the material is one of the most important elements for educators. You know educators who can take a very dry topic and make it the most exciting for their students, where students run and rush to listen to them".

"Education is about transmission of information…I think it should be done in conjunction with other thing which is observing a clinician and working with residents. Communication between clinician teacher, whatever you want to call it, and student is two forms: the first form is verbal communication, which is 40% of communication in psychology; the second form is non-verbal communication which is 60% in general. When I talk to you, 60% from the information that I am telling you is not from what I am telling you, when I look at you and move my hands. We are in the scientific world, but medicine is also an art, "Artisana", it is a "Craftsmanship" and not scientific. Most of what we do is not scientific, we do give an IV to a patient, but we talk to him for 20 minutes explaining to him that he is not going to die."

2. Behavioral and Organizational Skills

Behavioral and organizational skills appeared to be an important competency in the four roles, with qualities ranges from organizational skills, team management skills, engagement, availability, taking initiatives, problem solving, and performance

management, documentation, and others. Below quotations illustrate the responses to the question related to the behaviors that should be exhibited in all four roles:

"The same kind of talents and behaviors that made you a good clinician are the ones that made you a good educators, because lot of it is by role modeling, team management skills, good communication skills, being engaged and available and taking initiative in terms of solving problems".

"Like people who wear multiple hats, you are a chair, you are a head of a committee, and you are an associate dean, and a researcher and you are a clinician and yet you do it all well, and there are people here and are doing it, and this is when getting organized and getting serious, and this is when you get disciplined, discipline is very important for people who want to become leaders. You have to have a leadership skills, it is a combination of many things, charisma, knowledge, of self-confidence, of organization or discipline, of time management, and lots of other things."

3. Continuing Education

Continuing education and updating knowledge stands out as a behavior that should be exhibited in academic physicians while performing all their roles, as highlighted by the participants. Demonstration of such qualities appears below:

"Another quality and its mandatory now in health providers, you have to continue to educate yourself, medicine 15 years ago is certainly not medicine now, I graduated 15 years ago, if I do not educate myself every year I will become absolutely outdated, my knowledge will be obsolete now, when we read a paper written 15 years ago we label it as obsolete, we should discard it, we should not read, it changes very quickly, it is mandatory for doctors now to update their information, if you don't read

each month the 2-3 journals in your specialty, the main journals you are really not a good health provider."

"Here as a researcher, I think knowledge becomes like extremely essential because, number one, you need to know first of all what you are working at, he needs to know the background of what you are working at in order to do research, and it is also good to have a good knowledge of what people are doing around you in terms of research."

4. Professional Ethics and Integrity:

Ethical matters were frequently mentioned almost by all the participants, and in every corner of their multifaceted roles. Examples were ample, from telling the patient the truth, respecting patient's privacy, and demonstrating professional behavior, etc… Below quotations represent qualities and incidents that raise ethical concerns, as depicted from the study:

"First thing is this doctor ethical corner. Is he really doing what he is doing for the sake of the patient or for some gain?... you need to talk to people, communicating to patients what is happening to them, showing them some empathy, showing them that you care, telling them why you are sticking needles in them, telling them without lying what is going to happen to them".

"We really do not give enough time to our patients and explain and talk to them, and even if we talk to them, sometimes to cut it short, we say stuff that are not true. When you sit with a patient, you should explain the risks and the benefits and everything."

"Not examining the patient, not reviewing the history, not presenting himself to the patient or taking himself, lying to patients about diagnosis, telling them that they have infection instead of cancer. Not telling patients the truth, you have infection, we give you an antibiotic injection, you become bald but this is not a problem, you will be fine."

5. Emotional Intelligence

There are ample of behaviors that the participants thought should be exhibited in academic physicians. After examining and scrutinizing these qualities and behaviors, we thought that they fit with the emotional intelligence model suggested by Goleman, 1998, p. 88, which includes five dimensions: self-awareness, self-control, motivation, empathy, and social skills. Examples of these qualities are illustrated in the below quotations:

"It is very simple, seeing an attending physician sitting at the edge of the bed, holding hand with a patient with the family around, answering questions. You see that repeatedly at the medical center, repeatedly, and for me this is what we are all about when we talk about clinical care. People underestimate what does it mean for the patient and for the family when the physician comes and sits down, let alone sit on the bed and holds their hands."

"I have sent him a patient who had difficulty, little kid with constipation, and he leaves his work, comes to this kid, sits with the mother for an hour reviewing history and physical exam and explaining to her a step-by-step of what to do, and giving her a long prescription with detailed instructions on what to do, and he does it all the time. This is an amazing! Caring, you mostly care about a person, you can sense with the

person. Empathy, you empathize with the person, you know where they are, you are not subjective, you do not force your opinion on them, and then you give elaborate description of what to do."

II. Function-Specific Competencies

1. Teaching role

Two function-specific competencies were identified; examples demonstrating these qualities are presented below:

"There are people who are teaching with passion; they even force you to learn. He is the most professional person I have ever met, he is so dedicated. When he finished mentoring me, he gave me a reflex hammer, and told me "when you mentor somebody, and you feel you did teach him something, pass it on." He has got a ritual for passing on the knowledge until this day. I mentored a fellow when I was in the US and I gave her this hammer, and I hope this will continue too, because this behavior is super professional."

"When my mentors and leaders worked with me step by step, taught me how to critically think and how to get to where I want myself, rather than them telling me where to go."

a. "Knowledge and Teaching Skills"

b. Stimulation and Critical Thinking"

2. Research role:

For research role, three function-specific competencies derived from the collected data, and these qualities are exemplified in this quotation:

"For research, knowledge is very important, and also a quality of being highly observant and having an open mind to accept things; you know when you do an experiment or trial or whatever and you find something anomalous you have to keep that in mind because this anomaly may be opening the way to a totally new area, investigation, so that is the important quality to keep in mind, not being just driven by the book and this is what to do number 1, number 2, you have to have a little bit of creativity, and open-mind to accept things that are not the by the book."

"I'm giving you examples when I was a fellow. My mentor, who was in the States, she did a study on a disease and she devoted all her career, more than 10 years, just looking at that one particular disease, trying to find out how to best care for that particular disease. To me that was impressive."

"Incident whereby a researcher sticks to the integrity of reporting the data despite that being not ideal for the research outcome, you start with a certain research question and then you do the research and you look at the numbers and you look at the data and it is negative results, just taking that and not thinking of ways to kind of presented in a better way, just putting it just at it is with all integrity and honesty i think this is an incident that teaches us."

"You should have critical thinking, you should be able to ask the proper question…you should be able to analyze the literature with a lot of scrutiny and be able to see what are the missing fields or the areas for research that are pertinent enough to first launch or start a research project…, you should be very meticulous, very attentive

to details, of course scientific mind and then a lot of efforts for like surveillance to your project."

c. Knowledge and Research Skills

d. Conceptual Thinking and Data Analysis

e. Innovation and Creativity

3. Clinical role:

For the clinical role, two function-specific competencies resulted from the collected data, and these qualities are exemplified in this quotation:

"I think an excellent clinician, first and foremost needs to have the right training, they should have the basic medical knowledge or else they will never be good clinicians, even if they have good characteristics as persons. Now other more important thing is that they are humane, they have empathy that they can feel with their patients, and they know how they communicate with patients"

"First, respect of the patient, respect of the privacy and autonomy of the patient and patient family, listening to the patient, understanding the consent of the patient and the need of the patient, making the proper diagnosis, initiating the proper treatment and more importantly than the proper diagnosis and the proper treatment the comfort that is provided to the family in that context of providing that knowledge."

a. Medical Knowledge and Clinical Skills

b. Conceptual Thinking & Decision Making

4. Administrative role:

Two function-specific competencies stood out for the administrative role of an academic physicians, that can be exemplified in the below quotations:

"I can think of people who are in this institution who exhibited high leadership skills, where they put forth the people around them, they talked how they can get them advance in their career, rather than just looking at their own career."

"I can think of three immediately, one of them is purely operational, the physician took ownership of a complex clinical operation, and moved our operation from one level to another, total reversal of what was doing in this operation, because he understands the business how it works, and devoted time and energy by talking to people, listening, and planning and meetings and all the stuff to make it happen and staying at it, and it went in that direction, this is one operational units."

"This requires some knowledge and skills you need to learn them, like business etiquette, project management, business plan, strategic thinking, and public relations"

a. Business and Financial Knowledge
b. Leadership Skills

CHAPTER V

DISCUSSION

The current study has been designed with the objective of developing a competency model, assessing the gaps and needs, and establishing a competency-based framework of a mentorship program for junior academic physicians. These three headings will be discussed below:

I. The Competency Model of Academic Physicians

According to the results presented in Table 2, a total of 14 competencies emerged. These competencies are essential for academic physicians to fulfill their four traditional roles in teaching, research, clinical, and administrative duties, as confirmed by the participants of this study.

The data presented in this competency model suggest stratifying the functions performed by academic physicians into primary and secondary functions. Primary functions require those essential technical and other skills and behaviors to be performed; whereas, the secondary functions mainly require certain non-medical soft skills and behaviors that would help and contribute towards performing the primary functions in an outstanding manner, as portrayed in the below figure. This model represents a value chain business model that targets leveraging and playing it to the strengths of each academic physician through: 1) improving the level of performance, fulfillment and satisfaction of academic physicians; 2) helping physicians achieve personal and professional development, and achieving personal and professional goals;

and, 3) improving customer satisfaction and business performance. Consequently, the ultimate goal of this model is to serve both, the academic physicians and the institution at the level of value creation and strategic planning, as shown in the below figure.

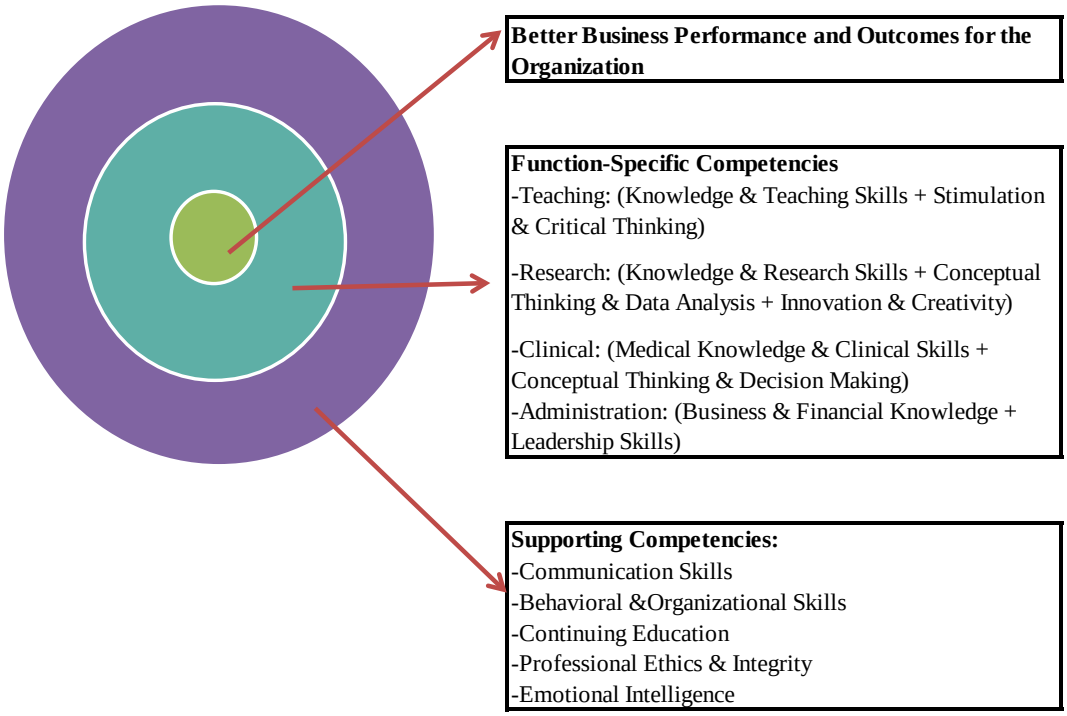


Figure 2: The Strategic Planning and the Value Creation Goals of the Competency Model

a. The Supporting Competencies of Academic Physicians

Five of the 14 competencies, with their common behavioral descriptions appeared in all four roles of academic physicians, and were labelled as "Supporting Competencies". These five competencies are: "Communication Skills", "Behavioral and Organizational Skills", "Continuing Education", " Professional Ethics and Integrity", and " Emotional Intelligence". These set of knowledge, skills, behaviors, and other attributes of the secondary functions strata, will support academic physicians while they

are performing their primary functions successfully. It is worth noting that the strong appearance of these five competences reflects their significant importance on the ability of academic physicians to perform their duties with higher level of job fulfillment and satisfaction, as reported by the participants themselves: “communication is the most important thing in our job, because 80% of the patient whatever you do for them they get well, and finally all people die; meanwhile, you need to talk to people!”, “the first form is verbal communication, which is 40% of communication in psychology; the second form is non-verbal communication which is 60% in general.”, “he has got a ritual for passing on the knowledge until this day”, “I think about teachers who were so good that they made you love what are they teaching you…whenever you think about teacher, you think about the few people who left an impression on you, because they loved what they do and they impact their love to the students…they have the power of giving, they give their knowledge, they give their love of their material…I think that is the giving part that is important”, “inquisitive mind, always looking for answers for questions that come up, innovative, team worker, and dedicated for the improvement in the care provided to patients and their families”, “for a researcher you need to have a question to answer, and you also need to have the proper education and mentoring to do that.”

Moreover, researchers found that greater physician’s job fulfillment and satisfaction lead to better satisfied patients (Brown & Gunderman, 2006, citing Grembowski et al., 2005; Haas et al., 2000); this job fulfillment and satisfaction per se, would serve the mission of the AUBMC and contribute to a better healthcare and business outcomes. In other words, these supporting competencies serve as an umbrella for the core or primary activities of academic physicians, and will have major

contribution for fulfilling these activities in alignment with the mission of the institution.

b. The Function-Specific Competencies of Academic Physicians

The function-specific competencies are a set of 9 skills and behaviors that emerged from this study, and are characterized by its specificities to each particular role of the four roles of academic physicians.

i. For the teaching role, two competencies identified: “Knowledge and Teaching Skills”, and includes the following behaviors and skills: has a good training, knowledge and expertise in own field, acquire the art of teaching and passing on knowledge in a positive and constructive way, mastering the art of providing positive and constructive feedback, and ability to update own knowledge and support information with evidence from scholarly works. The other competency is “Stimulation and Critical Thinking” and includes the following skills and behaviors: enticing students to think and eliciting their curiosity; encouraging students to share opinion, permit creativity, and accept criticism; developing the process of critical thinking, and challenging students in a professional and permissive manner; facilitating the flow of information, and the transmission of knowledge.

ii. For the research role, three competencies developed: “Knowledge and Research Skills” and demonstrated by these abilities: has a good training, knowledge and expertise in own field, has a good grasp and grip of the basic science, acquire the art of research design, methodology and principles. The

second competency is “Conceptual Thinking and Data Analysis” and represented by these skills and behaviors: able to observe and think critically beyond the conventional and traditional boundaries, able to critically manage and analyze research data and results, able to plan a good research. The third competency is “Innovation and Creativity” and is demonstrated by the following attributes: able to come up with innovative research idea and form a good research question and hypothesis, have creativity, inquisitive mind and scientific curiosity, and has research vision and scientific goals.

iii. For the clinical role, two function-specific competencies appeared: “Medical Knowledge and Clinical Skills” and is illustrated by these attributes: has the basic clinical knowledge and expertise to perform clinical procedures in own specialty, follow standards of practicing medicine, and evidence-based healthcare, able to examine, diagnose and analyze patient's symptoms and decide on a differential, and able to use advanced clinical skills and technologies to perform medical procedures. The second competency is “Conceptual Thinking and Decision Making”: and is represented by these skills and behaviors: able to think critically beyond the boundaries of the clinic to make a decision, able to conceptualize solutions to clinical problems and initiate a proper treatment plan, and able to make a balanced decision taking into consideration patient's health and financial situation.

iv. For the administrative role, two function-specific competencies arose “Business and Financial Knowledge”, which is illustrated by these attributes: has good knowledge of budgetary affairs, has good knowledge of financial analysis, has good knowledge of project management, business plan, and

public relationship; and “Leadership Skills”, which is demonstrated by: has a vision and able to develop own strategy, able to inspire people, make them believe, and guide them along a certain direction, able to create a harmonic atmosphere and a team work environment, and assume responsibility to full extent. In this regard, Gray and Armstrong (2003) indicated the presence of a leadership gap in health care institutions, the matter that adversely affect the performance of individual careers and institutions.

In reference to the Accreditation Council of Graduate Medical Education (ACGME) core competencies, which are: “Patient Care”, “Medical Knowledge”, “Interpersonal and Communication Skills”, “ Practice Based Learning and Improvement”, “Professionalism”, “System Based Practice”, and “Resident as Teacher”, as depicted from the College of Medicine, University of Toledo website, many similarities appear with the competencies emerged from this study. Moreover, the findings of this study are very comparable with the findings of Patterson et al. (2000), described in the literature review section, who defined the competency model of general practice, except for the “legal, ethical, and political awareness” competency arose, and except for the areas related to teaching, research and administrative functions that were not within the scope of that study.

The behavioral descriptions of this competency model can be used for the purposes of selection, performance evaluation, training and developing, and retention purposes

II. Assessment of Gaps and Needs

The competency model is presented in Table 2, whereas the competencies with their key-anchored behaviors and behavioral descriptions are shown in Appendix V. Most of the competencies appeared to be “non-technical” or soft skills, such as “communication skills”, professional ethics and integrity”, and “emotional intelligence”. These qualities and behaviors are non-medical ones, and are neither taught in medical schools, nor in post-graduate clinical programs, which reveals certain gaps in the behaviors and skills that need to be acquired by academic physicians.

Moreover, Stigler, Duvivier, Weggemans, and Salzer (2010) found that “working in health care means working in multidisciplinary and interdisciplinary teams. As teamwork is a soft skill which can be learned, its development should be fostered by the proposed interprofessional courses starting at an early stage.” On the other hand, the Hippocratic Oath describes the practice of medicine by an “art”, which agrees with findings of this study, that using of non-scientific qualities and behaviors in practicing the four roles of academic physicians is of an utmost importance, “medicine is also an art, “artisana”, it is a “Craftsmanship” and not scientific.” In addition, these findings support the idea of “Cross Functionality” in practicing the art and science of academic medicine, and blending the skills of non-medical fields; such as business, financial, marketing, human resources, and public relations. Notwithstanding the many challenges of operating within the framework of academic medical center caused by high levels of internal conflict and misalignment of missions and resources, a significant business improvement in academic, clinical, and financial, student, and customer satisfaction

levels has been reported by (Sanfilippo, Bendapudi, Rucci, & Schlesinger, 2008) as a result of implementing a value chain business model to an academic healthcare center. This suggests establishing a model that helps academic physicians: 1) bridge the gaps and needs in their skills, behaviors and other attributes; and, 2) can help them achieve their personal, professional, and ultimately the institutional mission and business goals.

III. A Framework for a Mentorship Program for Academic Physicians

Research findings questioned whether academic physicians can still play the triple roles simultaneously, and that these three activities in teaching, research, and clinical are competing with each other (Borges et al., 2010). On the other hand, DeCastro et al. (2013) mentioned that effective mentoring should include multiple competencies, roles, and activities, and illuminated that the probability of finding a mentor who exemplifies all qualities concurrently is rare, and if found, single mentors provide insufficient mentoring in certain ways. On the other hand, (Castell, 2011) mentioned that mentoring provides mentors with a sense of immortality and legacy considering the parental role that they play in raising unending generations of academic offspring. He went on documenting the following essential behaviors and traits for an academic mentor: meeting, enthusiasm, networking, team building, oral skills, respect, intellectual curiosity, non-academic career, and many other things like being a good listener and serving as a role model.

Moreover, research studies emphasized the crucial role of structured mentoring programs in supporting and developing the future physicians who choose a career in

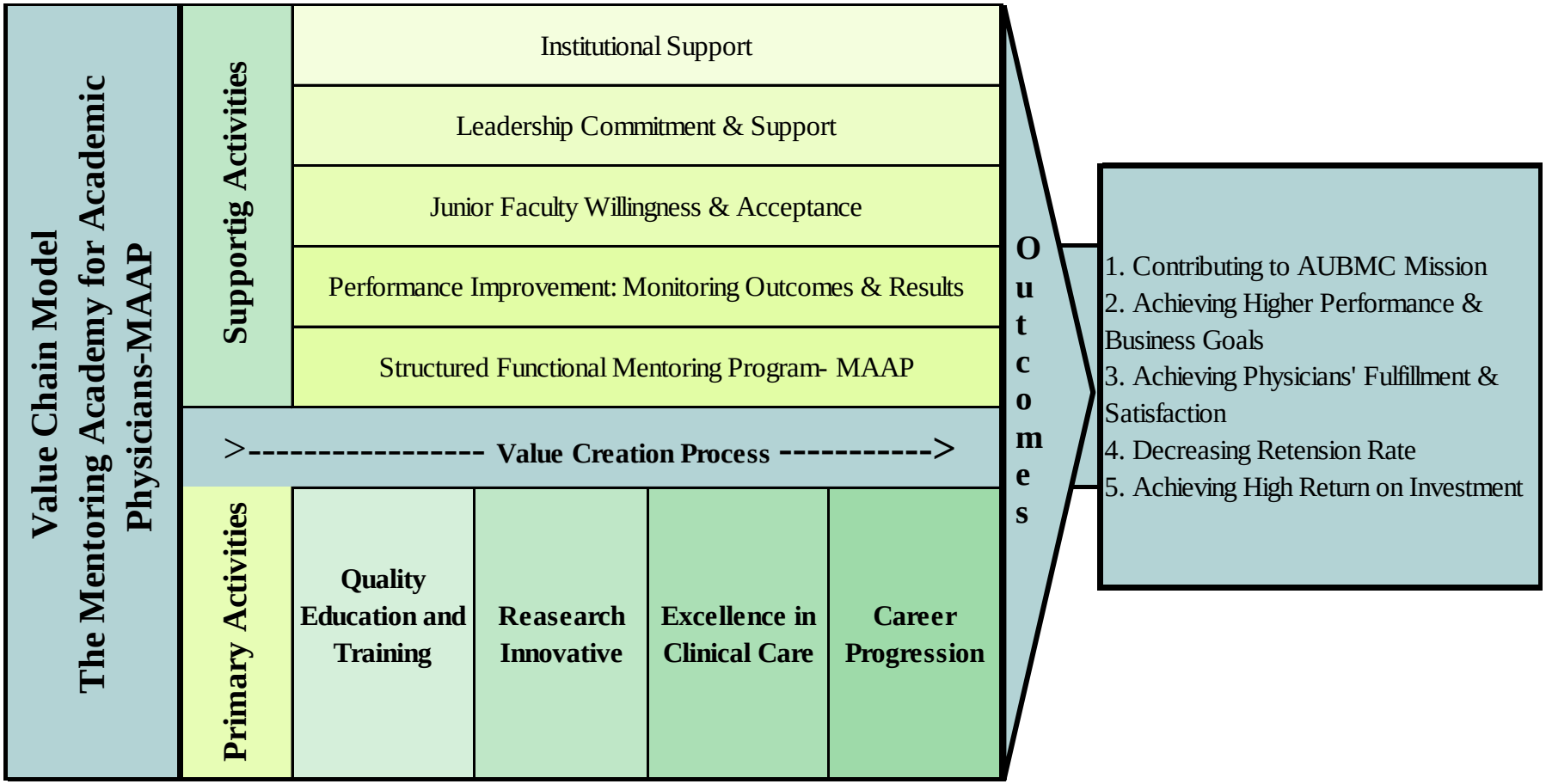
academic medicine (Borges et al., 2010). Considering the stratification of activities of academic physicians, the results of this study confirm the research findings that academic physicians who can engage fully and achieve excellence in the traditional triple roles in teaching, research and clinical activities is becoming less possible and impractical (DeCastro et al., 2013; Borges et al., 2010; Howell and Bertakis, 2004; Pololi and Knight, 2005; De Janasz et al., 2003). Supporting this argument, one participant pointed out that: "you cannot anymore expect from anyone to be able to be good at four things, educating, and being a researcher, and being an administrator and being a very good clinician, and I think many institutions have realized that this combination is not very easily possible. A lot of time a good researcher may be a very scientific researcher may be he is so much involved in his activities in a way that he is not good at other things, so you need to accept that. You cannot be good at all four things."

In reference to research scholars, Thorndyke et al. (2006) presented the framework of what so called "The Junior Faculty Development Program" at the Penn State College of Medicine. This program consists of two components: 1) a structured for developing faculty in research, education, clinical practice, and career development; and, 2) an individual project completed under supervision of a mentor. This program is suggested to have all the ingredients for success, through empowerment of junior faculty through a professional development program, and through having: 1) institutional support; 2) funding; and, 3) willingness and acceptance of junior faculty to join the program. Other research finding recommended defining a competency model for academic physicians that could provide faculty with clear expectations, and respond to their needs at different career stages (Milner et al., 2011). Thorndyke, Gusic, and

Milner (2008, p. 162) described functional mentoring as “the pairing of a mentee with a mentor who has the skills and expertise to provide guidance on a defined project”, which provides clear objectives to the mentoring process and ability to measure outcomes.

Therefore, it is recommended to establish a competency-based functional mentoring program, with a suggested name: “The Mentoring Academy for Academic Physicians-MAAP”, that: 1) fits with the stratification of academic physicians’ activities, 2) contributes to their professional success and career progression; and, 3) contributes to the institutional mission and business goals. This mentoring model is suggested to have an academy-type structure where by junior academic physicians may apply and be admitted to study for a master degree in certain fields, such as but not limited to, business administrative, finance, marketing, health sciences, education or other; at the same time, they would take designated courses that help in developing certain competencies of their choice, and depending on their academic track. The thesis or the project of their master degree will have to be aligned with their future career path or academic track. The successful ingredients of this program are demonstrated in the below figure:

Figure 3: Value chain model for the mentoring academy for academic physicians-MAAP



The above value chain model for “MAAP” is proposed as a business model targeting to develop the essential knowledge, skills and behaviors for academic physicians to fulfill their roles successfully; it also aims to provide the institution with return on its investment in such a program. For successful implementation of “MAAP”, it is suggested to: 1) provide institutional resources, protected time and funding (Milner et al., 2011); 2) have the commitment of the leadership through direct participation and involvement in the program; 3) have the willingness and acceptance of junior academic physicians to join this program (Milner); 4) have the tools and ability to measure the program outcomes, through career progression of junior academic physicians, patients’ satisfaction, research productivity measured through quantitative and qualitative indicators; and finally; 5) holding junior academic physicians accountable for fulfilling the requirements of the program; and, 6) transferring knowledge, skills, and behaviors to the job.

Following are the prospective incentives for junior academic physicians to join the suggested mentoring academy: 1) integrating the program with an academic degree; 2) full sponsoring of this program by the institution; 3) link the outcomes of the program to professional development and career advancement.

CHAPTER VI

LIMITATIONS

There are limitations to this research project. This study has been conducted at the Faculty of Medicine and Medical Center of the American University of Beirut, and included 25 participants. Though the study has been continued until reaching saturation of themes, the sampling size might limit the ability to generalize its results. The fact of conducting this study in a US academic healthcare institution operating in the Middle East area might form another limitation for generalizability of results.

The fact that the study included only junior academic physicians, and academic and clinical senior administrators, might also derive a third limitation, as defining the competencies of academic physicians might have involved other parties, such as, medical students, post-graduate trainees, nurses, and patients; including these categories might reveal other important competencies for academic physicians.

CHAPTER VII

RECOMMENDATIONS

Based on the findings of this research study, it would be important to conduct further studies to define the competencies of academic physicians from the perspective of other categories, such as: medical students, post-graduate trainees, nurses, and patients; including these categories might reveal other important competencies and add dimensions for the roles of academic physicians. On a different note, it is also recommended and worth conducting longitudinal studies to explore the effectiveness of mentoring programs for academic physicians, in terms of its impact on career progression, professional development, academic physicians fulfillment and satisfaction, and overall business improvement.

CHAPTER VIII

CONCLUSION

The findings of this research illuminated the importance of defining a competency model for academic physicians, and suggested stratifying the activities into supporting activities and function-specific ones. The role of the supporting activities is to assist academic physicians while performing their four traditional roles in teaching, research, clinical, and administrative. Though many research studies concluded that no one single physician can do the four roles successfully, the stratification of activities found to be important in fulfilling specific roles as part of a value chain model, where each function complements the other to ultimately form a successful business and value creation model.

It was also suggested to establish a competency-based functional mentoring program, that: 1) fits with the stratification of academic physicians' activities, 2) fits with the performance appraisal based on academic physicians competency model; 3) contributes to their professional success and career progression; and, 4) contributes to the institutional mission and business goals. This mentoring model is suggested to have an academy-type structure whereby junior academic physicians may apply and be admitted to study for a master degree in certain fields, such as but not limited to, business administrative, finance, marketing, health sciences, education or other; at the same time, they would take designated courses that help in developing certain competencies of their choice, and depending on their academic track. The thesis or the

project of their master degree will have to be aligned with their future career path or academic track.

For successful implementation of “MAAP”, it is suggested to: 1) provide institutional resources, protected time and funding (Milner et al., 2011); 2) have the commitment of the leadership through direct participation and involvement in the program; 3) have the willingness and acceptance of junior academic physicians to join this program (Milner); 4) have the tools and ability to measure the program outcomes, through career progression of junior academic physicians, patients’ satisfaction, research productivity measured through quantitative and qualitative indicators; and finally, 5) holding junior academic physicians accountable for fulfilling the requirements of the program.

Following are the prospective incentives for junior academic physicians to join the suggested mentoring academy: 1) integrating the program with an academic degree; 2) full sponsoring of this program by the institution; 3) link the outcomes of the program to professional development and career advancement.

APPENDIX I

Email Script:

"This is not an official AUB message. It is for research purposes only, and sent on behalf of Dr. Lina Daouk-Öyry"

We are conducting a research study entitled "A Systematic Approach for Establishing a Competency-Based Mentorship Program for Academic Physicians", that has the ethical approval of the Institutional Research Board of AUB.

The PI of this study is Dr. Lina Daouk-Öyry (Assistant Professor at OSB, email address: ld15@aub.edu.lb, office extension: 3955). This study is purely for research purposes, and aims at establishing a framework of a competency-based mentorship program for academic physicians. You have been selected randomly to participate in this study, which requires conducting a taped interview with you for 30-40 minutes in your office and at your convenient date and time.

Please note that participation in this study is on a purely voluntary basis, and if you do not wish to participate in this study, please feel free not to. If, however, you wish to participate in this research study, you are kindly asked to reply to this email, and the research team will be calling you for potential participation, and to explain more about the study, and to set the most convenient date and time to conduct this interview in your office and at your own convenience. During the interview, you shall be provided with a Written Informed Consent that explains the risk involved in participating with this study. Even if you agree to participate with this study now, you may always decide to decline your participation at any time with no risk at all resulted from your decision not to participate.

The Co-PIs are Dr. Ghazi Zaatari, the Associate Dean for Faculty Affairs at FM/AUBMC, Mrs. Boushra Rahal, the Academic Affairs Coordinator at FM/AUBMC, and Mr. Nabil Mansour, MHRM student at OSB and the Executive Officer/HR Specialist at FM/AUBMC.

Mr. Nabil Mansour will be conducting the interview.

We assure you that only the PI Dr. Lina Daouk-Öyry, and the Co-PI Mr. Nabil Mansour will be having access to the electronic collected information and to the transcribed ones, and that the Co-Investigators will neither be involved in the recruitment or consenting processes, and they will not have access to the list of physicians who participated in the interview, in order to ensure confidentiality and protect the research subjects from any undue influence. The Co-Investigators will not be provided with access to any collected information until the data have been aggregated and all identifiers that can be linked to subjects' identities have been removed, in order to protect the research subjects from undue influence. They will only be provided with the aggregated report that shall have no identifiers that can be linked to subjects' identities."

APPENDIX II

Reminder Email Script:

"This is not an official AUB message. It is for research purposes only, and sent on behalf of Dr. Lina Daouk-Öyry"

Pursuant to our first email, this is a friendly reminder that we are conducting a research study entitled "A Systematic Approach for Establishing a Competency-Based Mentorship Program for Academic Physicians", that has the ethical approval of the Institutional Research Board of AUB.

The PI of this study is Dr. Lina Daouk-Öyry (Assistant Professor at OSB, email address: ld15@aub.edu.lb, office extension: 3955). This study is purely for research purposes, and aims at establishing a framework of a competency-based mentorship program for academic physicians.

You have been selected randomly to participate in this study, which requires conducting a taped interview with you for 30-40 minutes in your office and at your convenient date and time.

Please note that participation in this study is on a purely voluntary basis, and if you do not wish to participate in this study, please feel free not to. If, however, you wish to participate in this research study, you are kindly asked to reply to this email, and the research team will be calling you for potential participation, and to explain more about the study, and to set the most convenient date and time to conduct this interview in your office and at your own convenience. During the interview, you shall be provided with a Written Informed Consent that explains the risk involved in participating with this study. Even if you agree to participate with this study now, you may always decide to decline your participation at any time with no risk at all resulted from your decision not to participate.

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APPENDIX III

A Systematic Approach for Establishing a Competency-Based Mentorship Program for Academic Physicians

Semi-structured Questions and Critical Incident Interview

Interviewer: Nabil Mansour
Candidate for the degree of Master in Arts (Human Resources Management)
Suliman Olayan School of Business-American University of Beirut
Email: nmm39@aub.edu.lb
Mobile: +961 70 918 525

The role of an academic physician as a "Teacher" or "Educator":

Question # 1: Kindly indicate the most important characteristics (whether knowledge, skills, abilities or other characteristics), that in your opinion, a teacher or medical educator needs to possess in order to perform this role effectively?

a. In your opinion, what are the behaviors that should be exhibited in an excellent teacher or a medical educator?
b. In your opinion, what are the behaviors that should NOT be exhibited in a teacher or a medical educator?

Question # 2: Through your experience, you might have witnessed academic physicians who have exemplified excellent or poor performance as teachers or medical educators. Whether the experience had been a personal one, or related to someone else, whether it had happened at AUB or somewhere else, and without mentioning names or presenting any kind of signs, indicators, or identifiers that could help in identifying the place where the incident could have happened, or the persons who might have been involved with:

c. Could you please describe a specific incident where a teacher or a medical educator's behavior made you believe that his/her performance as teachers was excellent?
d. Could you please describe an incident where a teacher or a medical educator's behavior made you believe that his/her performance as teachers was poor?

The role of an academic physician as a "Clinician" or "Healthcare Provider":

Question # 1: Kindly indicate the most important characteristics (whether knowledge, skills, abilities or other characteristics), that in your opinion, a clinician or healthcare provider needs to possess in order to perform this role effectively?

a. In your opinion, what are the behaviors that should be exhibited in an excellent clinician or healthcare provider?
b. In your opinion, what are the behaviors that should NOT be exhibited in a clinician or as a healthcare provider?

Question # 2: Through your experience, you might have witnessed academic physicians who have exemplified excellent or poor performance as clinicians or healthcare providers. Whether the experience had been a personal one, or related to someone else, whether it had happened at AUB or somewhere else, and without mentioning names or presenting any kind of signs, indicators, or identifiers that could help in identifying the place where the incident could have happened, or the persons who might have been involved with:

c. Could you please describe a specific incident where a clinician or healthcare provider's behavior made you believe that his/her performance as a clinician or as a healthcare provider was excellent?
d. Could you please describe an incident where a clinician or healthcare provider's behavior made you believe that his/her performance as a clinician or as a healthcare provider was poor?

The role of an academic physician as a "Researcher":

Question # 1: Kindly indicate the most important characteristics (whether knowledge, skills, abilities or other characteristics), that in your opinion, a researcher in the medical field needs to possess in order to perform this role effectively??

a. In your opinion, what are the qualities that should be exhibited in an excellent researcher in the medical field?
b. In your opinion, what are the qualities that should NOT be exhibited in a researcher in the medical field?

Question # 2: Through your experience, you might have witnessed academic physicians who have exemplified excellent or poor performance as researchers in the medical field. Whether the experience had been a personal one, or related to someone else, whether it had happened at AUB or somewhere else, and without mentioning names or presenting any kind of signs, indicators, or identifiers that could help in identifying the place where the incident could have happened, or the persons who might have been involved with:

c. Could you please describe a specific incident where a researcher's qualities made you believe that his/her performance as a researcher in the medical field was excellent?
d. Could you please describe an incident where a researcher's qualities made you believe that his/her performance as a researcher in the medical field was poor?

The role of an academic physician as an "Academic or Clinical Administrator":

Question # 1: Kindly indicate the most important characteristics (whether knowledge, skills, abilities or other characteristics), that in your opinion, an academic or clinical administrator needs to possess in order to perform this role effectively?

a. In your opinion, what are the qualities that should be exhibited in an excellent an academic or clinical administrator?
b. In your opinion, what are the qualities that should NOT be exhibited in an academic or clinical administrator?

Question # 2: Through your experience, you might have witnessed academic physicians who have exemplified excellent or poor performance as academic or clinical administrators. Whether the experience had been a personal one or related to someone else, whether it had happened at AUB or somewhere else, and without mentioning names or presenting any kind of signs, indicators, or identifiers that could help in identifying the place where the incident could have happened, or the persons who might have been involved with:

c. Could you please describe a specific incident where an academic or clinical administrator's qualities made you believe that his/her performance as an academic or clinical administrator was excellent?
d. Could you please describe an incident where an academic or clinical administrator's qualities made you believe that his/her performance as an academic or clinical administrator was poor?

APPENDIX IV

Informed Consent Form
Suliman Olayan School of Business and Faculty of Medicine and Medical Center
American University of Beirut
P.O. Box 11-0236, Riad El Solh, 1107 2020, Beirut, Lebanon

Consent Form for Interview including Taping of Interview

Project Title: A Systematic Approach for Establishing a Competency-Based Mentorship Program for Academic Physicians

Project Director: Lina Daouk-Öyry, Ph.D.**, ld15@aub.edu.lb, 01-350000 extension 3955**
Co-Investigator: Ghazi Zaatari, MD., **zaatari@aub.edu.lb, 01-350000 ext 5163**

Co-Investigator: Boushra Rahal, **br02@aub.edu.lb**, 01-350000 ext 4720
Co- Investigator: Nabil Mansour, **nmm39@aub.edu.lb**, 70-918525

We are researchers in the Suliman Olayan School of Business (OSB) at the American University of Beirut (AUB). We are here to conduct a study that will look at competencies of academic physicians in an attempt to establish a framework for a mentorship program for academic physicians.

Before we begin, we would like to take a minute to explain why we are inviting you to participate and what we will be doing with the information you provide to us. Please stop us at any time if you have any questions. After we have told you a bit more about my project, you can decide whether or not you would like to participate.

We are doing this study as part of a research in the Suliman Olayan School of Business and the Faculty of Medicine and Medical Center at AUB. We will be interviewing a sample of 12 to 27 randomly selected academic physicians who are currently holding the rank of assistant professor at the Faculty of Medicine and Medical Center of the American University of Beirut, and 10-20 randomly selected academic and clinical administrators who are currently serving in the capacity of dean, associate deans, chairpersons of academic departments, medical center director, and chief of medical staff at the Faculty of Medicine and Medical Center of the American University of Beirut, within the age group of 28-64 years old,, about characteristics, qualities, and behaviors of academic physicians. This collected information will be used purely for research purposes, in writing a thesis, published research as well as in academic presentations. We will also share this data with other co-investigators at AUB and FM/AUBMC only in an aggregated report after all the identifiers that can be linked to subjects' identities have been removed.

Participation should take about 30-40 minutes. Participation is on a purely voluntary basis. You will be interviewed, and during the interview you shall be asked several questions that will take approximately 30-40 minutes. If you do not wish to answer any particular question in the interview, you may skip the question by either not answering the interview question or saying "skip" during the interview. All data collected, whether digital taped materials, written notes, or

transcribed data are treated as confidential information. Your name or any identifiers are not included in our research analysis without your explicit permission. All data shared with other investigators are purely aggregated data and have no identifiers that could be linked to your personal responses. All completed interviews are kept under lock or on a password protected computer in the office of Dr. Lina Daouk-Öyry at OSB-AUB. Five years after the end of the research study, the taped interviews and any other information or data whether electronic or hard copy will be destroyed by Dr. Daouk-Öyry herself and in her office at OSB-AUB. I will keep aggregated research data on my computer files for future use in other competency-related research studies for a maximum period of five years.

If at any time and for any reason, you would prefer not to answer any questions, please feel free not to. If at any time you would like to stop participating, please tell me. We can take a break, stop and continue at a later date, or stop altogether. Your refusal to participate, or to stop participating at any time will involve no penalty or loss of benefits to which you are otherwise entitled to.

We assure you that only the PI Dr. Lina Daouk-Öyry, and the Co-PI Mr. Nabil Mansour will be having access to the electronic collected information and to the transcribed ones, and that the Co-Investigators will neither be involved in the recruitment or consenting processes, and they will not have access to the list of physicians who participated in the interview, in order to ensure confidentiality and protect the research subjects from any undue influence. The Co-Investigators will not be provided with access to any collected information until the data have been aggregated and all identifiers that can be linked to subjects' identities have been removed, in order to protect the research subjects from undue influence. They will only be provided with the aggregated report that shall have no identifiers that can be linked to subjects' identities.

I would like to tape record this interview so as to make sure that I remember accurately all the information you provide. I will keep these tapes or digital files in a locked file drawer or on a password protected computer in the office of Dr. Lina Daouk-Öyry at OSB-AUB. They will only be used by Dr. Daouk-Öyry and Nabil Mansour. The interview tapes will not be shared with other collaborators, and only aggregated data from the interviews will be shared after all the identifiers that can be linked to subjects' identities have been removed. You may still participate in the interview if you do not want to be taped.

If you have questions, you are free to ask them now. If you have questions later, you may contact me, Nabil Mansour at Suliman Olayan School of Business at the American University of Beirut, email: nm08@aub.edu.lb, or at my mobile phone +961 70 918 525, or you may call the PI of this research study Dr. Lina Daouk-Öyry at her email: ld15@aub.edu.lb or at her office phone at OSB-AUB: +961 (0)1 350 000 extension 3955.

If you have any questions about your rights as a participant in this research, you can contact the following office at Research University:

Social & Behavioral Sciences Institutional Review Board at the American University of Beirut
Located at Gefinor Building, Bloc C, 5th floor, Maamari street, Ras Beirut, Lebanon
Phone: +961 (0)1 350 000 ext. 5440, or email: irb@aub.edu.lb

Do you voluntarily consent to take part of the study?

Consent to Record Interview

(Question should be posed at the start of the recording)

Do you also voluntarily consent to this interview being recorded?

Consent to Quote from Interview

I may wish to quote from this interview either in the presentations or articles resulting from this work. A made-up name will be used in order to protect your identity, unless you specifically request that you be identified by your true name.

Do you agree to allow me to quote from this interview?

Consent to Use Name

There are a number of reasons for which you may prefer that your true name be used in presentations and articles related to this research. This choice is entirely voluntary. Your participation in the research study does not require the use of your name.

Would you like your true name to be used in any oral presentations or written articles or documents resulting from this research?

If you agree to have your name used, please sign below to confirm your choices:

Consent for participation: _____

Consent for taping of interview: _____

Consent for quoting from interview: _____

If you chose to be interviewed and have your name used, you will be given a copy of this consent form with your signatures.

Confirmation of Consent to Record Interview

(Question will be posed once recording has begun).

Do you voluntarily consent to this interview being recorded?

_____

Signature of the research PI:

Lina Daouk-Öyry, Ph.D.
Assistant Professor, OSB-AUB
Office Telephone: 01-350000 ext. 3955
Email: ld15@aub.edu.lb

APPENDIX V

a. Competencies of Academic Physician as a "Teachers or Medical Educator"

	Competency	Key-Anchored Behaviors	Behavioral Description: Semi-Structured Interviews	Behavioral Description: Critical Incident Technique
1	Communication Skills	-Understand the knowledge level of target audience and tailor complex message accordingly -Able to communicate in a culturally-sensitive manner -Able to convince using facts in a sensitive manner -Able to actively listen to fellows, residents, students, and peers	verbal and non-verbal communication, good listener, good communicator, make sure audience are awake, make sure they understand, communicate with people, students, and residents, clarity in the teaching method	listening to patient, communicating in a clear manner, explain to the level of understanding of students and patients, able to describe and summarize complex materials, transmit knowledge in a respectful and permissive manner, listen to students' findings
2	Knowledge and Teaching Skills	-Has a good training, knowledge and expertise in own field -Acquire the art of teaching and passing on knowledge in a positive and constructive way -Mastering the art of providing positive and constructive feedback -Able to update own knowledge and support information with evidence from scholarly works	pick the subject of interest, give constructive feedback, make it fun activity, make it interesting activity, knowledgeable, teaching in every way, well prepared, providing enough substance, has credentials and training, being succinct, summarizing information, supporting information by scientific evidence, know how to transfer knowledge, able to attract students, lead by example	knowing the material, good quality teaching materials, prioritizing teaching materials, has excellent information, support information provided with evidence, have the talent, knowledge and skills, demonstrate knowledge in action, provide constructive feedback, teach and lead by example, teach by example how to approach problems, permit the flow of information in bi directional ways, love the materials and impact love to students, made students love the teaching material

3	Stimulation and critical thinking	-Enticing students to think, and eliciting their curiosity -Encouraging students to share opinion, permit creativity, and accept criticism -Developing the process of critical thinking, and challenging students in a professional and permissive manner -Facilitating the flow of information, and the transmission of knowledge	encourage to share opinions, get students involved, simplify not over simplify, brings out their interest, get out their best qualities, interactive, permissive, promotes inquisitive ideas, engage audience, engaged, encourage, teach at student level, transmitting knowledge, critical thinking, motivating, push to work more, entice student to think, elicit student curiosity, helps students move forward, very involved, there is no I am the teacher and you are the student, allowing the flow of information, openning the floor for questions, good listener, permit creativity	develop the process of critical thinking, learn from student, make sure students understand, challenge students professionally, focus on the learning experience, keep challenging students, get the best out of students, fosters critical thinking and facilitate the transmit of knowledge process
4	Behavioral and Organizational Skills	-Has organizational and time management abilities -Able to identify areas of weaknesses and improve outcomes -Able to attend to details and prioritize -Able to establish a good performance management system	team management skills, team management approach, interdisciplinary team work, incorporate students, residents, fellows and nurses and make them part of what you do, showing up on time	manages and leads team effectively in a very calm way

5	Continuing Education	-Able to continuously update medical knowledge and skills in own field-Eager to learn and read persistently -Willing to learn from students and develop own self	continuing education, updating information, update knowledge	wilingness to learn from student, read persistently, eager to learn and develop own self
6	Professional Ethics and Integrity	-Provide truthful information and support it with scientific evidence -Maintain a professional image, create good academic teaching environment -Respecting privacy, autonomy, and consent -Demonstrate professional behavior towards students and peers	good behavior, use proper language, non-politician, provide truthful information and support it with scientific evidence, ethical, truthful, value students	maintain a professional image, create good academic teaching environment, respecting patient's privacy, behave ethically and professionally towards colleagues, demostrate professional behavior
7	Emotional Intelligence	-Know own limitations, and ease to admit it-Has unselfish and altruistic qualities-Be aware of own personal qualities	**Self-Awareness** know his limits and ease to admit it, role model, professional, observant, sincere, honest, transparent, balanced, meticulous, humble, ethical, confident, disciplined, cheerful, caring, smiling, passionate, easy to approach, approachable, enthusiasm, craftsman, thinking, efficient, risk taker	**Self-Awareness** high self-esteem in teaching, show trust and confidence, role modeling, inquisitive

		-Able to control own emotions and transmit calmness to team members -Able to accept criticism and to be questioned for own knowledge and skills	**Self-Regulation** open minded, accept to be challenged, accepting criticism, permissive shown from the pitch of voice, has control over emotions, self-controlled, accept criticism	**Self-Regulation** maintain calmness in difficult situations and transmits that calmness to the team, learn how to mallow down, controlling temper, open for criticism
		-Displaying an altruistic and student-centered approach -Dedicating time and effort for teaching -Ctreate positive environment for teaching and embracing trust in students -Has the inner passion and love for teaching in every way, and has the ritual for passing on the knowledge	Motivation displaying student centered approach, interested, take things seriously, willing to give, love for educating, dedicated, showing interest, punctual, reach and explain target, teach with pleasure, well prepared, observe knowledge in action, devoting time, prepared mentally, shows commitment to teaching, hands on	Motivation giving priority for teaching, show on time, considering teaching time as a sacred time, passionate for teaching, passionate about teaching, get a ritual for passing on the knowledge, available to show findings, go out of own way to help students learn, spending time with students, show students that you have dedicated time for teaching, show students interest in teaching and in the subject being taught, give a positive energy to students, embracing and building trust in students and in what they do
		-Showing empathy towards students -Embrace caring and giving attitude -Being considerate to students	**Empathy** accepts that students do not know, considerate, empathetic,	**Empathy** show caring and empathy to patients, acknowledging the need of patient and family during teaching process, embrace caring and giving attitude, learn how to understand people, put yourself in the shoes of the students, make sure that the student is satisfied

		-Maintain professional relationship with students, trainees and peers-Inspire, leave impression, and instill traits in students' characters-Empower students, and show confidence and trust in what they do-Sharing knowledge in a positive manner	**Social Skills** displaying comprehensive care, team player, respecting students, trainees, and colleagues, sharing knowledge, being a good educator for students and patients, explaining, team work, make the team very important piece of the medical procedure, being part of a team, let the team help you retracting, sharing knowledge in a positive manner, participative, available, empowering, willing to share and give	**Social Skills** respecting patient, student and team, displaying professional behavior, display respect to students, pass knowledge in a positive and constructive manner, teach students how to do things by allowing them to do mistakes,capable of passing the knowledge, impress students and ensure they are awake, leave a track in the mind and soul of students, encouraging students to move forward, push students forward and encourage them, instill traits in their students and in their characters, empower students and trust them to apply skills, have the power of giving, showing confidence in students and in what they do, instill a trait of hard working, leaves impression on students

b. Competencies of Academic Physician as a "Researcher in the Medical Fields"

	Competency	Key-Anchored Behaviors	Behavioral Description: Semi-Structured Interviews	Behavioral Description: Critical Incident Technique
1	Communication Skills	-Understand the knowledge level of target audience and tailor complex message accordingly -Able to convince using facts in a sensitive manner -Able to communicate in a cultural-sensitive manner	communicate well, know how to communicate the information, good communication with patients and colleagues	explaining to patients, explain to others
2	Knowledge and Research Skills	-Has a good training, knowledge and expertise in own field -Has a good grasp and grip of the basic science -Acquire the art of research design, methodology and principles	knowledge is very important, having proper education and mentoring, knowledgeable of the basic science, have a good grasp and grip of the basic sciences, knowledge of the research principles, know how to design a research project, extensive knowledge, basic skills	has research background, knowing the principles, knowing research methodology, having good level of knowledge, has great background knowledge and really know their stuff, getting in depth with the research

4	Innovation and Creativity	-Able to come up with innovative research idea and form a good research question and hypothesis -Has creativity, inquisitive mind and scientific curiosity -Has research vision and scientific goals	innovative, creative, inquisitive mind, open minded, having a good question, framing the question in a way that is answerable, forming relevant hypothesis to own medical practice, ability to answer a question, has research goal, always looking for answers to questions that come up, has vision, has a scientific goal, has research vision and good purpose	has scientific curiosity, asking the right question, work hard in an attempt to answer the question, transforming of knowledge, analyzing research question
3	Conceptual Thinking and Data Analysis	-Able to observe and think critically beyond the conventional and traditional boundaries-Able to critically manage and analyze research data and results-Able to plan a good research	critical thinking and analysis, scientific mind, skills to write, very thorough and very careful, looking beyond the conventional and beyond the traditional, always looking and seeking their beyond, highly observant, to analyze, to critically analyse or to come wiht final project, know how to approach the problem, aware of the details of own studies, data management	planning a good research

5	Behavioral and Organizational Skills	-Able to manage a multidisciplinary research team -Able to know how and what to delegate responsibility with the research team -Able to choose the right research team	able to manage a multidisciplinary team, time management, team management, know how and what to delegate	team management skills, choosing the right research team
6	Continuing Education	-Able to continuously updates knowledge and information of what other researchers are working on -Able to research areas that have not been touched before -Able to seek opportunities to learn more	well read and informed, staying up to date, updating knowledge of what other researchers are working on, aware of the missing fields	reads all documents, doing work that has not been touched on at all, do not ignore, use that opportunity to learn more

7	Professional Ethics and Integrity	-Collecting accurate data and reporting accurate information-Acknowledge for contribution and give credit to the research team-Being involved in developing the research idea and methodology	has integrity, ethical, collecting accurate data, reporting results accurately, give proper acknowledgement, give credit to the research team, reporting accurate information, clear separation of conflict of interest	sticks to the integrity of reporting the data despite that being not ideal for the research outcome, respecting coworkers, giving credit to the research team, honest in collecting data, ethical in conducting research, genuine and pretty straight forward, getting evidence to practice safe medicine, acknowledge for contribution, being involved in developing the research idea and methodology
8	Emotional Intelligence	-Has an altruistic approach in conducting research-Being straight and professional-Being meticulous and attentive to details	**Self-Awareness** talented, patient, responsible, having altruistic approach, have the charisma, meticulous, attentive to details, honest, straight forward	**Self-Awareness** efficient, has an extremely pleasant personality,having altruistic targets from conducting research, straight, being professional, perseverance, devoted, stimulous, has research focus, extremely meticulous, truthful

		-Observing research rules and regulations -Willing to accept research results as they are -Respecting patients and consenting them for doing research	**Self-Regulation** conducting useful research, respecting all the regulations, reserving the rights of the patients, observant of research rules and regulations, willingness to accept research results as they are	**Self-Regulation** consenting patients, respecting the patients
		-Has self-motivation and passion for research-Dedicating time and effort for research-Self-driven and motivated-Does research for the sake of filling a gap in science and improving patient care	**Motivation** dedicated, interested in the research topic, motivated, passionate about research, committed to research, dedicating time, dedicated for the improvement of care provided to patients and their families	**Motivation** self-driven and motivated, self-motivation to advance science, work to change the way medicine is being practiced, filling a void in certain research area, trying to find out how to best care for a particular disease, actively recruiting patients according to the guidelines of conducting research, getting in depth with the research, sacrifice time for research, passion for research
		-Caring about research subject -Being considerate and empathetic	**Empathy** caring about research subjects, considerate, empathetic	**Empathy** put yourself in the shoes of the research subject

		-Able to establish good research network in own field-Able to embraces trust and collaborate with the research team-Able to create a positive non-competitive environment and support research team members to grow with their ideas to the extreme	**Social Skills** team worker, encouraging, collaborative, have demeanor, behaving in an appropriate scientific manner, good connected with researchers in the same field, nurturing and supportive, team player, create a positive non-competitive atmosphere, create productive environment, leadership skills	**Social Skills** team work and collaboration, transforming people, support researchers to grow to the extreme with their ideas, embracing trust in own team, set the way for lots of people, helping and providing junior faculty with support and pushing them to go up, spends time clarifying the points that need to be found, teaching junior faculty and research team

c. Competencies of Academic Physician as a "Clinician or Healthcare Provider"

	Competency	Key-Anchored Behaviors	Behavioral Description: Semi-Structured Interviews	Behavioral Description: Critical Incident Technique
1	Communication Skills	-Understand the knowledge level of target audience and tailor complex message accordingly -Able to communicate in a culturally-sensitive manner -Able to convince using facts in a sensitive manner -Able to actively listen to patients, fellows, residents, students, and team members	communicating with patient, family, colleagues, residents, fellows, students, and team members, listening to the patient, considering the state of knowledge of the patient, explaining to patient and team the conditions, the key component of the decision making, the risks and benefits, trying to understand, establishing direct interaction with patient, answering questions, ensuring that the patient understand, talking respectfully to patients, listening and hearing form patient	let patient ask questions, answer patient questions objectively, ask patient questions, provide patient with clear instructions, tailor message to the level of the patient, wait for patient to absorb the information and listen to questions, listen to patient and family, tailoring message to the level of understanding of patient, explaining to patient, communicate with different level of people, able to start the interview and develop a good rapport, able to gain the trust of the patient in short period of time ask the right question, able to get the needed information, conduct difficult conversations with patient, talk to patient in a culturally acceptable way, communicate with patients, actively and empathetically listen to patients, give elaborate description about what to do, explain to the level of understanding of patients, show patients diagrams and figures to ease fear, communicate knowledge, have great way of communicating knowledge

2	Medical Knowledge and Clinical Skills	-Has the basic clinical knowledge and expertise to perform clinical procedures in own specialty -Follow standards of practicing medicine, and evidence-based healthcare -Able to examine, diagnose and analyze patient's symptoms and decide on a differential -Able to use advanced clinical skills and technologies to perform medical procedures	having basic medical knowledge, putting the effort in examining patients, competent, board certified, knowing how to perform medical procedures, having the right training by doing and seeing, having the skills to conduct knowledge, performing medical procedures well, pursuing patients symptoms, conducting proper diagnosis, initiating proper treatment, ordering appropriate tests	diagnosing patients based on findings, prescribe proper medications, recognize symptoms of a disease, focus on issues, follows standards of practice, have good fund of knowledge, examining the patient, reviewing the history, excellent medical knowledge, decide on proper tests, having the clinical skills, systematic in patient approach, taking history and examining patients, and reviewing charts, have good fund of knowledge, competent
3	Conceptual Thinking and Decision Making	-Able to think critically beyond the boundaries of the clinic to make a decision-Able to conceptualize solutions to clinical problems and initiate a proper treatment plan-Able to make a balanced decision taking into consideration patient's health and financial situation	Solving problems, analyzing what is hindering things moving forward, exceeding clinic boundaries, making thoughtful decisions, thinking of patient	get all the information needed before digging any critical decisions, direct to the point, thorough and sharp thinking of clinical problems, problem solving

4	Behavioral and Organizational Skills	-Able to manage and engage a multidisciplinary medical team and make them part of the healing process -Assume and share responsibility with the members of the team -Has organizational and time management abilities -Able to monitor performance, provide feedback, and improve outcomes	team management skills, team work, interdisciplinary team work, being part of a team, incorporate students, residents, fellows and nurses and make them part of what you do, let the team help you retracting, make the team very important piece of the medical procedure, team management skills, well-organized, documenting findings and everything said to patient, establishing a good system, figuring out what is important, monitoring outcomes, identifying areas of weaknesses to improve outcomes, making sound financial decisions	team player, share the responsibilities with everybody around, having the people skills, self-driven, able to mingle with the medical team in a professional way, easiness of mind, document findings and what was said to patients, time management skills
5	Continuing Education	-Able to continuously update medical knowledge and clinical skills in own specialty -Eager to learn and read persistently -Willing to learn from students, trainees, and other stakeholders	continuing education, updating information	willingness to learn from student, read persistently

6	Professional Ethics and Integrity	-Treating all types of patients equally and professionally-Advocating patient's rights and dedicating time and effort to patient care-Respecting privacy, autonomy, consent, and need of patients and families	ethical, giving time to explain and answer questions, giving time and effort for patient and clinical care, advocating for the patient, treating patients as equal as ours, giving equal treatment to all types of patients, acting according to the findings of outcomes, does not drink or gamble, available, respecting patients, families, and medical team, respecting the privacy of the patient, respecting the autonomy of patient and patient's family, not harassing, sitting to talk, maintaining confidentiality, tell the patient the truth	ethical, thorough, ethical standards, truthful, truthful, taking responsibility, treating patients equally regardless of their social status, give a chance to patient, respecting patient privacy, respecting what patient says, respect that patient does not know, telling patient the truth
7	Emotional Intelligence	-Know own limitations, and able to decide when to call for a specialized consult -Has unselfish and altruistic qualities -Be aware of own personal qualities	**Self-Awareness** knowing own limits, knowing when to call for a specialized consult, able to reach out to different disciplines, being thorough, attentive to details, being professional, unselfish, wise, calm, delightful, humble, altruistic, honest, straight, ideal role model, down-to-earth, meek	**Self-Awareness** confident, honest, understand own limitations, knows limitations, outreach to different disciplines, seeks second opinion, professional, open-minded, humble, courteous, meticulous, altruistic, nice, polite, respectful

		-Able to control own emotions and contain others -Able to accept criticism and to be questioned for own knowledge and skills -Able to present self to patients and medical team	**Self-Regulation** patience with the patient, emotionally intelligent, controlling over emotions, accept criticism, accept being questioned, behaving around the staff, representing to the patient, family, colleagues, residents, fellows, students, and team members	**Self-Regulation** controlling anger, accept for his knowledge and skills to be challenged, accepts criticism, contain the patient, presenting self to the patient
		-Displaying a patient-centered approach-Dedicating time and effort to patient care and attending thoroughly to patient needs-Go out of own way to offer patients the knowledge and skills needed for healing-Has the inner motivation to heal patients without being affected by external factors that prevents performing job.	**Motivation** reading materials very carefully, displaying patient centered approach, easiness of approach to patients, dedicating time to patients and families, showing commitment, dedicated, being engaged and available, approachable, checking on patient after discharge	**Motivation** provide an altruistic and self-driven care, patient-centered, willing to stay after schedules, dedicated, work with wholeheartedness, not really affected by factors that prevent doing job, go out of way to save life, never surrender, offer patient the knowledge and skills, take time with patients, attentive to details, dedication to patient care, attentive and caring to patients and their needs, attend thoroughly to patients, take time to diagnose patient and relate symptoms

		-Showing empathy towards patient and family -Able to deal with patients, families, and medical team effectively and in a conducive manner -Being considerate to the situation of the patient	**Empathy** empathetic, showing compassion to patients, caring and healing, caring for the autonomy, consent and need of patient, humane, passionate, considerate to the situation of the patient, providing comfort to the family, understanding the consent and need of the patient, sensitivity to patient side, looking into the psyche part, the family part, and the social part of patient	**Empathy** empathetic, good behavior, considerate, understand the frustration and suffering of patient and their feeling of despair, caring and empathizing about patients, compassionate, go out of one's way to help patients and provide them with support, understand their fear and turn it into comfort, provide comfort and assurance to patients and families, put yourself in the shoes of the patients, make sure that the patient is satisfied with the care
		-Maintaining professional relationship with patient, family and medical team-Being approachable, patient, thorough, and exemplifying great bed side manner-providing comfort and reaching target with patient and family	**Social Skills** having great bed side manner, friendly towards patients and their families, maintaining excellent and professional patient-doctor relationship, paramedical, and medical staff, know how to reach the target with the family, keeping an image, displaying genuine humility, advising patient rather than giving orders, sharing knowledge, guiding the patient	**Social Skills** friendly, having a friendly approach towards family and medical team, know how to deal with patient, good conduct, good practice, convincing patients and advising them, embrace cultural awareness and cultural openness, being constructive

d. Competencies of Academic Physician as an "Academic or Clinical Administrator"

	Competency	Key-Anchored Behaviors	Behavioral Description: Semi-Structured Interviews	Behavioral Description: Critical Incident Technique
1	Communication Skills	-Able to communicate own vision and strategy to a different level of people -Understand the knowledge level of target audience and tailor complex message accordingly -Able to communicate in a culturally-sensitive manner -Able to convince using facts in a sensitive manner -Able to actively listen to people	communicating with constituency, has the ability to explain, ability to listen to different stake holders, knows how to communicate and be mellow, good at verbal and non-verbal communication, conveying knowledge, communicating knowledge, listening to what people are asking for, listening to people's needs, listening to what preventing people achieving common goals, has the listening skills, excellent communication skills, make sure that people understand the rules, communicating with people, allows people to express their opinions openly and honestly, able to communicate goals	listen to people, willing to listen, listening to everyone, communicate and talk, able to transmit message, able to argue a point with simplicity, talking to people, listening to subordinates, talk to people at the same level, listening to people's interest and concerns, conducting good conversation and outcomes, communicating and involving people
2	Leadership Skills	-Has a vision and able to develop own strategy -Able to inspire people, make them believe, and guide them along a certain direction -Able to create a harmonic atmosphere and a team work environment -Assume responsibility to full extent	leading skills, has leadership or leader's qualities, create leaders, has vision, developing own strategy, communicate vision, has the ability to convey the vision, clarifying vision, smart in conveying goals, make people believe, convince people that the goal is a shared goal for them, inspiring people, guides people along a certain direction, able to make other people follow, able to see the bigger picture, a servant leader,	has a vision, has a goal, communicating and explaining the goals, instilling a culture of trust, creating buy-in, bring, building team work environment, creating harmonic atmosphere, bringing people together, bring everybody together in a positive way

			know the potential of own team, taking responsibilities to the full extent, able to bring people together, able to get people to buy in, able to synchronize own team	
3	Business and Financial Knowledge	-Has good knowledge of budgetary affairs -Has good knowledge of financial analysis -Has good knowledge of project management, business plan, and public relationship	knowledgeable, know budgetary affairs, good financial skills, has business knowledge, knowledge in team management, good financial knowledge, know project management, know business plan, know public relationship	knowledgeable

4	Behavioral and Organizational Skills	-Able to identify and form teams, and manage multi-functional teams-Able to make and implement decisions, and getting things accomplished-Able to set goals and priorities, clarify outcomes, and delegate responsibilities with accountability-Able to establish and monitor a good performance management system-Has a flexible management style	able to figure out and understand numbers, know the business etticquette, management skills, up to par in various administrative skills, system thinking, focusing on processes and systems, macro manager, identify and form the right team, very smart in selecting people, able to identify people's strength, look at the bigger picture, good administrator, ensure the system can perform at a higher rate, able to manage different personalities, time management, has administrative skills, know how to delegate, doesn't have any hierarchical system, arrange for things, know how to distribute responsibilities, figure out a good way to delegating responsibilities with accountability, reach out to the team, follow up on things, going back to people is crucial matters, make employees more efficient and productive, strength of the character to hold people accountable and to defend the position, make sure that everybody follows the rules, be involved closely with people's performance, follows up on matters, exploring options, involving team members with decision making, able to make informative decisions, make decisions,	global thinking, think out of the box, able to see the bigger picture, system thinking, organizational awareness, organized, improve work environment, identifying the right people, being ahead of the game, supervising his people well, get the job done, has time management skills, identifying deliverables, measuring deliverables, made people accountable, following up, provides the team with incentives, has clear objectives, being simple and straight to the point, understanding the business, has time management skills, has project management skills, making changes based on feedback, reinforcing rules, making and implementing decisions, ensure that everything is being done, make informative decisions, able to delegate tasks, assigning clear responsibilities, empowering everybody around, follow up, assign tasks based on people's abilities, getting things accomplished, make everybody work along some clear tracks, puts things together all the time, project coordinator, putting everybody in prospective, able to assess the quality of people, search for alternatives, assume responsibility, taking action, planning, focusing on outcomes, entrusting people,

			implement decisions, make decisions quickly but appropriately, clarifying the deliverables, focus on outcomes, has systematic approach and make things more influential and sustainable, make things improve or progress, strong personality, outcomes and goals oriented, has a dynamic way of dealing with things and people, facilitating people's work, make people happier in order to achieve goals, able to make people perform without forcing, facilitating people's work, good organizational skills	building team, knows the quality of own team member
5	Continuing Education	-Able to continuously updates knowledge and information -Eager to learn and advance	learning and advancing, always updated about performance improvement and strategy	
6	Professional Ethics	-Able to advocate creating a work/life balance environment that supports working women -Able to establish trust and deliver on promise -Able to apply rules systematically and treat people equally	integrity, establishing trust, giving the proper time and effort to the job, treat everybody equally, deliver on own promise, standardized way of applying rules, systematically applies rules	observe work/life balance, advocate to create a work/life balance environment that supports working women, set up of schedules and meetings to suit working women, available, easy to reach, respecting privacy of people, treating people equally, deliver on promise, provides honest feedback

		-Respect privacy of people and provide honest feedback		
7	Emotional Intelligence	-Has an altruistic and employee-centered approach -Has positive and constructive attitude and has an open mind -Being malleable, permissive, caring, diplomatic and charismatic -Being responsible, disciplined, energetic, meticulous and attentive to details	**Self-Awareness** strategic thinking, truthful, honest, modest, has a good stamina, accurate, meticulous, energetic, open minded, flexible, firm but fair, empowering people, trusting people, caring, charismatic, malleable, delivering, positive attitude, altruistic, diplomatic, wise, employee-centered approach, permissive, respectful, organized, efficient, decisive, able to identify own strength	**Self-Awareness** conscious, decisive, flexible, appreciative, open minded, calm, supportive, honest, altruistic, focused, efficient, responsive, truthful, trusting people, entrusted, hard worker, humble, has positive attitude, decisive, risk-taker, good moderator, serious, disciplined, charisma, self-aware, caring, honest, crisp, permissive, smart, friendly, constructive, organized, focus, malleable, direct to the point, well organized, highly responsible, energetic, attentive to details
		-Able to observe policies, rules and regulations -Willing to accept criticism and others opinions -Being culturally oriented and willing to accept others -Able to control emotions and absorb anger -Able to reflect on own experience	**Self-Regulation** culturally oriented, accept criticism, willing to accept feedback and criticism, accepting others, values the opinions of peers and subordinates, observing rules and regulations and policies and procedures, not stepping beyond own boundaries	**Self-Regulation** getting feedback from team, control emotions, absorb anger, able to reflect on own experience, understand the differences in views

		-Has self-motivation to make people's life easier -Able to devote time, energy and effort -Being available, reachable, and approachable -Able to put extra effort and go beyond the scope of the job	**Motivation** dedicated, dedicate time, go beyond the scope of the job, available, reachable, put extra effort and commitment, making people's life easy, show people that they can get along, approachable, committed, attending to matters, coming on time	**Motivation** motivating, approachable, dedicating time, devoting time and energy
		-Caring about the interest and concerns of people -Able to understand the needs of people -Able to relief people	**Empathy** caring for own team and interest, look at the concerns and needs of people, relieving people, think for the interest of group as a group	**Empathy** understanding people's situation, understanding the needs of people, put forth the people around them, looks at the concerns of others
		-Able to develop and promote people and contribute to their career advancement -Has good negotiation and conflict resolution skills -Able to bring people together, form and work with teams -Has leadership qualities and abilities	**Social Skills** promoting others, emotional intelligence, socially skilled, team player, knowing how to handle different types of people, reaching out to people, involved in people's development, supportive in anyway possible, managing conflict, ready to resolve problems, conflict resolution ability, able to form and work with teams, team player, problem solver, able to solve organizational issues	**Social Skills** high leadership skills, consulting with people, resolving conflict, reaching consensus, advancing people in their career, team work, team player, bringing people together, make people aware, helping people making their own plans, mentoring and developing others, great coach, try to promote people, problem solver, respectfully negotiate, propose respectfully solutions, achieve solutions, has good negotiation skills

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