

Level of Individuation, Emotional Intelligence and Adversity Quotient[®] of Medical Doctors: Basis for a Proposed Enhancement Program

In partial fulfillment of the requirements for the Degree of Bachelor of Science in Psychology

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Dedication

The researchers dedicate this study to the medical doctors of UERMMC as a humble effort to optimize their capacities in providing healthcare. Furthermore, this study was fueled by the researchers' pursuit to achieve their dream which is to become medical doctors. Also, this is dedicated to the University of the East - Department of Behavioral Sciences as a contribution to its collection of immense knowledge and work. Finally, this research is dedicated to PEAK learning as a support in their movement towards empowering individuals' resilience.



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CHAPTER 1

THE PROBLEM AND ITS BACKGROUND

Introduction

The Department of Health reports that the Philippines' healthcare system is wealthy when it comes to human resource. These are people who provide health education and services. However, a great number of these people are centralized in urban areas like Metro Manila. By the year 2030, it is the department's vision to be "a global leader for attaining better health outcomes, competitive and responsive health care system, and equitable health financing." In line with this, it will only be ideal to enhance and to achieve optimum service given by healthcare professionals; particularly Medical Doctors. This study offers a way to achieve such feat and contribute to the betterment of healthcare service in the country.

Medical professions greatly deal with social demands and stress. People in these professions must be fully “well” to cope up with workloads, stress and burdens in the clinical field (Heechun & Park, 2016). Medical Doctors' well-being impacts on their physical and mental health, and also on their performance as professionals. There is no consensus around the single definition of the word “wellbeing”. Wellbeing is described as “a dynamic state in which the individual is able to develop their potential work productively and creatively build strong and positive relationship with others and be able to contribute to their community” (Cohen, Winstanley, Palmer, Allen, Howells, Greene & Rhydderch, 2013). Thus, wellbeing gives full capability to Medical Doctors to attend to the needs of the patient with their full potentials and their capabilities to handle workloads at ease and without the presence of severe stress.



Payawal (2015) described the journey to being a medical doctor as “not easy” as she shared her experiences as a medical student. She described it as the science of saving lives wherein a lot of considerations and sacrifices must be done. In the journey, one will be facing the challenges of academics, which may include worrying about your grades and fees, being test-ready, studying ahead and developing the appropriate study habit, and compensating with failures and insecurities. One’s social relations will also be tested. Finding time to spend with your family will be tough, interacting with upperclassmen may be a great help, and interacting with non-med people will be weird. Lastly, one will have to deal with interpersonal challenges; it includes having the will to continue through the journey, reflecting over previous choices in life, and facing moral dilemmas. In the end, entering, and staying medical school shall be worth it because, according to her, “if this is what you really want, it will be the most fulfilling decision of your life.”

Being a medical doctor is a very challenging profession because it challenges the physical, mental, and emotional state of an individual. The academic years of being a medical doctor is where the students’ physical, mental, and emotional limits will be tested. It brings out the best and worst qualities one has to acquire and those who will persevere will be rewarded with the title.

This study focuses on three bases that support one’s well-being namely: Level of Individuation, Emotional Intelligence, and Adversity Quotient[®]. These factors will be used to propose a program that aims to help Medical Doctors improve their wellbeing.

According to Carl Jung (1937) as mentioned by Schirp (2016), accepting a person’s dark side is vital to becoming a unified whole. Individuation requires recognition of both



constructive and destructive influences with their primary motivating forces such as altruism and selfishness, respectively. These two factors have to be observed according to which overpowers which in Medical Doctors. Individuation is a matter of concern in this study because the Level of Individuation reveals the extent to which the Medical Doctors are willing to choose themselves over other people. The level of individuation of Medical Doctors may or may not affect their general clinical performance, but it may show when they're off-duty, or during personal or leisure time. Low level of individuation suggests selflessness or altruism, while high level of individuation suggests high self-regard.

Emotion is fundamental to the medical field. Emotional Intelligence is considered as an important characteristic of people providing health care and services, which can affect the quality of their work including clinical, decision-making, critical thinking, evidence and knowledge used in their practice. Results of previous studies on Emotional Intelligence show that there is a direct relationship between Emotional Intelligence and the positive organizational performance including a more positive outcome in teamwork performance and more effective interactions to conflicts and a lower level of tension. Emotional Intelligence plays a vital role in developing one's well-being; lapses in having a developed well-being may lead to ineffective and unsatisfying outcomes in dealing with patients (Barkhordari & Rostambeygi, 2013). A review which was conducted by Cherry, Fletcher, and O'Sullivan (2013) explored previously existing studies about Emotional Intelligence. Upon the end of their review, results were found to be dynamic and diverse. Previous studies emphasized the need to explore this area in relation to these respondents. (Sarkar & Senapati, 2016).



Adversity talks about hardships that one may face in his workplace. It deals with the way doctors rebuild themselves and bounce back after facing failures and challenges. Failure to attend to the adversities may lead to burnout, which is a major concern in medical centers because of its impact to healthcare (Eley, Cloninger, Walter, Laurence, Synnot & Wilkinson, 2013). Adversity generally relates to frustrations and the tolerance thereof, how is it dealt with, expressed and how it affects Medical Doctors. In order to deal with these adversities, resilience must be observed.

Adversity Quotient[®] is a measure of human resilience that is being extensively used to improve performance, productivity, innovation, agility, change, pace, problem solving, optimism, engagement, morale, retention, hiring, development, coaching, people, leadership, and culture in the workplace. Dr. Paul Stoltz, founder and CEO of PEAK Learning, believes that Adversity Quotient[®] a best global practice because it can be applied across multiple contexts, is scientifically and statistically reliable and valid, and it already delivered results of significant gain that exhibited results that stick.

As psychology majors, the researchers were inspired to do this study because they share the common passion to enter the medical field and to become potential doctors; hence, the researchers took psychology as their pre-med program.

Overall, the studies and readings show that these three bases are potential factors in developing an effective wellness program that will innovate the healthcare service of the country and may become a breakthrough in helping Medical Doctors in providing good service to the patients they are attending to.



Theoretical Framework

The following discussions contain theoretical bases for Level of Individuation, Emotional Intelligence, and Adversity Quotient® as indicated by how they were dealt with in this study.

Jung’s Theory of Individuation

According to Carl Jung (1993) as cited by Margaret Ann Gibb (2014) through individuation, we learn to become ourselves. The concept of individuation describes the process of becoming aware of a person’s capability to know their limitations. The importance of individuation is to which people can achieve and maintain their mental stability by choosing themselves over others. Individuation, however, can end up producing self-centered individuals who follows what the ego wants. Basically, individuation pursues to raise consciousness beyond the ego and individual attitudes, and cultural identification to a much broader self-understanding.

Genos Emotional Intelligence

Identical to the Emotional Intelligence concept is the Genos Emotional Intelligence Model. According to Gignac (2010), Emotional Intelligence is the ability to adjust, shape, and identify environments through emotion processes that are relevant. This model consists of different sets of Emotional Intelligence showing competencies in workplace behavior. These competencies show skill and behavior from underlying experiences and abilities. The Genos Model of Emotional Intelligence has seven core skills, as follows:



Emotional Self-Awareness (ESA). This skill is about being aware of the way one individual feels and what are the impacts of this feeling in one's performances, behaviors and decision making. According to Gignac (2010), this measures the relative frequency with which an individual consciously identified their emotions at work.

Emotional Expression (EE). It emphasizes how an individual expresses his emotions in an appropriate way. It implies that there is a right way, right time and right people for its expression (Gignac, 2010).

Emotional Awareness of Others (EAO). It emphasizes the understanding and acknowledgment of the emotions expressed by other people. It demonstrates empathy with others (Gignac, 2010).

Emotional Reasoning (ER). It measures the frequency of how much an individual's emotions integrates with others emotions when making decisions at work (Gignac, 2010).

Emotional Self-Management (ESM). It measures the frequency of how individuals successfully manage their emotions at work. Emotional Self-Management often involves moving on from an emotional set-back, rather than staying over the situation (Gignac, 2010).

Emotional Management of Others (EMO). It measures the frequency of how an individual successfully manages other people's emotions at work. It involves creating a positive atmosphere at work for others or helping one individual resolve problems that make them stressed (Gignac, 2010).



Emotional Self-Control (ESC). It measures the frequency of how an individual successfully control their strong emotions at work. It is somehow similar to Emotional Self-Management but it focuses more on intense reactive emotions at work such as anger. Emotional Self-Control is more reactive while Emotional Self-Management is more proactive (Gignac, 2010)

Stoltz' Adversity Quotient[®]

Dr. Paul Stoltz Adversity Quotient[®] or simply known as "AQ[®]" is defined as "the capacity of the person to deal with the adversities of his life and as a science of human resilience." By the use of this model, one can effectively predict another individual's resilience. AQ[®] can also be used to measure how an individual reacts to adversity. AQ[®] consists of four factors, the "CORE":

Control – This is the ability to control capability of dealing with adversity. It shows that the learning result of an individual is connected to its effort. According to Dr. Paul Stoltz, People with higher AQ[®] are able to manage their responses when adversity comes.

Ownership – This refers to an individual's ability to determine the cause of events and responsibility for the outcome of adversity. According to Dr. Paul Stoltz, those with higher AQ[®] feel that they are responsible for dealing with situation in any case. Those with lower AQ[®] blame themselves for bad situation.

Reach – This factor shows the scope of the effect of adversity on oneself. This shows how well a person perceives the upcoming problems. According to Dr. Paul Stoltz, those with higher AQ[®] deal with problems positively and do not let the problems affect

their lives. On the other hand, those with low AQ[®] are inclined to be poor in decision-making.

Endurance – This factor shows how long (duration) and how deep (depth) a person perceives the frustration caused by adversity. According to Dr. Paul Stoltz, those with higher AQ[®] maintain hope and optimism. For those with low AQ[®] they see their ability as the cause of failure

Conceptual Framework

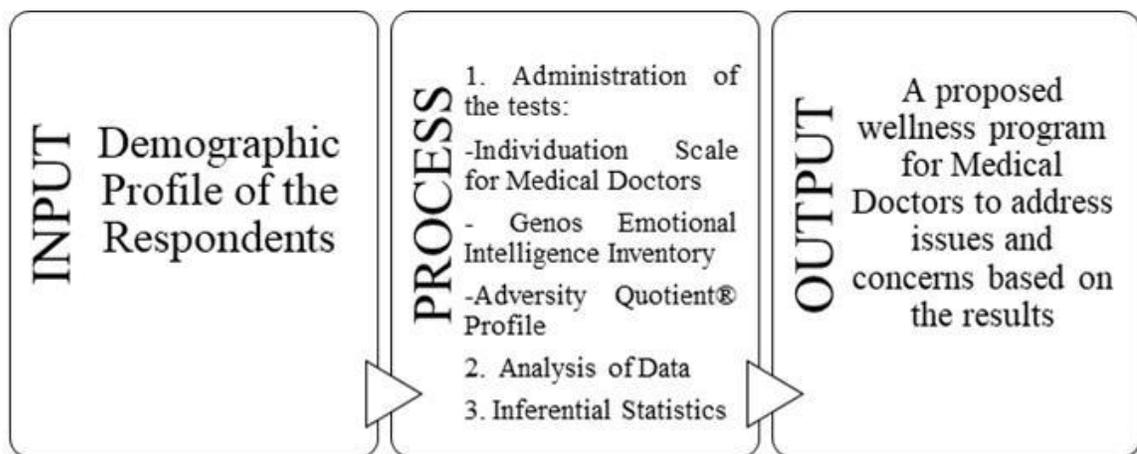


Figure 1 shows the overview of how the research was constructed. The respondents were described through their demographic profile: age, sex, religion, specialization and length of service. The respondents were evaluated through their Level of Individuation, Emotional Intelligence, and Adversity Quotient[®]. From there, the researchers presented, analyzed and interpreted the gathered data. Lastly, the output of the study was a proposed enhancement program based on the results of the variables.



Statement of the Problem

The study mainly sought to propose an enhancement program for Medical Doctors by using their Level of Individuation, Emotional Intelligence, and Adversity Quotient[®] as bases.

Specifically, this study sought to answer the following questions:

1. What is the demographic profile of the respondents, who are grouped according to:
 - 1.1. Age;
 - 1.2. Sex;
 - 1.3. Religion;
 - 1.4. Specialization; and
 - 1.5. Length of Service?
2. What is the general Level of Individuation of the respondents?
3. What is the general Emotional Intelligence of the respondents?
4. What is the general Adversity Quotient[®] of the respondents?
5. Is there a significant relationship between Level of Individuation, Emotional Intelligence and Adversity Quotient[®]?
6. Is there a significant difference between Level of Individuation, Emotional Quotient, and Adversity Quotient[®], when grouped according to their demographic profile?



7. What wellness program can be proposed based on the results of the study?

Null Hypotheses

H₁: There is no significant relationship in Medical Doctors' Level of Individuation, Emotional Intelligence and Adversity Quotient®.

H₂: There is no significant relationship in Medical Doctors' Level of Individuation, Emotional Intelligence and Adversity Quotient® when grouped according to their profile.

Scope and Delimitation

This study primarily focused on the Medical Doctors' Level of Individuation, Emotional Intelligence, and Adversity Quotient® and how these factors affect their overall performance as professionals in the medical field. The data gathering for this study only included Chief Residents and Junior Consultants practicing in the University of the East Ramon Magsaysay Memorial Medical Center (UERMMM). Only those who agreed to participate will be included in this study.

The study was specifically delimited to Medical Doctors and excluded the involvement of other Doctorate degrees (e.g. DMD, EdD, PhD). This was because one of the main goals of the researchers was to know the respondents' Emotional Intelligence and Adversity Quotient® - which the researchers believe would manifest more in the Doctors who are more exposed to emotion-triggering adversities like death of a patient, or delivering bad news to a patient's family.



Significance of the Study

This study determined the Medical Doctors' Level of Individuation, Emotional Intelligence, and Adversity Quotient[®] as the basis for a proposed enhancement program. The results of the study are most likely to be useful to the following:

Medical Administrators- The results of the research will be beneficial to the medical administrators so that they will be able to monitor the healthcare performance of the Medical Doctors.

Helping Professionals- The information found in this study will help other professionals increase their knowledge about Individuation, Emotional Intelligence and Adversity Quotient[®]. It can help them deal with their personal and spiritual adversities from work. Therefore, it will improve their management skills to be able to give a better service to their patients.

Future Medical Doctors- The realization obtained from this study would be beneficial for them for this will provide them knowledge on how to deal with adversities that they may encounter and ways on how to counter it.

Psychology Practitioners- The suggested wellness program in this research can be used as a therapy to enhance the Level of Individuation, Emotional Intelligence and Adversity Quotient[®] of Medical Doctors.

Psychology Majors- This study will provide them the needed information as part of their preparation to the field of medicine.



Future Researchers- The results of the study could be beneficial to future researchers who will conduct similar studies. This study can be used as their reference.



Definition of Terms

The following terms are defined operationally:

Adversity – Problems or issues Medical Doctors experience at work.

Adversity Quotient[®] (AQ[®]) – The ability of Medical Doctors to deal with frustrations and obstacles; measured by the Adversity Quotient Profile[®] by Dr. Paul Stoltz.

Emotional Intelligence (EI) – The result of the Genos Emotional Intelligence Inventory.

Individuation – The extent to which Medical Doctors are willing to choose themselves over their patients.

Level of Individuation (LI) – The result of the Individuation Scale for Medical Doctors.

Medical Doctors – Natural people with an “M.D.” in their name who are actively practicing as Chief Residents and Junior Consultants in UERMMMC.



CHAPTER 2

REVIEW OF RELATED LITERATURE AND STUDIES

In this chapter, the researchers will discuss literature and studies that will contribute to a broader understanding of the problem at hand.

On Level of Individuation

Carl Jung (1971) defined Individuation in a lot of ways through his continuous study of Psychology. In one of his books, he defined it as:

... the process by which individual beings are formed and differentiated; in particular, it is the development of the psychological individual... as a being distinct from the general, collective psychology. Individuation, therefore, is a process of differentiation... having for its goal the development of the individual personality.

In later years, Jung augmented this definition by further describing Individuation as (1) the process by which a person becomes a psychological “in-dividual,” that is a separate, indivisible unity or “whole,” (2) the better and more complete fulfillment of the collective qualities of the human being, and (3) “coming to selfhood,” or “self-realization.” These definitions and the Western belief of individualism mislead many to believe that the two might be the same. In some books, Individuation was exposed to oppose Spirituality; which was further explained using indirect proportion: an increase in individuation results in a decrease in spirituality, and vice versa.



Individuation retained its definition to be “one” and undivided; while spirituality holds that of being “for other people”. In Jung’s *Collective Works* in 1928, he defined our spiritual needs as “as real as hunger and fear of death” which easily supports that these are also guidelines as to how people lead their lives. Individuation deviates from Spirituality in terms of how one individual lives his daily life. To know whether one is being governed by which shall be elucidated by answering the question “do you value yourself more than others?”

Individuation can help limit dehumanization by means of making patients more identifiable and by spreading interests of good obligation in doctors (Haque & Waytz, 2012). Individuation, in this issue, advances imagination, improvement and strengthening in the recuperating demonstration and gives healers and patients more prominent association and control in the development of mending reality and does not simply lead into 'victim-blaming' (McClellan, 2005). Shealy and Church (2006) asserted that self-actualization is vital to the process of moving towards ultimate adult maturity called individuation. This basically states that when an individual is fulfilled by himself, he is a step closer to maturity.

In this study, individuation refers to the altruistic behavior of Medical Doctors. Altruistic implies self-sacrifice for the welfare of others (Burks & Kobus, 2012). Which basically means if they are willing to choose themselves over their patients. According to Steinberg (2010), “Individual motives ascribed to altruism include meeting a perceived social or familial obligation, the expectation of reciprocity, enhancing one’s self-image, religious or spiritual beliefs, and the avoidance of guilt.”



In this study, individuation is a complex process and it is not easy to define. McNeely said that individuation is choosing to be mindful in becoming the person we are capable of being in our fullness our strength and know our limitations (McNeely, 2010). According to Erikson (1968) as cited by Gibb (2014), Erikson see the importance of individuation as a process by which people maintain their fullest potentials by separating themselves from others. In addition to that Erikson also said that you can never be successful socially unless you find your strengths and know your limitations. Therefore, it is a good indicator that individuation also measures the mental wellbeing of a person.

On Emotional Intelligence

Numerous studies proved that Emotional Intelligence has significant effect on the performance of a person in his or her workplace. According to the blog of a Clinical Psychologist, Dr. Boboy Sze Alianan, Emotional Intelligence starts with understanding oneself well, and striving in the direction of ever greater understanding as one goes through one's experiences. It then results to an acceptance of the person who one is, including his or her flaws. With this information comes a practicable mastery of one's reactions and eccentricities. One is then capable to take obligation and to discover methods to cope with one's response to people, conditions, and occasions. Over time, one is capable of controlling one's emotions satisfactorily to be aware of and to deal with other people's feelings and reactions. This includes a dynamic procedure of doing consistent self-assessments and responding to relevant cues from others.

The demographic profile of a person can also affect the level of Emotional Intelligence. It is indicated in the study of Daloo (2015) that the Emotional Intelligence of



helping professionals is anchored on their age group. Those who are older are more expressive when it comes to their emotion, they can also address their emotions maturely, and they are conscious of their colleagues' emotions at work. This is probably because they are already professionals in handling different emotionally challenging scenarios that they experienced all throughout their careers. Furthermore, a study conducted by Ilyas and Habib (2014) states that working women have higher Emotional Intelligence as compared to working men. In one study the Emotional Intelligence of surgeons and psychiatrists were compared. The study only included male participants and data were gathered using the Bar-On EI-i assessment tool. The results showed that both respondents got an average Emotional Intelligence therefore they have similar level of emotional functioning. However, they differ in some of the Emotional Intelligence subscale, the psychiatrists have higher emotional self-awareness, empathy, social responsibility and impulse control. On the other hand, surgeons have higher self-regard, stress tolerance and optimism. These findings illustrated that they possess the qualities of their role as psychiatrist and surgeons (Stanton, Sethi, Dale, Phelan, Laban, & Eliahoo, 2011). However, based on the results of the study by Papanagnou, Linder, Shah, London, Chandra and Naples (2017), resident physicians may be having a hard time with their self-expression and self-perception. With Emotional Intelligence of physicians directly and indirectly impacting so many elements of quality of care, it seems likely that focusing on this area would be a worthy place to begin making improvements (Morales, 2014).

Several studies mentioned and proposed that programs should be made to increase EI. Shetty (2012) in her study, found that the Emotional Intelligence of medical students to be low, thus implying the necessity to improve because according to her, having poor



Emotional Intelligence blocks their academic competence and adaptation throughout their training. She also asserts that inclusive to high Emotional Intelligence are: the skill to understand and control emotions, empathy, and even social competence. Such good Emotional Intelligence is linked with good performance in sleep, interpersonal relationship, recreational activities, and exercise.

Emotional Intelligence capacities might be a reasonable method for building up a program for critical professionalism competency, due to a proceeding fact this might be important in this circumstance. In line with this, a test for Emotional Intelligence were given to a hundred and fifty medical postgraduates from tertiary care hospital and the result reported that 70% have poor Emotional Intelligence (Srivastava, et. al, 2011). Building up Emotional Intelligence is necessary to fortify the ability of people in the medical field to handle the stress in workplace and develop efficient relationship with colleagues and patients (Ibrahim, Elgzar, & Mohamed, 2016, Srivastava et. al, 2011). In one study that elaborates how Emotional Intelligence branches into social awareness and relationship management, Victoroff and Boyatzis (2013) indicated that people in the medical field during their undergraduate education, should develop their Emotional Intelligence. Emotional Intelligence should be considered as a key standard in this kind of field. This includes prioritizing the patient's needs, providing good quality service and having self-regulation towards the self.

Finding out the EI of an individual may reveal his or her capabilities. As mentioned by Libbrecht, Lievens, Carette and Cote (2013), one's ability to apprehend emotions is a distal predictor of one's performance than the ability to manipulate emotions. The capacity to understand emotions denotes a response and may have an influence on how we can react



and adjust to a certain situation. In other words, people most likely control their emotions after recognizing an action that may trigger the said emotion. Consequently, the findings by Miri, Kermani, Khoshbakht, and Moodi (2013) states that Emotional Intelligence includes ability to solve emotional problems, capacity to accept reality, flexibility, and ability to regulate and alter the affective reactions of stress and crisis. This statement was agreed upon by Jing, Otten, Sullivan, Lovell-Simons, Granek Catarivas and Fritzsche (2013) when they discussed how analytical group process encourages the in-depth growth of introspection alongside a wide array of subjects including: openness, unconscious processes, “thinking outside the box,” “courage of one’s own stupidity,” and “beginner’s spirit,” which then results to the promotion of individuation - a “small but significant change in the personality of the doctor.”

On Adversity Quotient®

According to Tian and Fan (2013), in order to overcome the adverse events that they faced, people in the medical field should enhance their capability to cope with adversity. Furthermore, the study of Nikam and Uplane (2013), suggests that different coping mechanisms work for distinct kinds of personality. Low resilience affectively associates with depression and vicarious traumatization. When helping professionals experience adverse scenarios in their workplace, especially during emergency and traumatic situations which demand their resiliency, low level of Adversity Quotient® is exhibited. Making a program for AQ® was discussed and accomplished in an academic article by Santos (2012) when she established the necessity to gain insight about one’s AQ®. Furthermore, improving one’s AQ® can be a weapon to fight the sense of helplessness and despair that we feel when faced with challenges. To do so, she introduced



an AQ[®] program which consisted of five modules. Upon comparing, the program was found to raise the AQ[®] of her target participants making it an effective program. The said program was based on the CORE dimensions which is a widely used concept in understanding and approaching the topic of adversity.

Adversity Quotient[®] can also be related to other concerns in the environment at the workplace. Woo and Song (2015) conducted a study identifying the factors affecting the adversity of nurses and office workers. Using the Adversity Quotient[®] Profile (AQ[®]P) by Stoltz; and Wong and Law Emotional Intelligence Scale (WELIS) by Wong and Law, they found out that there are significant differences between Emotional Intelligence and the Adversity Quotient[®]. Based on the results, the nurses had lower levels on both Emotional Intelligence and the Adversity Quotient[®] than office workers. This study enables the participants to enhance the nature of each work service, the nurses' and office workers' job satisfaction, give basic data information that could help build up a nursing intervention for nurses and office workers to cope productively with their workplace and to enhance the quality of their service.

Todd Mayfield (2013), in his article in Fearless Men states that understanding your Adversity Quotient[®] is quite essential. It tells a lot about you, your power towards limitations obstructing your endeavors, and how resilient you'll be at some point of attempting circumstances. According to Bowman (2017), your Adversity Quotient[®] is the way you respond to life—particularly the tough stuff. It's a gauge and a measure of the way you address everything from stress at home, to work, the small hassles and the “big offers” that come their way on each day—and rare—foundation. The more resilient you



are, the more constructively and efficiently you could respond to, and work through, life's problems.

In healthcare, resilience is needed because different challenges arise which may affect psychological and emotional aspects of a human that might lead to problem (Mills & McKimm, 2016). That is why clinicians also need to know that there are varieties of ways to deal with stress and self-regulate (Epstein & Krasner, 2013). Several studies discuss about the need of training for Medical Doctors when it comes to their resiliency since it is really necessary in medical field. According to Eley, Cloninger, Walters, Laurence, Synnott and Wilkinson (2013), the concept of resilience can be used for training and professional development of people in the medical field. Having resilience as one of the core parts of a medical training might help to prevent burnout among Physicians and this would also encourage them to get the help they need (Rakesh, Pier & Costales, 2017). Resilience may develop and improved through experiences, learning from others and a formal training (Matheson, Robertson, Elliott, Iversen & Murchie, 2016).

Synthesis

This study aimed to measure the Level of Individuation, Emotional Intelligence, and Adversity Quotient[®] of Medical Doctors; and, ultimately, to create and propose an enhancement program that would keep these variables in check which will consequently improve the performance of Medical Doctors. Previous studies have suggested the need to create wellness programs that will benefit the EI and AQ[®] of medical doctors; as such, this study is a response to those recommendations, with the addition of enhancing their LI as well.



The researchers only found few studies that highlight Individuation as one of the main variables. Believing that a sense of self is as important as knowing how to manage and understand your emotions and how to bounce back from adversities at work, the researchers included individuation as one of the factors that affect medical doctors' overall performance in the workplace. In this study, Level of Individuation was measured using a self-constructed test – due to the lack of available materials regarding the variable. Individuation may be a daunting concept to be associated with people who are in the helping profession; however, it was also proved and elaborated that a healthy amount of individuation is actually vital to be manifested by medical doctors for it helps them keep a sense of themselves and it makes them work more efficiently.

The researchers encountered studies that have explored the relationship of different demographic variables of medical doctors with EI and AQ[®], those did not include religion which is enlisted in the demographics to be explored by the study at hand.

Previous studies have established the impact of the concerned variables to people. This study is interested to know if medical doctors would choose themselves or their patients first through investigating their Level of Individuation. The concept of Emotional Intelligence is broad; thus, this study is mainly concerned with the application of that concept in the work setting. Lastly, this study is also interested in knowing the resiliency of doctors as measured by their AQ[®].



CHAPTER 3

RESEARCH METHODOLOGY

This chapter will tackle the research designs that were used throughout the study, and the respondents. Furthermore, this chapter also includes the data gathering procedure, research instruments, and the statistical tools utilized in the treatment of data.

Research Design

This study is a quantitative research which specifically used descriptive and correlational design. It gives importance to objective measurement such as statistical analysis of the data gathered through questionnaires.

This study utilized descriptive design which emphasized the present condition of Medical Doctors. The researchers gave three test questionnaires which measured the Level of Individuation, Emotional Intelligence and Adversity Quotient[®] of the respondents. These tests were used to gather necessary data and information about the respondents' current situation concerning the three variables. The form of research is the correlational design wherein researchers used correlational statistics to define and measure the connection between two or more variables (Creswell, 2012). Meanwhile, this study also determined the relationship among the variables and it allowed the prediction of upcoming phenomena from present information. These designs have been expounded into a more broad relationships among the variables.



Respondents of the Study

The target respondents for this study are Medical Doctors from the University of the East Ramon Magsaysay Memorial Medical Center which is located in Quezon City, Philippines. The researchers secured a list of all Junior Consultants and Chief Residents across thirteen departments of the hospital from the Chief of Clinics of UERMMMCC. Junior Consultants and Chief Residents gave their consent to be respondents in consideration of their availability in the hospital. Originally, the population consists of 50 medical doctors but only 32 respondents agreed to participate in the study/ This population is made up of 50% males and 50% females with ages ranging from 27 to 47.

Research Instruments

The researchers used three (3) instruments to gather the necessary data for this study. Each instrument corresponds to the variables being measured in this study.

1. Individuation and Spirituality Scale for Medical Doctors

Due to the limited number of studies that pertains to the nature of this research, the researchers opted to construct their own instrument to measure the respondents' level of individuation. This test was constructed with a consideration on the nature of respondents being Medical Doctors. Hence, the scale was named Individuation Scale for Medical Doctors. The scale consists of two scales, 25 items, and utilizes a Likert scale with answers ranging from 4 – “Very True of Me” which means that they do/feel the situation presented on a regular basis; 3 – “True of Me” which means that they sometimes do/feel the situation presented; 2 – “Somehow True of Me” which means that they seldom do/feel the situation



presented; and 1 – “Not True of Me at All” which means that the situation presented does not apply to them.

Reliability and Validity

The questions were analyzed and validated by three Registered Psychometricians to ensure that the questions address the measurement of the respondents’ level of individuation; and face validated by the respondents. This scale was tested for inter-item reliability. Individuation Scale for Medical Doctors has a Cronbach’s alpha coefficient of .780 for the Individuation scale and .760 for Spirituality scale which means that the questionnaire is reliable.

2. Genos Emotional Intelligence Inventory

To measure the Emotional Intelligence of the respondents, the researchers used the Genos Emotional Intelligence Inventory. It is a measure designed to be applied in the workplace. It was made in August 2002, by the Swinburne University. In relation to the model conceptualized by Ben Palmer and Con Stough, and was later published as Swinburne University Emotional Intelligence Test. That test evolved to the current Genos Emotional Intelligence Inventory that people are using today. This inventory is proud that it consumes less time and has high “workplace face validity.” The model used by Genos EI yields a total EI, along with 7 factors namely: Emotional Self-Awareness, Emotional Expression, Emotional Awareness of Others, Emotional Reasoning, Emotional Self-Management, Emotional Management of Others, and Emotional Self-control. This inventory is answerable by shading an answer from a scale of 1 to 5 wherein 1 = “Almost Never”, 2 = “Rarely”, 3 = “Sometimes”, 4 = “Often”, and 5 = “Almost Always” (Palmer,



Stough, Harmer, and Gignae, 2009). In their web page, they offer a long list of research papers, book chapters, theses, and manuals that uses and explores the Genos Model of Emotional Intelligence.

Reliability and Validity

The Genos EI Inventory is an established instrument having been examined by 5 peer-reviewed and published research papers. This inventory has a .83 test-reliability coefficient was calculated for a two-month period for the Genos subscales.

3. Adversity Quotient[®] Profile

The AQ[®] Profile v10.0 was used by the researchers to measure the Adversity Quotient[®] of the participants. This was generated by Dr. Paul Stoltz designed using scale-based and forced-choice questionnaires. It utilizes a 5-point Likert scale to respond to the presented scenarios. The test could be finished within an estimated time of 10 minutes. The researchers secured the link to the AQ[®] Profile; however, a confidentiality agreement between the researchers and PEAK Learning, Inc. specified that the questionnaire must not be published nor appended.

Reliability and Validity

The AQ[®] Profile by Paul Stoltz has been used across respondents from 51 countries, and through this it has exhibited strong universality and applicability across cultures. An independent psychometrician who trained at Educational Training Service in the U.S. found that the test shows high reliable. Stoltz' AQ[®] Profile has a test-reliability that ranges from 0 to 1.



Data Gathering Procedure

The data gathering procedure immediately commenced after the proposal and research instruments have been prepared and approved by the adviser and the panelists.

The researchers first sought the approval of the medical institutions to conduct the study and administer the questionnaires. After being approved, a letter requesting to conduct the study and to gather the needed data was presented to the Chief of Clinics of UERMMMC. The letter of request for permission to conduct the study was approved; so, the researchers started looking for respondents.

The Medical Doctors who agreed to participate were informed about the nature of the study. To ensure freedom of choice and provide an avenue for the respondents to voluntarily consent or decline participation in the study, the informed consent of each respondent was secured.

The researchers administered the questionnaires during the data gathering procedure. Measures were employed to abide by the ethical principles in the conduct of the research.

The researchers distributed and administered the questionnaires to the respondents. They were given enough time to answer the questionnaires and were allowed and encouraged to ask questions for clarification. After answering, questionnaires were collected by the researchers and were compiled for interpretation and analysis.



Data Analysis/ Statistical Treatment

Correlations and significant relationship computations were done through IBM SPSS Statistics 20. In order to present a valid and reliable interpretation of the data, the researchers used the following statistical methods to provide quantitative descriptions of data: frequency and percentage, Linear Regression Analysis, One-way Anova and Independent sample for t-Test

1. Frequency and Percentage

This will be utilized in determining the demographic profile of the respondents, their level of Individuation, their general Emotional Intelligence and Adversity Quotient[®] to answer Statement of the Problem numbers 1, 2, 3, and 4.

Formula:

$$\% = \frac{f}{N} \times 100$$

where:

f is the frequency

N is the total number of the respondents

100 is a constant value



2. Linear Regression Analysis

This was used to determine the significant relationship between Level of Individuation and Emotional Intelligence and Level of Individuation and Adversity Quotient[®] to address Statement of the Problem number 5.

Formula:

$$Y = a + bX$$

Where:

X is the explanatory variable

Y is the dependent variable

b is the slope of the line

a is the intercept (the value of y when $x = 0$)

3. One-way ANOVA

This was used to determine the significant difference between the Level of Individuation, Emotional Intelligence, and Adversity Quotient[®] when grouped according to respondents' Religion, Specialization, and Length of Service in order to answer Statement of the Problem number 6.



Formula:

$$F = \frac{MST}{MSE}$$

Where:

F = ANOVA Coefficient

MST = Mean sum of squares d

MSE = Mean sum of squares due to error.

4. Independent Samples t- Test

This was used to determine the significant difference between the Level of Individuation, Emotional Intelligence, and Adversity Quotient® when grouped according to respondents' Age and Gender in order to answer Statement of the Problem number 6.

Formula:

$$t = \frac{\mu_A - \mu_B}{\sqrt{\left[\frac{(\sum A^2 - \frac{(\sum A)^2}{n_A}) + (\sum B^2 - \frac{(\sum B)^2}{n_B})}{n_A + n_B - 2} \right] \cdot \left[\frac{1}{n_A} + \frac{1}{n_B} \right]}}$$

where:

($\sum A$)²: Sum of data set A, squared

($\sum B$)²: Sum of data set B, squared

μ_A : Mean of data set A



μ_B : Mean of data set B

ΣA^2 : Sum of the squares of data set A

ΣB^2 : Sum of the squares of data set B

n_A : Number of items in data set A

n_B : Number of items in data set B



CHAPTER 4

PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA

This chapter presents, analyzes, and interprets the data obtained during the study. The presentation of data includes the description of respondents in terms of their demographic profile; likewise, it presents the differences and relationships of constructs being studied.

- 1. What is the demographic profile of the respondents, who are grouped according to:

Table 1

Frequency Distribution of Demographic Profile of the Respondents

Table with 4 columns: Demographic Profile (N=32), Frequency (f), Percentage (%), and Rank. It contains data for Age (18-40, 41-65) and Sex (Male, Female).



Total	32	100.00	
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Religion

Catholic	23	71.88	1
Non-Catholic	3	9.37	3
Unspecified	6	18.75	2
Total	32	100.00	

Specialization

Ancillary Service	9	28.13	2
ENT	3	9.37	3
General Medicine	2	6.25	4.5
Internal Medicine	2	6.25	4.5
Surgery	16	50.00	1
Total	32	100.00	

Length of Service

Less than 3 years	12	37.5	2
3-5 years	19	40.62	1
6-10 years	6	18.75	3
More than 10 years	1	3.13	4



Total 32 100.00

Table 1 shows the demographic profile of the respondents. Among these results, it shows that majority belonged to the 18-40 age bracket (81.25%). Since our respondents are Junior consultants and Chief Residents, in terms of their years of practice they will most likely to fall on the said bracket. It also shows that there was equal distribution of Male and Female respondents (both 50%). Most of the respondents are Catholic (71.88%), considering the fact that we are living in a catholic country. Half of the respondents were from the Surgery department, this is because the Surgery department covers more sub-specialties. Lastly, the table revealed that most of the respondents have been practicing for 3-5 years (40.62%) since the respondents are junior consultants and chief residents.

2. What is the general Level of Individuation of the respondents?

Table 2

General Individuation of the Respondents

	Mean	SD	Interpretation
Individuation	2.86	.357	Low Individuation

As shown on Table 2, respondents obtained a mean score of 2.86 with a standard deviation of .357 which means that they are only slightly individuated. In the study of Harris (2017), it was explained that if medical doctors will work unselfishly, there might be a risk in providing health care service, which is why possessing a certain degree of individuation is necessary. Medical doctors are encouraged to exercise a healthy amount



of individuation, which means that, to some extent, they should take care of themselves first, so that they could give their patients the best healthcare service. Spirituality was found to be high which is explained by the study of Koenig (2012), wherein results showed that religious and spiritual beliefs are common in medical practice, and is used to cope up with different challenges. People who are more religious and spiritual are proven to have better mental health. The effect of having a healthy mind has a huge impact on the physical health of a person, thus medical doctors who are more religious and spiritual have better mental health, and are more capable of treating patients better. As presented in the Table 1, most of the respondents are Catholics; consequently, it is safe to say that they follow the Catholic ideology of thinking about other people. Being mostly surrounded by an extensive doctrine may pose an effect to how the respondents exhibit both individuation and spirituality simultaneously. However, self-care education is important to those people in medical field so they can improve the quality of patient care they can provide (Minford & Manning, 2016). Stevenson, Phillips and Anderson (2011), stated that medical doctors are motivated by the thought that they should help disadvantaged people because it is the right thing to do. Some medical doctors may still help their patients regardless of their religion: Catholic or non-Catholic, since it is the nature of being a doctor.



3. What is the general Emotional Intelligence of the respondents? Table 3

Emotional Intelligence of the Respondents

Emotional Intelligence	Mean	SD	Verbal Interpretation
Emotional Self- Awareness (ESA)	3.77	.555	High
Emotional Expression (EE)	3.50	.487	High
Emotional Awareness of Others (EAO)	3.79	.449	High
Emotional Reasoning	3.78	.583	High
Emotional Self-Management (ESM)	3.62	.565	High
Emotional Management of Others (EMO)	3.65	.494	High
Emotional Self-Control (ESC)	3.64	.729	High
<i>Total Mean</i>	3.68	.107	High

Table 3 revealed that the mean for the seven subscales of emotional intelligence were found to be high. Furthermore, the standard deviations of the subscales were relatively close except for emotional self-control. This means that answers on the said subscale is more diverse other than the remaining scale. It is also evident that among the subscales, “Emotional Awareness of Others” has the highest mean of 3.79. “Emotional Awareness of Others”, according to Gignac (2010) indicates that an individual is sensitive and aware



about the emotions of others in the same workplace. It also includes how an individual consider other person's emotions that can affect their behavior at work. It also agrees with Kerasidou and Horn's (2016) study which posits that being aware of others' emotions is fundamental in healthcare professions. Their study also mentioned that empathy is probably one of the prerequisites in terms of medical practice. Moreover, despite being the lowest mean in the subscales, which is 3.50, Emotional Expression still falls on the high category. Having high level of Emotional Expression implies being weak and unprofessional among medical doctors, it opposes the work ethics of a hospital (Wible , 2015). Finally, the overall mean of the emotional intelligence was found to be high with a mean score of 3.68 and a standard deviation of .107. This is similar to Ubaidi's (2018) study by which he implicated that Emotional Intelligence is a vital skill to improve a doctor's healthcare service. This level should either be maintained or enhanced as high EI was suggested to have an effect on physicians' job performance and job satisfaction (Law, Wong, & Song, 2004). Furthermore, EI is negatively correlated to burnout (Swami, Mathur, & Pushp, 2013); consequently, less instances of burnout leads to more fruitful work.



4. What is the general Adversity Quotient® of the respondents? Table 4

Adversity Quotient® of Respondents

Subscales	Mean	Verbal Interpretation
Control	38.00	Average
Ownership	40.28	Below Average
Reach	28.5	Below Average
Endurance	37.03	Average
Mean Average of AQ®	143.87	Average

Table 4 shows the results for the Adversity Quotient® of Medical Doctors. The result, as well as the verbal interpretation shown in this table were all made by PEAK learning, and was sent to the researchers through e-mail. The general AQ® of the respondents was found to be average with a mean of 143.87. In relation to the subscales, Control and Endurance are both average with a mean of 38 and 37.03 consecutively. Average score in control may imply that they are essentially equipped to influence whatever may happen to them, consequently average score in endurance may denote that that they exert a fair amount of time to deal with the frustration caused by adversity. According to Tempiski et al. (2015) developed resilience is one of the important strategies to decrease emotional distress and improve medical training. On the other hand, Ownership and Reach are both below average with a mean of 40.28 and 28.5 consecutively. Below average score in ownership may point to a poor amount of accountability, they tend to



blame others whenever adverse situations arise while below average score in reach may suggest that they do not essentially deal with and perceive the problems moderately and let the problems affect their lives. According to Gellis (2002) as cited by Mccann et al., (2013), people on medical field tend to use avoidance as coping strategy which make them prone to higher job stress.

5. Is there a significant relationship between Level of Individuation, Emotional Intelligence and Adversity Quotient®?

Table 5

Relationship between Level of Individuation and Emotional dimension of Respondents

Linear Regression between EI and LI

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.008 ^a	.000	-.033	.27692

a. Predictors: (Constant), EI

While Table 5 shows the regression analysis between LI and EI. It was found out that EI is also not a good predictor of LI with a Pearson r of .008 only, with a .000 coefficient of determination and an adjusted r² also indicates that AQ® explains -3.3% the variability of LI. This indicates that there was no correlation between the emotional intelligence on altruistic behavior of medical doctors. It has the same results in one study



wherein there is a weak association between emotional intelligence of people in medical field and empathy (Abe, Niwa, Fujisaki & Suzuki, 2018). For doctors, it is normal to feel empathy towards their patients but this also could not affect their emotions with their patients. One of the protocols of being a doctor is they should not to feel attached to their patients emotionally. Physicians were trained to be emotionally detached from patients to perpetuate the idea of skilled and cool-minded professionals (Kerasidou & Horn, 2016). If the doctors were emotionally attached to their patient, this could affect their service towards them wherein they might become bias in treating their patient.

Table 5.1

Relationship between Level of Individuation and Adversity Quotient[®] dimension of Respondents

Linear Regression between AQ and LI

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.190 ^a	.036	.004	.27187

a. Predictors: (Constant), AQ

Table 5 shows the regression analysis between LI and AQ[®]. It was found out that AQ[®] is not a good predictor of LI with a Pearson r of .190 only with a 0.36 coefficient of determination and an adjusted r² indicates that AQ[®] explains .4% the variability of LI. In this case, the resilience of the doctors does not have any correlation with their LI. The



results of this study are the same with the study of Robertson et al., (2016), wherein it was stated that there was no evidence that when resilience increased, it is correlative to the improvement in patient health in primary care. This is mainly because they are already used to it and they already have their own way to cope up with the difficulties that they are facing in workplace wherein it will not affect the way they treat their patients. Length of service may be one of the reasons why they are used with tough situations, since it was said in Table 6 that there is a relationship in the length of service of doctors and their resiliency, this might indicate that even if they are faced with adverse situations, they can still provide their patients a good healthcare service. This is also in line with the study in the study of Gopichandaran (2017) wherein it was stated that altruistic behavior of medical students is low. However, in that study it was found out that parents and traditional social values became the factor of altruistic behavior of the medical students.

- 6. Is there a significant difference between Level of Individuation, Emotional Quotient, and Adversity Quotient[®], when grouped according to their demographic profile?**



Table 6

Correlation among Level of Individuation, Emotional Intelligence and Adversity Quotient[®] of Medical Doctors when grouped according to their demographic profile

Demographics	Level of Individuation	Emotional Intelligence	Adversity Quotient [®]	Decision	Verbal Interpretation
Age	.377	.292	.378	Accept H ₀₂	There is no significant difference
Sex	.946	.502	.156	Accept H ₀₂	There is no significant difference
Religion	.254	.361	.457	Accept H ₀₂	There is no significant difference
Specialization	.749	.978	.729	Accept H ₀₂	There is no significant difference
Length of Service	.254	.245	.043	Reject H ₀₂	There is significant difference

Note. p value ≤.05 highlighted in boldface signifies statistical difference.



Table 6 illustrates the significant difference of the demographics to the Level of Individuation, Emotional Intelligence and Adversity Quotient. In treating the data, the researchers used t-test independent sample for age and sex, and One-Way ANOVA for the Religion, Specialization and Length of Service. Of all the demographics only, length of service showed significant difference between Adversity Quotient with a $p = 0.43$. This indicates that the longer the tenure in their work, their resiliency in their workplace also improved. This result agrees with the study of Chao-Ying (2014) that length of service is positively correlated with the adversity quotient of the respondents. They also mentioned in their study that sex has no significant effect on the adversity quotient of the respondents. Resilience improved when the residents were engaged in uncertainty and adversity whereas they manage to find their own way to cope with adversities that they experienced as residents (Winkel, Honart, Robinson, Jones & Squires, 2018).

Consequently, no significance was found between EI and age which is the opposite of the result of Tomar (2016). In that study, it was revealed that the tenure of service is positively correlated with emotional intelligence; thus, it should be an important factor to consider as it was an influential factor as to why the doctors might get higher emotional intelligence.

Likewise, no significant findings were found between EI and specialization which is consistent with the findings of McKinley (2014); however, she noted that within departments, there could be a dynamic array of EI profiles.



7. What wellness program can be proposed based on the results of the study?

From the results of the study, the researchers proposed a program with the following modules:

Module 1- A Greater East: Enhancement in Emotional Expression, which is composed of three activities specifically designed to help medical doctors with their emotional expression.

Module 2- A Greater East: Enhancement of Adversity Quotient[®], which is composed of four activities that address the need to improve medical doctors' ownership and reach during adverse situations.

(See Appendix I to see the full details of the modules)



CHAPTER 5

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

The following chapter will conclude this study. The summary of the research will be presented, the conclusion generated will be discussed, and the researchers' recommendations for future researchers will end this chapter. Moreover, the relationship among Level of Individuation, Emotional Intelligence, and Adversity Quotient[®] will be explained, and a wellness program for Medical Doctors will be proposed.

Summary

The study aimed to determine the relationship of Level of Individuation, Emotional Intelligence, and Adversity Quotient[®] of medical doctors and use those variables as a basis in proposing a wellness program. The following are the results drawn from the study:

1. The study utilized a total of 32 respondents. Majority of the respondents fall under the 18-40 years old and both had an equal frequency when it comes to their sexes. They were mostly catholic and their specializations were clustered into five groups namely: Ancillary, General Medicine, Internal Medicine, ENT and Surgery. Lastly, their length of service is also grouped into four groups: Less than 3 years, 3-5 years, 5-10 years and more than 10 years.

2. The respondents had a high spirituality which means that they are selfless. It suggests that medical doctor should be encouraged to exercise a healthy amount of individuation for them to have a balanced distribution of selfish and altruistic tendencies.



3. The respondents had a high general EI which implies a great control of emotions at work.

4. The respondents had an average general AQ[®] which states that they have adequate resilience and have sufficient capability to deal with adversity

5. It was found out that Emotional Intelligence and Adversity Quotient[®] is not a good predictor of Individuation of the respondents.

6. Of all the demographics and the variables, only one correlation was found. The length of service manifests significant difference towards Adversity Quotient[®]. It implies that the longer the tenure, the greater the resilience of the medical doctor.

Conclusion

Based on the results, it was found out that both Emotional Intelligence and Adversity Quotient[®] are not, in any way, correlated with Individuation. This indicates that EI and AQ[®] are not good predictors of Individuation. Among the subscales of Emotional Intelligence, emotional expression has the lowest score which could mean that instead of getting along with emotional problems, the respondents still tend to ruminate with the situation. Furthermore, garnering a below average score in the ownership and reach subscales of adversity quotient may indicate that the respondents have poor decision-making skills, and that they need improvement in taking responsibility for the outcome of adversity even though it is a bad outcome. Because of these results, it can be said that the variables involved affect the respondents' healthcare service towards patients.



Recommendations

In view of the previously mentioned results, the following recommendations were offered:

1. The researchers recommend that the administrators of medical institutions should keep in check the Level of Individuation, Emotional Intelligence, and Adversity Quotient[®] of Medical Doctors in order for them to provide a good healthcare service.
2. The proposed wellness program should first be tested and validated before its utilization.
3. Future researchers should conduct further testing on other validity measures and improvement on the self-constructed test Individuation Scale for Medical Doctors.
4. Future researchers should improve this study by gathering a larger number of respondents from different hospitals.
5. Future researchers should utilize a different group of medical doctors like interns, lower year residents, and or senior consultants.
6. Gathering data from doctors of other fields such as DMD, PhD, and EdD, then comparing them to this study may yield interesting results.
7. Future researchers are encouraged to discover more about the concept of level of individuation.



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