THE MEANING OF WELL-BEING FOR UNDERGRADUATE MEDICAL STUDENTS: PERSPECTIVE FROM INDONESIA

UNIVERSITY OF GLASGOW
COLLEGE OF MEDICAL, VETERINARY & LIFE SCIENCES
SCHOOL OF MEDICINE, DENTISTRY & NURSING
DOCTORATE IN HEALTH PROFESSIONS EDUCATION
2020 – 2021

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List of Contents

List of Contents i
List of Tables vi
List of Figures viii
List of Appendices x
List of Abbreviations xi
Acknowledgements xii
Abstract xiv

Chapter 1. CONTEXT

1.1. Demogeography of Indonesia 1
1.2. Medical Education in Indonesia 4
1.3. Body of Research on Well-being 6
1.4. Contextual Limitations of Previous Research on Well-being 11
1.5. Purpose of This Study 12

Chapter 2. LITERATURE REVIEW

2.1. Search Strategy 14
2.2. What is Well-being? 16
2.2.1. Philosophical Overview 17
2.2.2. Modern Understanding on Well-being 18
2.3. Well-being in The Real World 25
2.3.1. Well-being and Culture 25
2.3.1.1. Sociocultural Aspect of Well-being 25
2.3.1.2. Religiosity, Spirituality, and Well-being 31
2.3.1.3. Section Summary 34
2.3.2. Well-being and Tangible Factors 34
2.3.2.1. Money, Infrastructure, and Well-being 34
2.3.2.2. Health and Well-being 37
2.3.2.3. Section Summary 38

2.3.3. Well-being, Behaviour, and Personality 38
2.3.3.1. Behaviour and Well-being 38
2.3.3.2. Personality and Well-being 41
2.3.3.3. Gratitude and Other Personal Dispositions 52
2.3.3.4. Section Summary 53
2.3.4. Well-being, Studying Medicine, and Future Career 54
2.3.4.1. Academic Performance and Well-being 54
2.3.4.2. In-school Curriculum and Intervention Related to Well-being 56
2.3.4.3. Well-being from Higher Education to Work 59
2.4. Studies on Well-being in Indonesia 60
2.5. Chapter Summary 61

Chapter 3. RESEARCH DESIGN

3.1. Goals of The Study 62
3.1.1. Research Purpose 62
3.1.2. Research Questions 62
3.2. Methodology 63
3.2.1. Phenomenology 65
3.2.2. Descriptive Phenomenology 66
3.2.3. Data Collection and Analysis in Descriptive Phenomenology 69
3.3. Contextual and Ethical Considerations 72
3.3.1. Time and Place 72
3.3.2. Ethical Approval and Interview Access 73
3.3.3. Potential Ethical Issues 73
3.3.4. Recruitment of Participants 75
3.4. Field Work 76
3.4.1. Instrument and Piloting 76
3.4.2. Interviews 77
3.5. Data Treatment 79
3.5.1. Recording and Transcription 79
3.5.2. Analysis 80
3.5.3. Rigour of The Study 82

Chapter 4. FINDINGS

4.1. Participants Characteristics 86
4.2. The Essence of Well-being 88
4.2.1. Sense of Fulfilment 89
4.2.1.1. Feeling Happy 89
4.2.1.2. Feeling Satisfied and Sense of Achievement 90
4.2.1.3. Having Sense of Purpose in Life, which also Includes Devotion to Other People and Other Productive Activities 90
4.2.1.4. Experiencing Sense of Growth 91
4.2.2. Sense of Being Enabled 91
4.2.2.1. Possessing Sense of Agency, or Feeling Empowered/Adequately Resourced in The Face of Challenge 91
4.2.2.2. Obtaining The Proper Rights and Responsibilities 92
4.2.3. Acting Grateful 92
4.3. Positive Influences 93
4.3.1. Supportive Relationship and Connectedness 93
4.3.2. Constructive Activities 96
4.3.3. Environment and Infrastructure Conducive for Both Studying and Being Independent 97
4.3.4. Personal Aspects 98
4.4. Negative Influences 101
4.4.1. Dysfunctional Relationship 101
4.4.2. Bereavement 102
4.4.3. Deficiency 102
4.5. Changes Throughout Study 107
4.5.1. Relationship Dimension 108
4.5.2. Time Dimension 109
4.5.3. Studying Dimension 111
4.5.4. Personal Growth Dimension 115
4.5.5. Religiosity/spirituality 120

4.6. Hopes 121
4.6.1. Achievement and Self-actualisation 121
4.6.2. Atmosphere and Personal Attitude in The Workplace 124
4.6.3. Relationship-related 126
4.6.4. Other Hopes 129
4.7. Fears 130
4.7.1. Academic and Professional Issues 130
4.7.2. Relationship and Loss 132
4.8. Chapter Summary 135

Chapter 5. DISCUSSION

5.1. Findings Overview and Transferability 136
5.2. Phenomenological Psychological Meaning of Well-being 138
5.3. Diorama of The Findings 139
5.3.1. Social and Interpersonal Domains and Well-being 139
5.3.1.1. Relationship and Religion 139
5.3.1.2. Sociocultural Issues in Medical School 142
5.3.1.3. Nature, Infrastructure, and Financial Stature 144
5.3.2. Personal Domains and Well-being 146
5.3.2.1. Students' Attitudes, Behaviours, and Habits 146
5.3.2.2. Appreciating Time, Self Management, and Self Direction 148
5.3.2.3. Personality Dynamics and The Lived Experience of Well-being 149
5.3.3. Studying and Career in Medicine 154
5.3.3.1. Remarks on Studying 154
5.3.3.2. Students' Health and Faculty Interventions 155
5.3.3.3. Views on Potential Career and Income 156
5.3.4. Section Summary 157
5.4. Study Rigour and Limitations 157
5.4.1. Brief Remarks on Rigour 157
5.4.2. Limitations of The Study 158
5.5. Personal Reflection 159

Chapter 6. CONCLUSIONS AND RECOMMENDATIONS

6.1. Summary 161

6.2. Recommendations 162

6.2.1. Future Research 162

6.2.2. Curricular and Policy Implications 163

REFERENCES 164

Appendices xv

List of Tables

Table 2.1. Inclusion and Exclusion Criteria 15
Table 2.2. Dimensions of Personal Satisfaction 21
Table 3.1. Commonly Used Terms in Phenomenology 69
Table 4.1. Medical Schools Where Students were Interviewed 86
Table 4.2. Participants Demographics 87
Table 4.3. Participants' Parental Occupations 88
Table 4.4. Relationship Domains Supportive towards QOL 94
Table 4.5. Interactive Aspects of Supportive Relationship 95
Table 4.6. Receptive Aspects of Supportive Relationship 96
Table 4.7. Activities Improving QOL 97
Table 4.8. Environmental and Infrastructural Aspects Improving QOL 98
Table 4.9. Personal Aspects Improving QOL 99
Table 4.10. Aspects of Dysfunctional Relationship 101
Table 4.11. Appraisal and Resilience Issues Negatively Affecting QOL 103
Table 4.12. Health and Situational Issues Negatively Affecting QOL 104
Table 4.13. Intellectual Issues Negatively Affecting QOL 105
Table 4.14. Intangible Changes in Students' Relationships 108
Table 4.15. Tangible Changes in Students' Relationships 109
Table 4.16. Time Management Changes 110
Table 4.17. What is Lost in Time 111
Table 4.18. Attitude in Studying 112
Table 4.19. Cost of Studying 113
Table 4.20. External Tensions of Studying 114
Table 4.21. Rewards of Studying 115
Table 4.22. Determination Changes 116
Table 4.23. Esteem Changes 117
Table 4.24. Kindness Changes 118

Table 4.25. Learned Skills 119
Table 4.26. Academic Achievement 122
Table 4.27. Career Achievement 123
Table 4.28. Personal Achievement 124
Table 4.29. Regarding Personal Attitude in Workplace 125
Table 4.30. Regarding Workplace Atmosphere 126
Table 4.31. Harmonious Living 127
Table 4.32. Other Relationship Matters 128
Table 4.33. Other Hopes 129
Table 4.34. Situational Fears within Study and Career 131
Table 4.35. Personal Fears within Study and Career 132
Table 4.36. Fears of Loss 133
Table 4.37. Fears around Relationship 134

List of Figures

Figure 1.1. General Make-up of The Country of Indonesia 2
Figure 1.2. Variability of Medical Schools in Indonesia 5
Figure 1.3. Maslow's Hierarchy of Needs 9
Figure 2.1. Basic Building Blocks of Subjective Well-being 20
Figure 2.2. Temporal Aspects of Well-being 21
Figure 2.3. The Growing Understanding of What Constitutes Well-being 24
Figure 2.4. Influence of Dark Triad Components on The Hedonic and Eudaimonic Facets of Well-being 43
Figure 2.5. Relationship between Personality Traits and States and Subjective Well-being 44
Figure 2.6. Components of Psychological Well-being 45
Figure 2.7. Concept of Core Self-evaluation 49
Figure 2.8. Congruence amongst Personal Values, Goals, and Actions Maximises Happiness 50
Figure 2.9. Self-construal Dynamics between Independence and Interdependence Influences Self-esteem 51
Figure 2.10. Relationship between Gratitude, Psychological Needs, and Subjective Well-being 52
Figure 2.11. The Best Potential Well-being 54
Figure 2.12. Cognitive Model of Satisfaction for Higher Education Students 55
Figure 3.1. Phenomenological versus Natural Lens towards Living 70
Figure 3.2. Data Flow Prior to Analysis 80
Figure 3.3. Iterative Data Analysis in Giorgi's Descriptive Phenomenology 82
Figure 3.4. Steps Taken to Increase Credibility and Dependability 84
Figure 3.5. Steps Taken to Increase Transferability 84

Figure 4.1. What Well-being is for The Participants 93
Figure 4.2. Positive Influences towards Participants' Well-being 100
Figure 4.3. Negative Influences towards Participants' Well-being 107
Figure 4.4. Appreciation of Changes in Participants' Lives in Relation to Their Well-being 121
Figure 4.5. Participants' Hopes for The Future 130
Figure 4.6. Participants' Fears for The Future 135

List of Appendices

Appendix I.	Databases and Formulae Used for Search on The Literature	xv
Appendix II.	Summary Diagram on Literature Search	xxi
Appendix III.	Ethics Application Approval Letter	xxii
Appendix IV.	Request E-mail for Access to Medical Schools	xxiii
Appendix V.	Research Proposal for Access to Medical Schools	xxv
Appendix VI.	Example Approval E-mail for Medical School Access	xl
Appendix VII.	Interview Invitation Letter	xli
Appendix VIII.	Interview Information Sheet	xlv
Appendix IX.	Interview Invitation Poster	li
Appendix X.	Interview Consent Form	liii
Appendix XI.	Snowball Interview Invitation Letter	lv
Appendix XII.	Snowball Interview Information Sheet	lix
Appendix XIII.	Interview Schedule	lxv
Appendix XIV.	Request Letter for Member-checking/Validation	lxvii
Appendix XV.	Example Data (Transcript) Analysis Method with Descriptive Phenomenology	lxix
Appendix XVI.	Activities Improving QOL	lxxxiii
Appendix XVII.	Personal Aspects Improving QOL	lxxxv
Appendix XVIII.	Aspects of Dysfunctional Relationship	lxxxviii
Appendix XIX.	Appraisal and Resilience Issues Negatively Affecting QOL	xc
Appendix XX.	Intangible Changes in Students' Relationships	xcii
Appendix XXI.	Academic Achievement	xciv
Appendix XXII.	Career Achievement	xcvi
Appendix XXIII.	Harmonious Living	xcviii
Appendix XXIV.	Other Hopes	c
Appendix XXV.	Situational Fears within Study and Career	cii
Appendix XXVI.	Personal Fears within Study and Career	cv
Appendix XXVII.	Fears of Loss	cvii

List of Abbreviations

GDP	=	gross domestic product
HE	=	higher education
IPA	=	interpretative phenomenological analysis
MBSR	=	mindfulness-based stress reduction
NA	=	negative affect
NEO-PI	=	NEO Personality Inventory (NEO being a name and not an abbreviation); the five-factor model of personality comprising of openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism, sometimes abbreviated as OCEAN; NEO-PI's subsequent developments include NEO-PI-R, NEO-PI-3, NEO-FFI, NEO-FFI-3, and IPIP-NEO)
PA	=	positive affect
PWB	=	psychological well-being
QOL	=	quality of life
SWB	=	subjective well-being
SWL	=	satisfaction with life

Acknowledgements

A new day,
A new night,
A new hope,
A new purpose,
A new spirit.
(untitled, 27.06.2008)

In the beginning, there was wonder, curiosity, and axiology, followed by dissatisfaction, confusion, and anxiety. After that, natural science, which was only able to explain almost none. Now, social science.

...

Please allow me to trace back.

It is difficult for me to show my appreciation through words without being able to mention you one by one in name, but it is only appropriate that I express my deepest gratitude towards each of my supervisors, *oi méntores mou symvállontes stin evdaimonía mou,* my unfailing guide and keepers. With both expertise and humbleness all of you taught me what being a(n independent) learner means. From you I also learned in abundance about managing expectations in work. Your every word, support, and exceptional kindness kept me going all this time. I thoroughly understand I have been privileged having you as my teachers, and I will bring the attitude you taught me onto my line of work as well.

I sincerely thank the staff of the University of Glasgow library, the student support team, also the counselling and psychology services, and particularly those in Health Professions Education programme, who made my life as a student easier.

My heartfelt gratitude towards Ali, for the time and empathy you shared with me both as a friend and colleague.

I want to extend my appreciation to Indonesian Endowment Fund for Education and in particular Ms. Prabandari for acknowledging my existence and abilities in the vast sea of possibilities and indifference, and allowing me the chance to be more.

To the medical schools in Indonesia involved, their medical student bodies, and all the principals and faculty staff whose warmheartedness in accepting my presence was genuinely palpable, including Dini and Arga, who helped me around in the field: without you, this study wouldn't have been successful. Thank you.

I'm grateful for Janice, Dessy, and Inke for being the counsellor, psychologist, and psychiatrist friends for the longest time. Fauzia, shoutout for the eyecatchy posters. And Restu, thanks for the elegant charts.

In chronological order: Dipta, Radityo, Jimmy and Narisa, Robby and Anastasia and Jim, Asra and Iim and Qiel and Bian, Sari and Inne, you have been my lifeline throughout this segment of my life, both physically and mentally. Of this I have no doubt and now I know more fully what it means to live. I (and Audrey) am indebted. Also, my thanks to Putro and Albar families for willingly helping me with things you didn't need to be bothered in the first place.

DJ, Eka, Peter, and Sofi, fellows in profession, fellows in life journey, and Sagit, my friend for 25 years and (never) counting; if I dissolved and parts of me became yours, then I'd truly be the most happy person. I cherish each of your existence.

"Rev." Liz, Davina and Stephen, Aris, Momo... because of all of you, although I am poor, I can say that I already inherited the kingdom.

Anggi and Matt, Dika, we have been learning to navigate life together, and I hope it stays that way until the day we part. Audrey Kalea and Natalie Millie, I hope what I did will worth a thing or two to your happiness.

As well, to all members of the discussion group Eudaimonia. I hope my existence has been useful for your meaning-making of life.

To my parents, and teachers in the past, of special note Prof. Siagian, Prof. Hilmanto, Mr. Iwan, and the late dr. X Sp.B.: in thinking of this study, the roads lead back to you, your gentleness, and what you imparted towards me throughout life. It can be said then, that if I hadn't had you in my lifeworld, there wouldn't have been this research. Thank you. And Mr. Cullen, Dr. Gorrie, Mr. Carrier, I'd kiss your hands.

To all the people who were grateful for me being there with you, I am grateful that you all have made my journey worthwhile.

Finally, to the Doctor(s), the 46, the participants who shared their lives with me and invited me as part of their lifeworld, you taught me aplenty. This is yours as much as it is mine. I wish all of you happiness and flourishing as professionals, and most of all as human beings.

Abstract

A paucity in the literature concerning the well-being of the medical student population in Indonesia was identified, while there has been a rapid change in the landscape of Indonesian medical education and socioeconomic circumstances. The purpose of the study was to gain an understanding of the well-being of Indonesian medical students with a focus on the student themselves. Well-being is important for the students' academic achievements and their flourishing throughout their lives. Specifically, the well-being of Indonesian medical students is explored using semi-structured interviews of 46 third and fourth-year undergraduate students in 10 medical schools, acquired by means of purposive and snowball sampling methods. After Giorgian descriptive phenomenological analysis of the data, an essence of what is being well for the students emerged: it is being fulfilled, enabled, and grateful. There are many contributors that influence both the students' well-being as well as its dynamics. The students acquire a sense of growth as a person throughout medical school, but descriptions of well-being related interventions in medical schools were sparse. On the whole, the findings, including the students' expectations and challenges concerning their well-being, agreed with previous studies in the area and adequately answered the research questions. Recommendations for future research were presented alongside ways to ensure credibility and transferability, which include discussion on reflexivity and study limitations.

1. CONTEXT

Presently Southeast Asia has become the new region of focus for global health, and within the medical education context Indonesia has been playing and will continue to play a crucial part for the foreseeable future, being the largest international provider of professional medical practitioners from within Southeast Asia (Acuin, Firestone, Htay, Khor, Thabrany, Saphonn & Wibulpolprasert 2011; Kanchanachitra, Lindelow, Johnston, Hanvoravongchai, Lorenzo, Huong, Wilopo & de la Rosa 2011). Furthermore, in recent years there have been rapid developments in the field of medical education in Indonesia that renders the country an interesting locus for attention. Some of the more important aspects about the dynamics of Indonesia and its burgeoning field of medical education are discussed at greater length in the following sections.

1.1. Demogeography of Indonesia

Hsu & Perry (2014) maintained that geography of a location is the first and foremost factor influencing the well-being of a society, and Southeast Asia is a rapidly developing region, politically, economically and in regional cooperation. Indonesia is the largest country in Southeast Asia, and it possesses rich natural resources, a high level of biodiversity, and also the fourth largest population in the world (The World Bank 2016). On the other hand, because of its location, Indonesia is one of the most disaster-prone countries in the world, with tsunamis and landslides posing the greatest threat. These disasters increase poverty as they disable people through injuries, destroy houses, and destroy health and education infrastructures, costing the Gross Domestic Product (GDP) in excess of US$ 85 billion (Hsu & Perry 2014).

After geography, the economic structure modifies the given land, air, water, and natural resources which further affects well-being as well as environmental sustainability. Hsu & Perry (2014) mentioned the lack of sanitation coverage and access to clean water alongside urban air pollution in Indonesia, which caused 120 million disease incidence a year, 50,000 premature deaths per year, increased medical expenses, and the loss of many working hours. There is also the deficient

coverage and quality of social services, including healthcare due to the want of proper governance in the past. This includes inadequate health data reporting, dearth of access to health services, poor existing facilities, and deficient training of medical professionals (Ngana, Meyers & Belton in Hsu & Perry 2014). Indonesia spends relatively little on healthcare and half of medical expenses are paid out of the household pocket, and the same could be said regarding education. Health and healthcare are income-dependent to a degree, and although the number has been improving, still almost 11% of all Indonesian people are below poverty line (Badan Pusat Statistik 2016a; Campbell & Porquet 2015). Only recently in 2014 the government implemented a national health coverage system, which was intended to fully cover all Indonesian citizens by 2019. There is also the double burden of communicable diseases and the rise of non-communicable diseases, and this may increase the health costs of a family.

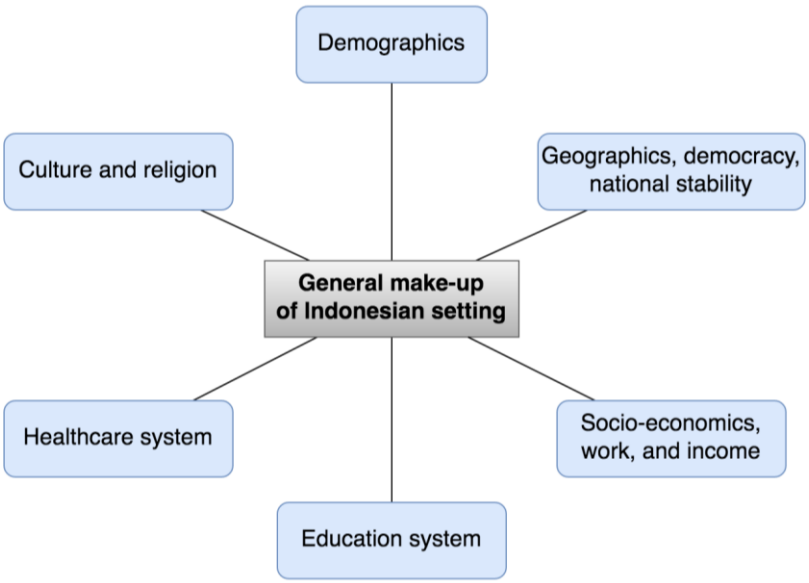

Figure 1.1. General Make-up of The Country of Indonesia

Regarding social life, in Indonesia gender has been viewed by the public as binary, with a traditional role attached for each –e.g. male as sole provider and female as housemaker and child-rearer. Indonesia is one of the countries which places an emphasis on collectivity, and is the largest Muslim-populated country in the world. Research showed that personal well-being is related to collectivity, religiosity, and spirituality (Abdel-Khalek 2013; Fabricatore, Handal & Fenzel 2000; French & Joseph 1999; Unterrainer, Huber, Sorgo, Collicutt & Fink 2011; Walker 2009; Yu, Zhou, Fan, Yu, & Peng 2016), and Theuns, Baran, van Vaerenbergh,

Hellenbosch & Tiliouine (2012) found that cultural views also interact with these concepts. Abdel-Khalek (2013) noted that religious people are happier in religious nations, and one of the latest studies of well-being found that spiritual life plays a significant part in Indonesian people's happiness (Inoguchi & Fujii 2013). Yet within that collective and religious culture, inequality has been increasing. Academics (Campbell & Porquet 2015; Stein & Sadana 2015) have found that equality is an important factor in a country's net well-being, but throughout Indonesia rural, urban, and regional disparities occur, with differences in access to income opportunities, health care, and education; differences between ethnic groups also exist, and this carries over into inequality in educational attainment (Glatzer 2015a; Hsu & Perry 2014). The income share of the wealthiest 20% of households remained stable from 1990 at 42.1%, but after the Asian financial crisis around 2008 it became 49.5% in 2012, and until that year the social protection system did not cover 60% of the citizens (Hsu & Perry 2014). Estes (2015) also observed the paradox between the wealth of Islamic nations, and the low-performing educational and health systems, difficulties in financing development programs, inefficient modes of governance, and high levels of public and commercial corruption, alongside extreme poverty, joblessness, illiteracy, ill health, social and political unrest of the citizens, and in several regions religious extremism. Inoguchi & Fujii (2013) further mentioned that people in Java, the island with the most developed cities in Indonesia, are less happy compared to people in Sumatra, owing to Java's high population density and hectic pace of life, and other regions are the least happy as they are either undeveloped or underdeveloped and/or isolated by the sea. This is not exactly in line with Veenhoven's (2015) observation that in developing nations city-dwellers are happier than their rural counterparts. Scholars (Campbell & Porquet 2015; Schaeffer 2015) observed that happiness is higher in democratic countries than in dictatorships and well-being is positively associated with civil rights and the rule of law. In this regard, Indonesia has been on the path towards a better democracy since the fall of the New Order regime in 1998. Improving the well-being of citizens is part of the democratic process and understanding the subject is valuable in shaping government policies, a sentiment shared by different scholars (Campbell & Porquet 2015; Stein & Sadana 2015; Tay, Kuykendall & Diener 2015). Altogether, Maggino (2015) summed up that equality, well-being, and sustainability define the progress of a nation.

1.2. Medical Education in Indonesia

Education is a vital tool in expanding choices for people. Power (2015) asserted that education improves people's quality of life (QOL), and perhaps more importantly, assists people in learning how to improve their well-being. There were some suggestions that modern life in western populations appears to typically be more satisfying than in traditional societies (e.g. Veenhoven 2015). Being the largest provider of international medical practitioners in the region, and with the backdrop of Indonesian disaster-prone geography, the huge number of people living in the area, the double burden of communicable and non-communicable illnesses, added to the rural-urban migration phenomenon, Indonesian medical education needs to be especially tailored to provide adequate support for Indonesian people.

In Indonesia, HE institutions normally only admit students graduated no longer than three years from high school, and undergraduates not progressing after seven years face expulsion; as such, undergraduates in Indonesia are usually aged 18 to 25 years. Studying for a bachelor's degree in medicine in Indonesia takes three and a half to four years as a minimum. Via a spiral curriculum (Harden 1999), students are taught pre-clinical –mostly involving basic sciences– aspects of medicine in the first two years, and the clinical sciences in the next two years. Daily teaching and learning involves problem-based discussions amongst ten to fifteen students facilitated by a tutor, clinical skills practice labs with either mannequins or simulated patients, and traditional lectures in a class of normally around twenty to fifty students, but sometimes around a hundred. Students graduated with the bachelor's degree can then take one-and-a-half to two-year clinical internship rotations under consultants' supervision in multiple hospitals and regional health centres. After that they must pass a National Competence Examination, authorised by the Ministry of Education, to be registered as qualified general practitioners. No specialist programme is directly available for medical students; anyone wanting to be a specialist must be a general practitioner first.

The most recent developments in the current Indonesian context are the decision from the government of the capital city of Indonesia to free Jakarta's future public undergraduate students from tuition fees, in similar way to the step taken by the public medical school in West Java, University of Padjadjaran, which had started to exempt medical students and residents from tuition fees (Adityo 2016; Hendika 2015; Rasmin 2010). This progressive step is akin to the spirit of equality

and widening participation that has been propagated in higher education (HE) institutions in other countries including the UK, so that more people from different socioeconomic backgrounds will have the chance to obtain tertiary education in a seemingly prestigious field. Other, more salient contemporary transitions include the fast growth of private medical schools, adoption of problem-based learning systems and continuing medical education, establishment of laws governing medical practice and education, and successive changes in professional competence regulation (Denura 2012; Konsil Kedokteran Indonesia 2012; Lestari 2012; Undang-undang Republik Indonesia Nomor 20 2013; Undang-undang Republik Indonesia Nomor 29 2004). Further, while private and public universities share more or less similar numbers of students (43% and 57% respectively), private universities comprise 97% of HE institutions in Indonesia, i.e. there are a few large public medical schools and an abundance of small private ones (Hsu & Perry 2014). The financial cost of obtaining a degree from a private institution in Indonesia is arguably higher than from its government counterpart. Other factors contributing to the complexity of medical education in Indonesia include the unequal distribution of population, medical schools, and healthcare centres across Indonesian provinces, while not all Indonesian medical schools possess teaching hospitals (Badan Akreditasi Nasional Perguruan Tinggi 2016; Badan Pusat Statistik 2016b; Badan Pusat Statistik 2020). These issues, together with the recently established universal health coverage system, also create a nationwide pressure in providing enough medical practitioners proportional to the population in a particular area.

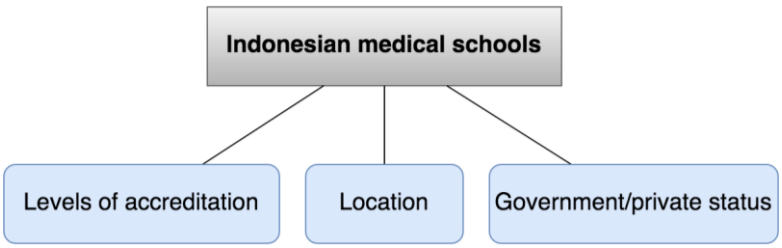

Figure 1.2. Variability of Medical Schools in Indonesia

While much attention has been given to the regulation of institutional and curricular affairs (e.g. Findyartini, Werdhani, Iryani, Rini, Kusumawati, Poncorini & Primaningtyas 2015; Miller, Chen, Srivastava, Sullivan, Yang & Yii 2015; Widyandana, Majoor & Scherpbier 2011), less has been given to medical students' well-being. Shamionov (2014) contended that transitioning to a HE level may

decrease students' satisfaction with life (SWL). It seems that education indirectly contributes to a person's QOL. This is in contrast to Power's (2015) view, and he has called for more research on the relationship between education and well-being. It is not known whether Indonesian undergraduate medical students' QOL is keeping up with the developments in medical education, or with the pressure from the very low doctor/population ratio, the general backdrop of people living in poverty, and the fact that the largest portion of healthcare consumers make a living in the informal sector (i.e. they pay for health services out-of-pocket) (Kanchanachitra et al. 2011). This ought to be a concern as several studies have shown that within the context of education being essential to personal well-being, medical students can experience motivational change throughout their academic years, students' QOL may have an impact on their academic motivation and achievement, and also faculty's attitude and academic burnout is correlated with the students' QOL (Henning, Hawken, Krägeloh, Zhao & Doherty 2011; Eklund Karlsson, Crondahl, Sunnemark & Andersson 2013; Monk-Turner 2013; Pagnin & de Queiroz 2015; Tempski, Santos, Mayer, Enns, Perotta, Paro, Gannam, Peleias, Garcia, Baldassin, Guimaraes, Silva, da Cruz, Tofoli, Silveira & Martins 2015; Yalçin 2011). Diener, Suh, Smith & Shao (1995) also suggested that students in Asia may suffer from extreme pressure to achieve, but again the exact causes for dissatisfaction with their schools and life still have to be explored. It has also been shown that low QOL is correlated with depression in people in their early old age (Hassel, Danner, Schmitt, Nitschke, Rammelsberg, & Wahl 2011). Lastly, apart from Tuzgöl Dost's (2006) finding with undergraduate students in Turkey, that different perceived economic status affects well-being, hard data on medical students' views with regards to their study and living costs are lacking, but it seems that public perception in Indonesia on this issue is that medical school is one of the most expensive educations one can have, and following that, those that can afford to be medical students must be well-off.

1.3. Body of Research on Well-being

Both well-being and QOL are technical counterparts of what people usually recognise in popular parlance as happiness, or how one judges their life favourably. While there is much overlap in usage of the terms, it might be understandable that they are not totally synonymous with each other. Happiness in daily usage may generally be understood as fleeting pleasant emotions one feels

in one's daily, lived experience. QOL as a proposed term to represent happiness came from studies in economics, as I will further elaborate below. As such, QOL is more technical, global, and calls for measurable numbers, usually involving regional or national data as they are expediently quantifiable. On the other hand, well-being, particularly subjective well-being (SWB), is more personal and closer to individuals' lived experience and thus to the term happiness mentioned earlier, although it has been found that SWB also comprises one's cognitive evaluation of their whole life instead of just momentary feelings (Abdel-Khalek & Lester 2010; Correia, Batista & Lima 2009; Emmons 1986; Lennon 2000; Macaskill & Denovan 2014; Molnar, Busseri, Perrier & Sadava 2009; Robak, Chiffriller & Zappone 2007; Satici 2016), and as such, is not wholly similar to happiness. There is also the growing sentiment (e.g. Macaskill & Denovan 2014; Rojas 2015) that an individual's own voice is more befitting to judge their own well-being instead of some detached, impersonal measuring instrument, or authorities either governmental or academic. There are also two different approaches towards characterising well-being: eudaimonia, the fulfilment of purpose in life and the aspiration for excellence; and hedonia, the gain in pleasant affects and evasion from negative ones (thus the latter is even closer to what "being happy" usually means in daily speech). To compound the issue, scholars sometimes equate hedonia with SWB, while the latter clearly has a cognitive aspect instead of just affective, as will further be elaborated in Chapter 2. It seems clear that using the term happiness as is, is not enough to explain the whole concept of well-being and may even bring with it loaded prejudice from its daily usage.

Research on well-being has been burgeoning since the 1960s, but only recently expanded its focus on the area of SWB, by moving away from purely economic numbers. Scholars (Diener et al. 1995; Glatzer 2015b; Tam, Lau & Jiang 2012; Yamaguchi & Kim 2013) have both demonstrated the existence of differences between nations in understanding well-being and written at length about the many reasons behind the differences. The relationship between objective data and happiness is not straightforward. For example, there are countries with either short life expectancy or low GDP but high happiness rates (Glatzer 2015a). Such objective data are used because they are often readily available for most countries, allowing a global comparison. Nevertheless, Glatzer also mentioned that the fastest growth in life expectancy since 1950/55 took place in Asia. Writers (Land 2015; Tay et al. 2015) suggested that well-constructed social indicators should

show output variables of a public policy (i.e. how much something of interest has changed) and remarked that all-inclusive numbers such as GDP are not suitable for use as indicators of well-being. It could not reveal the real beneficiaries of the income, and there are achievements not measurable through GDP, such as better health services, access to knowledge, better working conditions, physical security, leisure time, and a sense of participating in the community.

Further, Charlemagne-Badal, Lee, Butler & Fraser (2015) observed that definitions of, and instruments used to, measure QOL were usually specific in purpose and context, and Yamaguchi (2015) and Monk-Turner (2013) maintained that measurements and results in QOL studies can seem to contradict each other. The tendency now is to re-examine the scholars' attitude of treating QOL as a function of only material resources (Assi, Lucchini & Spagnolo 2012; Salvador-Carulla, Lucas, Ayuso-Mateos & Miret 2014). Many disciplines, including economic, sociological, psychological, medical, and environmental, are interested in the subject, further emphasising the multidimensionality of QOL and the preferred holistic approach towards the issue (Abdel-Khalek 2010b; Charlemagne-Badal et al. 2015; Salvador-Carulla et al. 2014).

Scholars (Estes 2015; Guillen-Royo & Wilhite 2015; Uchida, Ogihara & Fukushima 2015) remarked that GDP, Gross National Product, Per Capita Income, and size of possessions cannot explain the dissatisfaction and the social maldevelopment in the supposedly rich countries and societies. The standard hierarchy of needs (Maslow in Nishimura & Suzuki 2016; see Figure 1.3) cannot always explain the differences in individual's behaviour and preferences, e.g. altruism v. material loss. Rojas (2015) further added that past approaches in studying well-being were only partially correct because they presumed there were authorities more qualified to judge a person's well-being, and the experience of the people was of little relevance. This resulted in many frameworks and discussions, but no corroboration. Apart from an agreement on some components that affect the construct (mainly that it consists of cognitive evaluations of and affective reactions to life events), there is still no consensus among researchers on a hard and fast definition of well-being (see Sections 2.2.1 – 2.2.2). Maggino (2015) and Abdel-Khalek (2010b) appear to believe that well-being is the subjective aspect of QOL (the other aspect being living conditions), but mostly the two terms are used interchangeably in the literature, also with a few other terms such as life satisfaction and happiness. Even for the same term, there have been multiple different

definitions, which prompted Yamaguchi & Kim (2015) to say that the terms are impossible to operationalise. Nevertheless, it is also agreed that QOL is linked with both good physical health and social relationships (Tay et al. 2015). Cummins & Weinberg (2015) further suggested that there is both a genetic influence and a life experience component to life satisfaction that make each individual's response to life challenges uniquely different.

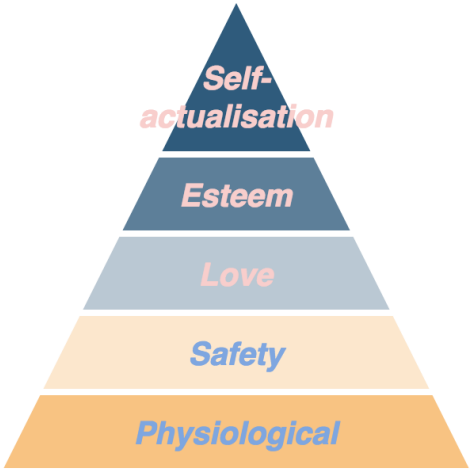

Figure 1.3. Maslow's Hierarchy of Needs
(synthesised from Nishimura & Suzuki 2016)

Inoguchi & Fujii (2013) pointed out that with regards to QOL, people consider all the things that matter to them and give value and preferences to those various elements. SWB cannot be thoroughly understood by objective indicators of a life situation, but by asking the people experiencing the situation, a sentiment also shared by Glatzer (2015a) and Maggino (2015). The available evidence suggests that internal and personal factors are more important than external or social ones (see Section 2.3.3.2).

Generally, although unhappiness and dissatisfaction prevail in developing countries where a large proportion of the population lives at subsistence levels (Veenhoven 2015), people in Southeast Asian countries viewed their happiness more positively than their Per Capita Income and Human Development Index (HDI) would suggest when compared to more affluent regions (Inoguchi & Fujii 2013). Inoguchi & Fujii found that Indonesians are satisfied in most domains of their life, including spirituality, health, and education. Yet they did not explain how or why Indonesians enjoy life in general and are happier compared to other populations in Asian countries. Although Hsu & Perry (2014) mentioned that Indonesia has been able to reduce absolute poverty from 18.2% in 2002 to 13.3% in 2010, this degree

of happiness is still remarkable as scholars also found, for example, that in Indonesia the standard of living is relatively low and both physical assaults and sexual abuses are still problematic (Inoguchi & Fujii 2013; Hsu & Perry 2014). Food insecurity for some households could be so severe that the people cannot obtain the required amount of nutrition (Hsu & Perry 2014). It remains to be seen whether being male, female, or otherwise in Indonesia and acting outside a traditional gender role affects one's perception of well-being. Regarding work satisfaction, Inoguchi & Fujii (2013) found that satisfaction in Indonesia is just average compared to that in other countries, which somewhat reflects Hsu & Perry's (2014) observation that unemployment has been a major concern in Indonesia since the Asian financial crisis. Moreover, regional segregation occurs between Java and Bali versus outside Java and Bali and between western Indonesia versus eastern Indonesia, since Java and Bali are much more developed than Eastern Indonesia (Suryadarma, Widyanti, Suryahadi & Sumarto in Hsu & Perry 2014), which may further explain the disparity in Indonesian people's QOL compared to each other.

In the context of undergraduate students, as an example of the relationship of the multitudinous life aspects and well-being, studies have shown that daily activities and health-promoting behaviours play roles in the well-being of students. Enough sleep, not using tobacco, eating breakfast daily, and social support positively correlates with students' well-being while drug use worsens this (Allen & Holder 2014; Molnar et al. 2009; Peltzer & Pengpid 2013). With the advancements of information technology and widening use of personal gadgets, recent studies found high cellphone use and posting negative content on Facebook platform worsens well-being (Lepp, Barkley & Karpinski 2014; Locatelli, Kluwe & Bryant 2012). It is also interesting to see other pioneering research, e.g. studies of the relationship between pro-environmental behaviour and increased happiness, or classic studies such as the contribution of prosocial spending on happiness (Corral-Verdugo, Mireles-Acosta, Tapia-Fonllem & Fraijo-Sing 2011; Yamaguchi, Masuchi, Nakanishi, Suga, Konishi, Yu & Ohtsubo 2016). More promisingly, there were studies which showed that HE students' well-being may be modulated through various interventions such as mindfulness practice (de Vibe, Solhaug, Tyssen, Friborg, Rosenvinge, Sørlie & Bjørndal 2013; Rajagopal, Pugazhanthi & George 2012; Shapiro, Brown, Thoresen & Plante 2011; Weytens, Luminet, Verhofstadt & Mikolajczak 2014; for more discussion see Sections 2.3.2; 2.3.3.1; 2.3.4.2).

All in all, well-being is a multidimensional construct and the vast range of issues interplaying, from genetics to national stability, is often not straightforward. Multiple terms have also been used to address the concept, arguably because of the different lenses and philosophical traditions employed by scholars, not because there are multiple categorically different definitions of happiness existing out there. A sense of well-being is also both personally and culturally nuanced. We must avoid falling into the trap of using a reductionist approach to wellbeing, treating it as a narrow subject, or blindly dismissing one approach towards well-being and exclusively preferring another approach. Realising the gap in understanding Indonesian people's view of this complex subject matter, examining the material and intangible factors that influence their judgments of SWB is a desirable endeavour, and it is only appropriate that we explore these issues with the primary sources themselves. Only then can we begin to add to our understanding of how to improve our well-being.

1.4. Contextual Limitations of Previous Research on Well-being

Scholars (Diener in Glatzer 2015a; Land 2015; Maggino 2015) asserted that studying well-being is a chance to improve the condition of a population and it is critical for a nation to have an interest in well-being. Little is known about QOL in Asia compared to Europe and North America, as it has not been "comprehensively and systematically examined" (Inoguchi & Fujii 2013, p3). Inoguchi and Fujii and Yiengprugsawan, Seubsman, Khamman, Lim & Sleigh (2010) further asserted that Asia is relatively ignored in the field of well-being and social science in general, notwithstanding it comprises two-thirds of the world population, and right now Asian countries are under the pressure of globalisation. Writers (Abdel-Khalek 2010b; Abdel-Khalek 2013; Rojas 2015; Wong, Ho, Li, Shin & Tsai 2011) noted that most studies in SWB were both grounded in western theories only and mostly conducted in a western culture, and it is questionable that the practice of applying them as a universal yardstick is appropriate. Scholars (Glatzer 2015b; Uchida et al. 2015) are concerned that how people express their thoughts and feelings are different between cultures and languages, and Wong et al. (2011) also mentioned that both research on SWB in Asia and research which considered the within-group cultural differences is lacking. Even individuals within the same group could have different values and attitudes concerning aspects of their life. Stein & Sadana (2015) further listed the challenges in the field: narrow conceptualization of health

and well-being; homogeneous and limited data sources, yet a vast number of tools and indices; greater reliance on mortality or illness measures than those that assess positive health; and a lack of meaningful approaches to communicating and interpreting multidimensional concepts. Moreover, the seemingly religious Indonesian population would be a rich place to apply qualitative methodologies to allow more understanding about the issue of well-being, religiosity, and spirituality, in accordance with Berkel, Armstrong & Cokley's (2004) advice. Lastly, the field of medical education in Indonesia faces unique challenges.

Following the previous sections, it seems that Indonesia is a ripe context for study, also considering the immense size of the population and, more importantly, the diversity of its people and the novel context.

1.5. Purpose of This Study

The points mentioned above make a study aiming to explore Indonesians' understanding of the concept of QOL and their perceptions of the state of their QOL relevant and timely. In particular, I intend to undertake the research on a relatively untargeted population, namely medical students. Indonesia provides unique pluralistic cultures and situations that may play a role in how the students perceive their well-being. Indonesians are also exposed to languages and cultures from mostly English-speaking countries and also Chinese and Arabic backgrounds. Despite the expanding research on SWB around the world and the importance it has, few studies have been conducted in Indonesia, and none within medical student population. It is also anticipated that more understanding of the role of education for the students' well-being (see Sections 1.2; 2.3.4) will be obtained with the study. The research aims of exploring Indonesian medical students' conceptualisation of QOL and their perceptions about their own QOL are articulated in the following objectives:

1) Explore what quality of life means for medical students in Indonesia.
2) Identify concepts, whether external or internal to a person, that contribute to personal perception of quality of life in the context of learning medicine in Indonesia.
3) Understand how medical students in Indonesia view and actively give meaning to the factors that contribute to their quality of life.

The corresponding research questions are:

1) What are the ways in which Indonesian undergraduate medical students define quality of life?
2) What is the meaning that the students ascribe to the concepts they consider as significant in contributing to their quality of life?
3) What changes happen to the ascribed meaning throughout the students' study years?

In line with the existing literature, the terms well-being, SWB, QOL, and happiness will be used interchangeably. While the results of this study will be expected to contribute towards the improvement of the concept of QOL, the originality of this research is that the study is done within a dynamic context which is relatively rarely mentioned within the literature, i.e. (Southeast) Asian demogeography with Indonesia as an exploratory sample. Also, while there has been some attention towards the SWB of HE students and public in general (e.g. Hassel et al. 2011; Miller et al. 2015; Schnettler, Denegri, Miranda, Sepúlveda, Orellana, Paiva & Grunert 2015; Sharma et al. 2013; Yalçin 2011; Yamaguchi 2015), the state of undergraduate medical students' QOL has not received as much attention. Further, it is hoped that the study will ultimately result in prosperity and good governance for the people involved (Glatzer 2015a; Inoguchi & Fujii 2013; Yiengprugsawan et al. 2010).

2. LITERATURE REVIEW

Within this chapter I will report the summary of the literature search, followed by a treatment on the body of research on the topic of well-being, and lastly how it might relate to Indonesian medical students' context. I also created tables and figures in an effort to help in conveying meaning in the chapter. Where the tables or figures were adapted from others this is explicitly stated.

2.1. Search Strategy

The literature search phase took place from May until August 2016 to identify relevant literature concerning the subjective well-being (SWB) of undergraduate students. All database providers available through the University of Glasgow library were searched one by one to find those relevant to the fields of education, psychology, or medicine and other healthcare professions. Eight database providers were identified: Campbell Library, Cochrane Library, EBSCOhost, Expanded Academic ASAP, Open Grey, Proquest, ScienceDirect, and Web of Science. In attempting as best as possible to prevent missing a relevant article, adjusting search formulae between databases was inevitable, considering built-in differences amongst search engines. Three relevant providers, all considerably smaller in database size compared to those previously mentioned, were discounted: OCLC and Zetoc because their search engine is not advanced enough to handle the search measures even after considerable simplifications, and Ovid because all the relevant database services it contained were already included in the first eight providers.

Relevant terms including well-being, quality of life, happiness, undergrad*, and a few others were used as search keys together with the suitable Boolean operators for each database service. The search measures were applied in the expert or advanced search option for titles, abstracts, or subject/keywords. Verbatim search formulae for each database are available in Appendix I. Despite various attempts in formulating search keys to find reports regarding SWB in undergraduates studying medicine, the search needed to be broadened to include

similar studies on undergraduate students from other disciplines. This became the first indication that more studies focusing on SWB within medical students are needed.

Inclusion and exclusion criteria (Table 2.1) were applied with each search and the whole search process is summarised in Appendix II.

Table 2.1. Inclusion and Exclusion Criteria

Inclusion	Exclusion
1) Peer-reviewed empirical study or systematic review 2) Book, book chapter, thesis, dissertation, conference proceeding, or report 3) Studies focusing on the whole concept of well-being or quality of life (QOL) 4) Content written in English, Indonesian, or Malayan 5) Undergraduate students as the focus of the study and/or the sample population	1) Editorials or commentaries 2) Mean age of sample population <18 or >29 3) Sample population did not include undergraduate students 4) Patients or non-human as main focus of the study 5) Instrument analysis/validation as main focus of the study

This literature review excludes studies in student populations aged above 29 years for demographic reasons stated in Section 1.2, where the combination of maximum study duration and limitations coming from regulations regarding entering and finishing an undergraduate education in Indonesia, including in medicine, is such that normally there are no mature students in the country's undergraduate level. After elimination of duplicates, 397 articles were found and after exclusion, 107 articles were reviewed in the end. The Qualitative Assessment and Review Instrument by Pearson (2004) and the Critical Appraisal Skills Programme UK (2013) qualitative checklist were both used to help evaluate the literature. Together they provided guidance on establishing the cohesiveness between methodology and aims within each reviewed article and prompts on whether the articles were worth further review. A textbook on global QOL was also found through hand search. In addition, the literature search was repeated in May

2020 to stay relevant with the state of research and learn the developments within the literature. Thirteen most pertinent new articles were included within this review, bringing the total book chapters, dissertations, and articles reviewed to 140.

The reviewed studies were conducted with undergraduate students from different disciplines as the participants, and unless otherwise stated they were usually done cross-sectionally in European and North American contexts, with sample sizes between 120-300. The method(ologie)s employed were mostly quantitative, including responses to self-report instruments and quasi-experimental. Some research in the field, such as student well-being in relation to information technology or ecological sustainability, have only started relatively recently and as such results are limited. The studies normally did not show causal relationship amongst the factors studied and may not necessarily be generalisable into other contexts. Incorporating those studies was worthwhile in building a multidimensional framework, or in other words to find the needed answers by providing a more thorough picture of the topic.

Throughout the remaining sections, I will explicate the complexity of the subject of well-being, followed by how research on well-being fares in the contexts of medical school environment and Indonesia.

2.2. What is Well-being?

Here I will briefly present philosophical views on well-being, followed by touching upon the dynamic real-life situation of well-being research, which for the most part has been empirical (Dodge, Daly, Huyton & Sanders 2012), either coming from an SWB or QOL approach. Viewing well-being as a multidimensional phenomenon is appropriate and even important (cf. Camfield & Esposito 2014; Cooper, Okamura & Gurka 1992; Cooper, Okamura & McNeil 1995; Maggino 2015). Scholars (Macaskill & Denovan 2014; Rojas 2015) asserted that subjectiveness is important in well-being research, and at the same time it is "complex and need[s] to be treated with caution" (Camfield & Esposito 2014, p222). The terms well-being, QOL, and SWB will be used interchangeably for reasons that will become clear; and I will put the construct of SWB at the forefront in this study, while drawing heavily from debates in the more objective elements, i.e. QOL research, in the hope of understanding the issue as thoroughly as possible.

2.2.1. Philosophical Overview

The concept of well-being has been in discourse since ancient times, with some of the famous discourses coming from as far as Buddha Gautama's period (ca. 6th century BCE) on trying to identify how humans may either obtain or cultivate happiness. Buddha asserted that suffering will persist as long as an individual is attached to any phenomenon they experience. In the west, two classic schools of thought regarding well-being emerged. The first is the hedonic approach, the view that happiness, and thus well-being, is achieved by having all the possible pleasures that can be found, of which Hume and Bentham were proponents (Stewart 2014). It can be said then that here well-being is a somewhat fleeting emotional experience. The second school, eudaimonia, is concerned with working towards a realisation of potentials and goals, i.e. purpose in life and human flourishing, which is a temporally more stable view of well-being; the concept of eudaimonia goes back to Aristotle and was further elaborated by Sen and Nussbaum (Jongbloed & Andres 2015; Stewart 2014; Wajsblat 2011). Scholars (Jongbloed & Andres 2015; Layard in Stewart 2014) added to the issue, saying that happiness is the ultimate purpose in life and all other aspects in life are valuable insomuch as they promote that purpose. As an aside, there is the negative –and arguably longer recognised– side of well-being. This "ill-being" comprises diseases, disabilities, worries, and negative affects, and comes from unfavourable socioeconomic circumstances and lack of sense of control in one's life (Glatzer 2015a; Headey, Holmström & Wearing in Gulyas 2015).

Well-being is understandably an abstract concept, and the various strands of thoughts above influence modern well-being studies, where many scholars from multiple fields and different views contribute to its complex understanding. While good, this also has added layers and divergences in the definition, framework, and measurement strategy for well-being. In general, while researchers may disagree on the particular relationship between hedonia and eudaimonia, they acknowledge the existence of both. They can be seen as distinct, but complementary, constructs for improving well-being (Sen in Jongbloed & Andres 2015), and there are views that hedonic pleasure is also a part of eudaimonic pursuit (i.e. eudaimonia comprises hedonia and other, non-affective components) (Biswas-Diener, Kashdan & King 2009). In other words, happiness is but an aspect of well-being. Biswas-Diener et al. (2009) continued, saying that instead of quantifying hedonic effect, studies must pay attention to these non-affective aspects of well-being, as

positive experience does not always translate into flourishing. I will also add that it is entirely possible for one to sometimes accept feeling worse in a situation hedonic-wise, if that situation brings them closer to their eudaimonic purpose, which adds another facet to approaching the concept of well-being. An example of this is when a student passed going to a party to focus on studying for an exam.

All in all, the view seems to be that happiness or hedonia alone is not enough to explain well-being, as it is seen as only the affective part of the whole concept, and more is needed to complete the picture. Elaborating on this is what the rest of this chapter is set out to do.

2.2.2. Modern Understanding on Well-being

More recently, the field of well-being research has drawn from concepts in biology, economics, sociology, medicine, and psychology. While studies have been flourishing for around three decades, particularly in Europe and North America, there has been no solid agreement in delineating or operationalising the concept of QOL or well-being. An example of a definition of well-being that demonstrates not only its subjectivity, but also the need for its elaboration, was drawn by the World Health Organization (WHO) QOL workgroup as cited by Gold & Miner (2002, p4) and is still current (WHO 2020):

> *[Well-being involves] individuals' perceptions and their position in life in the context of the culture and value system where they live, and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept, incorporating in a complex way a person's physical health, psychological state, level of independence, social relationships, personal beliefs, and relationship to salient features of the environment.*

In the past QOL was considered an objective subject matter singularly indicated by material wealth, but this failed to explain the various differences in people's happiness even when they are equally affluent. Gold & Miner (2002) remarked that well-being is more than demographical statistics or anything that can be measured, as will be further explained. Despite some views in the past that SWB is an indivisible unit (e.g. Bernheim in Theuns et al. 2012), the consensus now is that it is a configuration of internal constructs an individual has, intermeshed with external factors that altogether shapes their opinion of how fulfilling their life is. There have been many terms and definitions used to encapsulate the SWB and QOL construct

(for a further reading of the terms having been used, see e.g. Abdel-Khalek & Lester 2010), and in considering the universal relevance of the concept, flexibility in defining well-being is maybe unavoidable. Well-being is not just about things an individual recognises in their life, but more importantly a process that also involves how they react to that recognition (i.e. a subjective appraisal; Camfield & Esposito 2014; Haucap & Heimeshoff 2014; Macaskill & Denovan 2014; Tončić & Anić 2014). Overall, subjectivity seems to be a basic approach in appraising well-being. It "happens in the realm of the person and not in the realm of objects[, and] the experience cannot be detached from the person" (Rojas 2015, p323).

As a testament to the dynamic development in the field of SWB research, new models and measurement instruments are always introduced, e.g. the "love of life" construct as yet another analogue for SWB (Abdel-Khalek 2010b; Abdel-Khalek 2013). Love-of-life's significant dimensions in particular are happiness, optimism, self-esteem, hope, satisfaction with life (SWL), and extraversion.

Theuns et al. (2012) stated that cultures define both people's life domains and their standards of satisfaction differently, and reported that classical models failed to explain the relationship between QOL and the plethora of existing life domains, which indicates that some more elaborate model is necessary. They even speculated that multiple valid concepts of QOL may coexist together across cultures. Others (Campbell in Wajsblat 2011; Walker 2009) also emphasised the subjectivity and participants' "experienced feeling" (Abdel-Khalek & Lester 2010, p1134) in assessing QOL. Bechtel & Corral-Verdugo (2010) added that heredity even influences well-being. Furthermore, findings in well-being research are complicated by the multiple links demonstrated from empirical research into SWB, behaviour, emotion, personality, and infrastructure together, and by the fact that the same SWB correlates were sometimes treated as predictors and sometimes dependent variables. Aspects constituting SWB and how they interrelate are very complex and we are still endeavouring to comprehend them (Abdel-Khalek & Lester 2010; Sanjuán & de Lopez 2013; cf. Haucap & Heimeshoff 2014; Marlo & Wagner 1999; Theuns et al. 2012; Wong et al. 2011). Wajsblat (2011) added that limitations within this area of research include the difficulty to operationalise the constructs constituting SWB. People also may put different priorities in pursuing the different correlates of SWB, depending on the values they hold (Camfield & Esposito 2014; Oishi, Diener, Suh & Lucas 1999). Examples of the broad sources of SWB correlates are age, quality relationship, good health, emotional

intelligence, self-efficacy, leisure, income, occupation, academic satisfaction, hope, religiosity, self-esteem, optimism, and the Extraversion aspect of personality (Abdel-Khalek 2010b; Abdel-Khalek 2013; Datu & Mateo 2016; Geng 2018; Zanon, Bardagi, Layous & Huts 2014, Satici 2019). Abdel-Khalek (2013) pointed out that the literature has shown that personality (see Section 2.3.3.2) carries more weight towards SWB compared to social and demographic properties, and continued by asking whether this also works in cultures which emphasise collectivity and traditional family roles. Cognitive and motivational processes moderated external effects on SWB (Lyubomirsky in Abdel-Khalek 2010b).

Bechtel & Corral-Verdugo (2010) noted that despite various theories attempting to explain well-being, findings are convergent. While there is still disagreement on terms used for the construct and the precise definition for SWB, what SWB consists of in general has been well-established. They are the three hallmark components (Figure 2.1): global cognitive evaluation of life, positive affect (PA), and negative affect (NA) (Abdel-Khalek & Lester 2010; Correia, Batista & Lima 2009; Molnar et al. 2009; Robak, Chiffriller & Zappone 2007; Zanon et al. 2014; cf. Locatelli et al. 2012). The cognitive aspect of well-being is usually referred to as SWL, although there are also a few varying views (e.g. Abdel-Khalek 2013; Katschnig & Krautgarner in Abdel-Khalek & Lester 2010); PA and NA are two discrete spectra of the more changeable mood each with its own frequencies of occurrence. SWL, PA, and NA together is what people usually call happiness (Abdel-Khalek & Lester 2010; Tay et al. 2015; Walker 2009). It is generally viewed that people evaluate their SWB by comparing their experiences with the ideals of life they have in mind. On the other hand, Katschnig & Krautgartner (in Abdel-Khalek & Lester 2010) did not consider the SWB construct as corresponding to QOL, but instead as one of QOL's constituents alongside social functioning and access to external resources.

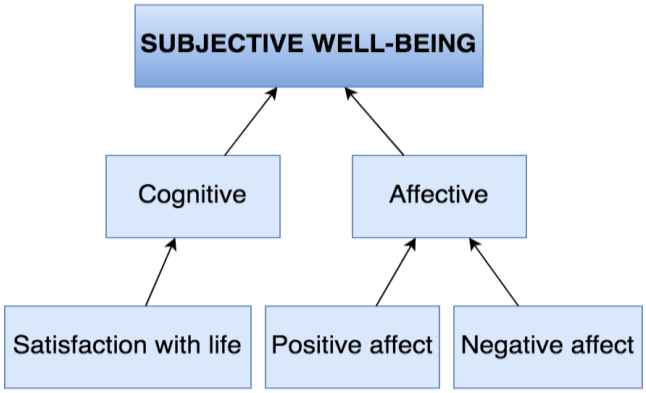

Figure 2.1. Basic Building Blocks of Subjective Well-being

Scholars (Glatzer 2015a; Glatzer 2015b; Gulyas 2015) also mentioned future dimensions of well-being (see Figure 2.2): hopes, the optimistic aspect, and fears, the pessimistic counterpart. They asserted that these components may affect well-being to a great extent, yet are less studied. As illustrations of their importance in one's well-being, one can feel sufficient at present but fear losing their job or spouse, or one can live in a warring country, but also understand that it will end soon. Gulyas also noted that hopes tend to be stronger in less developed countries, and there is a tendency towards pessimism in some developed countries.

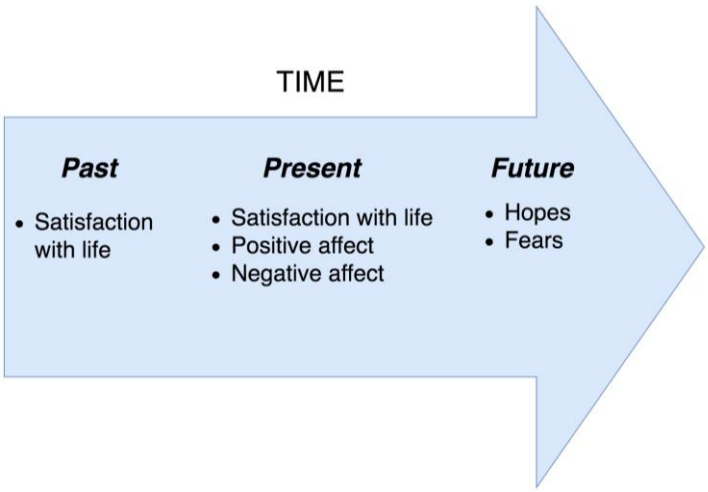

Figure 2.2. Temporal Aspects of Well-being

Furthermore, Veenhoven (2015) broke satisfaction into four components depending on its temporal and life domain characteristics, which can be seen from the next table.

Table 2.2. Dimensions of Personal Satisfaction
(adapted from Veenhooven 2015)

	Passing	**Enduring**
Particular domain	Pleasure	Domain satisfaction
Life as a whole	Peak experience	Life satisfaction

Peak experience may happen when one experiences tremendous feelings that overwhelm or evoke wonder, which at times brings a sense of wholeness to their disparate aspects of life, or I suspect maybe even a sense of connectedness with something outwith the self, e.g. another person, nature, or the divine (see Sections

2.3.1.2; 2.3.3.1). An example of domain satisfaction is when a person considers their marriage is doing well, but not their career, or vice-versa. Veenhoven also asserted that domain satisfaction and life satisfaction can separately influence each other. One's satisfaction in a life domain may affect their evaluation of overall life satisfaction, and their life satisfaction may also improve or worsen their evaluation of satisfaction in one particular life domain. To compound the issue, scholars (Tay et al. 2015; Uchida et al. 2015; Veenhoven 2015) also noted that academic and political discourses often fail to distinguish between the means and ends of well-being, or preconditions for and the functional state of happiness.

Continuing on the ideas of hedonic and eudaimonic well-being (Section 2.2.1), it seems that modern literature is more involved with the concept of hedonia when discussing happiness (cf. Sections 1.3 – 1.4). Hedonia is considered as humans' search for means of pleasure external from the self, with the goal to maximise the experience of those pleasures. These positive emotions and experiences in turn will enhance one's psychological and cognitive attributes, e.g. attention, creativity, and coping ability, and relationship quality, while negative emotions and experience do the opposite. At the same time, one's cognition may set different values to each specific life domain (Diener, Larsen, Levine & Emmons 1985) while assessing SWL. It was over-simplistically translated in the past into buying power (summed up in GDP) to explain well-being (Stewart 2014), and failed to explain the long-term disparity between changes in buying power and changes in QOL (Easterlin 2015). At some point GDP was absorbed into a broader proxy for well-being, namely the Human Development Index (HDI), which also includes education and life expectancy domains (Land 2015). HDI was developed following the newer understanding that means –i.e. buying power– does not equate to ends –i.e. value or purpose–, and that well-being also involves freedom and enablement to pursue personal goals and be the optimal self (Stewart 2014). While HDI has been criticised, e.g. it failed to account for the diminishing return of income and the within-country inequalities, at least it cares for human flourishing rather than just buying power (Glatzer 2015a; Land 2015). On the whole, GDP and HDI have been utilised as measures of QOL because they are expedient to use across the world's countries.

In relation to what was said regarding HDI and human flourishing, eudaimonia studies grew alongside 20th century humanism and positive psychology, which orients scientists to pay attention to personal resources and growth instead of

deficiency or failure. Rather than looking outward, eudaimonia looks into the self, making one's own meaning, and emphasises happiness as realising the best self and fulfilling that meaning. Eudaimonia lauds individual virtues, e.g. gratitude, as the means to that goal and even as the goal itself. As a result, it is suggested that QOL research should explore personal strengths that may play a role in increasing well-being (Eklund, Dowdy, Jones & Furlong 2011; Proctor, Maltby & Linley 2011; Wajsblat 2011).

Compton (2001) was wary that different researchers may have different interpretations of the literature on SWB, and further stated the near impossibility of choosing one model of SWB over another because of the multifaceted nature of the construct (cf. Maggino 2015). Further, Camfield & Esposito (2014) suggested that incidental judgment of SWL is not complete without investigation of one's past experiences and whatever consideration individuals take into account when they judge their SWL. While many instruments have been developed to measure SWB (see Abdel-Khalek & Lester 2010; Abdel-Khalek 2013; Disch, Harlow, Campbell & Dougan 2000; Hagedorn 1996; Theuns et al. 2012 for examples of and critique on SWB measures), with the SWL Scale possibly being used the most nowadays, scholars are cautious of generalising both their use and the results onto other contexts, not least because most of the time they are not tied to any theoretical formulations (Cooper et al. 1995; Diener et al., 1985; Lepp et al. 2014; Owusu-Ansah 2008). Hagedorn (1996) meanwhile asserted that scholars' own ways of thinking, consolidated in the QOL instruments, may not be always suitable as they can fail to capture the interplay between participants' personality and perception of environment. There are suggestions that different cultures or nationalities and different methodologies may affect the consistency of findings on SWB (Diener et al. 1995; Oguz-Duran & Yuksel 2010; Rojas 2015). Generally, these measurements rely on self-report, owing to the experiential and subjective nature of QOL. Scholars (Abdel-Khalek & Lester 2010; Macaskill & Denovan 2014; Rojas 2015) even contended that because of SWB's phenomenological dimension, participants in SWB studies are the best assessors of their own SWB. Furthermore, Rojas (2015) warned of the dangers of ethnocentrism and other biases from the researchers. As stated by Camfield & Esposito (2014, p212):

> *[T]he use of subjective indicators requires careful analysis, interpretation, contextuali[s]ation, and awareness of a number of factors which may influence responses.*

Other scholars (Compton 2001; Wong et al. 2011; Owusu-Ansah 2008; Rojas 2015) have observed that the full extent of the experience of SWB is inherently bound to one's natural culture. Further, they in unison with other scholars (Abdel-Khalek & Lester 2010; Camfield & Esposito 2014; Oguz-Duran & Yuksel 2010; Tam et al. 2012) found the need to address this cultural diversity. Extending SWB research is even more pertinent because the attitude that comes from people's subjective perception of their lives is more relevant than objective indices of QOL (Macaskill & Denovan 2014; Sanjuán & de Lopez 2013), in order to

> *provide more information on the subjective experiences of well-being in [individuals], their views on what well-being entails, the experiences they value, and the domains of life in which they experience the most happiness and meaningfulness. (Rugira, Nienaber & Wissing 2013, p428)*

The general modern development of what being well means is summarised in Figure 2.3.

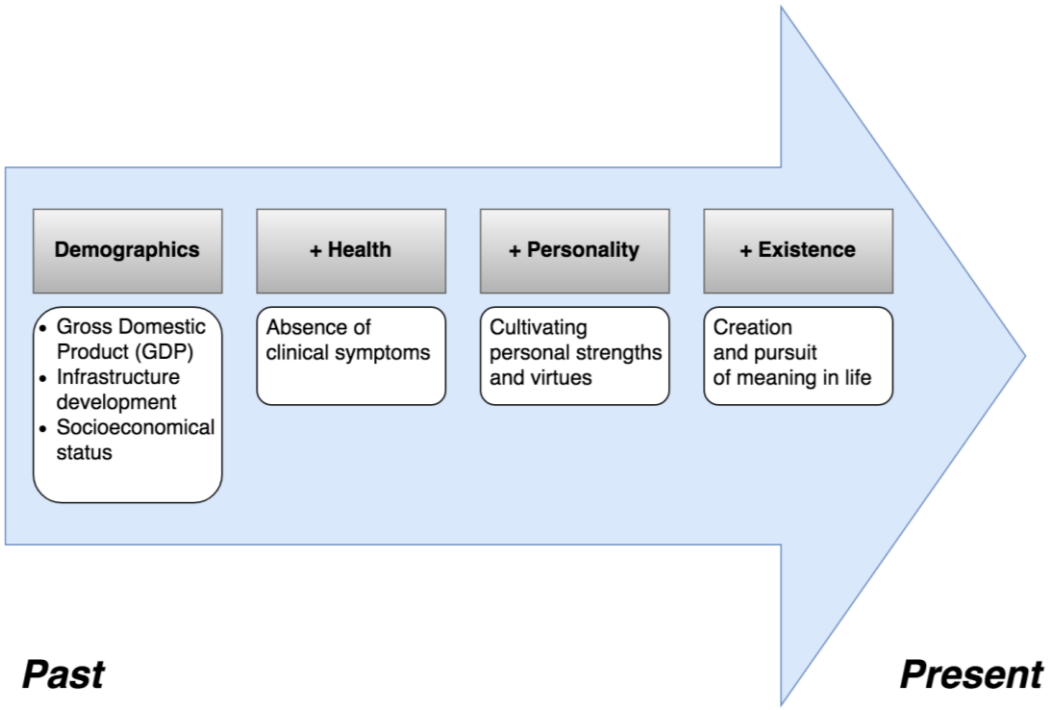

Figure 2.3. The Growing Understanding of What Constitutes Well-being

In the end, the overall sentiment is that defining well-being is still an endeavour to achieve (Abdel-Khalek & Lester 2010; Wajsblat 2011; Walker 2009). Camfield & Esposito (2014) more recently conceded that even after decades of study in the area, one probably will never create a complete list that exhausts all the correlates of SWB. Nevertheless, SWB is found to have cognitive and affective components, and intensity and temporal fluctuations. Well-being is still inadequately studied using so-called objective proxies such as GDP and HDI. The consensus is that well-being is a complex, multidimensional phenomenon, involving different domains in life and various overlapping terms, and a universal investigation is important to gain a holistic conclusion of the concept, which in turn may affect societal policies, including in a HE context. I consider being open to what will be found in the field is a better stance to take in this study, rather than imposing a hard and fast definition and risk losing all the nuances I may encounter regarding the concept of well-being.

2.3. Well-being in The Real World

Having discussed the philosophical views of the concept of well-being and the dynamics of the field in general within the previous section, I will now go into details on real world elements that academics have found relevant to the issue of well-being. I will start with the more societal ingredients, through environmental and material ones, to the more personal components, and end with contextual findings in higher education more generally, and in Indonesia specifically.

2.3.1. Well-being and Culture

Here I will present a treatment on the grand features of society in relation to the well-being of its members, starting with demographic issues such as sex and gender role, through country and cultural differences, interrelational dynamics among individuals, ways of seeing life’s adversity, and ending with religiosity and spirituality.

2.3.1.1. Sociocultural Aspect of Well-being

Until as recently as 2014, Camfield & Esposito still questioned whether and how demographic attributes shape people's assessment of their satisfaction (cf. Compton 2001). Bechtel & Corral-Verdugo (2010) asserted that equality in responsibility, decision-making, and resource distribution, within institutions as

small as marriages and as big as countries, improves happiness. Veenhoven (2015) noted that unhappiness is common in developing countries, where people live at subsistence levels. While Emmons & Diener (1985) noted that demographic variables affected SWB, more recent studies revealed that some of the relationship is still controversial. Akbağ & Ümmet (2017) found female students have better SWB than their male counterparts. Several studies found that women report higher levels of distress, suicidal threats, and lower levels of SWB than men (Abdel-Khalek 2010b; Abdel-Khalek & Lester 2010; de Vibe et al. 2013; Heiman 2008), and other studies reported that gender plays little impact on SWB (Cooper et al. 1995; Lindfors, Hultell, Rudman & Gustavsson 2014; Mazzucchelli & Purcell 2015; Peltzer & Pengpid 2013; Tuzgöl Dost 2006). Tuzgöl Dost contended that the relationship between demographic variables and SWB is weak, while Walker (2009) noted that within African-American culture, there are other factors that influence people's SWB exclusively within that culture.

Zucker, Fitz & Bay-Cheng (2016) also found that women still face objectification and sexism. They further stated that many women experience discrimination both impersonal, e.g. wage gaps, and interpersonal, e.g. sexual harassment. In the case of women of colour, they face both structural inequalities and personal tolls caused by explicit and often intentional offenses. Discrimination has been found to lower well-being (Datu & Mateo 2016). Zucker et al. (2016) contended that because people's resources are drained by coping with discrimination, institutional or otherwise, they may engage in health-damaging behaviours, thus making the effect of discrimination long-term. Another example where this double-burden of discrimination can occur is on female students with learning disabilities (Heiman 2008). Zucker et al. (2016) recommended further exploration regarding this issue within different settings. It is interesting to understand whether this also exists in Indonesia.

Wajsblat (2011) stated that both gender and well-being research has been limited by theoretical and methodological constraints, i.e. inconsistent operational definitions and exclusive self-reporting of personality, and in her thesis about the relationship between gender expression and SWB she questioned why in the past traditional masculine and feminine roles have repeatedly been a consistent predictor of positive and negative SWB, respectively. Moreover, she is cautious of well-being components as construed in the numerous measurement instruments (e.g. SWL Scales, Scales of Psychological Well-Being, Subjective Happiness

Scale). She found that people who expressed their gender roles freely, whether masculine, feminine, or otherwise, reported themselves and were reported by others as happier than those who repressed themselves. Wajsblat remarked that this may be because one is expected to behave in line with the environment's construct of gender. Moreover, Robak et al. (2007) found male students in the past tended to define happiness through financial achievement. Whether this has a relationship with the traditional notion of the male gender role as the breadwinner in the community remains to be seen.

Other than gender construct, other demographic factors that may affect student SWB include facing racism or other types of hostilities, want of power, financial and infrastructure conditions (see Section 2.3.2.1), family, community, and religious issues (see Section 2.3.1.2), career obligations (see Section 2.3.4.3) (Rajagopal et al. 2012; Walker 2009). Moreover, differences amongst nations regarding SWL may occur due to either differences in country issues, e.g. infrastructure and democracy; cultural orientations, e.g. maintaining group concord v. self-actualisation; different interpretations of individuality, e.g. as autonomy v. egoism; and lastly methodological or measurement issues (Uchida et al. 2015; Zanon et al. 2014). Diener et al. (1995), when comparing Japanese and Chinese participants with USA ones, found that Asian students were not satisfied with themselves, their health, their education, lack of leisure, and infrastructure, and maintained that this dissatisfaction could be attributed to bad living conditions, normative boundaries in expressing positive and negative emotions, and not least being subjected to pressure from high academic expectations commonly perceived in Asian culture; in sum, their life satisfaction is affected by both objective material conditions and their subjective response to their living situation. Yamaguchi & Kim (2015) also stated that how people see themselves is socially mediated, e.g. in Euro-American countries SWB is more about self-esteem, self-efficacy, and pursuit of personal happiness, while in Asia, SWB is about self-criticism, discipline, and adjusting to neighbourhood. Therefore, in the first context, pursuing a goal may very well be an end in itself, i.e. a personal accomplishment, while in the second, the purpose is to promote group harmony. Diener et al. (1995) even warned that individuals in a collective culture may try to conform to what they think researchers want to see from them.

A stark example with regards to cultural boundaries on SWB is a study by Tam et al. (2012), which found contentment with family more strongly affected SWL of

individuals in a Chinese culture than in an American one, while satisfaction with freedom was in fact negative to people in Chinese culture, contrary to Americans where it was positive. Another example is the study by Yamaguchi & Kim (2015), which demonstrated the differences of students' SWB in mainland USA and Japan. USA participants were more affected by individual-oriented SWB, which in turn is positively influenced by self-independence, while the Japanese sample was more affected by socially-oriented SWB, which includes social goal pursuits. Yamaguchi & Kim (2015) added that in Asian culture, one is obligated to consider the opinions and desires of family members or close ones when making life decisions, while Tuzgöl Dost (2006) found that, with regards to HE students, those who perceived democratic attitudes from their parents have better SWB than those with parents who are perceived to be overly protective or avoidant. More alarmingly, Satici (2019) recently found that university students who believe their self-worth depends on approval from others have worse SWB. To compound the issue, Yu et al. (2016) also suggested that in real life, individuals may exhibit behaviors that are consistent with an independent self-construal in some situations and with an interdependent self-construal in other situations. While being cautious of the possibility that participant bias may be stronger in some cultures than others, these studies show that judgment of SWB is a culturally specific process. In fact, scholars inquired whether people across cultures judge their SWL in the same way, and urged for more studies in non-western parts of the world (Abdel-Khalek & Lester 2010; Wong et al. 2011; Zanon et al. 2014). More recently, Peltzer, Pengpid, Sodi & Toloza (2017) showed in their study involving 17,508 undergraduates in 24 countries, Indonesia not included, that students in Asia and North Africa are less happy than their counterparts in Caribbean, South America, and sub-Saharan Africa. Peltzer et al. (2017) also found that this difference is correlated to country and behavioural differences alongside socio-economic standing. Indeed, Yamaguchi & Kim (2015) demonstrated in their study that cultural variation exists with regards to college students' perception of well-being and physical health, in agreement with other scholars' (Camfield & Esposito 2014; Tam et al. 2012) observation. Specifically, Yamaguchi & Kim (2015, p12) wrote that

> *the effectiveness of perceived goal pursuits in enhancing SWB and health is indeterminate unless the nature of the cultural context is fully considered.*

Tam et al. (2012) advised researchers against the simplistic generalisability of SWB instruments, and other scholars (Camfield & Esposito 2014; Wong et al. 2011) even warned that both western scholars and media in their actions might modify other societies' perception of their QOL. Again, sensitivity to each context and indigenous concepts is needed. On the whole, further SWB studies in more heterogeneous environments will bring more understanding of the role of sociocultural makeup in influencing SWB. This is important as it is pointed out by Lennon (2000) that a higher degree of congruence between material, social, and personal resources and a person's goals will promote higher SWB.

Yazdani, Jibril & Kielhofner (2008) found that when Jordanian students perceive that they have social and environmental support, they are less at risk of experiencing low SWB. Owusu-Ansah (2008) argued that a social support network is key in enhancing physical and mental health throughout an individual's lifetime. Although these may be the case both in western and eastern cultures, Cooper et al. (1995) asserted that in a collective culture friends and family matter most with regards to well-being (cf. Nishimura & Suzuki 2016), and the wellness of social relationships and group emphasis arguably has a greater value for one's SWB compared to self-actualisation or independence. Recently, Uchida et al. (2015) reported that in the USA individualism might start to negatively affect well-being by creating the feeling of loneliness. My present take on the effect of the tension between personal and social domains towards one’s well-being in Asian, including Indonesian, settings is that collectivism and conforming to social expectations may play a greater part compared to that in Euro-American culture. Just the quantity of close friends one has may help increase happiness (Abdel-Khalek & Lester 2010; Cooper et al. 1995). One may even be suppressed from saying that one is happy, to preserve uniformity or to avoid being perceived as arrogant (Diener et al. 1995). Other researchers (Walker 2009; Yiengprugsawan et al. 2010) further warned that the pressures –which can occur either within western or eastern culture– of either modesty or self-enhancement may be dangerous for one’s well-being as they promote dissonance between a person’s internal state of well-being and their external appearances, and may hinder us from obtaining authentic results even when well-validated instruments are used. This again justified scholars' (Walker 2009; Wong et al. 2011) assertion that SWB studies must accommodate culture-sensitive theories and measures.

Many scholars concluded that intra-cultural SWB study designs may not be transferable for intercultural studies because different cultures conceptualise happiness differently, and they questioned the suitability of using a western (for the purposes of this study I define western as views, ideals, and norms commonly associated with European, North American, and Australian society; incidentally, most well-being studies also came from this Euro-American context) paradigm and instruments as universal measures of SWB across different contexts (Oguz-Duran & Yuksel 2010; Rojas 2015; Theuns et al. 2012; Wong et al. 2011). A subtle pitfall in evaluating SWB is when a society considers only pleasant emotions as the desirable state, which may make the people seem happier than other societies, and vice versa (Diener et al. 1995). Regarding this, I understand that people of Far East descent, or from a Buddhist and Taoist background, may have a different view about SWB. While people in western cultures may understand happiness as about maximising positive experiences and avoiding negative ones, in this Far Eastern dialectical concept –what I think is encapsulated best in the Japanese term "wabi-sabi"– SWB is about embracing the wavering reality of happiness, by accepting negative sensations and life's imperfections as integral and even value-contributing parts of living, and maintaining contained attitude towards positive experiences. Diener et al. (1995) encouraged further exploration on how SWB is construed by people in different cultural settings. Only one study (Mazzucchelli & Purcell 2015) reported small correlations between social contact and better SWL and PA or less NA. They suspected that their participants already had good social lives so that it was no longer their concern. On that note, I view it as key here to understand that loneliness is found to worsen well-being (Tu & Zhang 2015; Ye & Lin 2005), and that the most consistent predictor of happiness with regards to one's social life is the satisfaction experienced in doing social activities instead of the amount of social activities (Cooper et al. 1992; Cooper et al. 1995). Regarding these findings, I argue that it is possible for people to do plenty of social activities without feeling engaged (see also Section 2.3.4.2 on student engagement in faculty), such as when they do it out of familial obligations, routines, or to satisfy people who they consider authority, e.g. in workplace or religious contexts.

Lastly, there is some suggestion that a multicultural personality, i.e. a person immersed in a culturally heterogeneous population, may have an increased well-being, with signs such as embracing the differences found in everyday life, empathy to others, flexibility in thinking, and understanding and being secure with

their own self (Wajsblat 2011). This is relevant to the Indonesian situation: while people retain their traditions and ethnicities, they are also Indonesians and at the same time are exposed to other cultures, e.g. Chinese, Arabic, and Euro-American. In other words, many Indonesians are multicultural individuals. Indonesia may provide a unique sample illustrative of a pluralistic Asian environment, which makes the present study even more interesting and could lead to further understanding of potential cultural influence in medical students' attitude and behaviour with respect to their QOL.

2.3.1.2. Religiosity, Spirituality, and Well-being

Although religiosity may be understood as a social phenomenon, religiosity and spirituality also has an intangible and personal perspective; as such, they can be challenging to be objectively studied. For example, Owusu-Ansah (2008) argued that there is much disagreement on the issue of religion and spirituality in relation to SWB and that their impact on well-being has not been widely studied. Surprisingly I found a burgeoning literature studying the relationship between well-being and religiosity/spirituality. I think there are intertwined explanations for this: happiness has been a concept of scientific interest for some time now, as shown by the exponential growth of literature, and the understanding that religion or spirituality in general attempts to offer happiness, accompanied by the emergent realisation that materialism alone cannot explain happiness.

While some found that neither religion nor religious activity influences well-being (Peltzer & Pengpid 2013), generally religiosity/spirituality is found to be related to SWB and considered to have protective and even augmentative properties towards human's health, health-promoting behaviours, longevity, and SWB (e.g. Abdel-Khalek 2010a; Abdel-Khalek 2013; Abdel-Khalek & Lester 2010; Haucap & Heimeshoff 2014; Kress, Newgent, Whitlock & Mease 2015; Tuzgöl Dost 2006). Spirituality may affect SWB more within some cultures than others (Rajagopal et al. 2012; Walker 2009). Scholars (Abdel-Khalek 2013; Theuns et al. 2012) asserted that the importance of religion is culturally transmitted, and this affects how religion/spirituality affects people's SWL. In other words, it is entirely conceivable that religious people are happier in religious nations. Yet, I would caution against an over-romanticised view towards religiosity, as sometimes people only see the good in what they consider part of their identity (cf. Abdel-Khalek 2010a), and fail to see its imperfections.

While Disch et al. (2000) noted that there is a consistent overlap of well-being theories with theories in religiosity, spirituality, belief systems, meaning in life, and existentialism, Compton (2001) also observed that historically there have been too many disparate ways of operationalising religiosity, e.g. mystical experience or frequency of church attendance, and asserted that religiosity is anything but a simple matter. Myers (in Bechtel & Corral-Verdugo 2010) defined faith as something that provides a sense of hope. People may act religiously for non-religious reasons and vice versa; therefore Compton (2001) broadly outlined religiosity as religion-driven selflessness. In his tripartite model of mental health, he argued that religiosity is the third aspect of a person's happiness alongside SWB and personal growth. Until now, fully identifying the unique ways in which religiosity creates happiness compared to the other two constructs has been difficult. While SWB and personal growth are self-centered in nature, religiosity may be a self-transcending issue; yet all three similarly involve making meaning in life, self-actualisation, and social contribution. Some research, however, found that religiosity is a distinct positive factor for happiness in samples of Muslim HE students (Abdel-Khalek 2010a; Abdel-Khalek & Lester 2010; cf. Unterrainer et al. 2011). In addition, religiosity negatively correlated with anxiety and depression, although Abdel-Khalek (2010a; 2013) also conceded that a relatively smaller body of research found religiosity to be unassociated or even correlate negatively with SWB. He also cited Okulicz-Kozaryn's study in 79 nations that found religious people tend to be either very happy or unhappy, and went on to elaborate that forms of religiosity that predict happiness are the ones that promote social capital, and that religious people are happier in religious nations. The strength of Abdel-Khalek's study (2010a) is in the saturation achieved.

All in all, although there might be other ways to define the two terms, and some might even conflate them, I consider it appropriate to discriminate spirituality as a relationship with or belief in a specific transcendental power or experiences, and religiosity as formal or institutional activity within a belief system (cf. Kress et al. 2015; Walker 2009). Thus it is conceivable a person can be spiritual without following rituals specific to a religion, or for people to follow activities exercised in a belief system for other reasons than seeking a transcendental experience. Walker (2009) also agreed that religiosity and spirituality are two different concepts, although the concept of spiritual wellness which does not distinguish between religiosity and spirituality still persists (e.g. Unterrainer et al. 2011).

Both religiosity and spirituality can enhance SWB in multiple ways and not in necessarily an exclusive manner. For example, following the line of thought in the previous paragraph, spirituality may give one purpose/meaning in life, while religion and its rituals bestow social interaction, which itself may also create purpose. That being said, Unterrainer et al. (2011) pointed out that religiosity may at the same time be seen as representative of schizotypy, a psychopathological syndrome comprised of loose cognitive association, introvertive anhedonia (i.e. inability to experience pleasure), asocial behaviour, and magical ideation, which often occurs in schizophrenic personalities. One can then see that religiosity and spirituality arguably has both ameliorating and deteriorating features, something Abdel-Khalek (2013) also noted. Unterrainer et al. concluded that it is still unclear how the limits between useful and harmful religious or spiritual ideas can be delineated, and emphasised the importance of taking these matters into account in mental health studies.

French & Joseph (1999) in their study relating Christian religiosity and happiness showed that they are partially mediated by having a purpose in life, i.e. religious people may have a greater sense of purpose, something similarly argued by Rugira et al. (2013), and also Abdel-Khalek (2013) within a Muslim context. Kress et al. (2015) in their study with 14,385 HE students found that students with better SWL indicated that they had already found meaning for their life, while students who found meaning for their life considered spirituality as an important aspect in their life. In other words, the constructs positively correlate with well-being, but whether a causal relationship exists between spirituality and SWL and meaningful life is still unclear. Walker (2009) also found that spirituality, but not religiosity, is significantly related to both psychological well-being (PWB) and SWB (see also Section 2.3.3.2). It is notable that scholars (Abdel-Khalek 2013; Fabricatore et al. 2000; Walker 2009) suggested that instead of religiosity per se, a spiritual life impacts SWB positively by means of both social support and personal experience of the divine when facing life's troubles. They also suggested that possessing hope may play a role in a spiritual person's SWB, despite present circumstances. Other scholars (Abdel-Khalek 2013; Allan, Steger & Shin 2013) suggested that religiosity increases SWL through aspects that promote social capital, i.e. factors that enable the smooth functioning of society such as good relationships and shared sense of identity, something that is also observable with regards to reasons people have to make and spend money (see Sections 2.3.1.1;

2.3.2.1). Walker (2009) expressed the need to examine religiosity/spirituality and SWB in geographic locations other than where she studied, and Abdel-Khalek (2013) advised the psychotherapeutic use of religiosity in enhancing HE students' SWB.

My position is that Indonesia is a very relevant setting to further inquire how Indonesians, in this case medical undergraduates, understand religiosity/spirituality and the value of religiosity towards SWB, as although Indonesia is a secular country, religion is considered part and parcel of Indonesian citizens' daily life. Moreover, Indonesia's contrasting demographics from the Euro-American environment usually found in the literature, in which a greater part of the population is non-Christian (Badan Pusat Statistik 2016b) makes this study even more interesting and may fill the gap in the research. It is also of interest whether religion/spirituality may help students cope with pressures within the academic life and without.

2.3.1.3. Section Summary

Social situations, personal relationships, and religiosity and spirituality play parts in one's well-being in complex ways which may be different for each individual and in different cultural contexts, even when the basic makeup of those social parts is the same among societies. As such, caution must be exercised when applying knowledge around these issues in studies in a different country or society.

2.3.2. Well-being and Tangible Factors

Moving on from the discussion of the relationship between well-being and sociocultural aspects of life, here I will present what the literature has until now said regarding the more tangible aspects of life, namely money, infrastructure, and human health, in relation to well-being.

2.3.2.1. Money, Infrastructure, and Well-being

Veenhoven (2015) reported that research on the relationship between physical environment or infrastructure and well-being is still burgeoning, and often driven by politics rather than empirical inquiry. Ng (2005) found that one's QOL is affected by the quality of the surrounding infrastructures, in line with Diener et al.'s (1995) study. Also, alongside Mazzucchelli & Purcell's (2015) finding that security is a significant predictor of SWL and NA, Camfield & Esposito (2014) found that safety

and housing were the first and second strongest predictor of SWL, followed by being married and being religious (see Sections 2.3.1.1 – 2.3.1.2).

Ng's (2005) study in Hongkong found that his respondents were quite satisfied with their residential environment, indicating that the high density does not necessarily translate into low quality of daily living (cf. Section 1.1). However, the relatively low satisfaction scores for environmental quality and greening highlight the effect of environmental degradation towards people's QOL. Rugira et al. (2013) similarly argued that the urbanisation and industrialisation that has been taking place in developing countries may have weakened the social fabric that promotes and maintains mental health. Ng (2005) further suggested that in the Asian environment, a compact infrastructure can actually enhance convenience, accessibility, and social interaction. Ng also said that collecting further data on what society wants regarding infrastructure is important to improve SWB.

Yiengprugsawan et al. (2010) found that while Bangkok is socioeconomically better off than the rural areas, they found rural Thai residents are happier than those of Bangkok. They suggested that rapid urbanisation again may play a role in this. Fabricatore et al. (2000) previously found that everyday annoyances play a stronger role on adverse physical and mental outcomes than major negative life events. Yiengprugsawan et al. (2010) also mentioned that three important domains –namely standard of living, achievement in life, and future security– explain SWL (cf. Section 2.2), and went on to articulate that living in rural areas, increasing age, being married, having assets and higher income, and education is also associated with improving SWL. Interestingly, considering that Thailand is an Asian country, they found that sense of community is one of the less important domains of SWL, alongside health (see Section 2.3.2.2), which they attributed to the young age of the sample and/or the newly implemented universal health coverage. Higher levels of education and more assets further contributed to lower "sense of communality" and spirituality/religiosity (see also Section 2.3.1).

Lennon (2000) suggested that a higher degree of congruence between material, social, and personal resources and a person's goals promotes higher SWB. While material resources are the least indicative of one's happiness compared to their personal and social facets, money may still be relevant depending on the circumstances involved. Its relation is stronger to well-being for people in poorer countries where gaining income is important for basic life needs, than for people in richer countries, where it can correlate negatively with SWB

(Allan et al. 2013; Mazzucchelli & Purcell 2015; Nishimura & Suzuki 2016; Robak et al. 2007; Tuzgöl Dost 2006; Walker 2009; Yamaguchi et al. 2016). Robak et al. (2007) asserted that money can be inversely correlated with well-being because being an external motivator, money can lower one's sense of self-determination and competence (see Section 2.3.3.2). Camfield & Esposito (2014) also suggested that people may put more weight in how their income compares to their neighbours', which puts their locus of control further externally. While there were studies which found that students with higher economic status are happier than others or that financial satisfaction also increased SWL (Owusu-Ansah 2008; Peltzer & Pengpid 2013), Owusu-Ansah (2008) also observed that having enough money for basic needs without excess is better for SWB. It seems that with money, there is a point of diminishing return for an individual, where more money plays a lesser and lesser role in one's SWB. Guillen-Royo & Wilhite (2015) also asserted that more consumption –and production– does not necessarily mean increased happiness.

Rojas (2015) mentioned that scholars more often take issue with measuring rather than conceptualising poverty, and even extended that assertion to the realm of well-being research. Yamaguchi et al. (2016) insisted that how money is used is more important than just having money, where spending only enhances happiness when it improves the spender's social bonding. This accords with Emmons & Diener's (1985; 1986) remark that it is the social-oriented traits that are related to happiness. Bechtel & Corral-Verdugo (2010) also mentioned that altruism improves the frequency and intensity of happiness in relationships, and added that happy people feel less need to compete, and are more empathetic and helpful to others. Robak et al. (2007) listed four basic motives for making money that were shown to either positively correlate to NA or do not correlate to well-being at all: comparing self to others, impulsiveness, overcoming self-doubt, and being an entrepreneur, while the following positively correlate to SWL and/or PA: to be charitable (see Sections 2.3.1.1; 2.3.3), physical security, and to be proud of oneself. Because Robak et al. also demonstrated that young adults commonly have making money as one of their main goals in life and that they show strong expectation towards it, we must consider whether this applies to Indonesian HE students and whether their happiness is affected by it. In addition, Bechtel & Corral-Verdugo (2010) asserted that frugality actually increases happiness and is a self-reinforcing behaviour, therefore is a powerful way to help boost well-being.

Lastly, Ng (2005) asserted that QOL is impossible to achieve without enough provision of infrastructure, e.g. transportation, schools, public place, and hospitals. With regards to the present dynamic changes in Indonesian educational and national context (see Sections 1.1 – 1.2), it is worth further investigation whether physical security and making money are still some of the main concerns for students in Indonesia, while remembering Camfield & Esposito's (2014) remark that both students' previous knowledge and experience regarding their material deprivation/contentment may distort their present happiness.

2.3.2.2. Health and Well-being

Boundaries between physical and mental health may be ambiguous (Abdel-Khalek 2013), but it has been the general consensus that SWB has a positive relationship with both. Some consider health as the precursor of SWB, and some as the result of SWB. Tay et al. (2015) reported that SWB benefits health by means of physiological improvement and health-promoting behaviours (see Section 2.3.3.1). The evidence for a positive correlation amongst the triad of physical and mental health, SWB, and religiosity/spirituality has been accumulating (Abdel-Khalek 2010a; Abdel-Khalek & Lester 2010; Tsaousis, Nikolaou, Serdaris & Judge 2007). SWL is also found to contribute to mental and physical outcomes, and there is a positive relationship between Neuroticism and stress, anxiety, and depression (Abdel-Khalek 2010a; Wajsblat 2011). In general, people with a sense of purpose in life which conforms to the prevailing culture will obtain better mental health more readily (Abdel-Khalek 2013; Wong et al. 2011). Eakman (2014) also noted that meaningful activities are consistently negatively related to depression. Theuns et al. (2012) found that the contribution of health to people's SWL is also affected by the state of development and accessibility of health care services, and Glatzer (2015a) noted that the relationship between well-being with longevity is not always straightforward: people in countries with high life expectancy may feel happier the longer they live, but there are developing countries where the people evaluate their happiness highly, even with short life expectancy and heavy burden of morbidity. Por, Barriball, Fitzpatrick & Roberts (2011) reported that the status of physical and psychological health is related to emotional intelligence, an essential constituent of SWB (see Section 2.3.3.2).

Rugira et al. (2013) asserted that university is a critical context for studying youth mental health as students must adapt to new environments which may

increase the risk of depression or negative behaviour, and de Vibe et al. (2013) found that medical students reported experiences of mental disturbance and lower levels of happiness. In Indonesia, the public and some within medical faculty generally consider that medical students are under more pressure compared to undergraduate students from other schools. Ahmed, Banu, Al-Fageer & Al-Suwaidi (2009) recommended that medical schools identify students with a low stress threshold early to be able to provide preventive measures for them.

2.3.2.3. Section Summary

Most studies regarding tangible aspects in human life –e.g. housing, city condition, and income– attempted to quantify, instead of yielding a sufficient conceptualisation of, the relationship of these aspects with QOL. Nevertheless, it is acknowledged that these tangible components affect an individual's well-being and health.

2.3.3. Well-being, Behaviour, and Personality

In addition to the environmental situation and health, some of the behaviours detrimental to, and promoting of, health and their relationships with SWB are addressed in the next section, followed by sections on relationship between traits of personality and well-being.

2.3.3.1. Behaviour and Well-being

Here I will critique the literature on relationships between QOL and several more popular behaviours in young HE students. First, I will discuss internet and gadget use in students, as the number of studies in this area have expanded. The arrival of the information age, within which new ways to connect people are developed every day, makes appraising these new social modalities in relation to SWB timely.

Interpersonal relationships are key to generating positive emotions and well-being (see Section 2.3.1.1). Lyubomirsky, King & Diener (in Schiffrin, Edelman, Falkenstern & Stewart 2010) concluded that social support provided by interpersonal relationships is one of the most robust correlates of well-being. Social support has been associated with higher self-esteem, better coping skills, as well as increased physical and mental health. Similarly, positive emotions have been

found to increase social interactions, yielding an upward spiral of social support and well-being.

Ye & Lin (2015) in their study with Chinese HE students found that online interaction, loneliness, and less internal self-control were all positively correlated, and together they all worsened SWB. Schiffrin et al. (2010) in their study on internet use found that individuals reported less fulfilling communication online but continued to increase the amount of time they communicate with others online while simultaneously indicating that it has no impact on their overall well-being. Similar to previous research, they also considered face-to-face communication to be more enjoyable than computer-mediated contact. All of these factors suggest that the internet may have an adverse effect on relationships, social support, and well-being. People who reported spending more time on the internet had lower well-being levels than those who spent less time online. In a related study focusing on Facebook use, Locatelli et al. (2012) asserted that social media, e.g. Facebook or Twitter, use amongst HE students is very high, and they found that frequently updating Facebook status with negative contents, such as venting negative feelings, complaining, or criticising people puts one at risk of life dissatisfaction, physical illness, and depression by enforcing repetitive negative thinking, even without further reinforcing comments from Facebook friends. Other studies found that excessive cellphone use reduces students' academic performance, worsens sleep quality, physical and mental health, and in turn, their SWL (Lepp et al. 2014; Li, Lepp & Barkley 2015). They suggested that using a cellphone distracts students from studying, taking rest, or doing physical activity, and call for more student awareness in using cellphones. These studies found relationships between the undesired behaviours, SWB, and locus of control (see Section 2.3.3.2).

Problem gambling, an uncontrolled type of the behaviour, can lead to irresponsible behaviour and criminal activities (Wong, Chan, Tai & Tao 2008). Problem gambling in college students is the highest amongst the USA and Canada population (Shaffer, Hall & Vander Bilt in Wong et al. 2008). Wong et al. (2008) found that men in Macao, where gambling is ubiquitous, are more susceptible to problem gambling compared to women. This behaviour is found to be related to impulsivity trait and other impulsive behaviour such as alcohol abuse, and together they may serve as a means to escape from an unsatisfying life. Wong et al. (2008) found that problem gambling when happening in the context of university students is negatively associated with SWL.

On the other hand, alcohol use has a more complex relationship with well-being. A lighter consumption may be associated with positive outcomes such as sociability and stress relief, which in turn increase SWB. Alcohol abuse, however, is strongly linked to psychological dysfunction and adverse well-being (Molnar et al. 2009). Abdel-Khalek (2010b) also found that alcohol abuse is more common in men. Molnar et al. reported that university students tend to consume alcohol to socialise, which they argued may actually increase SWB. Wong et al. (2008) and Molnar et al. (2009) also emphasised that students' proclivity to problem gambling and alcohol abuse and the relationship strength between the behaviours with SWB depends on the students' trait dispositions (cf. Section 2.3.3.2), and they urged institutions to identify interventions that increase students' coping ability and supportive peer groups.

Peltzer & Pengpid (2013) in their research on Indian university students found that happiness relates to normal sleep duration, no tobacco use, and daily breakfast alongside greater social support and personal mastery, whereas intriguingly alcohol use, and also physical activity, failed to show any association, contrary to previous research. Abdel-Khalek & Lester (2010), for example, found that happiness is inversely related to alcohol consumption, and even prior suicide attempts. There are several possible explanations for the finding in Peltzer & Pengpid's study. It may be that the students in their study consumed alcohol sparingly or just for social purposes, or only few participants reporting alcohol consumption, or that alcohol use in the population was uncommon in the first place.

Marijuana use in the past has generally been associated with poorer well-being. More recently, Allen & Holder (2014) in their study with university students found that marijuana is the most common illicit substance used and also the most predictive of well-being amongst those substances. Furthermore, the unwanted effects of drug use were negatively correlated with Agreeableness and Conscientiousness, and positively correlated with Neuroticism (see Section 2.3.3.2). Negative consequences of drug use explained negative well-being over that accounted for by personality.

In the particular intersection of SWB and issues of sustainability, although there were past sentiments that producing hedonia is contradictory to pro-ecological – i.e. minimising one's negative impact on the environment– behaviour (Brown & Kasser in Bechtel & Corral-Verdugo 2010), scholars (Bechtel & Corral-Verdugo 2010; Corral-Verdugo et al. 2011; Guillen-Royo & Wilhite 2015) asserted that pro-

sustainability behaviours promotes happiness. Corral-Verdugo et al.'s study in Mexico –another developing country where, similar to Indonesia, studies in this area are relatively rare– found that the more pro-ecological, altruistic, and equitable a young person is, the happier they are. While they hypothesised that frugality also correlates with well-being, the study failed to demonstrate it, possibly because some respondents still link SWB with consumerism (see Section 2.3.2.1). Because these behaviours are culture-bound, scholars (Bechtel & Corral-Verdugo 2010; Corral-Verdugo et al. 2011) asserted that people need to know the benefits of practising environmentally protective behaviours and experience the satisfaction and pleasure derived, so that more and more people behave accordingly.

It is important, however, to remember Diener et al.'s (1995) admonition that Asian students' reporting on their SWB may be influenced by the prevailing contextual norms on positive and negative emotions. I consider that conducting pro-ecological and health-promoting behaviours found in the literature, having purpose, and emotional adaptability will improve students' physical and mental well-being (see also Section 2.3.3.2). Also, while interpersonal communication and prosocial behaviour are salient traits in Asian countries including Indonesia, it is to be seen whether gambling or drinking alcohol are relevant for Indonesian medical students, as gambling and alcohol use are against the law. The religious atmosphere (see Section 1.1) also deters people from being involved in impulsive behaviours related to gambling and substance use.

2.3.3.2. Personality and Well-being

It has been said that SWB is an abstract and complex concept, and concerning this section, I found that most of the existing literature examines the topic in association with the subject of individual personality. This is possibly because it is useful as it facilitates an understanding of how well-being may be improved by the individual, instead of demanding external changes. That way, the changes will be more practical, internally maintained, and permanent. Another possible explanation is that the historical narrative of the studies in well-being simply made this an emergent objective of well-being or personality studies, as I will further expound. Moreover, I will also attempt to present the diverse theories and empirical findings on the personality aspects related to well-being into a hopefully more integrated structure.

Scholars have found that without the necessary and sufficient conditions for a person's living, e.g. food and shelter, people will be preoccupied with how to obtain that. On the other hand, without working on some purpose in life, at some point the superfluousness of resources apparently stops fueling the person's well-being. While realising that the hierarchy of needs by Maslow (in Nishimura & Suzuki 2016) may be imperfect, this superimposes neatly with his proposed explanation of human needs, where initially humans need physical health and security, and only after that they will care for more abstract motives such as self-actualisation. Therefore, there is some truth in both hedonic and eudaimonic views of happiness. Moreover, Allan et al. (2013) observed that SWB determinants are neither simple nor static. The amalgamation of these two conceptions of well-being is reflected in the dual-factor model of mental health, in which well-being is not only the state of freedom from symptoms of illness, but at the same time the thriving of an individual's life aspiration (Eklund et al. 2011; Macaskill & Denovan 2014; cf. Figure 2.3). The latter is of course part of the reason that students enter HE. This thriving of character strength must be integrated into well-being appraisal and interventions.

On the subject of hedonia and eudaimonia, Aghababei & Błachnio (2015) reported an interesting finding from their study relating Narcissism, Psychopathy, and Machiavellianism –together somewhat unpropitiously named The Dark Triad of personality, characterised by hostility, insensitivity, dishonesty, and disagreeableness– where Narcissism in fact is linked with hedonic (SWB) and eudaimonic (PWB) well-being positively, while Psychopathy negatively (Figure 2.4). In trying to find explanation for Narcissism's role on one's well-being, I drew from Sanjuán & de Lopez's (2013) suggestion that people tend to explain their life in a way favourable to them as one of the ways to maintain SWB, and Hagedorn's (1996) note that some dose of self-deception or self-serving bias may lead to good adjustment and well-being by increasing resilience and self-esteem. As a consequence, it seems that when the Triad yields an average or low happiness, it is because the psychopathic attributes that moderate one's personality are more pronounced, while having only a sub-clinical Narcissism may well benefit their SWB.

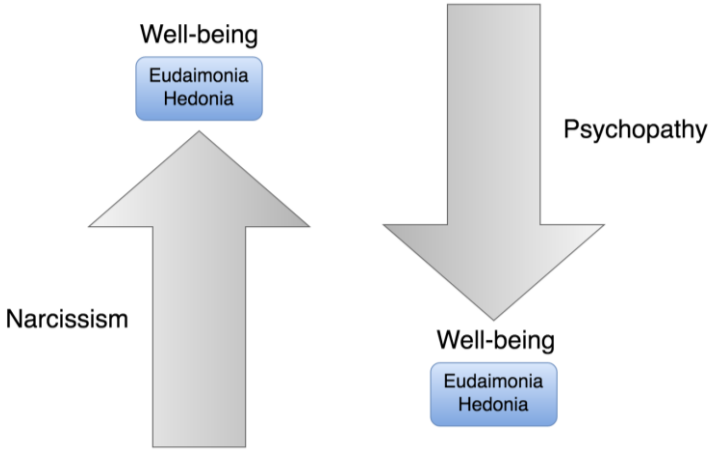

Figure 2.4. Influence of Dark Triad Components on The Hedonic and Eudaimonic Facets of Well-being

Models of SWB diversely tap into life activities, circumstances, events, human temperaments, traits, genetics, and cognitive and motivational factors (Busseri, Sadava, Molnar & Decourville 2009). Owusu-Ansah (2008) argued that we will understand SWB better by examining its correlates and discriminating the relationships they have, while Nickerson, Diener & Schwarz (2011) suggested that the smörgåsbord of measures used may contribute to inconclusive relationships between SWB components and students' academic performance. It has been recognised though, that personality is the major determinant for SWB, and situational variables, e.g. circumstances or demographics, play only a lesser role in determining happiness. As such, in happiness issues, attention has been shifted from those demographic and socioeconomic concepts into understanding human personal, intellectual, and affective aspects (Abdel-Khalek & Lester 2010; Extremera, Salguero & Fernández-Berrocal 2010; Garcia & Erlandsson 2011; Montasem, Brown & Harris 2013; Tsaousis et al. 2007; Tuzgöl Dost 2006). Personality may influence SWB directly or through life experience (Mazzucchelli & Purcell 2015). In addition, contributors of SWB can at the same time be seen as both traits and contextual behaviours (see Figure 2.5), i.e. top-down v. bottom-up make-ups of well-being, with some scholars even contending that to distinguish between them is impossible (Buchanan & Bardi 2015; Tsaousis et al. 2007; Walker 2009; cf. Heller, Komar & Lee 2007). This is an important issue because while traits are stable, behaviours more readily respond to interventions to increase SWB (cf. Macaskill & Denovan 2014).

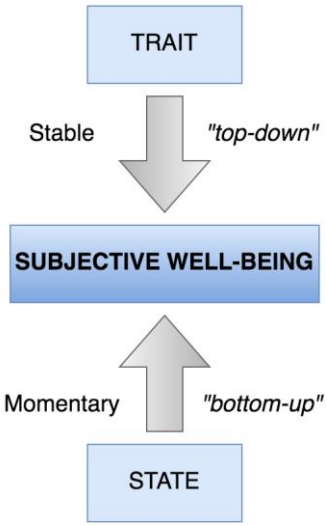

Figure 2.5. Relationship between Personality Traits and States and Subjective Well-being

It is well-established from empirical research that SWB comprises three core components (see also Section 2.2.2): SWL, a cognitive, more stable aspect of global satisfaction with various domains in life, possibly compared to a personal standard; and two emotional, more fleeting aspects of unpleasant and pleasant emotions: NA, e.g. fear and sadness, and PA, e.g. hopefulness and joy (Emmons 1986; Emmons & Diener 1985; Garcia & Erlandsson 2011; Lennon 2000; Macaskill & Denovan 2014; Mazzucchelli & Purcell 2015; Oishi et al. 1999; Satici 2016; Tsaousis et al. 2007). It has also been found that in relation to the five components of the NEO-PI personality construct –Neuroticism, Extraversion, Openness (to experience), Conscientiousness, and Agreeableness– NA is consistently and very closely related to Neuroticism, such that some scholars consider them indistinguishable, while PA is associated with Extraversion, and the rest of NEO-PI components relate to SWB only to a lesser degree (Emmons & Diener 1985; Emmons & Diener 1986; Garcia & Erlandsson 2011; Mazzucchelli & Purcell 2015; Páez, Mendiburo Seguel & Martínez-Sánchez 2013; Tsaousis et al. 2007; Walker 2009; for more discussion on Openness, Conscientiousness, and Agreeableness, see Nishimura & Suzuki 2016). SWL seems to result from a balance of Extraversion and Neuroticism influences. It is of note that –to the best of my knowledge– of all attempts for a personality inventory, only NEO-PI has been strongly supported by research.

The empirical, instead of theoretical nature of SWB research made some researchers dissatisfied. They then drew from available personality development theories and developed the concept of PWB, which looks into six cores of healthy psychological functioning (see Figure 2.6): self-acceptance, thriving relationship with others (what I would call intimacy), autonomy, ability to handle life intricacies (environmental mastery), having purpose in life, and personal growth (Bechtel & Corral-Verdugo 2010; Cooper et al. 1995; Durkin & Joseph 2009; Páez et al. 2013; Owusu-Ansah 2008).

Figure 2.6. Components of Psychological Well-being (synthesised from Cooper et al. 1995; Durkin & Joseph 2009; Páez et al. 2013; Owusu-Ansah 2008)

While one may equate SWB with hedonia and PWB with eudaimonia, I contend that the division may not be that clear-cut, as SWL also constitutes SWB, and furthermore that cognitive, long-term appraisal arguably directs a person's purpose in life as well. In addition, it is true that SWB and PWB are not completely similar to each other, but it is also true that both involve a subjective appraisal of a person's QOL, both can be viewed differently in different cultures, and there are similar factors influencing both that should not be seen as uni-dimensional, e.g. intimacy with others and personal development (Cooper et al. 1995; Owusu-Ansah 2008; cf. Tončić & Anić 2014). Lennon (2000) also noted that PWB has been operationally defined in various ways in the literature. Moreover, the terms SWB and PWB have been used interchangeably, usually owing to the well-being instruments available, although SWB may emphasise joyousness in life and PWB

purpose in life (Durkin & Joseph 2009; Walker 2009). Rugira et al. (2013) even stated hedonia and eudaimonia together constitute PWB. On the other hand, Compton (2001) suggested integrating PWB and SWB findings to fully understand the concept of happiness. On the whole, until now it seems that accumulating data show that a good life boils down to a life with both happiness and meaning.

With regards to PWB in particular, it is understood that relationships between PWB aspects of autonomy, environmental mastery, and purpose in life with perfectionism and psychological health are mediated by stress (Ashby, Noble & Gnilka 2012). While some may see perfectionism as one-dimensionally harmful, there are two faces of perfectionism (Gnilka, Ashby & Noble 2011). The first is maladaptive or neurotic, which is over-criticality of oneself and the persistent feeling of failure; and second adaptive, which is hard work towards personal standards accompanied by adaptability and a sense of self-worth. The neurotic version of perfectionism can be a problem with some medical students, as these students hold high achievement standards, but are inflexible with circumstances and incapable of feelings of fulfilment, and therefore may decrease their SWL and SWB. Further, Gnilka et al. (2011) found maladaptive perfectionism links to hopelessness and depression. This might be dangerous, as hopelessness and depression are major risk factors of suicidal behaviour, alongside faulty coping styles (Lew, Huen, Yu, Yuan, Wang, Ping, Abu Talib, Lester & Jia 2019). Çalışandemir & Tagay (2015) further noted that the kind of perfectionism which also cares for society's ability and achievement –instead of just one's own– increases SWL. The situation concerning Indonesian medical students' perfectionism traits remains to be seen. Understanding it further will help identify potentially vulnerable students and support them in their academic endeavour.

With regards to NEO-PI, Mazzucchelli & Purcell (2015) found that indeed, Neuroticism seems to directly relate to NA, but its relationship with PA is moderated by the environment and with SWL by either emotional instability or psychological inflexibility. Psychological inflexibility, i.e. the inability to keep or change behaviour based on the demands of a situation while still maintaining integrity with one's values, worsens an individual's SWB. Meanwhile, Extraversion is correlated with PA by its sociability component and environmental context, and impulsivity reduces the correlation between Extraversion and PA (Emmons & Diener 1986; Mazzucchelli & Purcell 2015). It is also notable that characteristics of spirituality, including schizotypy features (see Section 2.3.1.2), are substantially related to

NEO-PI (Unterrainer et al. 2011), although these authors also pointed out that the congruence and exact model of relationship between them is still inconclusive. Unterrainer et al.'s results suggested that in general, spiritual well-being is closely associated with Extraversion, and magical ideation with both spiritual well-being and Neuroticism.

On the whole, high Neuroticism in a person increases NA and decreases both SWL and PA, while high Extraversion decreases NA and increases both SWL and PA (Heller et al. 2007). Much research also has studied the concept of emotional intelligence, of which the opposite is emotional instability/inflexibility or specifically Neuroticism, which may be either a fully cognitive process or also influenced by personality traits. Emotional intelligence is a continual appreciation of self and others' values, emotions, and reactions, and this ability optimises an individual's well-being (Beduna & Perrone-McGovern 2016; Por et al. 2011). Geng (2018) furthermore found that emotional intelligence positively affects SWB, and contended that people with the ability to effectively process and regulate emotion will be able to evaluate their life and satisfaction in a more rational and positive way. I found it notable that these attributes of continual appreciation and regulation of emotion, existing within an emotionally intelligent individual, are also relevant to the concept of mindfulness known in eastern culture for a long time but only recently flourishing in western literature. Mindfulness itself can be summarised as an enduring awareness of phenomena, i.e. internal and external experiences, as they take place without being judgmental. Mindfulness is found to associate with higher SWB and lower anxiety (Bajaj & Pande 2016; Crowley, Kapitula & Munk 2020). Furthermore, Bajaj & Pande argued that mindfulness builds acceptance and resilience, which is important for students' well-being in medical school. Lastly, Extremera et al. (2010) also found in their short prospective study that trait meta-mood, which is the attentiveness towards and ability to understand one's affective information, i.e. experience of emotions, leads to more active and better emotional adjustment and subsequently better SWB regardless of personality make-ups (cf. Por et al. 2011). It will be interesting to find whether medical students with this kind of awareness are able to manage challenges better than those who lack it. To increase SWB, scholars have suggested interventions such as cultivating reflective habits and in-campus mindfulness training (Bajaj & Pande 2016; Extremera et al. 2010).

Another aspect of the affective components of SWB is their duration, frequency, and intensity dimensions. Duration is simply the length of occurrence of an affect, while frequency is the number of occurrences of PA or NA in one's daily life, and intensity is the degree to which one perceives the affect experience (Camfield & Esposito 2014; Walker 2009; Wong et al. 2011). These dimensions, particularly intensity, is useful in explaining why studies have found that long-term NA and PA each has its own axis, i.e. both are two distinguishable constructs (Emmons 1986; Emmons & Diener 1986). While their frequencies are necessarily diametrical to each other, the intensities apparently are separate from each other (Diener et al. 1985). Again, it is found that Neuroticism is closely related to frequent NA and fewer PA, and Extraversion with frequent PA, while the intensity of NA is moderated by Neuroticism and Extraversion, and intensity of PA exclusively by Extraversion (Garcia & Erlandsson 2011). This may mean that while people with high Extraversion feel both PA and NA intensely (i.e. they rebound with equal strength from both positions), people with high Neuroticism do not rebound after experiencing intense NA. Diener et al. (1985) further found that people who either amplify or suppress their positive experiences as methods to manage their emotions also experience the same with negative experiences. While affect frequency may be a practical and even a better measure of affective component (Garcia & Erlandsson 2011; Hagedorn 1996; Walker 2009), scholars (Camfield & Esposito 2014; Caplan, Tripathi & Naidu 1985) also warned that different temporal viewpoints (see also Section 2.2), e.g. past or present, may play a role in how one evaluates the intensity of perceived stress; furthermore thought biases may distort people's judgment on their SWB when recalling experiences. In addition, Hagedorn (1996) observed that current mood may influence one's rating of overall happiness, and to complicate the issue, current mood may not be induced by the present situation. On the whole, scholars generally agreed that frequent PA is the necessary and sufficient condition for happiness (Diener, Colvin, Pavot & Allman 1991; Garcia & Erlandsson 2011; cf. Oguz-Duran & Yuksel 2010), but Walker (2009) also warned that only looking at intensity and frequency of affects adds little contribution to understand the well-being concept on a more comprehensive level.

Alongside emotional intelligence, Core Self-evaluation, i.e. the capability of individuals to evaluate central premises they hold about themselves and their life functioning, also increases SWL, SWB, and goal-setting and problem-solving abilities, two advantageous competencies in the medical school environment

(Montasem et al. 2013; Tsaousis et al. 2007). Core Self-evaluation consists of Neuroticism, self-efficacy, self-construal, and locus of control (Figure 2.7). I found this model remarkable as it seems able to be a hub for other abstract correlates of SWB, as I will explicate below.

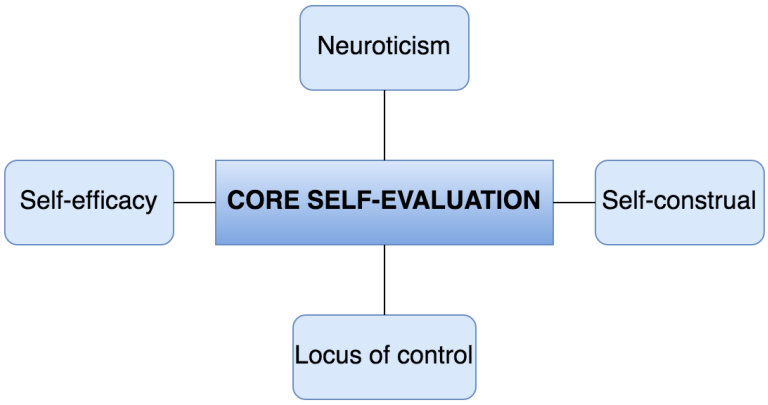

Figure 2.7. Concept of Core Self-evaluation
(synthesised from Montasem et al. 2013; Tsaousis et al. 2007)

Locus of control is the source of control a person perceives in their life events. It may come from self, i.e. internal locus, or one may feel that they do not have any control of what happens in their life, i.e. external locus. It is realised now, that higher internal locus of control increases well-being while doing heavy tasks with low decision control, for example, is related with dissatisfaction and stress (Cooper et al. 1995; Owusu-Ansah 2008; Tuzgöl Dost 2006; Van de Vliert & Janssen 2002; see also Sections 2.3.1; 2.3.2.1). Van de Vliert & Janssen found in their study that mastery-motivated action –located internally– brings satisfaction, while competition-motivated action –located externally– brings less satisfaction. Owusu-Ansah (2008) also found that perception of control in areas of social support and relationship, self-acceptance, and personal purpose and growth was very important for a general sense of satisfaction with the quality of one's life. In relation to goals or motives that a person may have in life, this may be approximated by the concepts of hedonia and eudaimonia already mentioned. When a person's goals are dictated by external circumstances, they may be considered as hedonic pursuits, and when they come from more personal purpose, they can be an approximation to eudaimonic pursuits.

In relation to the two aspects of SWB –affective/momentary and cognitive/stable– hedonia may very well provide a shorter-term satisfaction, while

eudaimonia the longer one. Aligning these short and long-term goals and engagement towards reaching them will minimise conflict and trigger iterative positive developments, which will result in the highest possible SWB, while conflicting goals harm well-being (Emmons 1986; Lennon 2000). This is in line with scholars' observations that values, a dimension of personal strivings, are related to well-being through behaviours that express them (Buchanan & Bardi 2015; Emmons 1986; Oishi et al. 1999). Values that a person holds inform their pursuits in life. In addition to mentioning that PA and happiness are associated with more goals and achievement, and NA and unhappiness with fewer goals and achievement, Emmons also moved further than other scholars by asserting that SWB might be better modified through individuals' perceptions of their idiosyncratic goal strivings rather than just nomothetic traits. In other words, instead of just comprehending their personality attributes, one should align one's short and long-term goals in one direction according to their personal values to produce a continuously happiest ideal (Figure 2.8). Another related factor here of higher SWL is environmental clarity, i.e. enough understanding of both others' expectations towards oneself and the potential short and long-term outcomes of one's activity (Mazzucchelli & Purcell 2015).

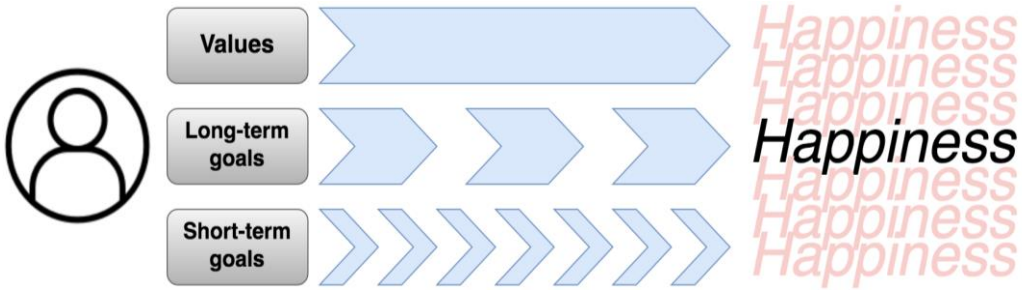

Figure 2.8. Congruence amongst Personal Values, Goals, and Actions Maximises Happiness

Scholars (Nishimura & Suzuki 2016; Oishi et al. 1999; Satici 2016) argued that values which are more extrinsic, e.g. people's recognition or financial success, interfere with SWB and are positively correlated with anxiety and depression, while more intrinsic goals, e.g. personal growth and intimacy, are related to increase in SWB. They also contended that different developmental stages in life and different cultures put different priorities on various values, and in recognition of the complexity of the value construct, inquired how non-western cultures understand

intrinsic and extrinsic values. It will be useful to know what values the Indonesian medical students consider important.

Self-construal can be defined as how someone sees himself in relation to others (Yu et al. 2016). It is an interesting component of Core Self-evaluation, as it involves the balance between how one evaluates his independence (see Figure 2.9), which apparently is more predominant in western culture, and interdependence or the welfare of the society where one is. This evaluation in turn also influences one's self-esteem, another correlate of SWB (Tsaousis et al. 2007). Bechtel & Corral-Verdugo (2010) also noted that egoism and altruism may be combined to produce happiness. It has been explicated in Section 2.3.1.1 how SWB is also shaped by social ingredients. What is notable regarding self-construal is that an individual needs both independence and interdependence at different times (Yu et al. 2016). In other words, self-construal is a very dynamic balance depending on the situation, and tapping on resources for independence and interdependence at the right times should provide more wholesome SWB.

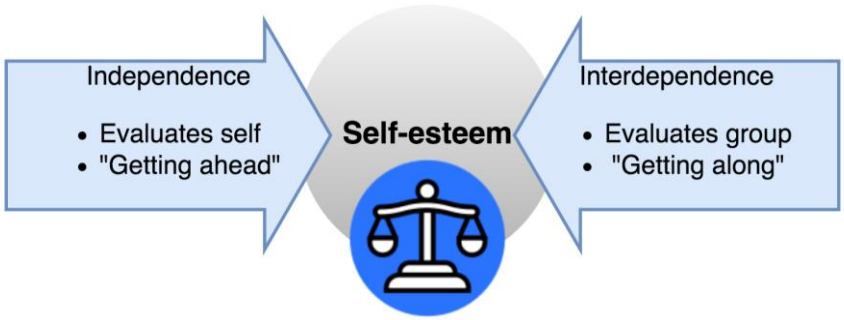

Figure 2.9. Self-construal Dynamics between Independence and Interdependence Influences Self-esteem

I found it striking that many studies suggested that ambivalence, rather than behaving in one way or another, invariably affects well-being in the worst way for a person. For example, the indecision between either expressing emotion or not is linked to lower SWB and health, compared to not expressing emotion at all (Chen, Chen & Tsai 2012). Eklund et al. (2011) also found attention problems to be most prevalent in a group of students they labelled the “ambivalent group”; these students reported high distress but at the same time high SWB. Eklund et al. also emphasised that more intervention is necessary for this specific group. Furthermore, Emmons (1986) found that people who experience much NA were

characterised by ambivalence regarding their strivings or goal pursuits. On the flip side, Uthayakumar, Schimmack, Hartung & Rogers (2010) found a link between decisiveness in pursuing a career with higher SWB.

2.3.3.3. Gratitude and Other Personal Dispositions

Gratitude, i.e. tendency to appreciate the good in life, has been found as a reliable link to SWB (Allan et al. 2013; Chen et al. 2012; Eklund et al. 2011; Macaskill & Denovan 2014). The intriguing part is that Chen et al. suggested that gratitude seems to protect individuals from ill-being more than promote their well-being. Recently, Geng (2018) remarked that in addition to positive correlation between gratitude and emotional intelligence, gratitude and SWB can reciprocally reinforce each other. Geng found in a sample of undergraduate students that gratitude partly moderates the positive relationship between SWB and emotional intelligence, a prominent construct in the discussion of well-being (see Section 2.3.3.2). Meanwhile, Wang (2020) found that alongside gratitude's direct effect towards well-being, gratitude also improves one's autonomy, intimacy, and mastery, which further heightens SWB (Figure 2.10). Wang further contended that grateful people are hopeful and view situations and other people positively, therefore they adjust well in relationships and different environments.

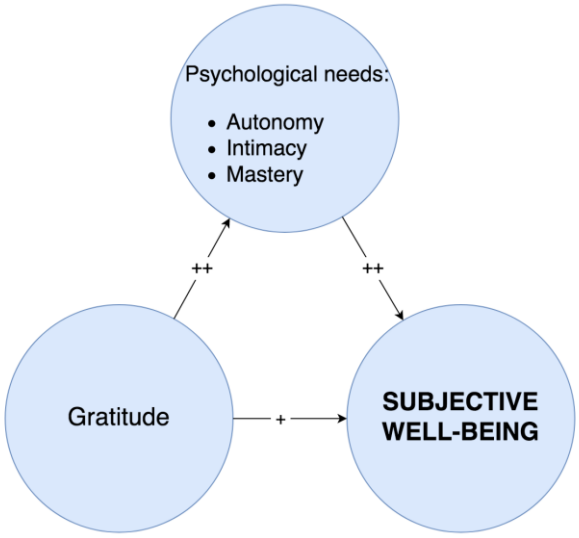

Figure 2.10. Relationships between Gratitude, Psychological Needs, and Subjective Well-being (adapted from Wang 2020)

There are various, more eclectic aspects of personality already linked with better SWB, which due to limitations of space, I can only briefly mention here, such as the balance between agency/“getting ahead” (self-focused advancement) and communion/“getting along” (other-focused relatedness), the use of self-enhancing humour, in which one sees unfortunate or challenging life events in a positive way, forgiveness and the belief that the world is just, time structure, occupational competency, adaptational potential, and variety in activities, which were found to positively relate to either higher SWL, PA, meaning in life, or SWB as a whole (Buchanan & Bardi 2015; Correia et al. 2009; Çalışandemir & Tagay 2015; Macaskill & Denovan 2014; Mazzucchelli & Purcell 2015; Oguz-Duran & Yuksel 2010; Páez et al. 2013; Shamionov 2014; Yazdani et al. 2008). Buchanan & Bardi's findings are notable because the self-reports are corroborated by peer-report measures. Scholars (Akbağ & Ümmet 2017; Datu & Mateo 2016; Eklund et al. 2011; Satici 2016) also noted that hope –i.e. both expectation and planning to reach a goal– and grit –i.e. consistency in effort and interest– are consistently positively linked with SWB, happiness, self-esteem, optimism, resilience, health, higher grades, and graduation rates amongst college students, while grit specifically has been found to negatively correlate with NA. Proctor et al. (2011) observed that hope and zest in particular are also associated with well-being, alongside gratitude, love, and curiosity. Myers (in Bechtel & Corral-Verdugo 2010) even concluded that happiness is composed of joy, hope, and faith. An unworried personality and the ability to employ strategies to overcome hardship are also major contributors to SWB, alongside having purpose in life and close relationships (Bechtel & Corral-Verdugo 2010; Sanjuán & de Lopez 2013; cf. French & Joseph 1999). Abdel-Khalek & Lester's (2010) study in a predominantly Muslim culture found that self-esteem, optimism, and hope are related to higher SWB, similar to how it is in the western counterpart. Lastly, Busseri et al. (2009) called for more person-centered –instead of variable-centered– research on SWB, which they believe will explain how people who apparently fail to fit the profile of high SWB individuals still report high levels of daily functioning.

2.3.3.4. Section Summary

All in all, there have been many ways and constructs proposed in attempting to explain the relationship between personality and SWB, showing again the complexity and deeply subjective nature of how well-being is understood.

Furthermore, these ideas apparently relate to each other and may illuminate different facets of the concept of well-being**.** In previous sections, I have mentioned what behaviours of higher education students or young adults have been studied in the literature, which are not always relatable to the Indonesian context. For example, gambling and drinking, even socially, are not salient behaviours, while it seems using gadgets is ubiquitous. Gratitude is also a commonly practiced attitude. I have also elaborated on the intricate relationships amongst psychological concepts found to relate to well-being –i.e. the dark triad, NEO-PI personality components, the SWB and PWB divide, emotional intelligence, and Core Self-evaluation– and their relationship with well-being itself.

I summarise what the literature has shown on how to potentially achieve the optimal well-being in Figure 2.11.

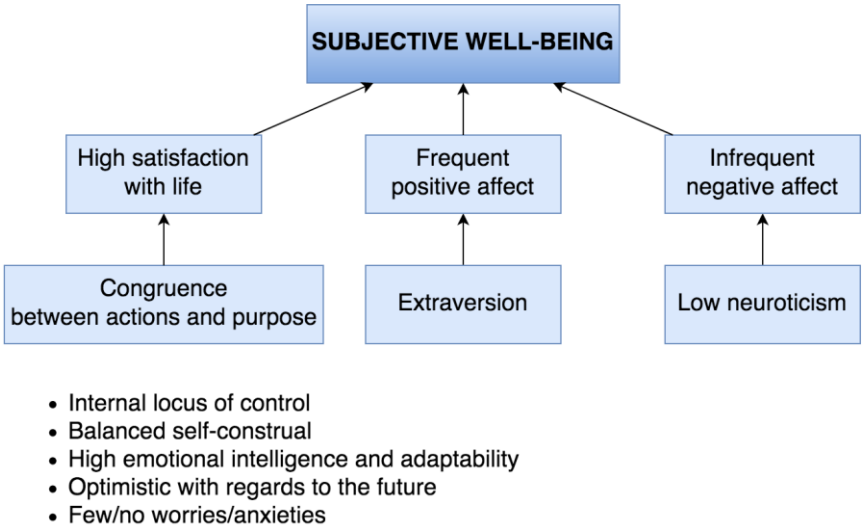

Figure 2.11. The Best Potential Well-being

2.3.4. Well-being, Studying Medicine, and Future Career

Having covered the concept of well-being found in the literature, I now move on to discuss how well-being relates to medical students and medical schools.

2.3.4.1. Academic Performance and Well-being

With most details regarding the concept of well-being having been presented in the previous sections, there are two studies worth a discussion here. First, in relation to HE students' academic enablement, Feldt (2012) studied elements of personality and well-being and brought them together in his model of HE students'

satisfaction (see Figure 2.12). One of Feldt's more remarkable findings is that Neuroticism and Extraversion only relates to SWL, contrary to other salient research (see Section 2.3.3.2). He also found that striving, discipline, and dutifulness, all aspects of Conscientiousness, directly relates to self-efficacy, and is predictive of GPA, academic persistence and progress, and career-related decisiveness, optimism, knowledge, and skills. On the whole, he agreed that personality variables predict student satisfaction.

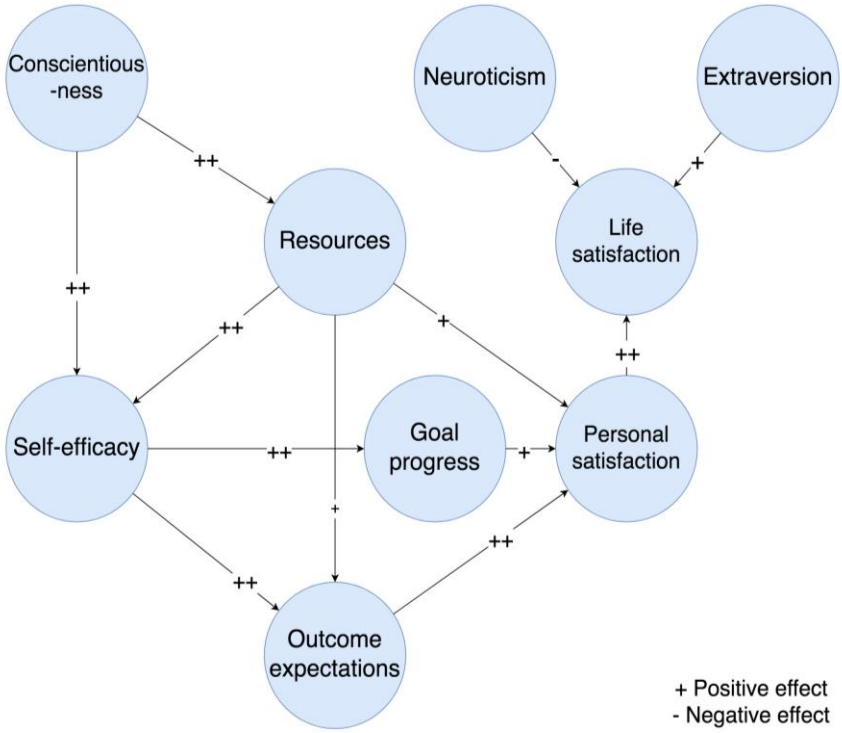

Figure 2.12. Cognitive Model of Satisfaction for Higher Education Students (adapted from Feldt 2012)

Lastly, a study in the USA that linked cheerfulness –also a proxy for PA, as Extraversion is– of year 1976 cohort as they entered 21 different HE institutions and that cohort's academic achievement data acquired 20 years later, found that PA was actually related to lesser academic achievement (Nickerson et al. 2011). Around 70% of all 23,597 then freshmen were included in the study. This finding might be caused by overconfidence the students brought in their self-assessments, or that individuals with high PA had a tendency to socialise more and that injured their academic performance. Arguably, there are various factors moderating a student's affects and their academic achievement, and the fact that Nickerson et

al. (2011) considered this finding counter-intuitive may further suggest that well-being has been approached somewhat simplistically in the quantitative literature.

On the whole, Disch et al. (2000) asserted that QOL and well-being studies should identify students' needs and concerns and their relationship with students' performance and functioning. This will help identify ways for students to have the best experience in their school years, and even boost their academic performance.

2.3.4.2. In-school Curriculum and Intervention Related to Well-being

It is alarming that Mazzuchelli & Purcell in 2015 reported little research on university students focusing on their SWB, and most was concerned only with their academic success. It cannot be emphasised enough that transition into HE and the medical school environment in particular can be a stressful experience, and the literature has repeated that assertion multiple times. Although it may be argued that some stress is inevitable and is even a motivating factor in medical training, excessive stress is counterproductive and can hamper learning and achievement. Tucker, Jeon-Slaughter, Sener, Arvidson & Khalavian (2015) observed that higher levels of anxiety and frustration have been associated with lower academic performance in medical students, and stress is a predictor of suicidal behaviour in research involving 2,074 university students (Lew et al. 2019). Eklund et al. (2011) had noted that mental health problems in college students have shifted from benign developmental to more severe psychological problems. There are plentiful similar observations that mental health problems in HE students have been increasing, with new environment, vulnerable age range, high workload, demanding schedule, financial problems, uncertainty about the future, all playing a part in causing a deterioration in students' mental health (Ahmed et al. 2009; Macaskill & Denovan 2014; Mazzuchelli & Purcell 2015; Oguz-Duran & Yuksel 2010; Shamionov 2014). Montasem et al. (2013) reported a similar finding in the dental school environment, where they found that dental students have poorer health compared to the general population and they are prone to burnout. Also, Uthayakumar et al. (2010) warned that Southeast Asian HE students appear less decided with regards to their career compared to other ethnicities, which is important as indecision and ambivalence can worsen well-being (see Section 2.3.3.2). Understanding HE students' well-being is critical not least to maintain and improve the students' attitude and academic performance, but also their health, career, and social life. Oguz-Duran & Yuksel (2010) argued that students' adjustments in life should also be seen through

their happiness instead of just academic achievement. In general, strategies aimed at increasing students' SWB involve identifying high-risk students, improving students' coping ability and resilience, and community support.

It is interesting to find how contemporary rapid changes in the medical education curriculum affect medical students' well-being (see Section 1.2). Moreover, the weight of the medical curriculum itself may play an important role in the increased prevalence of anxiety and depression in medical students, which is higher than the prevalence in the general population (Ahmed et al. 2009). Tucker et al. (2015) observed that previous research regarding this was inconclusive, and found that compared to students with traditional lecture-based curricula, students undertaking new curricula involving interactive problem-based and self-directed learning and early clinical exposure actually reported more symptoms of depression, lower morale, physical health, and SWB, and fewer sleep hours, leisure time, and social activities. On a more positive note, Boulton, Hughes, Kent, Smith & Williams (2019) found that academic and social engagements in university environment correlate positively with students' well-being, which might be a hint for HE institutions to always develop their faculty resources and physical or auxiliary environments in order to improve students' engagement (cf. Seligman in Bechtel & Corral-Verdugo 2010). Similarly, Botha, Mostert & Jacobs (2019) indicated that university may affect students' well-being physically, emotionally, psychologically, socially, and spiritually. Allen & Holder (2014) further urged HE institutions to introduce programmes which assist students to deal with academic stress. Although I observed similar symptoms within several Indonesian campus settings, hard evidence is still lacking with regards to this issue. It is possible that the anxiety students experienced from studying under the newer curriculum is related to the feeling of facing an unknown environment, deprived of the sense of an established system and unavailable guidance, e.g. from seniors, on what to do or what is expected of them within the curriculum.

Ahmed et al. (2009) noted that mental health problems students experience in medical school may last throughout their lives. With regards to active management and intervention to improve students' well-being, the Positive Emotion Intervention, which focuses on increasing happiness through boosting positive emotions whether in frequency, intensity, or duration, is efficacious (Weytens et al. 2014). Weytens et al. asserted that positive emotion is one of the important signs of a person's well-being, and they help increase concentration, creativity, longevity,

quality of relationship, and altruism, a trait associated with the medical profession. Further, they found that compared to an inactive control group, the Positive Emotion Intervention group showed a significant increase in SWL and happiness, significant decrease in symptoms of depression and somatic complaints, and some decrease in perceived stress. Maybury (2012) also found a positive psychology course in a curriculum promoted students' hope, happiness, and mindfulness, i.e. focused non-judgmental attention on experiencing the present moment as it occurs.

Another intervention method found effective in improving HE students' well-being involves some strands of meditation practice and mindfulness, with Mindfulness-Based Stress Reduction (MBSR) being the most prominent (de Vibe et al. 2013; Rajagopal et al. 2012; Shapiro et al. 2011). De Vibe et al. specifically noted that MBSR was more useful for the women compared to men in his study, although they were also quick to mention that there were not enough men in the intervention group. It is worth a mention that de Vibe et al.'s study is the first randomised-controlled trial that reported the usefulness of mindfulness in a non-USA setting, and the first to report this gender effect difference (cf. Section 2.3.1.1), while the strength of Shapiro et al.'s (2011) study, other than the randomised design, was that they tracked the increase in SWB, empathy, and hope, and the decrease in psychological symptoms, for over a year. Furthermore, in 2017 de Vibe, Bjørndal, Fattah, Dyrdal, Halland & Tanner-Smith published a systematic review of 101 mindfulness randomised-controlled trials from all over the world, which compared MBSR to inactive control and/or other well-being programmes. The review involved 8,135 psychologically healthy and symptomatic participants and 96 of the 101 trials were included in a meta-analysis. While cautioning that the quality of evidence was moderate, de Vibe et al. found in the review that benefits of MBSR towards social functioning, health, empathy and coping ability, and QOL crosses boundaries of intervention duration and participant gender and compliance, and that

> *if 100 people go through the MBSR program, 21 more people will have a favourable mental health outcome compared to if they had been put on a wait-list or gotten only the usual treatment. (p7)*

In addition to no reports of perceived costs or side effects, it seems that MBSR is an attractive mode of intervention to increase well-being. Satici (2016) also argued that, with mindfulness, resilience can be developed and be the target treatment in maladaptive and depressed students, and Rajagopal et al. (2012) have mentioned the need to incorporate meditation practice within the field of nursing as well. Akyurek, Kars & Bumin (2018) even found that occupational therapy students who practise mindfulness treat people with disabilities better.

Several other studies worth mentioning in relation to well-being curricular intervention exist. One was conducted by Higgins, Lauzon, Yew & Bratseth (2009), which found students' completing a wellness course had better knowledge, attitude, and behaviour about healthy lifestyle. Medical schools in the UK also adopted student self-reflective writing as part of assessing students' progress during their study. In trying to find how this activity affects students' well-being, a study (Marlo & Wagner 1999) involving expressing facts and feelings about negative experiences in writing found that there was no change in both short and long-term health following their intervention, but the participants' temporary mood was affected. Lastly, Diener, Colvin, Pavot & Allman (1991) observed some evidence that a tightly knit group may amplify the PA of its members by discussing pleasant topics, and otherwise NA by discussing negative topics. It is then possible that a constructive and light-hearted get together will benefit the students in a hectic and demanding setting such as medical training.

To sum up Sections 2.3.4.1 – 2.3.4.2, understanding the needs and challenges students encounter in medical school is a useful endeavour. Moreover, although some medical students in Indonesia may individually know or practice meditation and/or mindfulness, as far as I know medical schools in Indonesia do not have specific courses or interventions as part of their curricula. Thus, their effectiveness in maintaining and improving Indonesian medical students' well-being remains unknown.

2.3.4.3. Well-being from Higher Education to Work

Having a good coping ability and clear purpose in education and career will result in optimal time management, decision-making, and productivity (Disch et al. 2000, Durkin & Joseph 2009). These will lead to personal growth, while at the same time help obviate irresponsible behaviours and mental health issues (ibid.). Lew et al. (2019) even found that having purpose in life protects students from suicidal

behaviour. Furthermore, Tay et al. (2015) reported that happy and satisfied individuals are more likely to be productive workers and have successful careers.

Lindfors et al. (2014) found that while affective well-being may readily fluctuate more, students' cognitive aspect of well-being is not disturbed by their graduation and employment. In fact, Lindfors et al. contended that HE students consider entering the professional world as an integral and predictable part of their studying. On the other hand, Disch et al. (2000) asserted that few of the major college student concerns involve career planning and finance management, and students from different majors seem to place different importance towards money.

It is still to be found how Indonesian medical students view their career decisiveness (see Section 2.3.3.2 regarding ambivalence), and also whether Indonesian students –being in a developing country– are anxious about either getting a job or making money, as Robak et al. (2007) have mentioned the negative correlation between SWB and making money as a motivation (see Section 2.3.2.1).

2.4. Studies on Well-being in Indonesia

Despite the importance of and much research on SWB in the last 3 decades, such issues have received relatively little attention outside Europe and USA contexts. Not much research has been conducted in developing countries including Indonesia, particularly within its medical students' context. Veenhoven (in Yiengprugsawan et al. 2010, p202) asserted that studying well-being "is of great importance to policy makers mapping out development strategies" in all institutions, which in turn will bring societal improvement. This sentiment is also shared by Zanon et al. (2014). Recently repeating the literature search in May 2020, I only found one report (Yovita & Asih 2018) specifically studying the well-being of Indonesian undergraduate students, this time in relation to optimism and first year academic stress, i.e. impaired coping ability against the demands of academic life. The results were straightforward, i.e. academic stress decreased students' well-being while optimism improved it; moreover, optimism did not significantly moderate the effect of academic stress towards well-being, despite Seligman's (in Bechtel & Corral-Verdugo 2019) assertion that being more optimistic increases happiness. Yovita & Asih attributed this finding to both the small sample (215 students) and the study being conducted in a stressful period, i.e. final exams.

This study aims to expand on similar research and help build on the knowledge on well-being especially for undergraduate medical students in Indonesia. Indonesia is a ripe setting for this as it is home to hundreds of indigenous cultures (see Sections 1.1; 1.4). Indonesia provides a fresh sample, providing a pluralistic cultural environment with a predominantly Asian and Pacific Islander population, and will add to the predominantly Euro-American literature. The variety of ethnicities and cultural backgrounds in the study will hopefully be useful for the purpose of exploring potentially novel views on the subject of well-being, as well as in shedding light on possible further applications and investigations.

2.5. Chapter Summary

Throughout this chapter, I have elaborated on the state of burgeoning research in well-being, which showed well-being as a complex and important construct with multiple and fluid definitions, and that it is interconnected with a vast range of social, material, and personal elements, which can affect and be affected by well-being. Furthermore, well-being is a crucial dimension of a person that corresponds to environmental conditions and one's achievements, i.e. the hedonic and eudaimonic aspects respectively, which affect medical students in their academic endeavour. Notwithstanding the history and the ample body of research in this important field, the paucity of its investigation in Indonesia, let alone in its medical students, is clear.

3. RESEARCH DESIGN

Here I will discuss the theoretical considerations for the methodology I employed in the research with consideration towards context (Chapter 1) and what the literature shows regarding the issue of well-being (Chapter 2). Scholars (Cooper 2001; King, Horrocks & Brooks 2019) remarked that doing this is good practice as it enhances the quality of the research. All diagrams were designed by me, based on what I synthesised from the literature, in the hope that they will further help in reading the chapter.

3.1. Goals of The Study

3.1.1. Research Purpose

Despite the importance of understanding the issue of well-being and the attention it already gains in other countries, not many studies regarding this topic have been conducted in Indonesia and as far as I can ascertain, none with medical school students. The purpose of this study was to understand the well-being of medical students in Indonesia. In particular, the meaning of well-being for medical students and how it progresses throughout their lives, especially during medical school, were examined. As such, understanding through empathy instead of establishing cause-effect linkages was more appropriate (cf. Sarantakos 2013).

3.1.2. Research Questions

Studies indicated that people's perception of well-being is very subjective and personal, and that culture plays a role in it (e.g. Oishi et al. 1999; Tam et al. 2012; Wong et al. 2011; Yamaguchi & Kim 2015). The literature showed that the abundance of available instruments is yet to capture the whole dynamics of well-being. There is a need to understand the topic from the point of view of those experiencing life in each particular context, especially within those never investigated before such as undergraduate medical students in Indonesia. Rojas (2015, p323 – 324) asserted that

> *[a] crucial feature in the subjective well-being approach is the recognition that every person is in a privileged position to judge and report her well-being; hence, the best way of knowing people's well-being is by directly asking them.*

As such, the aim of this study is to reveal answers as detailed and complete as possible to the questions. I have shown in previous chapters that with regards to the body of research in this area, this study is important, timely, and will contribute to the field as a whole.

To provide a focused research frame (Agee 2009), the research purpose was broken down into three questions:

1) What are the ways in which Indonesian undergraduate medical students define quality of life?
2) What is the meaning that the students ascribe to the concepts they consider as significant in contributing to their quality of life?
3) What changes happen to the ascribed meaning throughout the students' study years?

3.2. Methodology

As this study assesses an already existing topic in the literature but within a novel context (Sections 2.2 – 2.3), an exploratory study to delve into the complexities and life experience and gain new insight from it is thus suitable, while utilising the existing body of research to obtain a sense of direction (cf. Marshall & Rossman 2016). Ritchie & Ormston (2014) advised the use of a qualitative approach when the topic of a study is multidimensional and intangible or related to beliefs and values, and when the study is done in a new context. Imposing the inherent limitations of a fixed design would restrict the knowledge gained (Marshall & Rossman 2016; Robson 2002). Furthermore, the aim of the inquiry was to uncover answers and not verify hypotheses (cf. Schutt 2015). The research has a clear topic while at the same time needed to provide room for elaboration, freedom of expression, and deeper insight (Bryman 2016; Cohen, Manion & Morrison 2018; Gillham 2005; May 2011; Robson 2002; Sarantakos 2013; Schutt 2015; Simmons 2001). Because the purpose of the study was to build rich descriptions, the act of confining participants' understanding and experiences within a preconditioned definition would limit valuable information. The reductionistic position would neither be able to acquire every detail nor deal with the unobservable (Cohen et al. 2018;

Sarantakos 2013; Seale 1999), as it “does not pay much attention to […] people's inner mental states” (May 2011, p13) and with quantitative methodology, what is untestable does not exist (Sarantakos 2013). Moreover, a quantitative design would restrict what can be obtained from the participants and may even consider the participants' contribution as irrelevant (Sarantakos 2013).

Scholars found that the environment, including but not limited to daily infrastructure and the school’s faculty, interplays with students’ well-being (e.g. Mazzucchelli & Purcell 2015; Ng 2005). May (2011) further asserted that how we conduct social research is inseparable from the issue being studied, that the only findings that can be justified are temporal and situational, and Gillham (2005, p8) added that “methods have to fit the research questions, and suit the kind of data that one is seeking to collect”. I therefore decided that a constructivist point of view, i.e. that meaning is internally constructed by one upon their experiencing a phenomenon (Gray 2014; Schutt 2015), is the best way to do this study in regard to the research questions; and to find the answers, the qualitative paradigm will be used. This study aims to produce as complete an understanding as possible about how undergraduate medical students in Indonesia perceive and experience the makeup and condition of their well-being.

It is also wise to give heed to Gillham's advice (2005) to judiciously choose between the “best” and “adequate” ways to acquire data, and Silverman's (2010) note to adopt the simplest design that will work for the questions at hand, for both practical reasons and variabilities in the field. While it might be argued that the largely positivistic quantitative research dominating the field gets in the way of a bottom-up understanding of well-being, and a grounded theory approach that brackets off that literature can be implemented, the limitations of time and personnel rendered using grounded theory impractical (Denscombe 2010; Schutt 2015).

A phenomenological study design is more appropriate for obtaining an accurate account of a particular aspect of the participants' ideas, opinions, or experience in life, and producing as full a description of it as possible (Brinkmann & Kvale 2015; Marshall & Rossman 2016). It has been explained that meaning in life is a major aspect of well-being and a fulfilling component of a person’s life (Sections 2.2.1; 2.3.3.2). As such, a phenomenological design is the most appropriate approach toward the issue (cf. Cohen et al. 2018; Schutt 2015). Phenomenology is used to study human experience and the way things are perceived as they appear to

human's consciousness, and is interested in people's perspective on that experience (Brinkmann & Kvale 2015; Langdridge 2007). Within this approach, I would be open-minded in acquiring and understanding the participants' view and the emerging data, and keep the awareness of both my self-positioning as a person and the knowledge I already had prior to being a participant –i.e. researcher– in the study (Cohen et al. 2018; Marshall & Rossman 2016; Sarantakos 2013). At the same time, it can be argued that because I have similar background –i.e. lifeworld– to the interviewees, accounts of their lives would be more readily understood and reported, i.e. less (mis)representation would be made from the data obtained (cf. Rojas 2015), making the findings more descriptive of the participants' experiences instead of interpretive.

3.2.1. Phenomenology

It is already known that the concept of well-being is a sophisticated issue with aspects of students' life experience being interdependent on each other. Phenomenology is sensitive to this complexity. The positivistic approach can only detect what can be measured, i.e. absent from and independent of experience (Giorgi 2009). Feelings, perceptions, and experience, meanwhile, are neither bound only to sensory stimuli nor physical objects. Phenomenology focuses on the person as a subject and fills the gap in understanding the details of their experience (King et al. 2019). In addition to recognising the material, phenomenological epistemology is also sensitive to anything that may emerge within the consciousness (Giorgi 2009). It is only natural that consciousness has to be understood from the perspective of the person experiencing it. Phenomenological design was chosen because of its closer suitability for looking at humans giving meaning to their lives. It provides a more authentic account of reality as experienced by the participants (May 2011). In other words, a phenomenological approach lends itself well to understanding people's lived experience. Lastly, instead of just giving importance to the researcher or the data, phenomenology values the participants. It allows us to appreciate the complexity of the topic, allows participants to provide their story –i.e. being authentic–, and allows participants to raise issues they feel important (Denscombe 2010; Gray 2014; Sarantakos 2013). As Ashworth (2015, p12) puts it: "the individual is a conscious agent, whose experience must be studied from the 'first-person' perspective". With regards to the topic being studied, implementing phenomenology treats the participants in a more

humanistic way. This study attempts to understand students' experience of and views on their well-being from their own point of vantage.

One possible limitation of phenomenological approaches is that because they tend to focus on psychological reality, objects psychologically irrelevant may be left out (Giorgi 2009). Concerning this, it has been explained that the concepts of happiness, quality of life, subjective well-being, and psychological well-being are indeed psychological in nature and studies suggested that personality may be the greatest contributor for them (Sections 2.2.1; 2.3.3). Gray (2014) also showed concern with generalisability of the findings, but the concern was minimised as the research questions are already contextual, and the methodological purpose is again to discover and not test.

In summary, phenomenology is an appropriate approach for this study, due to both the pluralistic situation of the context being studied and the nature of the research purpose and questions.

3.2.2. Descriptive Phenomenology

Phenomenology in the beginning was developed as a branch of philosophy that was concerned with understanding what can be known about this life, i.e. an epistemological tool (Giorgi 2009; Langdridge 2007). The original idea, now labelled transcendental phenomenology, came from Husserl, which posited that humans can extract essences, or encompassing meaning, of their experience by observing from outwith the experiencing. Existential phenomenology, the most prominent branch of the original, came from one of Husserl's students, Heidegger. Departing Husserl's original idea, it is more interested in how humans make particular meaning from experiences, as Heidegger believed that humans could not be totally detached from their experiencing (Denscombe 2010; King et al. 2019; Smith & Osborn 2014).

Thus, phenomenology originally was not specifically created as a hard and fast method of conducting research, and was even unwieldy as one. Even now the existing phenomenological methodologies have differed on the details. Nevertheless, there have been attempts to refine phenomenology, and clearer distillations of this as a research design, amongst many others, came from Smith, Flowers & Larkin (2009) with Interpretative Phenomenological Analysis (IPA), and Giorgi (2009) and Colaizzi (Morrow, Rodriguez & King 2015) with the descriptive counterparts. Although there are phenomenological approaches developed within

other fields, all previous camps mentioned came from psychology, with Colaizzi's method being used more in the field of health sciences (Morrow et al. 2015). As a method, descriptive phenomenology studies "structures of consciousness and types of objects that present themselves into consciousness" (Giorgi 2009, p87), or to put it simply, things experienced when they enter consciousness. Phenomenology allows objects free from confines of space-time and laws of causality to be examined as long as they enter human consciousness, which is useful in studying well-being, because well-being might be influenced by its temporal, or fleeting, features (see Section 2.2.1).

As such, this study's interest, well-being, and its purposively exploratory approach fell right within the phenomenological domain, where

> *a more secure founding for knowledge would start with consciousness, because no knowledge can be achieved without referring to consciousness (Giorgi 2009, p9).*

The expectation from approaching the subject phenomenologically is that the participants will more clearly see and better describe their perception regarding the issue at hand through discourses with the researcher, compared to how they naturally would in their daily lives. In turn, the researcher will gain more understanding about their lives. Scholars (Seidman 2006; Giorgi 2009) termed this "intersubjective attitude" (cf. Langdridge 2007). In particular, descriptive phenomenology is employed in this study, as the method was built to precisely describe the essence of the all-encompassing phenomenon being studied (cf. Morrow et al. 2015). This is different with interpretive phenomenological designs, which bring hypothesis, theory, or assumption to the findings. In other words, descriptive phenomenology attempts to add or subtract as little as possible from the experience, and at the same time stay open to all possible meanings. For example, when there are ambiguities in the meanings, descriptive phenomenology will not attempt to resolve them unless there is clear explanation from descriptions made. Instead, it will only describe the ambiguities as accurately as possible. This is why a sampling design with the purpose of maximising contextual variation, in effect a particular application of theoretical sampling, is ideal for the approach. In contrast to IPA which seeks to find thematic homogeneity, within descriptive phenomenology, the more variable the situation, the deeper and more meaningful the obtained structure is (Giorgi 2009; King et al. 2019). Through descriptive

analysis, what an object implicitly means to a person is made explicit through description of the participants' perception –i.e. thematisation– and description of the context –i.e. horizonalisation– (Giorgi 2009), and this is achieved by taking off the daily "natural attitude" (Giorgi 2009, p87), where things are taken for granted, and donning the "phenomenological attitude" (Giorgi 2009, p87), where we regard everything through consciousness.

While Smith & Osborn (2014) had stated that IPA does not try to interpret things according to prior hypothesis or abstractions, Spencer, Ritchie, Ormston, O'Connor & Barnard (2014) mentioned that IPA is used when reference to psychological concepts in the topic is already established, an observation also made by Giorgi (2009). In other words, there are non-given aspects introduced into the study. There were twofold considerations that made descriptive phenomenology more appropriate: firstly, the study was done in a novel context (see also Section 3.2), and secondly, as has been explained earlier within this chapter, the inherent design and benefits of descriptive phenomenology matched the plural and complex context studied. Smith & Osborn (2014) also observed that IPA is more concerned with capturing particulars of a case, while descriptive phenomenology attempts to understand a more general structure of an issue. Other interpretive phenomenological designs, e.g. ethnomethodology and other hermeneutic analyses, were not employed as what was needed to best answer the inquiries of this study was first-hand accounts from the participants, their views and opinions regarding their lived experiences.

Possible practical applications of a phenomenological approach are dealing with understudied populations, establishing new ways of thinking, and making improvements of human practice in daily life (Creswell 2007; Langdridge 2007).

Before delving further into the analysis method, for clarity it may be useful here to lay out salient terms in phenomenology used within this chapter (Table 3.1).

Table 3.1. Commonly Used Terms in Phenomenology

No.	Term	Meaning
1	Phenomenon	Anything that can emerge within a person's consciousness (Giorgi 2009)
2	Lifeworld	Everyday world everyone lives within (Giorgi 2009); everything lived by means of natural attitude and is taken for granted. This lifeworld is commonly shared with other human beings, or in other words, enables human beings to interact with and understand each other
3	Natural attitude	Automatic "attitude of everyday life [where] things are simply taken for granted" (Giorgi 2009, p87); to exist in lifeworld
4	Phenomenological attitude	"… to look at all objects from the perspective of how they are experienced" (Giorgi 2009, p87); to "be present" (Giorgi 2009, p77)
5	To intuit	To consciously experience a phenomenon by means of phenomenological attitude (Giorgi 2009); to focus our attention to what emerges within consciousness. This presence is contrasted to existence (Giorgi 2009)
6	Epoché/bracketing	Putting away natural facts bound within space-time, preconceived ideas, presuppositions, and judgments (Giorgi 2009); to stop taking things for granted and see them afresh (King et al. 2019); to doubt our natural attitude or everyday understanding and the biases coming with it. This, alongside free imaginative variation, is critical in order to obtain the truest meaning of an experience
7	Phenomenological reduction	The act of revealing the essence of experiencing a phenomenon, through presence and epoché (Giorgi 2009)
8	Free imaginative variation	Thorough search for the unchanging characteristics of a phenomenon when "intuit"-ing (Giorgi 2009)
9	Structure	The "relationship among the constituents" (Giorgi 2009, p102) of a phenomenon
10	Essence	The unchanging structure of "how things appear" (Giorgi 2009, p200) within consciousness, resulting from phenomenological reduction; the invariant meaning that "makes [a phenomenon] what it is" (King et al. 2019); the true meaning of an experience, previously hidden behind a person's natural attitude

3.2.3. Data Collection and Analysis in Descriptive Phenomenology

In phenomenology, the entity being studied is the phenomenon, i.e. any artefact that may emerge in a person's consciousness. As such, the best possible source of the data is the person themselves. The data are usually obtained through interviews, which accommodate and provide leeway for the person to describe

their account of the object being studied. These data, as with many other existing qualitative methodologies, are usually recorded, either in writing or multimedia, to preserve them and make revisiting the data possible, e.g. for analysis.

The end goal of a phenomenological analysis is making explicit the structures of the entity experienced by the person within their consciousness, which previously was unidentifiable behind the veil of natural attitude. These structures are called essences, which in phenomenology is the true meaning of an object appearing in a person's consciousness (see also Section 3.2.2). To be able to finally extract the essence, firstly a person expressing their account of the experience needs to:

1) put aside their normal daily attitude, i.e. their ignoring of their lifeworld, taking things for granted, or even being unaware of events occurring,
2) step back, i.e. suspending all automatic preconceptions and biases, and questioning again the daily attitude they have, and
3) put on the phenomenological attitude, i.e. seeing things "intuit"-ingly, or being truly aware of a phenomenon (see Figure 3.1)

1) and 2) are what is called epoché or bracketing in descriptive –i.e. transcendental– phenomenology, and 3) is presence.

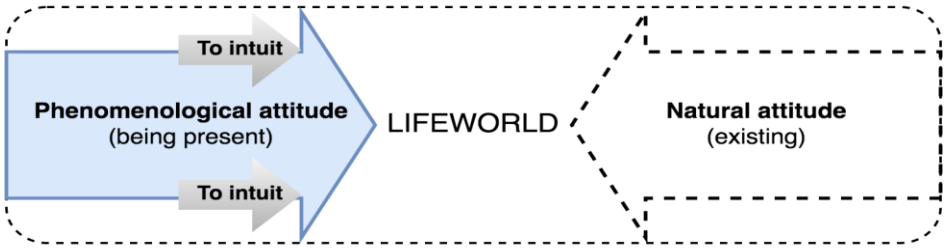

Figure 3.1. Phenomenological versus Natural Lens towards Living

There are several actions that can be conducted to produce the essence of a phenomenon, which together are termed phenomenological reduction. Phenomenological reduction involves:

- Textural description: account of the way something appears into/is experienced in consciousness.
- Structural description: account of the way something is consciously experienced within context, i.e. in relation to other descriptions, or in other words, considering the homeworld.

- Imaginative variation: the act of trying to exhaust alternative understandings of a structure, which will be followed by choosing the most plausible explanation.

Two prominent approaches in descriptive phenomenology, possibly because of their clear refinement of phenomenological philosophy into methods, were from Colaizzi and from Giorgi (Section 3.2.2). Morrow et al. (2015) stated that probably the most visible distinguishing feature between Colaizzi's and Giorgi's methods of descriptive phenomenology is the thematic style of the former and the distilling approach of the latter. Within this study, Giorgi's approach was the one chosen owing to my familiarity with it from conducting fieldwork. Moreover, King et al. (2019) noted that, due to its strong philosophical foundation, Giorgi's descriptive phenomenological methodology excels in phenomenologically understanding data, and by extension, human experience.

As steps to arrive at the essence in phenomenology (see Section 3.5.2 for more details), finding units of meaning is first done with the obtained data. Here the analyst separates a person's account of the phenomenon –usually a transcript– into a more manageable units, i.e. loci within the text which have different meanings in relation to the research questions. For example within this study, I divided a continuous text between the part in which a particular family situation conveyed that a student felt a specific way in relation to their well-being from the text directly following, which talked about another feeling, albeit still speaking of the same situation. These units of meaning are then assigned a shorter label called textural descriptions, which are chosen again with regards to the topic in hand.

After, or rather in line with the textural description phase, the units of meaning of an account are also described in relation to other emerging descriptions and the communal reality of this world. This phase and the resulting labels are called structural description.

Throughout the above processes of ascribing descriptions to the units of meaning, it is possible that an analyst will find there is more than one possible way to either describe a unit of meaning or link that meaning unit to the lifeworld. When this happens, the analyst will attempt to alter within their imagination different potential facets of the phenomenon, in order to consider whether they are essential to the phenomenon with regards to the research questions and other parts of the

data. If they cannot be omitted, i.e. are indeed essential, they are integrated within the structural description. This phase is called imaginative variation. Imaginative variation should be exercised with consideration to the text, i.e. units of meaning themselves, and the structure, i.e. how the texts relate between each other. Interpretation, i.e. introducing existing theories or assumptions from outwith, must be avoided.

After all units of meaning are described and all imaginative variations are exhausted, an analyst will unify the textural and structural descriptions and summarise them into an essence of one or several invariable structures, depending on the complexity of the findings and with sensitivity to the topic being researched, in this case in the psychological domain of well-being. In other words, the essence may neither be too generic/pragmatic nor too abstract/philosophical, that it fails to answer the research questions.

3.3. Contextual and Ethical Considerations

Marshall & Rossman (2016) cautioned that the site chosen to conduct the study must be realistic, i.e. there is access to the place and high probability of finding the object of interest, trusting relationship with participants is possible, ethical issues are minimalised, and credibility and quality assurance are reasonable. The rest of the sections in this chapter tackle those issues.

3.3.1. Time and Place

Data collection took place from August 2016 until May 2017 after ethical approval (see Section 3.3.2) by the University of Glasgow. As the descriptive phenomenological approach is the methodology used, maximum variation sampling was conducted to acquire the best data for answering the research questions (Giorgi 2009). Data were obtained from students in multiple medical schools in Indonesia across different accreditation and reputability lists (Badan Akreditasi Nasional Perguruan Tinggi 2016; Konsil Kedokteran Indonesia 2016; QS 2016; Times Higher Education 2016) and different geographical areas. Seidman (2006) believed that maximum variation is generally the most effective choice for collecting data through interviews, and these steps are taken in an attempt to ensure the obtained sample will feature maximum variation and help answer the research questions as completely as possible (Cohen et al. 2018; Langdridge 2007; Marshall & Rossman 2016).

Interviews were conducted during office hours within Indonesian university premises, or another public place requested by an interviewee, to help ensure the physical safety of both myself and the participants and to encourage openness from the interviewee's side (Brinkmann & Kvale 2015; King et al. 2019; Schutt 2015). Such precautions can help improve the quality of the collected data (Giorgi 2009). Before the actual interview, consent was taken after I restated the purpose and conduct of the study, and that the participant was able to withdraw their consent at any time during the interview.

3.3.2. Ethical Approval and Interview Access

Before the fieldwork, an ethics application was submitted to University of Glasgow College of Medical, Veterinary, and Life Sciences Ethics Committee, alongside pertinent documents for ethical approval. An approval letter was received from the Committee a month later (Appendix III). Access to undergraduate medical students was requested through emails alongside a proposal if required (Appendices IV – V) to faculty staff of the respective Indonesian medical schools, and interviews only took place where an approval email was received (Appendix VI). I did not personally acquire student email addresses. The Indonesian medical schools where I conducted the interviews were also given a copy of the ethical approval letter from the University of Glasgow, and as such they considered another local application for ethical approval unnecessary. After access from an Indonesian medical school to conduct the study was granted, invitation emails and information about the study were relayed to students by the school faculty, which also included invitation posters (Appendices VII – IX).

3.3.3. Potential Ethical Issues

Efforts were made to minimise potential ethical issues, protect participants' interests, and avoid harm being done to them (Bryman 2016; Denscombe 2010). These issues include the right to autonomy, anonymity, reviewing and withholding interview material, confidentiality during data analysis and reporting, and the participants' physical, emotional, and academic non-harm (Bryman 2016; Bulmer 2001; Cohen et al. 2018; King et al. 2019; McIntyre 2005; Seidman 2006). The fieldwork commenced only after ethical committee approval from the University of Glasgow. Furthermore, emails asking for permission, alongside information sheets explaining the intention of and procedure for the study, were first sent to the

medical schools for further distribution via students' emails. Interested students were invited to contact me through email or telephone, and both during invitations and before the interviews I always mentioned that I was not affiliated in any way with the institutions where they have been studying. I emphasised that they were always free to decide what could and could not be included in the study report before the data were anonymised. I also explained what would be done with the data, and that there were no immediate benefits for them from participating other than possible contentment from sharing their life experience.

Before interviews, I provided participants with my identification, information, and a chance to ask questions pertaining to the study, and only after that asked for their consent; I also treated the participants in a non-discriminatory manner (Denscombe 2010; Marshall & Rossman 2016; Sarantakos 2013; Schutt 2015). Interviews only took place after the participants gave their written consent (Bryman 2012). Anonymity was preserved during the research, as stated in the informed consent form (Appendix X).

In order to further ensure the confidentiality of the participants, they were identified by an ID number in the transcripts, and after transcript validation from each participant, all identifying details were removed. By then, nobody except I had access to the transcripts. The data were saved in a password-protected computer, and only I had access to the password. Consent forms were separately stored from transcribed data. Verbatim quotations that did not identify any individuals were used in the report. It might worth noting here that the whole ethical approval and data collection process for this study took place before General Data Protection Regulation became in effect in the UK. Nevertheless, the data collected throughout this study was treated in a manner adhering to the principles of General Data Protection Regulation (https://www.gla.ac.uk/myglasgow/dpfoioffice/gdpr/principles/) and the instruction for taught students concerning research data management (https://edshare.gla.ac.uk/853/).

The research design neither discriminated against, nor obstructed the participation of, students on the basis of their ethnic, social, or gender-based attributes. It was also explicitly stated that the students' involvement in the research would not in any way affect their position in the medical school. Students' academic standing would not be affected by their participation or refusal to participate and there would be neither discrimination nor disadvantage within the learning and

teaching situation after the study. I always attempted to avoid steering or coercing the participants towards my own views (Bryman 2016), and I always tried to develop a good rapport with the participants. No participant was a minor by the time of interview.

The sample population was composed of active medical students, and as such the probability of recruiting participants with a mental disorder was no more likely than that of the general population. Aside from the potential inconvenience for the participants from giving up their time or a very slight risk of emotional upset, no other risks –psychological and physical– to participants were identified. Interviews were conducted during office hours on the university premises.

Funding for the research was provided by the sponsor of my doctoral study, and neither I nor the sponsor had any conflicts of interest in the study. Furthermore, there were no power issues or dependent relationships between me and the participants.

The potential benefits of the study were considered to outweigh the possible risks stated (Cohen et al. 2018; Schutt 2015). The study would potentially yield a greater comprehension of undergraduate medical students' well-being, and this could be used as a basis for further research in a similar area or to find possible personal and environmental modifications with the aims to improve students' well-being. A possible, more immediate benefit for the participants was contentment from knowing that they had helped both myself and the scientific community by participating in the study, and the understanding that their voices were heard. The simple act of sharing their experiences and feelings, or the deeper realisation of the revelation in how they look into their life through the interviews might also bring satisfaction to the students (Brinkmann & Kvale 2015).

3.3.4. Recruitment of Participants

In accordance with the research questions and methodology, purposive sampling with an eye for maximum variation was used. Probability –i.e. random– sampling will work against both the philosophical and practical aspects of the study, as the intention is not to guarantee generalisation of the findings beyond the source sample, but rather its rich textures and thick description (Schutt 2015). As such, probability sampling would impose an unnecessary burden.

Participants were taken from medical students in the universities' third and fourth undergraduate years (see Section 1.2), as I considered the students in later years could have the benefit of retrospection, had understood more about their lives both in medical school and in general, and could provide richer and more holistic responses compared to students in first and second years. Snowball sampling possibility (Cohen et al. 2018) has been covered as well in the ethical approval. Some of the interviewed participants identified other potential interviewees after their peers' consent. These potential participants contacted me via email or telephone, and were given a specifically created invitation letter and information sheet (Appendices XI – XII). It was expected that around twenty participants, including the pilot interviewees, would come during the data collection window period, and the study would be conducted in a total of six public and private medical schools across BAN-PT –the Indonesian body for HE accreditation– accreditation levels and from within and outside of Java Island. While snowball sampling itself did not necessarily improve variation in sampling, schools where interview access was asked had initially been purposefully chosen from different accreditation levels, government/private ownership, and from within and out of Java (see Section 1.1). This was also amplified by the fact that phenomenological methodology is not confined by saturation point. Generally, the endpoint of data collection in qualitative research is saturation, i.e. the point when data no longer or only minimally produce new properties (Cohen et al. 2018; Schutt 2015), but phenomenological research neither aims for this specifically nor for a prescribed list of themes; it instead attempts to extract as much understanding as possible on the topic in hand, including its ambiguities and idiosyncrasies, e.g. diverging perspectives of a phenomenon, or fringe cases (Giorgi 2015; Langdridge 2007; Marshall & Rossman 2016).

3.4. Field Work

3.4.1. Instrument and Piloting

A semi-structured interview schedule (Appendix XIII) was developed for the purposes of this study. The precursor to this schedule was trialled first with three mock interviewees, i.e. non-medical students, following which, questions underwent major revisions. They were subsequently piloted with two medical student participants, after which questions only received minor alterations. These actions helped create more streamlined subsequent interviews, and increased

research credibility (Fielding & Thomas 2001; Gillham 2005; Seidman 2006). Whereas records from the trial interviews were not used as the exact questions were still formulated and the interviews were done with non-medical students, the data from the two pilot interviews were incorporated in the analysis. As doing interviews is an interactive situation, trials and pilots helped me get a feel for the conditions in the field and knowing myself better (King et al. 2019; Marshall & Rossman 2016; McIntyre 2005). Fielding & Thomas (2001) also stated that interviewees' elaboration in answering results from interviewer's eloquence in probing. Conforming to the nature of a semi-structured interview, the questions were open in order to accommodate data that were as rich as possible, yet with a few prompts to maintain overall relevance of the interview to the research inquiry.

In short, an interview schedule was created and tested through trialling and piloting so that the best data possible might be produced and I became better trained as an interviewer. The interview schedule was presented to be as succinct and open as possible to obtain rich data. During fieldwork, I always kept the research questions in mind and asked the participants to go into details, or give examples, about their daily experiences and how those lived experiences were pertinent to their well-being. Where it seemed that the relationship between something they said and the research questions and topic was not immediately obvious, I always followed through and probed until the relationship became clear.

3.4.2. Interviews

Face-to-face interviews were employed to collect data. The semi-structured mode of interview was chosen for efficiency: it provided focus compared to non-structured interviews, but still gave sufficient room for development so that detailed data could be obtained. Face-to-face interviews also facilitated rapport between myself and participants (cf. King et al. 2019). Interviews were recorded with two digital audio recorders to prevent higher possibility of losing the data in case there was a problem with either recorder. Recording helped avoid disrupting the flow of the interview (Schutt 2015), and thus enabled me to maintain a good rapport by focusing on and listening to the interviewees. It also provided the opportunity for richer data to be acquired in multiple ways: from the recording itself, by paying attention to non-verbal cues of the interviewees, and by having the chance to take notes. Field notes and a research journal, consisting of the interview details, reflections of methodological implementation, my personal feelings and thoughts,

and potential ethical concerns that emerged, were also taken for analysis. Field notes and research journal helped in keeping intact most of the memory about the interviews and the whole research in general, and bringing concepts and connections that might otherwise be missed (Giorgi 2009; Schutt 2015).

The time window for the collection of data was approximately 7 months. As it was, the students from the schools who gave access responded positively to study invitations, and they were eager to participate in the study. By the end of the data collection period (30 April 2017), 46 respondents from five public and five private medical schools in different cities and towns had been interviewed. Interview times ranged between 20 and 110 minutes (averaging 40 minutes).

20 participants were projected as responders to the invitations, considering what was practically achievable within the seven-month timeframe. There were twofold reasons for continuing the data collection past the number of 20 participants stated in the ethical proposal. Theoretically, phenomenology study does not necessarily look for saturation (see also Section 3.3.4); on the contrary, in the particular case of descriptive phenomenology a wide variability in sampling is actually desirable to help ensure the most accurate description of participants' reality. The practical reason was to keep good rapport with the community involved in the study (cf. King et al. 2019). In the Indonesian context, turning down what is perceived as help offered after it was asked for, in this case carrying out interviews and asking for someone's time and for them to open up about their life, may not sit well with them and be considered rude.

Data collection through the interview method was chosen as it is most appropriate to understand the experiences of others and what meaning they made of them (King et al. 2019; Seidman 2006), and is a "very rich source of knowledge" (Brinkmann & Kvale 2015, p63). Interviews are appropriate for the nature of this research (see Section 3.2). Furthermore, taking into account the available resources and timeframe, semi-structured interviews were also proper and expedient methodologically and practically: they both provided structure and facilitated discovery at the same time, also due to their iterative way of collecting data (Gillham 2005; Marshall & Rossman 2016; Sarantakos 2013). Direct interviews allowed me to build trust with the participants, and convey the sense of valuing them. They also allowed chance for providing reassurance to the participants and for their probing and clarification of the interview questions, therefore fulfilling the accessibility, cognition and ethics, and motivational aspects

needed in this method, in addition to enhancing the quality of the data (Giorgi 2009; Marshall & Rossman 2016; May 2011; Sarantakos 2013). Gillham (2005) asserted that because people know themselves best, interviews will increase data validity with regards to their feelings, beliefs, and attitudes. This will further ensure the richness and the honesty of the acquired data, instead of getting a “glib and easy answer” (Fielding & Thomas 2001, p126). The interlocution between interviewer and interviewee is hoped to heighten the sense of what all the time is present in interviewee’s consciousness instead of just letting the reality flow as usual. This interaction between interviewer and interviewee also helps with regards to exploratory design and phenomenological methodology (Giorgi 2009). Conducting interviews also follows scholars’ (Brinkmann & Kvale 2015; May 2011; Fielding & Thomas 2001; cf. King et al. 2019) advice to utilise the characteristics match between interviewer and interviewees as an advantage, as I am of same national and cultural background, am fluent in the interviewees' native language, and at one time had experienced being a medical student as well. Within the context of phenomenology, this also makes the process of describing the data from participants by me more possible, instead of falling into the hazards of interpreting them (cf. Langdridge 2007). Lastly, ethically I consider the benefits of conducting the interviews, and the whole research in general, outweighs the risks (Schutt 2015). In short, this is because the interview method humanises people and facilitates the collection of genuine data, which are important attributes for phenomenology.

3.5. Data Treatment

3.5.1. Recording and Transcription

The Indonesian language, the native language of both myself and participants, was used in the interview conversations in order to obtain rich data. I manually transcribed the records with VLC media player and LibreOffice Writer softwares on a laptop. This immensely helped me in immersing myself in the data (cf. King et al. 2019).

Audio-recording was done for both philosophical and practical reasons. It allows one to get the fullest meaning of the subject being discussed, and to capture as true as possible the participants' selves, thoughts, and consciousness (Seidman 2006). Audio-recording also made it easier to go back to the original data for analysis purposes or with regards to faithfulness of the study.

The process of transcribing is itself an act of translation (Brinkmann & Kvale 2015), and there is the danger of losing some of the meaning after interview data are transcribed. Accurate transcription was, again, one of the many measures taken for the assurance of the interview method (Langdridge 2007). The transcriptions were also sent back to each respective participant in a request email for member-checking (Appendix XIV), in which they were allowed to verify transcription accuracy to what they intended to convey (Brinkman & Kvale 2015; Gillham 2005; Langdridge 2007; Marshall & Rossman 2016; Sarantakos 2013). Four weeks after that, transcripts were anonymised and all identifying data erased, to maintain interviewees' privacy. Some of the transcripts were then translated into English as samples for independent raters, i.e. supervisors, to ascertain that I had a proper understanding of the analysis process and that we obtained corresponding findings. During translation, all verbal and paraverbal expressions were maintained as best as possible.

Data flow prior to analysis is illustrated in Figure 3.2.

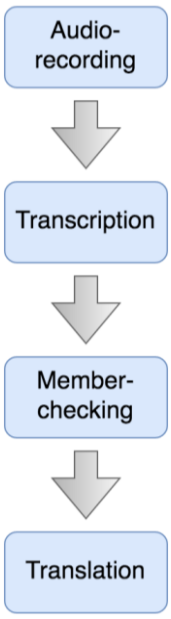

Figure 3.2. Data Flow Prior to Analysis

3.5.2. Analysis

Giorgi's descriptive phenomenological design is used in the data analysis (see Section 3.2.3; Appendix XV for an example). The first step was reading each transcript to get a holistic sense of the data. Both significant shift in meanings and places in the data that might be important for the next step of the analysis were

marked. Those parts were elaborated and further delineated to establish units of meaning. The created units of meaning were then tested by going back to the data to see if changing or eliminating those units would change our understanding of the data. Free imaginative variation, where an aspect of a phenomenon is removed or altered and all possible alternative meanings of a phenomenon are exhausted, were also employed to find if there is a change in understanding. In practice, this meant considering whether participants' understanding of the concept of well-being would be altered if the unit had been eliminated, and finding out whether a unit of meaning in fact augmented or diminished participants' well-being. When there was no more change found, then an invariant sense that encompassed all possible contexts had been found. I then integrated all invariant senses obtained from participants into structures, i.e. relationships among phenomenal constituents. These relationships might be intra-structural, when data variants fit into one structure, or inter-structural, where data variants do not fit into single structure. This invariant understanding attempted to be:

- explicit and detailed (Giorgi 2009, p192)
- articulated, i.e. renders visible the peculiar quality of the relationships among subject, others, and the situation (Giorgi 2009, p194)
- moderately general, i.e. not too abstract/philosophical so as not to lose all the sense of a phenomenon's function for human experience (not transcending psychological interests) (Giorgi 2009, p196)

Whenever a particular structure became either too unwieldy or internally contradictory, one could break it and generate two or more new structures. It can be seen that developing structural constructs requires sensitivity on the researcher's part (see Section 3.2.3).

The next part of the job after finding the invariant structures, or the essence, is writing down a description of those structures as accurately as possible. No adding or subtracting of the experienced reality and its meaning is done by the writer. Giorgi (2009) was quick to mention that the absence of a construct is different with subtraction, as the absences co-presenting with a present structure actually contribute to the essence, i.e. they take part in clarifying the horizon, or context, of the essence. Descriptive phenomenology lends itself well to both explaining the

relationship between these aspects, and yielding an overarching essence of the studied object.

A summary of steps in Giorgian phenomenological analysis is presented in Figure 3.3.

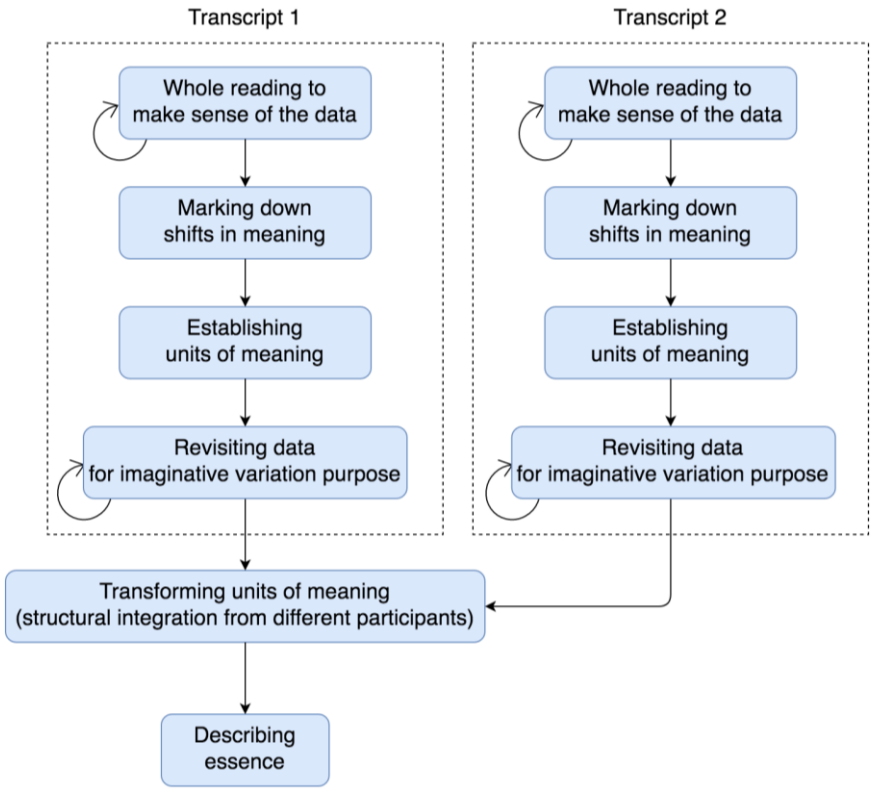

Figure 3.3. Iterative Data Analysis in Giorgi's Descriptive Phenomenology

The final purpose of the design is to help readers gain heightened psychological understanding of the studied phenomenon, which amounts to being able to see the significance of the points found in the data coming from participants' lived experience. This is made possible by making explicit the psychological aspect of the studied phenomenon through the aforementioned steps, into a more general understanding of the lifeworld (see Section 3.2.1).

3.5.3. Rigour of The Study

Since the start of the study, multiple measures have been taken so that they together improve both its credibility and transferability (Brinkmann & Kvale 2015; Gray 2014; Gillham 2005; Marshall & Rossman 2016; Sarantakos 2013; Schutt 2015; Seidman 2006). As a methodology, rather than in each single and granular

meaning unit, descriptive phenomenology's transferability lies in the general structures obtained from data analysis (Todres 2005). Furthermore, the object of phenomenology is experiences, and phenomenology attempts to gain insight to understand the meaning of human experiences. As such, phenomenology is open to more instances of both experience and meaning-making. The findings do not claim to be the final, best, or most important articulation of that insight (Todres 2005). Rather, they may facilitate understanding of a phenomenon, and they offer one of many potential ways to do that.

Respectful and ethical treatment towards participants (see Sections 3.3.2 – 3.3.3); as complete a literature review as resources allowed and which included both possible supportive and contradictory findings; purposive and snowball sampling from as varied medical school settings as possible (see Sections 1.1 – 1.2); prolonged field work; trialling and piloting the instrument; data collection from primary sources within their immediate daily environment and in the native languages of all participants; freedom for participants to talk; probing and clarifications during interviews; maintaining an honest and open attitude with participants and throughout each study phase; audit trail availability; data preservation through voice recording, note-taking, research diary, and member-checking; independent sampling of analysis done with supervisors; and lastly my self-reflectivity (see Section 5.5) were done to enhance the rigour of this study (Figures 3.4 – 3.5). In addition, the "intuit"-ing and exploratory nature of phenomenological methodology helps prevent response bias because participants "normally [do] not know what the researcher is seeking" (Giorgi 2009, p99).

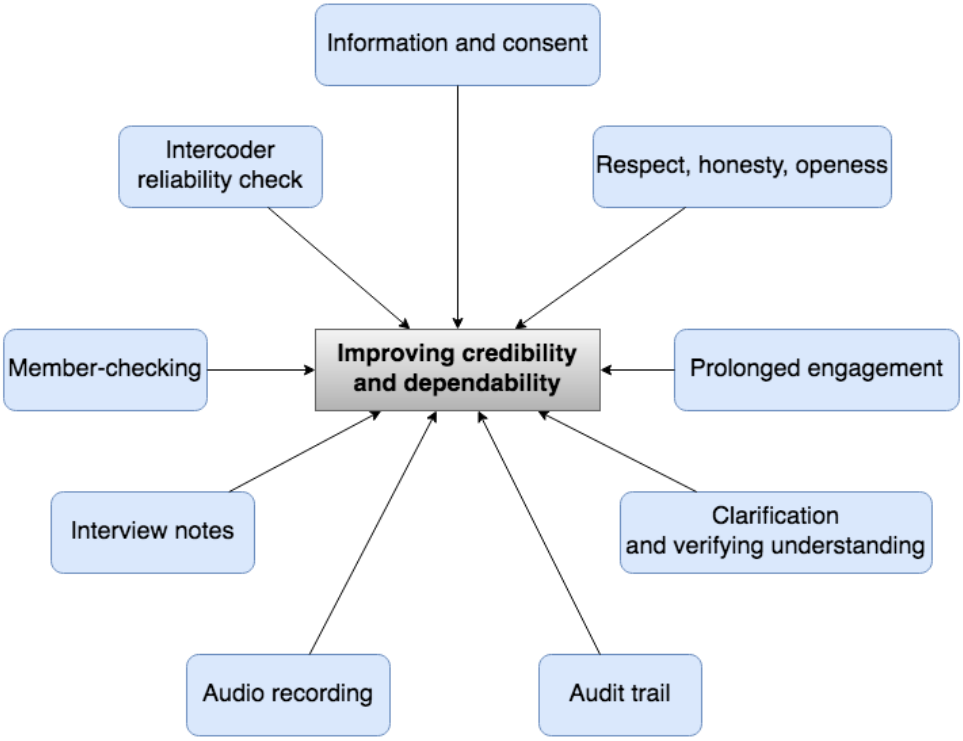

Figure 3.4. Steps Taken to Increase Credibility and Dependability

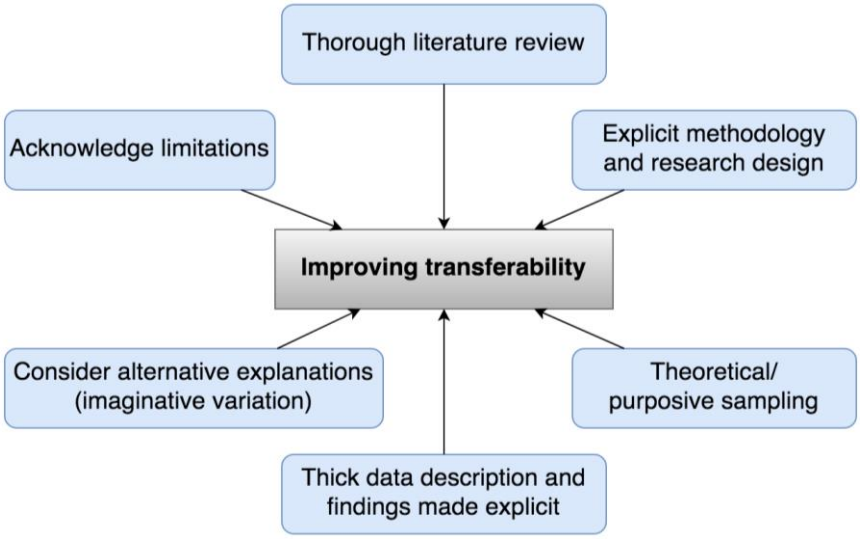

Figure 3.5. Steps Taken to Increase Transferability

4. Findings

Throughout this chapter, I will present the findings from interview data, treated with the methodology explicated in Chapter 3. Inclination to adhere to any single theoretical basis of well-being (see Section 2.2.1) was deliberately avoided, to prevent introducing presuppositions in the interviews (cf. Section 3.2.2) and to obtain as complete essences as possible in the findings. Per scholars' (Giorgi 2009; King et al. 2019) advice, I have attempted to include all potentially relevant data while staying sensitive to the issues around the topic of well-being.

The findings have been presented thematically in order to manage the large volume of data obtained. An example of how Giorgian phenomenological analysis was conducted is presented in Appendix XV. Tables have been used to present examples of the data in a concise form, and their titles and contents sorted in alphabetical orders within each subheading. Subheadings 4.2.1 – 4.7.2, titles of the tables, and contents under the titles of Activity, Aspects, or Topic within Tables 4.4 – 4.37 will serve as constituents of the overarching essence of well-being for the participants, while contents under the titles of Meanings and Changes within Tables 4.9 – 4.37 will typify the more granular structures. Where a table is too unwieldy to put on a single page, example quotes are presented with the full table available in Appendices. Giorgi (2009) mentioned that using only text presentation may potentially limit features of the findings that can be presented, therefore I also provide a summary diagram of the structure of the findings after each pertinent major discussion. Discussion on these findings will follow in Chapter 5. However, first we will look at the generic profiles of the participants to get a sense of their backgrounds.

4.1. Participants Characteristics

The participant group came from 10 different medical schools in 5 different provinces in Java and Bali islands ranging the whole accreditation levels A (the highest) to C. General attributes of the medical schools are presented in Table 4.1.

Table 4.1. Medical Schools Where Students were Interviewed

4.1a Region			**4.1b Ownership**			**4.1c Accreditation (at the time of interview)**	
Bali	2		Government	5		A (highest)	5
Central Java	3		Private	5		B	3
East Java	2					C	2
West Java	1						
Yogyakarta	2						

The profile of 46 medical students from the third and fourth years who responded to invitations is presented in the following Tables 4.2 – 4.3.

Table 4.2. Participants Demographics

4.2a Sex	
Female (F1-F29)	29
Male (M1-M17)	17
4.2b Religion	
Catholic/Christian	6
Hindu	10
Islam	14
Not stated	16
4.2c Ethnicity	
Aceh	1
Balinese	10
Batak	1
Cirebonese	1
Javanese	18
Lampung	1
Manadonese	1
Sundanese	3
Sulawesi (South)	1
Sulawesi (Southeast)	1
Mixed	7
Not stated	1

4.2d Age (years)	
18	1
19	3
20	19
21	17
22	4
23	2
4.2e Province of origin	
Aceh	1
Bali	10
Bangka Belitung	1
Jakarta	2
Java (Central)	10
Java (East)	10
Java (West)	3
Kalimantan	1
Kalimantan (East)	1
Lampung	2
Nusa Tenggara (East)	1
Sulawesi (Southeast)	1
Sumatra (North)	1
Yogyakarta	2

Table 4.3. Participants' Parental Occupations

4.3a Mother's occupation			4.3b Father's occupation	
Architect	1		Civil engineer	1
Civil service	12		Civil service	12
Entrepreneur	8		Entrepreneur	7
Medical doctor	2		Medical doctor	3
Midwife	1		Military	3
Nurse	2		Nurse	2
Pharmacist	1		Private employee	5
Private employee	3		Teacher (non-HE)	1
Teacher (non-HE)	2		Teacher (university)	8
Teacher (university)	3		*Retired*	2
Treasurer	1		*Deceased*	2
Housewife	8			
Deceased	2			

All participants took part in the study without coercion (cf. section 3.3), and the interviews were conducted as comfortably as possible.

The findings are presented below, sequentially according to the research questions.

4.2. The Essence of Well-being

The first research question asked: "What are the ways in which Indonesian undergraduate medical students' define the quality of life?" Students understood that QOL or well-being, and whether someone's QOL is good or bad, is a largely subjective concept involving a plethora of features. One student even stated that QOL defies measurement, while another thought that depression scales might be used as a proxy for QOL.

The following is the essence of participants' view of their well-being.

> *For the students, well-being is another way of saying (lasting) happiness; satisfaction; obtaining what they want; being comfortable or enjoying doing daily activities, even after taking into account both happy and sad events in life; and being free from stress, feeling chased, feeling limited, or feeling pressured.*

Furthermore, well-being means the balance between beneficial and harmful emotions and experiences in daily activities and life in general, having and receiving the rights and responsibilities according to one's position in society; balance in all domains of life and harmony with nature; balance between stressors/responsibilities and the capacity to handle stressors/responsibilities; having enough to be able to take care of self, and both distance self from and overcome problems. Well-being also means the ability to align personal goals with the available resources and existing rules; living or being responsible in accordance to religious laws; having a planned and disciplined life; the evaluation of how far one progresses in life compared to the standard they have made; how to improve self; achieving targets in life; being productive and useful to others; giving meaning or having purpose in daily activities or goals accomplished, as opposed to a stagnant, directionless, empty, or potentially destructive life; having freedom to choose and to be. Lastly, for the students, happiness is the ultimate goal in life. Students view well-being as a subjective concept, coming from state of mind, one's view of life, and active decision to be happy, satisfied, grateful, and calm. Students contrasted well-being with dissatisfaction, unhappiness, and depression. Supportive relationship; constructive activities; conducive environment; and personality that is kind, accepting, motivated, healthy, and flourishing influence students' well-being positively. Being deficient physically, intellectually, psychologically, and financially; lacking in self-confidence or control over life; having no motivation or purpose; pessimism and sense of failure; unsupportive relationship; unconducive infrastructure influence students' well-being negatively. During students' time in medical school, students grow as a person and become more capable to manage their life domains, despite facing challenges. Students hope to achieve more in the future, in part to self-actualise, and in part to help others. Students fear losing their loved ones, their way of life, their faith, and everything that enables them to achieve.

Three main structures of well-being for the participants are described as follows.

4.2.1. Sense of Fulfilment

4.2.1.1. Feeling happy

Students indeed viewed QOL as another way of saying happiness while sadness is its diametrical opposite. Moreover, they thought that the peak of their QOL is when they are in good health, are happy, and enjoy life, and contrasted it with stress, dissatisfaction, and depression.

Doing activities which makes me happy […] If we're enjoying doing that something, we'll enjoy that moment […] If we don't like doing something, we may want to run away. (F20)

When [my date] is in good mood, we're good, it's nice. (M5)

4.2.1.2. Feeling satisfied and sense of achievement

Paralleling the above, students also viewed QOL as feeling satisfied, obtaining what is wanted, and achieving targets in life, and contrasted it to unmet needs or desires.

[…] doing activities that inspires me, that the outcome, the result is, before I sleep I don't feel sad; I feel I've done what I did to the best of my ability. [Also,] to solve that day's problems [which means] no burden in the future. (F20)

4.2.1.3. Having sense of purpose in life, which also includes devotion to other people and other productive activities

Participants saw well-being as both having purpose in daily activities as opposed to a stagnant, directionless, or potentially destructive life. One student even remarked that having purpose is what makes us human. Some students also thought that having faith is a proxy to one's QOL, and that their state of QOL would affect how they regard other people, their future, and even the afterlife. There were voices that associated well-being with harmony with nature, and how beneficial oneself is to other people is a commonly shared sentiment among the students.

I like dogs [...] I just like interacting with dogs. [Also] looking at green plants [makes] my mind fresh. Those are [the things] I meant, [being] close to nature. (F16)

Before entering medicine, I thought my aim was to be a doctor. After entering medicine, I changed [...] So I see that becoming a doctor is a consequence of making a choice, while my goal is to make parents happy. [This is] important because it's a motivation that steadily grows [us]. (M9)

When I'm jaded from studying, I read quotes from […] world personages […] there's this boost from those inspirational characters that change my mindset, […] why can't I be more? It revives my enthusiasm. (M13)

4.2.1.4. Experiencing sense of growth

The experience of growth is possibly a landscape that connects the previous senses of enjoyment, achievement, and purpose (see 4.2.1.1 – 4.2.1.3) –which were contrasted to being pressured– and the senses of agency and resourcefulness (see 4.2.2.1 – 4.2.2.2), as the quotes below expressed:

> *Knowing self [and] not staying in comfort zone, [because] when my life is too static, no growth, it's something to be worried about. [...] My studying [medicine] in another province was because I want to get out of comfort zone [...] I'd be more independent, self-improving, facing the future. (F19)*

> *I didn't care about people. Here I often meet patients, simulated patients, other people. Now maybe I've been touched, so if there's a sick or [troubled] person I want to help. [...] How I behave, to the poor, the rich, everybody, never discriminate. So here I can feel I empathise. That's what I like most here. (M3)*

4.2.2. Sense of Being Enabled

4.2.2.1. Possessing sense of agency, or feeling empowered/adequately resourced in the face of challenge

Students considered that better QOL is achieved when they know their weaknesses and strengths and can improve on them, can be true to themselves while giving to other people, and live a personally chosen path. One may regard this as the more active, or possibly internal, aspect of enablement. Furthermore, students viewed QOL as both the beneficial and harmful emotions and experiences in life, and still being comfortable after evaluating both happy and sad life events. QOL was also understood as the evaluation of how far one progresses in life compared to the standard they made for themselves, and how to improve more.

> *What I respect from my parents [is] they never tell me to do things' but: 'We are giving you views, it's up to you what to do. You're an adult, so you can decide. Such and such is our view as parents.' […] my parents give me chance to have different views from theirs. (M9)*

> *Because education can change someone's standards of living […] It all can be achieved through adequate education. [Also] if we have money, and know how to use it well, we can improve our QOL, for example by buying things that support [our work]. (M14)*

4.2.2.2. Obtaining the proper rights and responsibilities

Accompanying Section 4.2.2.1 above, it is possible to see this construct as the conditional, or more external, aspect of enablement. Participants mentioned well-being as receiving the appropriate rights and responsibilities according to their position in the society, or being bestowed the power to wisely behave or take decisions, to take care of self, to face obstacles, and to be free from pressure, feeling chased, or feeling limited. Some voices also mentioned that the idea of well-being involves having a planned and disciplined life in accordance with laws, religious or otherwise, and the ability to balance resources available against responsibilities, goals, and existing rules.

> *[…] for example as a student […] Access to journals, books in library […] I feel luckier here than in other universities where getting learning resources may be difficult. (F26)*

4.2.3. Acting grateful

Although environment and other people may play a part in someone's QOL, participants thought that happiness is a state of mind, and foremost it involves the decision to think in a grateful, tranquil, happy, and satisfied way. Being grateful improved their mood while focusing on what was missing made them unhappy. A student considered that how they respond to challenges and choose to see things positively is more relevant for QOL than the challenges themselves, although they admitted that staying too long in a negative situation may change a person for the worse.

> *It's left to us whether to [have] a positive or negative attitude. What lowers QOL depends on our thoughts. (M15)*

The following is a summary diagram of the major structures assembling the participants' understanding of well-being.

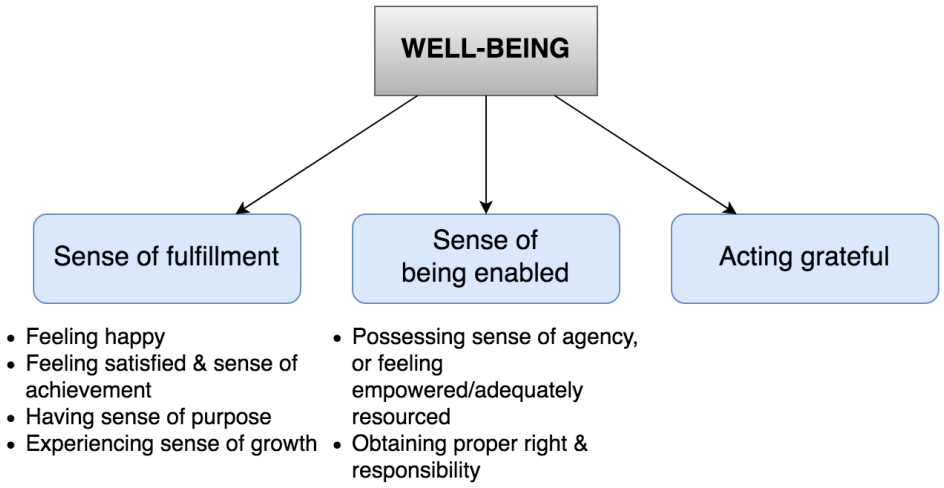

Figure 4.1. What Well-being is for The Participants

The second research question asked: "What is the meaning that the students ascribe to the concepts they consider as significant in contributing to their quality of life?" Participants conveyed that their QOL is modulated by positive and negative factors in their lives.

> *QOL for me is like– life, so what I go through, [there are] beneficial and harmful things for me. Positive and negative. (F14)*

In the next sections, real-life positive and negative contributors throughout time that helped define well-being for the participants as described within the essence and structures above will be further expanded. Subsections (e.g. 4.3.1) under main headings (4.3 – 4.7) will begin from the structures more ubiquitously shared by the participants.

4.3. Positive Influences

Contributors towards better QOL for the participants include supportive relationships, constructive activities, and both environmental and individual aspects that nurture their learning, independence, and growth.

4.3.1. Supportive Relationships and Connectedness

> *In my opinion my life is of quality when I receive the support from my closest ones. What else? The point is, I think social life is very important for improving QOL. (F9)*

Noticeably, supportive relationships or connectedness in many different forms are something that all students mentioned as improving their QOL, as illustrated in the following Table 4.4.

Table 4.4. Relationship Domains Supportive towards QOL

Relationship type	Illustrative quote
Colleagues	*It can also mean work colleagues. [We] need a working situation supportive to [us], so that [we] can be more productive. (F10)*
Friendship	*When there's no friend to tell or help us to study, for me it feels difficult. I'm lucky all this time my friends can help me, they help me a lot in that. (F26)* *Close friends. They improve our QOL [because] we can also learn from their lives. We can learn just by learning when they talk with us. (M9)*
God(s)	*Spirituality must be good […] As a religious person I need to be connected with God. (M12)*
Nature	*I like dogs [...] I just like interacting with dogs. [Also] looking at green plants [makes] my mind fresh. Those are [the things] I meant, [being] close to nature. (F16)*
Romantic	*When [my date] is in good mood, we're good, it's nice. Communication is comfortable. (M5)*
Parental or familial	*[Family] know [us] better. So family is able to make [us] more comfortable and happier. (F10)*
People in general	*By socialising we gain input from others, and it feels really improving our QOL, [and] hearing people's voices in real life is a delight […] It's human's basic need, in my opinion. (F20)* *For example, when I am sick […] it's impractical contacting parents or friends [far away, but] there are neighbours that may be able to take care of me. (M8)*
Teachers/doctors	*The atmosphere's good here. Here we can study together between students and teachers. The teachers are open to the students. (F25)*

Meanwhile, students' view on what constitutes a supportive relationship are shown in Tables 4.5 – 4.6. There are two closely intertwining dimensions of a supportive relationship, which I labelled as receptive and interactive facets. The receptive dimension is more about how the participants feel accepted or accommodated by the people around them, while the interactive aspect is about generally mutual acts between the participants and people in their surroundings.

These are important as for the students they became bases for purposes of discussion, fun, encouragement, and mutually improving each person.

Table 4.5. Interactive Aspects of Supportive Relationship

Aspect	Illustrative quote
Communicability	*When we interact well, we can share any information optimally with our friends. The purpose of the communication will run well. (F21)*
Cooperativeness	*If someone likes to learn, we can discuss. I like to learn too, I want to discuss. Progressing together is actually better […] Imagine when there're 10 different minds instead of just one, in a similar direction, strengthening each other […] If [two] miss something, well ok, there're eight to complement them. (M13)*
Encouragement	*Motivation from the surroundings […] When there's encouragement from people around, it certainly motivates me. (F14)*
Feedback	*When we tell our problems, friends can give us advice. (F11)*
Reciprocation	*I cannot live alone. [I] need others. I also need to be needed by others. If there's something, I can ask others for help, and people can ask me for help. (M12)*
Trust	*When we have trust, we automatically do everything with relief, with ease. (M10)*
Understanding	*Personally I don't easily trust [people] so to find someone who thinks alike [makes me] not feel alone. (F23)*

Table 4.6. Receptive Aspects of Supportive Relationship

Aspect	Illustrative quote
Appreciation and respect	*I like being acknowledged [and] I'm more enthusiastic when everything I do is appreciated by others [and] it can be said as prestige. It becomes encouragement for me to be better; [my relatives] said I have to study well so that people will not underestimate our family. (F21)*
Autonomy	*What I respect from my parents [is] they never tell me to do things, but: 'We are giving you views, it's up to you what to do. You're an adult, so you can decide. Such and such is our view as parents.' […] my parents give me chance to have different views from theirs. (M9)*
Equality and genuineness	*It's more open with friends […] we aren't limited. […] In my opinion being egalitarian is important because… with us being equal, it makes us connected more, nothing to conceal, and makes-- for me-- makes me be myself […] my friends also be themselves. (M5)*
Safety and acceptance	*Feeling safe, then also being able to say what we want to say to others in my opinion affects QOL a lot […] Then self-confidence, then acceptance from others. (F25)*
Validation	*Parents' blessing is a must; [when] we're down in what we're doing, because of parents' support [to] their child it becomes encouragement. (F4)*

To sum up, that relationships play such a big part in the participants' lives can be seen from the following quote:

> *[Studying medicine fulfils my] parents' desires. So I gave my relationship with my parents more importance; [and] because parents have asked [for it], I should be able to realise [it]. (F13)*

4.3.2. Constructive Activities

The second positive influence on the students' QOL is undertaking constructive activities, which is richly illustrated by the following quote:

> *Doing activities which makes me happy; doing activities that inspires me, that the outcome, the result is, before I sleep I don't feel sad; I feel I've done what I did to the best of my ability. [Also,] to solve that day's problems […] If we're enjoying doing that something, we'll enjoy that moment […] If we don't like doing something, we may want to run away. Run away, imagining things past and future. In the end, if we think of the future or past*

too much, we don't do what's present well [and] it drags. Today isn't too good, the next will be too. The next day we think of the day before. [Also] solving problems means […] no burden in the future. (F20)

There were various activities that improved QOL for the students, exemplified in the Table 4.7 and two quotes below. The full table is available in Appendix XVI.

Table 4.7. Activities Improving QOL

Activity
Contemplation; learning from great people in the past; learning from past mistakes, and planning for the future
Fulfilling religious obligations (e.g. praying, being useful for others)
Gaining knowledge that enables problem-solving or wise life decisions, and the activity of problem-solving itself
Regular exercise and lifestyle
Rest, vacation, hobbies, or recreation; these refresh from stress, tiredness and jadedness coming from studying; they also increase motivation and even remind the students of who they are
Studying and education
Treating self and others well, including helping others
Work/career

By knowing ourselves, we know […] what makes us happy [so] we can focus there [and] what to improve […] It's more about exploring self and fixing and improving potential. (F18)

Praying. I mean, like when there's a problem I can't fix alone. For me it's a little relieving. Like being able to pour your heart out. Makes [me] relieved, because I feel accompanied. (F24)

4.3.3. Environment and Infrastructure Conducive for Both Studying and Being Independent

Environment and infrastructure that support participants' studying and obtaining a sense of independence are positive influencers of QOL.

Basically, the three, wealth, position, [and success] is to facilitate our being happy. [The three] aren't my focus too much, see. [The focus is] happiness. (F18)

Aspects of the environment that affect QOL are listed in Table 4.8.

Table 4.8. Environmental and Infrastructural Aspects Improving QOL

Topic	Illustrative quote
Access to places and services	*Access to journals, books in library […] I mean, I feel luckier here than in other universities where getting learning resources may be difficult […] lab reports from seniors, lab subjects from teaching assistants. (F26)*
Accommodation and places to live	*[X city] is clean. Very comfortable to live in […] Good infrastructure is important because it makes our life easier. It's pretty much that. (F9)* *Also [the] place to live. I need to see if it's comfortable or not. (M2)*
Particular privileges	*Family is important for QOL [...] For example in medical world, if you want to apply to be a resident, people say if you are from common people* [sic]*, your chance to be accepted is somewhat lower than that of the child of a doctor, especially a staff in that hospital. (M11)*
Physical security, ranging from individual to global scale events	*[QOL] means no war and the likes, no natural disasters, [secure] physically and mentally, no terror from disturbing people. (M12)*
Regular and healthy meals	*Healthy food, yes. [If I am sick I] will not be fit to do anything. [It] decreases productivity. (F26)*
Stable job/finance; not just for self but also others	*[…] if we have money, and know how to use it well, we can improve our QOL, for example by buying things that support [our work]. So, money is also pretty important. (M14)*
Transportation system	*[X city] has all the facilities other big cities have, but there's no traffic jam! That's what I like. It's really comfortable to live there, and the people there follow rules; they obey the traffic rules. Here people ignore red lights and nobody will give chance to others. (F9)*

4.3.4. Personal Aspects

Descriptions of the participants' personal issues that positively affected their QOL are listed in Table 4.9 and illustrated by subsequent two quotes, with the rest available in Appendix XVII.

Table 4.9. Personal Aspects Improving QOL

Topic	Meaning
Achievement	Achieving goals/obtaining what is wanted; they serve as both success standard and further motivation
Exploration	Getting out of comfort zone and learning to know what activities give oneself satisfaction
Faith	Belief in religious teachings and/or God(s)
Freedom	Doing things whole-heartedly and not from coercion, which facilitates producing optimal results; also, by having the freedom to decide on something, students are also freely enabled to take responsibility for what they do
Health and longevity	A means of productivity enabling daily activities, working, and achieving
Internal motivation and determination	The willingness to grow, and willingness to sacrifice to progress, reach goals, and realise one's purpose
Patience and emotional stability	*[clear enough]*
Open-mindedness	Knowing personal views, thoughts, abilities, limits, attitude, goals; and whether they need to be improved; all these serve multiple purposes: to avoid disorderly life, to evaluate self, to direct self-development, and to fulfil expectations and self-actualisation
Safe feeling	Having neither worries nor anxiety
Self-acceptance	Focus on self, instead of comparing self to others, became the basis for motivation and self-improvement
Structured life	Conducting a disciplined and scheduled life; having plans enables the students to create measurement and steps to achieve goals and balanced life

> *If I weren't patient, I'd dropout before the third year […] In first semester I thought I wouldn't hang for long here. […] It seems I thought: 'In one year you'd be dead-- after-- if not insane, you'd be dead. Not breathing.' (F24)*

> *The importance of health is more about how someone can be productive, be creative, do daily activities. [Those are] what can make us happy. (M14)*

Regarding competition, the students had coloured perceptions, with voices that told it as being advantageous, deleterious, or neutral towards their studying and motivation, and even divergently affecting them at different times.

> *There's this fear seeing friends academically so bright, having connections, or having something I don't. (F18)*
>
> *[I'm] rather burdened with competition. Like in school seeing others already learn far [while] I haven't. [Competition] may decrease or increase […] motivation. (F19)*
>
> *Competition makes us grow, yes, grow so that [our] career also improves. [It's] actually good. (M11)*

Another thing of note is one student thought that augmenting positive factors for QOL should be the focus in life, while using the negative ones as a platform to learn to be a better person.

> *[…] we humans surely have positives and negatives [...] The important thing is doing the positive things […] We can learn. Everybody makes mistakes; we learn from the mistakes. (F14)*

Below is a summary diagram of the positive influences towards participants' well-being.

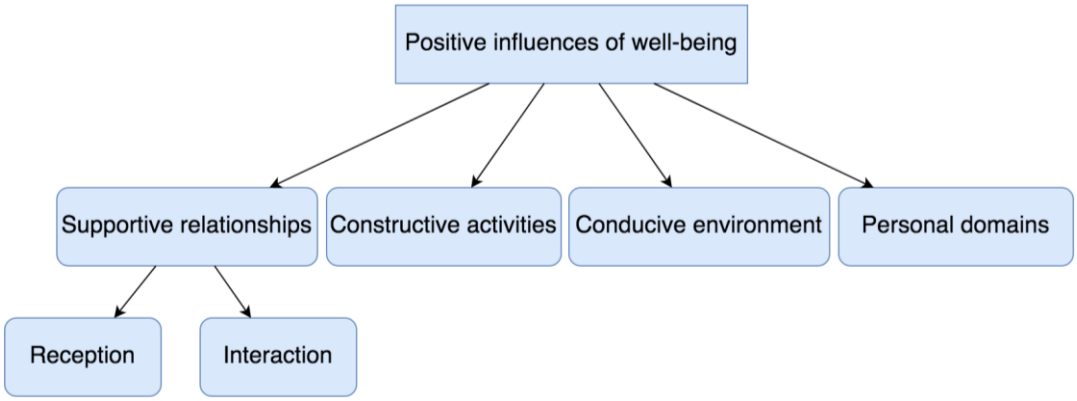

Figure 4.2. Positive Influences towards Participants' Well-being

Whereas negative factors might be seen in a positive light if they lead to learning and growth, the focus in the following section is on factors potentially detrimental to a good QOL.

4.4. Negative Influences

Again, there were nuanced facets that may deteriorate QOL for the participants, and these included dysfunctional relationship, bereavement, and a list of perceived deficiencies.

4.4.1. Dysfunctional Relationship

> *We can't live without other people. So if our relationship with people around us is bad, what is there to say, we can't do anything without them. (F9)*

The issues stemming from unsupportive relationships involve disappointments either within oneself or perceived from others, and a layer of overlap between both, as elaborated in the Tables 4.10 and illustrated by two quotes below. The full table is available in Appendix XVIII.

Table 4.10. Aspects of Dysfunctional Relationship

Topic	Meaning
Conflict with others	Problematic relationship, misunderstandings, conflicts, breakups, betrayal in the family, friendship, or dating; being let down after trusting; grudges and lack of forgiveness; feeling guilty; inability to establish communication, trust, cooperation, and mutual understanding; these disturb mood, bring sadness, and hamper cooperation for achieving goals)
Feeling chastised	Scolding by, restriction from, or contradiction with parents or tradition
Feeling lonely and not enough within self	Seeing colleagues having dates, especially when they were in the same class and both were smart, because it makes one feel alone and without help when studying; furthermore, comparing self to others whether in background, lifestyle, or goals
Feeling not enough for others	Rejection, lack of appreciation, support, and encouragement, or high expectations either from family, friends, partner, or other people; non-constructive feedback; bad opinion from others; these preoccupy student's mind, make one feel unappreciated, self-conscious, and uncomfortable, and shut self down from other people
Peer pressure	Having to follow what friends want when one does not want to do it (e.g. to keep getting along)

Maybe it's restriction from our parents. For example, when parents say I want you to be as such, while in [my] heart 'I can't do that'; in my heart, I'm not so sure about that. But because parents' restriction, and because parents still think of Javanese tradition, 'What will our neighbours say?' (F8)

Conflicts [are] very negative; mood free-falls throughout the day; hah, so sad. It can even continue the next day. (F20)

4.4.2. Bereavement

Students mentioned that death or the thought of death of the people they loved, especially parents, brought them considerable pain. In addition, becoming separated from people they had been close with before also upset them.

Death or people I love leaving, also break-ups may decide our QOL. Furthermore, relationship with friends becoming distant can affect [QOL]. It's sad to lose people who were close but [now] aren't. (M12)

4.4.3. Deficiency

Several overlapping negative influences towards the participants' well-being clearly radiated a sense of deficiency, and are putatively grouped as appraisal and resilience, health and situational, and intellectual aspects within Tables 4.11 – 4.13. Illustrative quotes for Table 4.11 are available in Appendix XIX.

Table 4.11. Appraisal and Resilience Issues Negatively Affecting QOL

Topic	Meaning
Complaining and complacency	Lack of gratitude, which also produced complaining, made one unable to empathise with and be beneficial to others; on the contrary, complacency might bring carelessness or regret; furthermore, staying in comfort zone might blind oneself from recognising their shortcomings
Incompetent or not achieving	Feeling and seen as incompetent may make participants upset, and is uncomfortable and shameful for the respondents
Lacking control	Not having enough command of emotion (including holding grudges), infrastructure, and time, which makes them uncomfortable because they feel controlled by situation instead of the other way around
Lacking faith/religiosity	With lack of faith in and devotion to God(s), students feared there will be many trials and obstacles that cannot be overcome, make them feel failed, and worsen self-confidence and happiness
Pessimistic	Pessimism and listening to negative words made oneself unhappy and ungrateful, unproductive, lazy, and waste time; similarly, sense of failure without enough fortitude, self-confidence, acceptance, and patience brought discomfort, unrest, frustration, even suicidal thoughts
Self-blame	Blaming self for undesirable events happening in life
Unconfident	Lack of self-confidence, which impedes self-actualisation
Undriven	Non-existence of motivation or purpose, lack of discipline, laziness, procrastination, unwillingness to sacrifice, and despair as they prevent one from achieving goals; being coerced or sudden/unplanned changes in schedule, which may make one work unpurposefully, half-heartedly, irresponsibly, or suboptimally; not solving problems, which may pile up and worsen

Table 4.12. Health and Situational Issues Negatively Affecting QOL

Topic (Meaning)	Illustrative quote
In non-conducive environment (Bad or non-suitable infrastructure for growth or reaching goals (e.g. uncomfortable accommodation and transportation system), which steals time and energy that should have been used for something productive; not possessing good education, or being "technologically stuttered")	*Can you imagine a crowded city where we have to go to school at 4 in the morning, and staying in the traffic jam? (F9)* *I can't do anything when [a place is] too small or a mess. (F17)*
Insolvent (Financial instability or having neither stable job nor income, which means inability to fulfil daily goals and brings stress, preoccupation, and disappointment)	*If we're [financially] hampered we won't be able to conduct daily activities, and later fulfil our targets for that day, which in turn makes us stressed, burdened. (M7)*
Physically and mentally deprived (Lack of food, rest, recreation, or exercise; physical illness (self or family; one student mentioned that being on period also annoyed her); low mood, and mental stress or instability; these make one weaker, prone to mistakes, jaded, uncomfortable, and also reduce the students' ability to think and work to reach life goals)	*Not meeting needs, like not eating when hungry, not sleeping when sleepy. [It] simply makes us ill. Being ill means our QOL-- like we can do nothing, non-functioning. (F20)* *My mum's sick, then died. Then there're so many tasks I couldn't finish. They're pressures. It made me* [voice trembling] *suffer from depression. I had to repeat semesters and all. It really deteriorated QOL […] Maybe people consider that I don't struggle enough… (M12)*

Table 4.13. Intellectual Issues Negatively Affecting QOL

Topic (Meaning)	Illustrative quote
Disorganised (Being irresponsible or failure in balancing life or managing time between activities (e.g. religious worship, studying, socialising, and within organisations) prevents one from focusing, achieving, and being present in a situation; it even worsened health and made oneself fail in education)	*At times, I did find imbalances, where my academic [achievement] deteriorated, while I was at the busiest in organisations. At those moments, in my opinion my QOL is in disarray […] Too much organisation, too much socialising, but diminishing academically, in my opinion doesn't improve QOL. (M9)*
Lacking wisdom or learner attitude (Lack of knowledge or inability to make informed decisions and solve problems, which lowers confidence and makes life and interaction more difficult)	*When we're unwilling to learn, we automatically won't know new things. We won't be able to discern between good and bad […] we can get lost [while] as humans we have to take responsibility for all our choices […] We'll be in difficulties, we'll also be confused. (M10)*
Unfocused (Distraction, preoccupying thoughts, ruminating about past or future, or not doing meditative activities (e.g. praying) waste time for the participants, and they made oneself complain, feel lethargic, unable to focus and do the best, and less able to control emotions)	*I […] I should've focused on just one activity. [I] sometimes went home late at night, or my mind became distracted; distracted mind made us […] stressed. (M11)*

The issues regarding appraisal, supportive environment, and health deprivation also pervade students' academic life. To illustrate the cultural situation the respondents experienced, they remarked about the culture of seniority where discourse is discouraged, or where they are expected to just follow or even fear their seniors or teaching staff, and communication was unidirectional, which may

impede learning and exchange of knowledge, progress, and realising potentials. Respondents also had trouble with convoluted bureaucracy and perceived conflicts of interest. They mentioned that the situation previously described, e.g. avoidance against verbal straightforwardness or inequality of access into competitions or organisations, might negatively influence their QOL.

> *Maybe an influence from culture, where as medical students, especially in this university which holds fast to culture of* kulonuwun [asking for permission, approval, or endorsement] *and* pakewuh [reluctance to bother others]. *So when I talk with my seniors or teachers or residents, there's always something held back from me, like my potential […] we automatically must just nod, stay quiet.* [respondent seemed exasperated recounting about this] *We should've been able to express opinion justly and fairly […] there's feeling of fear […] interns here must follow seniors everywhere* [which] *wastes time; we actually can do other stuff, making appointments with sure hours. (M14)*

Further within practical academic situations, this appraisal and support imbalance showed in that students worried about the lack of chance to discuss with teachers; heavy curriculum blocks; piled assignments and heavy study load; examination resits or semester repeat, which steal the time and energy needed to learn other subjects; justifications for high-stakes examinations and grades that did not reflect the effort made, which might lessen family's trust in their taking responsibility to study, and even bring despair for the students.

> *[…] heavy [study] blocks, or piled assignments, they increase stress. Can only think of assignments. Hard to do other activities. (F28)*

The structures of negative influences towards students' well-being are summarised in Figure 4.3.

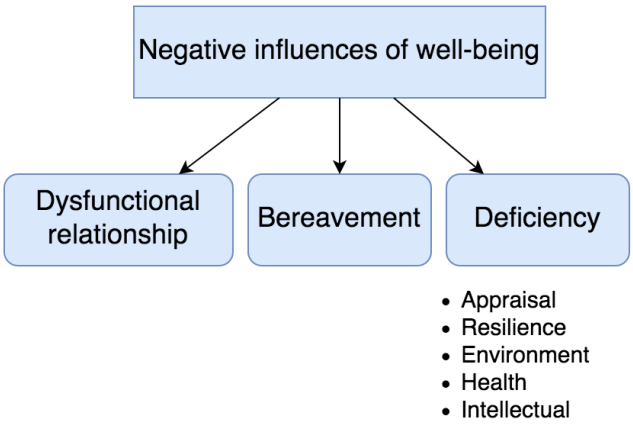

Figure 4.3. Negative Influences towards Participants' Well-being

How students, their studying medicine, and their well-being formed a dynamic relationship will be further explored in the following section.

4.5. Changes Throughout Study

The third research question asked: "What changes happen to the ascribed meaning [of QOL contributors] throughout the students' study years?"

> *So I feel that the changes were very significant, especially in the first year as I still tried to adapt, still tried to understand how to be a proper medical student; if we compare to other students, or other faculties, being a medical student is very different. And then the next years; in second year, we understand more how to regulate ourselves as a medical student, it formed – it is very important to be involved in organisations, or to know more people, because in the medical world, later I will be involved in a social environment. Finally, I'm thinking – in the third and fourth years, I'm thinking of where I want to go* [emphasis]*. After I graduate, after internship, what am I going to do? It is starting to come in mind. So there are these different... levels of thinking. (M6)*

After having studied medicine, students mentioned about changes, either positively or negatively viewed, occurring in five aspects of their lives, namely relationships, how they perceive time, their studying, personal growth, and spirituality/religiosity.

4.5.1. Relationship Dimension

What changed in the relationship part of students' lives is summarised in Tables 4.14 – 4.15. To facilitate reading, topics were grouped into intangible and tangible aspects of relationships. Two illustrated quotes pertinent to Table 4.14 are provided, with the whole table available in Appendix XX.

Table 4.14. Intangible Changes in Students' Relationships

Topic	Changes
Appreciation towards others	More appreciative towards what parents do and sacrifice for them, care for parents more; also respect for colleagues both senior and junior
Discomposure	For some students that study outside their hometown, they might feel confused as to how to socialise with new people
Empathy	Students became more patient and considerate towards other people; more listening and more empathetic to others' difficulties
Genuineness	Students valued genuine friendship more, not as just about having fun, but where they could be themselves, and as a support tool academically and otherwise
Giving	Students contributed more to the community
Learning socialising skills	Students learned to better socialise, respect others, and treat others well, be more open to people, be involved in more activities, tolerate situations more, are less selfish; those were perceived as important both to know and improve self, to maintain good relationship, and for their academic progress and productivity at work; one student mentioned that studying in a big city made them feel confused when trying to get along with others

> *Beside me was someone with Down Syndrome, [a condition] I learned about from studying, [so] I respect [people with that condition] more. [Furthermore] I learned about […] pregnancy and delivery. I [now] can value […] a mother's struggle. (F19)*

> *Now that I automatically stay [here], I must get along with friends […] Want it or not I learn [this] language, try to understand them too, how their [way of] live is, how courtesy here works. (M10)*

Table 4.15. Tangible Changes in Students' Relationships

Topic (Changes)	Illustrative quote
Impermanence (Student accepted that not all people stay)	*Only now I realise [even when] I did my best, you'd still have enemies or people who dislike you […] So I try to ignore [those things]. Actually ignoring [them] is good. (F25)*
Quantity and types of relationship, including romantic (Students met broader range of people, more indiscriminate, have more friends, started dating which may help in studying; yet a few students felt that some people are bothered because students have less time with them, and that either they instead have fewer friends or cannot date because of the demanding school schedule)	*I'm an adult student, certainly [I'm] interested in males. I found a boyfriend here. It helps motivate me […] to get good grades and graduate sooner [and] I feel he helped. (F14)* *I graduated from* madrasah [islamic school]. *Now that I entered [medical] school, it may be a little different with the situation in the past. The difference is [I] meet more people whose views weren't taught to me. (M2)*

4.5.2. Time Dimension

> *Time is important. Time is like a ruler, which symbolises how many centimetres we have today […] The target is doing what we must do along the length of the ruler. There are goals […] These daily goals are important for me, in order to achieve bigger goal, our life's dream, more or less. (M7)*

Changes in time management ability and what student felt is lost in relation with time are displayed in Tables 4.16 – 4.17.

Table 4.16. Time Management Changes

Topic (Changes)	Illustrative quote
Appreciation towards time and usefulness of time management (Students developed better abilities to manage and value time, in which colleagues and school environment contribute; students realised that they want different things but time is a limited resource)	*[Able to] manage time, honestly feels better. […] The longer [I am] here, the more I know to fit time to study, or what hours are good to study, when we arrange the time, when we're tired studying, we need leisure with either family or girlfriend. (M17)*
Not dwelling (Students cannot be upset for too long when unwanted things happen because studying medicine demands a "24-hour attention")	*In the past [we] often let ourselves be anxious and ruminating. So we leave it drawn out as such. Now in medical school we're like being told to stand by 24 hours [a day]. So the way of thinking [must be] changed. […] Tomorrow must be [on form] again. Can't ruminate too long. (F17)*

Table 4.17. What is Lost in Time

Topic (Changes)	Illustrative quote
Health (Students actually mentioned suffering from illnesses more after having been in medical school	*Health, because well, [I] often stay awake until late at night, obviously because studying medicine. Staying awake late more. That's the deterioration. [I] often catch cold. Especially near exams. (F11)*
Leisure (Students had less time doing exercise, hobbies, or daily routines such as watching TV, talking with neighbours, or attending traditional ceremonies; some actually felt this was an improvement because they then learned to decide what things were important and to focus on them)	*What's negative, I seldom exercise [in medical school]. It's a shame if I don't use 4 to 6 AM to study. (F15)* *The point is, finding time to have leisure is very hard [...] The past mindset was basically 'finish [studying] and only after that, leisure'. In reality… Proof is I didn't find time to leisure at all. It made me-- I thought-- I mean, I self-diagnose that it seemed I was depressed. I was very sad. So things I enjoyed doing were no longer enjoyable. (F20)*
People (Interaction with family, friends, and dates)	*Time is spent to study […] gathering with family became rare […] Something is lacking. Usually we told stories when we gathered. (F2)*
Rest (For students, lack of rest might result in unstable emotion, inability to concentrate, and proneness to illness. One student mentioned that falling asleep is akin to committing sin in studying medicine)	*Here in medical school, it's very difficult to get sleep […] If I choose sleep, it means I don't study. If I want to study, it means I don't sleep. [I'm] tired when at school. (F6)*

4.5.3. Studying Dimension

To facilitate reading flow, students' novel understandings around studying medicine are grouped in Tables 4.18 – 4.21, which respectively focus on attitude towards studying, then costs, external tensions, and rewards of studying.

Table 4.18. Attitude in Studying

Topic (Changes)	Illustrative quote
Coping (Students developed coping abilities and personal learning strategies for the study load; they learned to understand and connect concepts rather than just memorise; they thought this was important further down their clinical years to help think and act quickly in clinical situations; also, they developed understanding of why something needs to be learned)	*So I tried to tinker with my learning styles* [sic]*. Finally I found until now I like group study […] In group study I feel nudged to learn before my friends. So when I meet in the group I'm not empty, [also] besides they can give feedback. […] Also, much of my time spent in organisation, warnings and alarms from friends often motivate me [to study]. (M9)*
Diligence (Students were more diligent, to which many things contribute: family and friends' support, infrastructure, concerns regarding family, friends, or personal health, and increasing internal motivation)	*[I] ought to study more […] Maybe that's the most noticeable […] I am more productive. Yes, it is important because the schedule in this school is tight […] If [I] don't study even just a day, I will trail behind […] because a lot of people, lots of patients, expect from me, for them to trust me [...] (F8)*
Effort (More effort needed to understand studying subjects; a few students felt they have a hard time keeping up with the curriculum's pace)	*Now I need to read books-- journals, books with words I don't understand. […] I can't just read them […] Listening to teachers is not enough [and] in group discussions, tutorials […] if we don't read, we can't say anything. (F17)*

Table 4.19. Cost of Studying

Topic (Changes)	Illustrative quote
Physical cost (Students felt tired from the continuous burden of studying, even worsening health due to lack of sleep and exercise, even as they actually knew more how to maintain their own health)	*Sleep[time] lessens, certainly. (F17)* *[I'm] tired. Tired. Maybe-- Well [I'm] only human, studying morning until evening. (M3)*
Mental cost (Participants felt more frequent stress, which could cause jadedness, thinking difficulties, and less ability to control emotion; moreover, a few students at times actually felt anxious when studying a topic that might be related to their own health)	*[…] studying medicine makes me know a little about my own health, what happens within my body and all. Sometimes that makes me paranoid. Like in digestive block, when I experienced changes in my bowel movement, I got paranoid. (M10)*
Financial cost (Students felt the increasing expenses, both for daily life and medical books and instruments)	*I study in medical school, which automatically means I have plenty expenses for studying. If my parents' income isn't enough, my needs are automatically unmet, while those are very important for my study. (F9)*

Table 4.20. External Tensions of Studying

Topic (Changes)	Illustrative quote
With parents (Where studying medicine was their parents' desire, participants were more accepting now, although differences might still exist)	*I was a little lost, I mean I want to study [something else] but, um, parents seemed to disagree […] So at that time I considered until I decided to, um, um, say, substitute [it with] my mum's dream. So I decided to study medicine, even when… first year was actually like hell for me. I mean, heavily stressed […] There was regret actually, why I obliged, why I obliged, but if I stayed rejecting, hard at heart and head, my life would stay the same. So I learned to accept reality, that I am a medical student. (F25)*
With friends and people in general (Students realised that people outside medical school might not understand how medical school system works or the students' experience within it)	*[Old] friends saw me very differently […] I'm tired [explaining]. I have explained stuff, and I need to explain again […] I feel people outside medical school or medical world literally don't know at all what happens in the hospital. [It's] not a problem as long as I don't need to explain to them.* [laughing] *(F23)*

Table 4.21. Rewards of Studying

Topic (Changes)	Illustrative quote
Knowledgeableness (Students sensed they had more medical knowledge compared to the beginning of medical school, and this helps for: ▪ caring self ▪ further motivation ▪ informing in making decisions ▪ being empathetic towards and helping people ▪ knowing how they have been doing in relation to their goals, and ▪ source of gratitude and awe towards God(s))	*In terms of knowledge, clearly it's very good now [even to the point where] someone at home is sick, [they] ask me […] So I'm glad I can help. (M8)* *After entering medical school, I learned about human being and all about it. So I think I am being more grateful now for how God has created human […] I also feel more desire to maintain our health because it's a gift from God. (F10)*
Prestige (Students sensed the prestige and compliments from others by being known as medical students)	*In my mind there was no: 'Being a doctor is prestigious!' I really [did it] first because of my parents, second, it's a safe thing to do […] Now every time I told anybody I study medicine [...] they're struck in awe […] It's a new thing for me. (F23)*

4.5.4. Personal Growth Dimension

> *[Humans] want to always achieve things. But there are times, when we need to wait, until the coffee grounds settle, and only then we can drink the coffee. (M14)*

Details of personal growth are grouped for ease of reading into determination, esteem, kindness, and learning within Tables 4.22 – 4.25 respectively.

Table 4.22. Determination Changes

Topic (Changes)	Illustrative quote
Genuine (Doing things for the sake of helping people and not a reward)	*I'm speaking as a doctor who'll help to cure people, right […] We have to be genuine and not expecting back in helping people […] People still think that doctors earn a lot of money [and] have big salary; it's not true […] If we aren't [being sincere], we wouldn't perform our best. We'll just do so-so. Lazily do it. [But] when we're being sincere, we'll do it wholeheartedly. (F10)*
Purposeful (Students had clearer sight, further targets, and more sense of purpose compared to how they were in the past; they also explore more of what they wanted)	*After some thinking, at last I found new view, that humans are shaped to be someone meritable of what they do. […] Before entering medicine, I thought my aim was to be a doctor. After entering medicine, I changed […] So I see that becoming a doctor is a consequence of making a choice, while my goal is to make parents happy. [This is] important because it's a motivation that steadily grows [us]. I think when someone aims to be a doctor, after they become one, it's finished. But when their motivation is to make parents happy, making parents happy will never finish. So indirectly we add to our own capacity. (M9)*
Responsible (They became more responsible, even with more obligations; they managed money and other details of life better)	*So there are times when we have to postpone something we wanted to do just to fulfil a more important obligation. (M6)*

Table 4.23. Esteem Changes

Topic (Changes)	Illustrative quote
Confident (Students had more self-confidence and assertiveness, and students living away from family in particular saw themselves becoming more independent)	*Now that I live alone […] want it or not I need to be more independent, how I manage waking up in the morning, how I have meals, the school life, studying, socially, and so on. We must try to manage ourselves. (M10)*
Not paranoid (Students made fewer unfounded negative assumption)	*'These guys are talking bad about me.' Maybe I thought like that in the past. But, 'Oh, maybe they're discussing homework, or the [class] before.' So, not thinking like in the past. More positive thinking, and not easily judgmental. (F18)*
Proud (Internal pride from becoming a doctor was building in students)	*So I already said I didn't know there's this prestige [being a medical student]. It's a new thing for me, [thinking] 'Oh, is this a big deal?' [and] 'Yeah, I've come this far' […] So I accept that, like… basking in the glory. (F23)*

Table 4.24. Kindness Changes

Topic (Changes)	Illustrative quote
Accepting and making the most of the present (Students felt they were more accepting towards life and the past, and more forgiving towards self and others; they were more comfortable being themselves; these acceptances became the basis for self-improvement; they preferred to focus on developing their good qualities instead of ruminating on shortcomings or what people say about them)	*I wanted dentistry* [small laugh] *but parents, especially mum is like, 'Medicine is better.' […] My goal is to make parents happy too, so be it, [I'm] already here, […] maybe this is the place that'll make me grow. [I] got used to having to resit exams; it's a bad thing, attending remedials, but what can I do, my ability only goes so far. […] So I think, 'Just continue.' I'm continuing to the next stages, arranging for the future, also improving life […] The important thing is I neither stay still nor do nothing […] (F14)*
Consideration (They became more patient, empathetic, sociable, adaptable to the complexities of life; also able to be open-minded and see things from multiple views; furthermore they built networking)	*[I'm] more open-minded. Broader views… more able to deliberate. (F5)* *[…] I was stubborn [even] when I was wrong; but after I entered medicine, I feel that my character is more flexible [and therefore] comfortable. (M11)*
Appreciation towards human body and taking care of appearance (More knowledge from studying medicine prompted the students to be grateful and care for their own bodies more; they also took more care of appearance because of realisation that in real life people still judge by the cover, to mingle in more easily, as part of professionalism, and/or to obtain patients' trust)	[laughing] *This is funny: [I] care about appearance more. […] Because… you judge the book from the cover.* [laughing] *[…] I didn't care about it that much [but] after studying medicine, 'Oh, medical people should be like this.' […] Well, maybe [it's about] prestige too. […] It's still like that here. [Also] people, especially those new to us, will want to do interaction comfortably. (F21)*

Table 4.25. Learned Skills

Topic (Changes)	Illustrative quote
Financial (Students felt they are more capable in managing money)	*Ever since [I] became a boarding student, well-- it's good that I can manage [my] own finance; it's still difficult at times, [I even] lost track sometimes. But now it's good! It was horrible at first. (M8)*
Independent (Students have been learning to live by themselves)	*Now it's all by myself. Scheduling life, doing things. [I] adapt. [I] at first was often homesick. [Now I] become used to the long distance, feel more comfortable, and not too worried. (F12)*
Reflective (They were more critical, open-minded, and learned better from past actions to inform their present decisions, developed problem-solving ability, and valued not just results but the progress)	*If I didn't change my way of thinking, I wouldn't survive […] until becoming a doctor. So the ability [to think] is honed with problems [I experienced]. Rather than blaming others, […] I must find my mistakes and find solutions by myself. Sort of understanding differences [between me and other people]. (F17)*
Social (Students built leadership and managerial abilities, in order to help people and to realise dreams)	*[Medical] school is a plural environment and we're faced with different conflicts […] I learned a lot from that. So for example when I want to criticise a policy. It can't just be seen from one side. (F25)* *[Being in medical school] opened my mind regarding dealing with people whose backgrounds we don't know. [I'm] more understanding of others' situation. This relates to future profession as a doctor, where we can't choose who our patients are. (M7)*

Several students specifically noted that they were active in organisations more since they have been in medical school. For those who did this, they commented as well that doing so brought positive impact towards their development as a person and a professional, even if there were few instances where being involved in organisations made them tired or negatively impacted their academic grades.

> *[Time is spent in organisations] but not in vain. [There are many benefits] from doing organisations. […] Communication [skills], time management, things like that. Opening the mind… Meeting many people with different thoughts. (M9)*

4.5.5. Religiosity/spirituality

The students apparently did not distinctly separate between religiosity and spirituality, as can be seen from the answer below when one participant was given a probe question on whether they meant more about religious rituals or a closer relationship with God(s):

> *The way to get closer to Him is by doing what He told us to do, by the rules that we have in our religion. We have to follow those rules. (F10)*

Students feel closer to God(s) and more devoted now because they depend on God(s) to strengthen and comfort them in medical school, for those who are religious; religion also told one to maintain good relationship with others and treat people well.

> *[I asked] God to strengthen me [in medical school]. [I'm] closer to Him. I physically try the best, [and I] ask God at the beginning to be strengthened and at the end that what [I've] done be blessed. (F13)*

All in all, throughout time in medical school the students considered their well-being has been improving relative to their past. Even with difficulties still present, they become stronger, wiser, more realistic, and more adaptable in life.

> *I'd say [my QOL] has been improving, but it can be said as well that I have lots of shortcomings. As they say, the more I know, the more I don't know. […] In the past […] I was blind of where I was lacking. (F18)*

Figure 4.4 summarises the changes students experienced during their time in medical school.

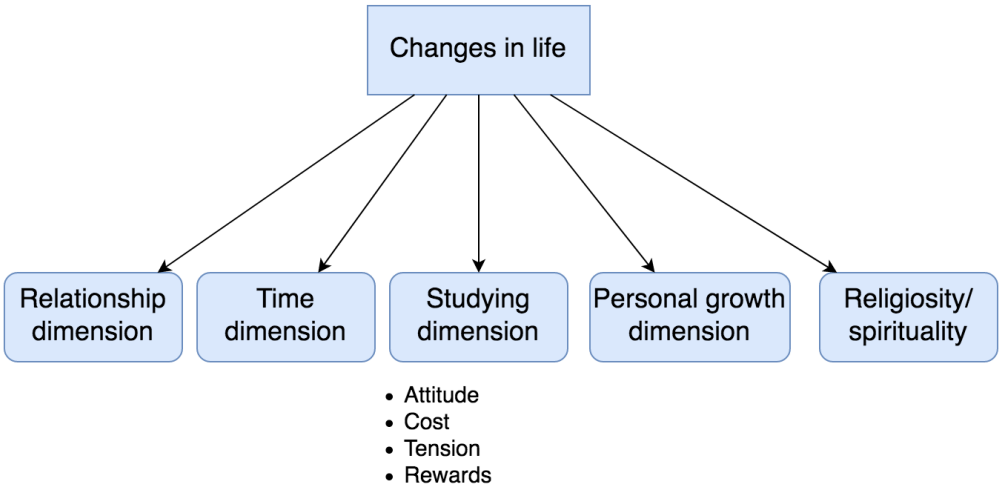

Figure 4.4. Appreciation of Changes in Participants' Lives in Relation to Their Well-being

Until now, I have covered both the changes between past and present life, and actual positive and negative QOL contributors. The last lens needed to round off my findings on Indonesian students' QOL are presented in the last two sections, which constitute their hopes and fears for the future (see Section 2.2.1).

4.6. Hopes

Participants mentioned many things that they considered would improve their QOL in the future. Although many constructs of the respondents' hopes overlapped each other, I attempt to group them into hopes regarding achievement and self-actualisation, work atmosphere and personal attitude in the workplace, relationship, and lastly few miscellaneous ones.

4.6.1. Achievement and Self-actualisation

Throughout the interviews, hopes related to sense of achievement and self-actualisation were the most commonly mentioned by the students. They are presented throughout Tables 4.26 – 4.28, clustered according to academic, career, and personal domains. Two quotes each follow Tables 4.26 – 4.27, with the full tables available in Appendices XXI – XXII.

Table 4.26. Academic Achievement

Topic	Meaning
Academically achieving smoothly	To study harder; to graduate soon without any resits, even obtaining cum laude; to have an internship as they wanted and learn through it; to pass national competence examination; those would become a reward, conviction, or justification for time spent, a mark of personal growth and professional responsibility by meeting the needs of the people, or fulfilment of parents' expectation and making them proud and happy
Studying further	Almost all students wanted to take a specialist degree, because they perceived people search for specialists rather than GPs; the degree will also give them a competitive edge and make them work better by having a focused field, or because their parents wanted them to do so, or as a personal reward for difficult experiences in studying medicine; students preferred specialisation in the field they love because it is something they will do for the rest of their lives and because they want to take care of other human beings optimally; a few students look for a possibility to obtain postgraduate scholarship; a few students hoped to obtain that scholarship abroad, to challenge themselves and live in a country considered more orderly and open-minded, and to more easily support their parents financially, or because they perceived that specialist study in the country is rife with seniority attitude, involves bare or no compensation, irrelevant orders, and sycophancy-favouring seniors/teachers

Better understanding of the rest [of things] to learn, indicated by satisfying grades, then graduating in time […] because [those are] indicators of my success in studying all this time. (F15)

Taking a specialist education, or maybe studying in health management […] Can't deny a GP now-- like-- not usef-- maybe less, not that "wow", [and] for the future is less promising [and] not useful [because] here I see people really straight away visit specialists. It also affects [financially]. (F5)

Table 4.27. Career Achievement

Topic	Meaning
Secure job	To work as a doctor, which means having a clear job and making money, and sufficient, unworrisome, and independent future life; acquiring plenty of clients, enough or proper salary, and good infrastructure as practitioner, as a reward in itself or a means to be even more beneficial to other people; a few students wanted to be medical teachers or policymakers; they thought that being involved in organisations was the most effective way to influence people and bring improvement; some aspired to be entrepreneurs, or create joint research/venture with colleagues to make a living instead from the illness of patients, and to eventually build a better community
Secure system	For more certainty in national policy regarding primary care, standard of medical qualification, and accreditation of medical schools; improvement in universal health care system for the comfort and benefit of both society and medical professionals; some students even mentioned going abroad because of the perceived hardship living as medical professionals in the country

[I wish the] healthcare system be better, so that doctors can have good job prospect […] When laws don't support doctors, it means like nothing supports us, covers us […] Chances to develop narrow because [of it]. (F15)

[I wish] with fellow doctors we create ventures, which doesn't depend on patients' illness […] so we don't depend so much on our job as doctors […] There's this stigma that doctors gain money from people being ill. (M14)

Table 4.28. Personal Achievement

Topic (Meaning)	Illustrative quote
Established (To be able to finance self and help others)	*I want to be independent. By working, I automatically can [provide] firstly for myself […] Financially established is a target [although] being established doesn't just mean materially. Socially, I can help others by having my job. (M10)*
Optimal self (To grow as a person and simply do the best one can in life and be the best version of oneself, also through learning from the environment)	*[I] must improve in everything. That's the hope. I want to be better and better [...] to be able to care for others, [...] have a conviction, [and] be noble. (F17)* *By making a family, we automatically know something new […] we can better learn about our own lives, how to build on life, build a household, and so on […] How we communicate and interact with people, acknowledge people, I probably won't get it in the class. I get it in doing organisations, when being with friends. (M10)*
Self-direction in studying (To have clearer understanding of what they want in the future regarding education and being involved in organisations, to avoid wasting time, make planning easier, and gain more control over daily life)	*I want to have a clear heading, like where to-- clear aim, and more assertively communicate it to my grant donor [who is] my parents. Sometimes, clashing with-- I actually didn't think I want medicine […] So in the future I want to know what... study to take, that I'll do it without feeling pressured. So it can be said my being in medicine is 70% pressured by… parents' desire […] Clear aim makes setting up action plan easier. So, we have more control of [our] activities […] Not having control, again, wastes time [and] not doing optimally; the result then isn't satisfying. (F20)*
Self-direction at work (To work in a place they want for different reasons: to be close to parents, to spare self from having to adapt yet again with the perceived difficult life and infrastructure; or on the other hand to self-actualise, get a new challenge or to adventure)	*It is very important! It's how it is! I really want to live [in X city]. My parents also live there […] I like familiar environments. (F11)* *I want-- I plan to intern outside Java [island]. To adventure. I also want to be a doctor in a company-- I like going around. I also want to be a doctor on a ship [...] I like [being] dynamic. (F25)*

4.6.2. Atmosphere and Personal Attitude in The Workplace

Hopes regarding work atmosphere and participants' own personal attitudes in the workplace are shown in Tables 4.29 – 4.30.

Table 4.29. Regarding Personal Attitude in Workplace

Topic (Meaning)	Illustrative quote
Confident (To believe in having professional capabilities and being beneficial to others in career)	*[But] so long as I get the knowledge, I think it's enough [because I] can be more confident with the knowledge I have [and] can conduct well as a doctor. It makes me happy, what I do being fruitful [and] people, similarly, gain the benefits. (F12)*
Dedicated (To love medical science more; to enjoy the process of becoming a doctor more; to enjoy their future job; to be sincere when working as a doctor and helping people, especially after they heard news about their profession being disadvantaged with the advent of the national health system)	*I hope I can be an* amanah [trustworthy in responsibility] *doctor, can help many people without thinking of* pamrih [personal interest or ulterior motive]*, and truly apply the knowledge […] I want to acquire even more knowledge so that I can help people […] seeing that now Indonesia has universal health coverage, if you want to live comfortably being a doctor, it's... no longer like that. (F8)*
Self-management (To improve handling emotion, patience, self-confidence, discipline, consistency, and independence; to avoid procrastination; to manage time and priorities even better in preparing for future career and family, because resources are limited and there are goals to achieve)	*Maybe also how to control myself […] how to behave, or how I feel about something […] maybe respect others' opinion more […] how to combine my thoughts with others' […] beside improving my QOL, I feel that it improves theirs too. (F24)*

Table 4.30. Regarding Workplace Atmosphere

Topic (Meaning)	Illustrative quote
Driving (A conducive and motivating work environment)	*I have to find challenges where I need to put my abilities to my limits in my workplace. I don't want to go halfway, be half-hearted. (M9)*
Fair-treated (Fair competition)	*When there's a selection, or… competition, or interesting opportunity, it must be openly announced to students […] The faculty can't just plot the same students again and again. (F26)*
Respected (To gain respect through good career)	*Career is important because we will be respected for it by other people. With career, it is easier to socialise with other people, when we are considered to have a quality career. (M6)*

4.6.3. Relationship-related

There were salient hopes concerning relationship expressed by the students, the most common being making parents happy, listed with others in Tables 4.31 – 4.32. Two illustrative quotes are shown for Table 4.31, with the full table available in Appendix XXIII.

Table 4.31. Harmonious Living

Topic	Meaning
Harmony with family and friends	To be able to help improve the situation in their family; to be happy together with family, friends, other people and continue to have a mutually supportive relationship with them, which included parents seeing them graduate and graduating with colleagues of the same cohort
Harmony with future children	To have children who would be helpful
Harmony with partner	To get a compatible partner who would understand the perks of being a doctor, which they thought will result in fewer problems, and also to build a family that lives in a peaceful home and neighbourhood. A few students see marriage as an inherent part of living, and that creating a family is a part of learning about life and becoming the optimal self; yet another student wished to create a social institution with future spouse that cares for disadvantaged people
Harmony with patients	To be able to communicate well with patients
Harmony with people in general	That people will accept them more and be more understanding towards each other

I've heard cases where an expert doctor couldn't communicate with patients despite their good competencies. So in such a case, the patients didn't feel better […] We have to broaden our connection so that we can learn how good communication is, how to understand each other, how to respond, so we can be better [emphasis] *in treating patients. (F10)*

Finding a partner, life-partner […] I definitely can't live alone, I need a partner to support me, maybe that's one of the ways I'm improving my future life. […] A partner is important because after I leave parents, I need someone I can trust [...] a friend to share; a friend to enjoy, well, maybe my success, and um, certainly to have children […] to continue what we've been working […] (M15)

Table 4.32. Other Relationship Matters

Topic (Meaning)	Illustrative quote
Family support (That family would have enough fund to finance medical study until the student graduate; that family would stay patient and still support them)	*[I] hope [I] will always get support from [my] parents. (F7)*
Helping others, and improving their QOL (To help people become independent and increase their QOL too; to mutually enrich each other)	*[…] that we may be beneficial towards as many people as possible by increasing their productivity and making them independent […] Now that's being helpful. [Together flourishing] with people is my life satisfaction. (M13)*
Legacy (To be inspiration to others; to leave legacy either through biological children or by teaching the next generation; one student mentioned that they hoped their children would support them when they get older)	*In the future I want to create a generation […] I have children or […] if I become clinician I want to teach. [It's] important because [we] must give whatever knowledge to another generation so that they may survive in their time. (M9)*
Making parents happy (To make parents happy as a return for what parents did all this time -- including financially supporting parents and/or siblings in the future-- either as a gesture of gratitude or because it was expected of them)	*Financially, because I'm the eldest child, mother like already cautioned me, if I work, your younger siblings are your responsibility […] because parents already paid much cost […] I feel as part of that burden. (F4)* *I hope I can go* hajj [pilgrimage to city of Mecca] *with my parents […] It's important because it'll make my parents happy. (F9)*
Networking (To meet even more people, make friends, and build networking in organisations or otherwise so that they can help each other including in career)	*[…] later we'll live out there [with] many influencing factors such as closeness with people and connection. […] People surely [recruit] people they know. So I try to show [them] myself. (F15)* *We move into career after studying. It's possible that into career we'll need relations […] It's said to enter specialisation [residency] we need recommendations. (F19)*

4.6.4. Other Hopes

Lastly, there were students' several miscellaneous hopes mentioned in Tables 4.33, followed by two illustrative quotes. The full table is in Appendix XXIV.

Table 4.33. Other Hopes

Topic	Meaning
Lasting health	To stay healthy and have a long life, both to help others and to do as many good deeds as possible for the afterlife or to pay for karmas
Maintaining well-being and its positive contributors	To still have the factors positive to their QOL, including having fun and do things one enjoys, in order to help others; to have more control in aspects of life and ability to cull non-productive habits
Managing time better and overcoming procrastination	Better in portioning time between study or work, leisure, relationship, and religious activities; also in order to stay mentally well
For future medical students	Students hoped that future doctors may also learn through process and not just results, especially with regards to compassion and the desire to help others
Religiosity	To be more devout towards God(s), including through profession; to deepen understanding of one's religion; to pilgrim to Mecca with parents; to *moksha* (the highest enlightenment one can experience in life)

> *I hope I can make myself closer to God, because I'm nothing without Him. […] As a doctor, we can only give treatment as best as we can do, the rest is on God's will, right? It's God who'll cure the patients. To treat His creation, I think we have to get closer to the Creator. […] If we are close to God, God will love us more, God will help us then to cure the patients. (F10)*

> *[I] hope I don't forget leisure, to have fun. Not forgetting things I enjoy, because [before] studying medicine I thought they weren't important, but they're actually very important […] to avoid stress. Sometimes doing leisure actually improves performance […] it's doing what we like by us, so we obtain inspiration* [emphasis] *easier! (F20)*

The next diagram shows the main structures of students' hopes.

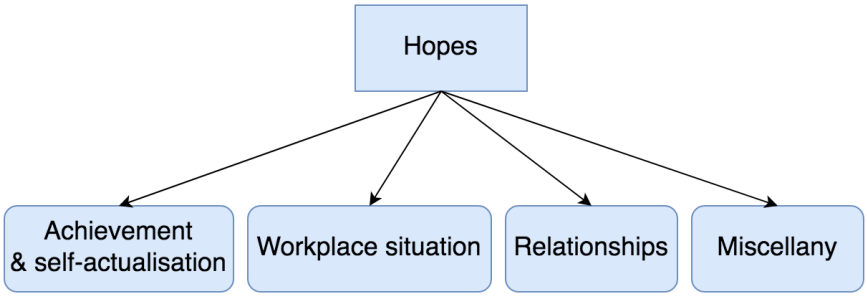

Figure 4.5. Participants' Hopes for The Future

After previously covering the construct of hope, in the next and last section of this chapter I shall talk about its opposite, i.e. fear.

4.7. Fears

A good deal of the participants' fears revolved around both their studying medicine and their career afterwards. Other than those, there were fears of losing something and relationship-related fears. Again, aspects of any single fear often interrelated with other fears and the fears themselves were often mentioned within the same sentence, as we have also seen with other types of findings portrayed in other sections.

4.7.1. Academic and Professional Issues

Fears related to medical study and career were common for the students, with anxieties before graduating most readily mentioned, followed by fear of being unable to obtain specialist degree and worries surrounding internship and work atmosphere. The list is shown in Tables 4.34 – 4.35, with three quotes illustrating structures in Table 4.34 shown below, and two example quotes for Table 4.35 following that table. Complete tables are available in Appendices XXV – XXVI.

> *The internship process. I fear that. Fear of unable of doing it. Fear of being scolded there […] because I fear of being incompetent, then ashamed. (F27)*

> *[…] medicine here is hierarchical. Also the nepotism. I mean, [my] parents' background isn't in medicine […] So what I fear is like injustice. […] I have less there, so I must put more effort than those who have it there. (M8)*

> *[I will be] ashamed to not graduate. […] many aspects of our culture is still about comparing […] It became rooted in children, that I must be better than [others]. (M16)*

Table 4.34. Situational Fears within Study and Career

Topic	Meaning
At work	Unable to handle either themselves or a particular medical situation in real life, unable to help others or failing people's expectations in the profession, which would affect the quality of their work or even make them fail in taking professional responsibilities; these would make students feel useless and sorry for the patients, rob them of their self-confidence, negatively affect their colleagues' trust or society's opinion of them, necessitate harder effort in career compared to peers, jeopardise the profession and alma mater's image, or even involve malpractice accusation and legal threat. On the other hand, students also felt this fear because they attempted to put themselves in the patients' shoes
Competition	Competition, which may dispirit some students; not securing or being laid off job as some students perceived the workforce is saturated; unfair competition, nepotism, patriarchy, and seniority in medical profession which means one must make more effort to advance in career or degree; furthermore, feeling unneeded in their profession because medical information is easily obtainable nowadays
Further education	Being unable to take postgraduate or specialist degree, or having a specialisation not in the field a student like, because it would make them work half-heartedly and might endanger other people, even tantamount to tormenting self
Internship	Long wait for internship, rough internship (e.g. rumours of fights or being repeatedly scolded by teachers and hospital staff), not being able to meet teachers' expectations or patients' needs in internship, or failing to optimally accumulate knowledge in the internship
The rest of undergraduate years	Academic results not as they wanted; failing small thesis; failing to absorb the needed knowledge/skills; not graduating cum laude, graduating late, or not graduating; these are against parents' and society's expectations, and means lower self-confidence, shame, or discouragement. This fear came from the thought of more time spent, more cost and burden for parents, and society's and parents' common habit of comparing people; one student actually stated this fear became part of their motivation

Table 4.35. Personal Fears within Study and Career

Topic	Meaning
Health-related	Health risks involved in medical profession from either patients or workload, deteriorating health, or a short life, because that would mean less chance to either realise own dreams or improve other people's life
Insolvency within studying	Not having enough funds to finish medical school or to be a specialist
Insolvency at work	Having financial difficulties as a doctor and that there will be either not enough assurance for their education and health in the future. They felt that having to think how to pay for healthcare when sick makes situation worse; on the other hand, becoming either egotistical or materialistic; uncertainties from the implementation of universal health coverage especially regarding remuneration
Professional incompetence	Difficult examinations or feeling incompetent at work, which will mean shame or lower self-confidence for them
Time management difficulties	Having even more difficulties managing time or priorities especially after they work in the future, which can mean missing time for self, family, or hobbies and failing to reach goals, and even becoming distant with loved ones, even more than when they are in medical school. One student felt that at that point suicide will be better

> *I also worry about BPJS* [Indonesia's universal health care system]. *There's a rumour that doctors' salary is getting lower, meanwhile my parents still expect high on salary. [Moreover,] I worry about my long-term prosperity. […] In the future, when I'm all grown up, I don't want to live depending on my parents. [Furthermore,] our parents won't be with us forever. If we can't guarantee our own future, who else will? (F10)*

> *[I] fear I can't readily apply [my knowledge] in internship or after becoming a doctor. Also, nowadays […] patients may sue [us] because of many things. [Also] if I'm not competent enough and harm the patient. [It] feels burdening […] People's mindset is that doctors must be able to do everything, but if [we] fail, [they] denigrate [our] name and stuff. (F13)*

4.7.2. Relationship and Loss

Fears of losing something and relationship-related fears are shown in Tables 4.36 – 4.37. Two illustrative quotes for Table 4.36 are shown below the table, with the full table available in Appendix XXVII. Within these issues, parents passing

away was the most common fear for the students, although it brought different meanings for each of them.

Table 4.36. Fears of Loss

Topic	Meaning
Faith	Losing faith in God(s) and bad things that will follow
Hope/drive	Losing hope or motivation; as they are the obligatory reason for one to do something, losing them means nothing else will help; something akin to this was failing to be open-minded and learn, or becoming arrogant after becoming a professional or gaining higher achievements; all these meant halted self-development Close to this is complacency or a system that promotes complacency, which participants thought will reduce one's usefulness to the society
Own life	Having a shorter life than expected
Social standing	Losing respect from other people
Parents and loved ones	Becoming distant with loved ones; also, parents or loved ones passing away before they become doctors. For some students this meant failing to make their parents happy, and even losing motivation and purpose of studying medicine; for the rest it meant feeling lonely, or losing financial support before they were able to be independent
Way of life	Losing own way and control in life; being forced to change course of life either because of circumstances or intimidation; not obtaining their goals even after they try as best as they can, because then something in life may require changes; regrets in the future regarding their study and career choices, and questioning their place in life

> *If [my] motivation diminishes I can't-- I become lazy and stuff, unproductive, no longer giving impact. […] Also when the environment isn't conducive […] I can do 10, but because my work environment only requires me to do 5, in my opinion that lowers QOL. (M9)*

> *But I wish it wouldn't happen, when I still study medicine, either of my parents passes away […] What's the point of studying medicine if I couldn't make my parents happy. Maybe that's the greatest [fear]. (M15)*

Table 4.37. Fears around Relationship

Topic (Meaning)	Illustrative quote
Burdened by others (People burdening the students in the future)	*What's awful is someone making trouble, but we're the ones who cater to the aftermath […] It disturbs [our lives] because sometimes it's not only a small issue. (M11)*
Burdening the family (Students adding or prolonging financial burden within the family)	*My mother is old. I'm the last child. I fear burdening people at home too long. My family isn't that well-off. (M8)*
Conflict, or people difficult to work with (Having difficulties dealing with people; trapped around people that do not care for others and will not cooperate, which will hold one back from being beneficial to others; conflict in neighbourhood; inappropriate judgment, slander, and betrayal especially from trusted ones, which may preoccupy the mind, may spread and influence the perception of yet more people, may destroy all the good works and good image built, and may hurt the people they love and have helped along the way; losing support from people around them)	*Of course a life partner is just one. If we choose wrongly, it's for a long term. It makes it uncomfortable […] We want divorce, it's not allowed […] Getting divorced is scary […] I don't like conflict. […] If we don't have the same vision and mission, what then? (F9)* *What I fear is people not caring for others, people that withdraw, close their eyes regarding situation around them. People difficult to cooperate with. (M7)*
Marriage and parenting issues (Failing to find an ideal spouse, or a spouse that gets along with parents; not having either harmonious family, or time for family; getting married too early, which potentially breaks what has been built for career or life goals, or even will mean future separation; being childless)	*I'm afraid I won't be able to maintain a family […] because I see myself easily bored. [My] family will have this concern, if they see me as difficult to maintain relationship. (F19)* *Family which doesn't motivate [me], is not harmonious. It also… makes me despair. (F21)*

Figure 4.6 summarises the fears students discussed.

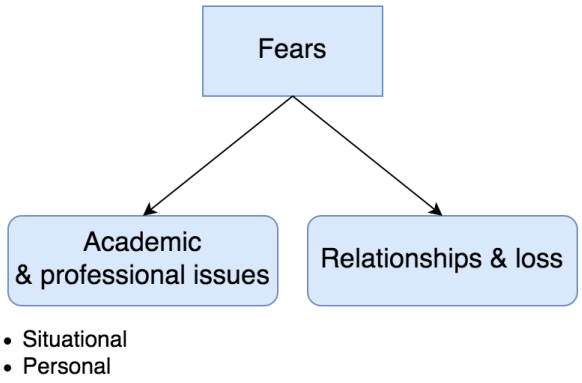

Figure 4.6. Participants' Fears for The Future

4.8. Chapter Summary

To summarise, throughout this chapter we have seen the demographics of the interviewees, their actual views on QOL at the time of interview, changes they experienced whilst studying medicine, and their hopes and fears. What this might tell us in relation to the literature reviewed (Chapter 2) will be expatiated within the next chapter.

5. DISCUSSION

Within previous chapters I have presented the contextual background and state of the literature pertaining to the research questions (Chapters 1 – 2), the details of the study design (Chapter 3), and the subsequent findings from the fieldwork (Chapter 4). Here I will expand on the summary of the findings in relation to the research questions and literature. Lastly, a recounting on the study's rigour and a section on reflexivity is reported in the final sections of this chapter.

5.1. Findings Overview and Transferability

Obtained by means of a phenomenological approach, the findings answered the research questions (Section 3.1.2) and filled the gap identified in the literature (see Sections 1.4 – 1.5; 2.3.1; 2.4) regarding well-being of Indonesian medical students. A condensed summary of the findings is stated below.

1. For the participants, on the whole, well-being means feeling fulfilled, enabled, and grateful (Section 4.2; cf. 2.3.3.3).
2. There were lists of negative and positive contributors towards the students' state of well-being (Sections 4.3 – 4.4; cf. 2.3), most notably relationship aspects and deprivation issues.
3. Relative to their position in life, i.e. presently being medical students, participants also experienced changes regarding their past and present well-being; as well, they each have hopes and fears regarding the future in relation to their well-being (Sections 4.5 – 4.7; cf. 2.2.2; 2.3.3.2; 2.3.4.1; 2.3.4.3).
4. Mentions by the participants about well-being related interventions in Indonesian medical schools were sparse throughout the interviews (cf. Section 2.3.4.2).

I have included as much relevant data to the research questions as possible, following King et al.'s (2019) advice. However, these findings neither aimed to be generalisable nor claimed to represent the general population of medical students or Indonesians, as these were neither the research questions nor the

methodology's purpose. Instead, the study aimed for transferability; the findings, owing to their being sufficient to answer the research questions in the given context, help to boost that, alongside other measures such as thorough review of the literature, explicit elaboration of the methodology and design, purposive sampling of respondents, explicit data reporting and their thick description, consideration for alternative explanations for the findings, and recognition of limitations (see Section 5.4.2; cf. 3.5.3). The prolonged engagement within the field, which yielded 46 interviewees, is also encouraging (see Sections 3.4.2; 5.4.1).

The meaning of well-being for this study's participants reflects general findings from similar studies within the Euro-American context, and it was hopeful to hear that the students grew both as individuals and professionals through their time in medical school. Nevertheless, some distinct findings exist. Indications of a collective attitude within Indonesian culture were repeatedly conveyed. Moreover, the students felt very strongly regarding the relationships they have, exemplified by four findings: firstly, relationship was the single thing every participant mentioned as affecting their well-being; secondly, many of the students entered medical school citing to maintain their relationship with their parents as one of the reasons, if not the only reason; thirdly, participants described their religious views through the language of a personal relationship with God(s); and fourthly, students' wanting to be useful towards other people was a frequent theme. More subtle findings that might differ with Euro-American studies were mentions of high expectations of academic achievement either personally, from people in general, and even among friends, but especially from parents and relatives; doubt and anxiety regarding future career and income; and how Indonesian culture felt constrictive for their self-actualisation, both within academic and non-academic environments. Examples of these were the salient fear of failing or being seen as incompetent within each phase of medical education, even outside of examinations, and the students' reluctance to express different views towards their teachers or seniors. Religion, i.e. following prescribed rituals, and spirituality, i.e. believing in a supernatural persona/power controlling one's life, also coloured the students' perception of their well-being a lot; on this note, the students did not discriminate between religion and spirituality. Meanwhile, mentions of alcohol and substance use and online interactions were absent with regards to their well-being.

Discussion on what became the phenomenon (see Section 3.2.2) when the students detailed about their well-being will be presented starting from Section 5.2, which will relate the findings to the first research question, namely how Indonesian medical students define their QOL.

5.2. Phenomenological Psychological Meaning of Well-being

What I found with regards to students' recounting their understanding of well-being generally fell in line with what exists in the field of well-being studies. The concept, although it may have a similar general motif for the participants, carries various details and undertones for each of them. The contributors for well-being, e.g. health, relationships, leisure, and money have been repeatedly mentioned in much other research. This only strengthens the thought that well-being should be approached through a multidimensional attitude. Something I consider more important here is that the findings showed that well-being is indeed not just about objects and ideas the students recognised existing in their lifeworld, but encouragingly also about how the participants react and flourish with that understanding. It could be seen that while mentions of spiritual, social, and material issues were brought forth, in the end they served as implements for the students' agency, growth, and achievement; in other words, it is more about what the material and non-material things mean for the respondents than their existence per se. This agrees with other scholars' assertions (e.g. Diener et al. 1985; Rugira et al. 2014). More to the point, even with or without the said implements being adequate enough, another distinct key aspect that improves the students' net well-being is the attitude of gratitude (see Section 2.2.4.3). Together with the agentic above-said understanding of well-being, this seems to tip the balance of the well-being concept to more 'eudaimonic' instead of 'hedonic' (see Sections 2.2.1; 2.3.3.2), at least for the medical students interviewed. In other words, although there were features of pleasure fulfilment mentioned by the participants, this seems to sustain the idea that the best happiness available for them is when this hedonic aspect is used in accordance with its eudaimonic counterpart, in agreement with Emmons's (1986) assertion. A possible caution to this finding is it seems most medical students in Indonesia came from already educated and/or well-off families, where physical needs have been less of a concern to begin with (cf. Section 5.3.1.3).

Taken as a whole, this is another cue to other scholars' sentiment that we should explore personal strengths in relation to how well-being may be improved.

Discussion on how the findings relate to the second and third research questions, regarding students' views on the contributing factors of their well-being and how those views change throughout time, will be tackled in Section 5.3.

5.3. Diorama of The Findings

At this point I will relate some more salient parts of the findings with the literature. They include the present positive and negative well-being contributors, how their aspects of well-being changed between the past and the present, and the participants' positive and negative future expectations regarding their well-being, or their hopes and fears. As well, although it might be difficult to entirely separate the themes on contributors to well-being, I will attempt to separate them into interpersonal, personal, and medical school and career dimensions to facilitate my own and readers' understanding and reading of the subject matter.

5.3.1. Social and Interpersonal Domains and Well-being

The most salient aspect of students' lives contributing towards their well-being was relationships, which will be discussed first within this section.

5.3.1.1. Relationships and Religion

What was most striking for me from the first few interviews in the field is that all participants always brought up relationships as an influence on their well-being, whether positively or negatively. For the students relationships might mean something obvious, in particular with parents and friends; in an academic context with teachers, consultants, and patients; and, more interestingly, with nature. This importance of relationships is understandable for people who live under a culture of collectivism (Cooper et al. 1995), and several studies found a similar symptom in other Asian contexts (Diener et al. 1995; Tam et al. 2012; Yamaguchi & Kim 2015). There is also an interaction amongst supportive relationships, the students' personal psychology, and their well-being in general: the participants considered being welcomed around people as a subset of feeling safe and unworried (see Tables 4.6; 4.9). Future studies pursuing clearer understanding of what makes relationships work in increasing well-being will be appropriate.

While the positive –e.g. validation and clear communication– and negative –e.g. rejection and conflict– facets of a relationship are quite clear in general, the students' conveying of feeling lonely and lacking after comparing self with others, specifically indicated that at times relating with others might injure someone even without the existence of an external agent actively doing the insult (see Table 4.10). This area is worth a mention as the issue asserts the need for a particular and possibly more useful treatment, one directed to self and not others, or in other words improving personal strengths, as this involves a person's internal locus of control which plays a good deal of importance for someone's well-being (Cooper et al. 1995; Owusu-Ansah 2008; Tuzgöl Dost 2006; Van de Vliert & Janssen 2002).

Compared with studies salient in a Euro-American context, as suspected, I found that religion and spirituality played a profound influence for the participants in deciding their well-being and whole lives. There were students who explicitly stated that religion brought them guidance and understanding, i.e. order and how to act, in daily life. The rest mentioned that accomplishing religious rituals and praying to God(s) gave them a sense of relief and calm. It is clear that for the students who mentioned religion/spirituality as part of their well-being contributors, it did help them cope with stresses within medical school and without, an issue of interest in the literature (see Section 4.5.5). That way, according to the participants, religion/spirituality can be taken to inject them with a sense of purpose and satisfaction and thus is useful for well-being and the promotion of social capital, in line with some literature (Abdel-Khalek 2010a; Abdel-Khalek 2013; Abdel-Khalek & Lester 2010; Allan et al. 2013; French & Joseph 1999). On the other hand, students also mentioned that not fulfilling religious obligations and lacking faith would mean a future with uncertainties and even upcoming obstacles and failures, including in studying. This gives them fears which obviously harms well-being (Table 4.11). On this note, there is no clear delineation whether the participants' fulfilling religious obligations constitutes a psychotherapeutic use of religiosity as advised by Abdel-Khalek (2013), so no comments can be made regarding this. Clearer comprehension is also needed on whether religious motivation in studying behaves more as a student's internalised purpose or actually an external pressure, e.g. from any authority. This is important because locus of motivation, congruence between personal strivings and goals, and balance between personal independence and societal expectations are significant contributors to one's well-being (see Sections 2.3.1; 2.3.3.2; 5.3.1.2 regarding authority figures; 5.3.2.1

regarding competition). Overall, studies on the mechanism mediating between religiosity/spirituality and well-being will bring more integrated understanding of this issue.

As another highlight on this topic, it is also distinct that being religious/spiritual has with it a notion of relationship with something transcendent for the students, of particular mention with a personal God(s). This might be because in Indonesia people in general take as a given beliefs in Abrahamic religions which have an agentic personification of God(s), in particular Islam. Within this culture, people are commonly used, or even encouraged, to talk to the transcendent through rituals, e.g. prayers. This is also probably the reason I found students did not distinguish between the concepts of religiosity and spirituality. This finding is in accordance to what is found by some scholars, particularly those who conducted studies in religious cultures (e.g. Abdel-Khalek 2013).

Finally, Unterrainer et al. (2011) remarked that NEO-PI constructs (see Section 2.3.3.2), and spirituality and schizotypy have superimposing attributes which are still inexplicable, and as such their full effect on the students' well-being is still unclear. It will be interesting to know the exact mechanism of how religiosity/spirituality modulates well-being, and to what extent this is different between groups of people with and without religious persuasions.

In relation to the pervasiveness of online or internet interaction, the students only reported that relationships modulated their well-being when they involved real contact or meet-up; no relationship mediated through internet and gadget use was mentioned by the participants in relation to the study. It is possible that this means for the students, the influence of online interaction towards well-being was in fact minimal; furthermore, typical daily situations in Indonesian cities where the students live are such that real-life people interaction is inevitable and happens often (cf. Ng 2005). This came as a surprise somewhat as, similar to other parts of the world, the use of gadgets and social media services are common in Indonesia, especially with youths, who adopt them more readily than the older generation. Secondly, there were no reports of impulsive or uncontrolled gadget use by the participants. On the other hand, there is a real possibility as well that for these medical students' real-world interaction plays a more important part in their well-being, if not the only kind of relationship that matters, and thus they seek real life socialising more. If this is of any indication, then it is positive as more time in real life interaction than online was found to be beneficial towards well-being and

avoided stealing time from doing productive activities such as studying and taking rest (Lepp et al. 2014; Li et al. 2015; Peltzer & Pengpid 2013; Schiffrin et al. 2010). The long-term dynamics of this issue are still to be seen, considering interaction through online means is on the increase without any sign of slowing down. It is also worthwhile adding that data collection for this study preceded the COVID-19 pandemic, so it would be interesting to know whether in this later situation students would give online relationships more importance.

Lastly, the findings are congruent with the body of research regarding loneliness (Tu & Zhang 2015; Uchida et al. 2015; Ye & Lin 2015): other than unfulfilling relationships (see Section 4.4.1), participants' feeling lonely regardless of their being alone or in the midst of people worsened their well-being. Afterall, being alone is not the same as being lonely. Students also had a common fear of being left by their parents before they can graduate (see Section 4.4.2). This is mostly correlated by the students with the feeling that they are obligated to somehow return to their parents what they have been given until the point where they became medical students, and parents passing away would rob them of that chance (see Section 4.4.2; Table 4.36).

Other findings related to relationships, including possible authority issues and relationship with nature and surroundings, will be discussed further within the following sections.

5.3.1.2. Sociocultural Issues in Medical School

I anticipated that at least for some of the students entering medical school, there was an expectation imparted by their parents and conceded by them, and the findings confirmed this (e.g. Tables 4.20; 4.24; 4.28). In Indonesia, the medical profession still holds prestige and it appears many parents are still inclined that their children study and have careers in the fields of natural science and engineering. As well, some students indeed showed some anxiety and even conflict after they were admitted into medical school. This may be explained as complex issues of self-construal, balancing between personal strivings and communal goals, and integration of personality (see Sections 2.3.3.2; 5.3.2.3), which scholars found somewhat more common in students in East Asia compared to their North American counterparts, exacerbated by the commonly higher academic expectations in Asian families and the generally stricter cultural boundaries for self-actualisation.

This pressure to conform to the desires of figures loved or considered authoritative could be problematic towards one's well-being, as remarked by scholars (Diener et al. 1995; Tam et al. 2012), while students who have democratic authority figures also have better well-being (Tuzgöl Dost 2006). Some students even mentioned deteriorating into suicidal thoughts with regards to this problem (e.g. Tables 4.9; 4.34). It is heartening, however, that later in studying medicine, the findings also indicated that the students for the most part found ways to accept their past and present, a wabi-sabi attitude (see Sections 4.3.4; 5.3.2.3), and with that reintegrate their attitude and strivings, what Yamaguchi & Kim (2015) have alluded to as socially mediated realisation of well-being.

Relevant to Indonesia's pluralistic environment, there were reports that studying medicine and/or studying away from hometown had placed students in a more heterogenous situation and it made them more open-minded and adaptable as a person (see also Section 5.3.2.2), in line with Wajsblat's (2011) remark that multicultural attitude might improve well-being. Moreover, whilst remembering the limited generalisability of this study, and the fact that as expected all students identified themselves as either male and female, it is refreshing that throughout the interviews I found that students did not report issues of hostility based on sex, ethnicity, or religion, including within a few medical schools I visited, which came from differing religious backgrounds. There might be a possibility the students might suppress these issues, especially considering the collective and seniority cultures that seem to still prevail in Indonesia, or that reporting this was actually not a priority for them; but these assumptions would be discordant to the para-verbal and non-verbal cues the students showed in the interviews, and the measures I took to best mitigate those (see Section 5.4). That said, it is palpable that some participants, especially male students, envisioned their future life within a more traditional gender role, i.e. the provider for their families, and while some accepted this as part of normal expectation, others were more doubtful or anxious, if only a little.

Furthermore, the students in fact voiced their concern with the culture of seniority and the feeling forced to be reluctant in the schools where they study (see Section 4.4.3). The participants mentioned the inability to express themselves fully, the diminished academic support by the faculty, and even unfair treatment, because communication with teaching staff and seniors felt strangled. This contrasts the sentiment where students felt supported by their teachers (see Table

4.4). In both cases they actually struck a chord with the fundamental meaning of well-being for the students, as to be well they need to feel satisfied and enabled (see Sections 4.2.1 – 4.2.2), including in the learning environment. Students even cited the broader issues of lacking support in work environment as part of their fears for the future (see Section 4.7.1). It is still to be seen whether this issue will be replicated in future similar studies, and if so how the medical schools will respond.

With regards to taking care of appearance, findings reported that there was the realisation of its importance for some of the female medical students who previously had not paid as much concern to the issue before. The students who recounted this only mentioned it in relation to people's expectations of their appearance (see Table 4.24). They mentioned that people around them, e.g. friends and patients, only identified them as medical students if they dressed somewhat more formally and glamorously than other people. It is possible that there is some gender expectation by the society here as no male students reported on the same topic, and furthermore it is to be seen whether this expectation issue of outward appearance holds weight towards the well-being of the students involved, as Satici (2019) has found valuing self by way of approval from others is detrimental towards subjective well-being (SWB). Even without gender issues, there is still the matter of balancing between personal actualisation and societal conformation (see Section 5.3.2.3). Within this particular subject, the students only reported behavioural adjustment and even after interview probing did not further explicate the impact of both the expectation and behaviour towards their well-being either way.

Lastly, the female medical students aspire within the findings to be wife and mother alongside a medical professional instead of "just" a housemaker. The long-term effect of this attitude towards the students' well-being is yet to be seen, also in relation to the societal expectation in general, but for the students themselves, career determination is generally seen as happiness-improving (see Section 5.3.2.3).

5.3.1.3. Nature, Infrastructure, and Financial Stature

Several students mentioned that being able to enjoy nature and feeling connected with it improved their well-being. However, in relation to this finding, it remains to be seen whether students also cultivate behaviours that promote

sustainability. Scholars (e.g. Ng 2005; Rugira et al. 2014) have found that deteriorating environmental quality worsens well-being while pro-sustainability behaviours improve it. Diener et al. (1995) also observed that Asian students in the past had much dissatisfaction with self, their health, and deprivation from leisure and sufficient living conditions.

Characteristics of the environment that students felt influence their well-being were described in Section 4.3.3 and for the most part they are straightforward. Although there were reports that housing conditions were one of the strongest influences towards one's well-being (Camfield & Esposito 2014), there were no reports regarding the students' well-being specifically being affected by the density of the residential place, possibly because medical students in general are capable of procuring a decent living place. What a student mentioned as discomfort instead was the noisiness of neighbouring students while the student needed to study. Another student said that he was upset by traffic jams and disorderliness commonly occurring in Indonesian cities, and the resulting travel time uncertainties.

Regarding the amount of money and future income potential from working in medicine, the findings by and large are in agreement with the literature, i.e. the students regard financial stature as a means to maintain health (which the participants in turn considered as yet another means), self-actualise, and help others. Caution must be taken when only making money is the end motivation of being a medical professional, as it can lower one's sense of self-determination, competence, and moves the locus of control externally (Camfield & Esposito 2014; Robak et al. 2007). While it is also true that the students and possibly members within their families possessed monetary expectations from a future in medical profession, the findings are for the most part encouraging. It seems the students in general had been obtaining enough sustenance for their living, and as such were better equipped to achieve (see Section 4.2). Furthermore, it has been shown that socially oriented spending is associated with better well-being (Robak et al. 2007; Yamaguchi et al. 2016). Instead of lack of food or housing condition, the common finding from medical students regarding physical deprivation was lack of rest (see Tables 4.12; 4.17), which students consonantly attributed to the weight of study load. Furthermore, one student showed specific worry over the possibility that their family would not have enough funds for her to finish medical school. Some students repeatedly exhibiting their anxiety regarding job and income stability also mirrored

Uthayakumar et al.'s (2010) warning regarding career undecidedness of Southeast Asian higher education (HE) students. Anxiety and ambivalent attitude can affect students in the worst way possible (Chen et al. 2012; Eklund et al. 2011; Emmons 1986). Whether these issues, and more broadly the worsening physical and mental health (also see Section 5.3.3.2), represent the reality of studying medicine throughout Indonesia is still to be evidenced, although some studies in other parts of the world suggested the same (Ahmed et al. 2009; Eklund et al. 2011; Macaskill & Denovan 2014; Mazzuchelli & Purcell 2015; Montasem et al. 2013; Oguz-Duran & Yuksel 2010; Shamionov 2014); and with that, what the medical schools' response would be.

5.3.2. Personal Domains and Well-being

5.3.2.1. Students' Attitudes, Behaviours, and Habits

The reports were salient from participants regarding their sleep regularity, duration, and quality being lowered as the result of studying medicine and sometimes being involved in organisations (e.g. Tables 4.17; 4.19), at least until they found strategies to cope with study demands. There were also relatively fewer observations regarding other physical security aspects, including the quality or regularity of students' meals which helped with their well-being (Table 4.8). On the whole students agreed that being able to regularly meet physical needs improves their well-being.

While there was some contention that being frugal may promote well-being, students did not specifically mention frugality, only that they manage their finance better and are more purposeful when spending money (see Table 4.25). This finding is good, as purposefulness improves happiness (Emmons 1986; Lennon 2000; Owusu-Ansah 2008). Gambling was not mentioned at all by the students, and the possibility of alcohol or substance use, even then by a friend of a participant, was mentioned only once. There are several possible explanations for this. First is the possibility of response bias or image management, which will be addressed further in Section 5.4.1. Second, there is the possibility that the students who participated were in fact those who actually avoided being involved in such behaviours. This was somewhat mitigated by the implementation of maximum variation sampling, i.e. trying to obtain as differing participants as theoretically possible (see Section 3.3.1; 3.3.4). Third, although not totally absent in the population, the Indonesian religious, cultural, and legal situation may provide some

resistance against gambling or substance use and abuse becoming commonplace, including for medical students. As such, again no remark can be made on these issues in relation to the medical students' well-being. On the other hand, no students brought up the issue of tobacco smoking either, although it is a behaviour conspicuously found in Indonesia. Again, it is possible that the students did not feel the need to remark about this, with two potential reasons: one, the students indeed did not participate in such behaviour, or two and more pertinently, they did not identify it as an issue relevant to their well-being. In general, the existing literature was optimistic for the students if they were indeed free of uncontrollable gambling issues and substance abuse, as it found not being involved in such activities is beneficial in maintaining and enhancing well-being (Abdel-Khalek & Lester 2010; Allen & Holder 2014; Molnar et al. 2009; Wong et al. 2008).

Respondents had different views on competition. There were those who were discouraged by competition, especially if unfair. There were students who were actually stimulated in the face of competition, and there were those who felt that competition did not sway them one way or another. Previous research has also found this to be a complex issue. While scholars generally agreed that self-motivation, or internal locus of control, is better for one's own happiness, for optimal well-being other scholars also mentioned the need to balance a person's independence with external obligations (Bechtel & Corral-Verdugo 2010; Yu et al. 2016). Competition, arguably an externally generated motivation, in general produces lower satisfaction than –for example– the need for mastery, an intrinsically elicited motivation (Van de Vliert & Janssen 2002; cf. Camfield & Esposito 2014; Cooper et al. 1995; Owusu-Ansah 2008; Robak et al. 2007; Tuzgöl Dost 2006; see also Section 5.3.1 regarding religious motivation). There were signs from the findings that students' comparing self to others brought harm to their well-being, at least in their first years studying medicine. On the other hand, students reported that further into medical training they were more aware of the development in their knowledge, problem-solving abilities, and being equipped for their future career and personal growth in general; as such it appears they were more focused on cultivating internal qualities rather than ruminating on external differences (see Sections 4.3.4; 4.5.2; 4.5.4; Table 4.18). It is also of note that some students viewed internal motivation as the most important thing for QOL (see Table 4.9), because it makes them a responsible person, including with their decision to study medicine. There were also statements conveying the students'

understanding that when they depended on external motivation, they stopped developing themselves when the external component was no longer there. This might relate to how students put such an importance to their relationships, and to their fear of losing their parents (see Sections 4.4.2; 5.3.1.1 – 5.3.1.2; 5.3.3.3; Table 4.36). More studies concerning students' locus of control, motivation, and competition are needed to fully understand the matter.

Sustainability-promoting behaviours have been discussed alongside the respondents' relationship with nature and environment in Section 5.3.1.3, where while the participants indeed said that their being able to connect with and enjoy nature improved their well-being, they did not remark anything regarding their activities or involvement in pro-ecological behaviours. Lastly, students' behaviour towards online social interaction by way of gadget or internet usage has been commented on in Section 5.3.1.1.

5.3.2.2. Appreciating Time, Self Management, and Self Direction

Other than relationships, another construct that greatly influenced the students' well-being was their flourishing as individuals, with or without social and infrastructural support. The students mentioned that the act of obtaining academic knowledge and problem-solving and decision-making abilities is useful for their happiness (Table 4.7). Even more to the point, they also cherished the times when they could reflect about their life or learn from other people, alongside the ability to fulfil obligations and responsibilities (Table 4.7). They held dear this attitude and the willingness to grow while being aware of which parts in their past they could not change (Tables 4.9; 4.24). Moreover, after they had been in medical school they further developed a sense of exploring life and achieving, and felt disheartened when they sensed a lack of wisdom, control, or organisation within themselves (e.g. Tables 4.11; 4.13). The two sides of fear –of being both incompetent and complacent– also worsened the participants' well-being.

Of particular salience in the students' mentioning their personal development is how their appreciation of time changed throughout their being in medical school, and how they were involved more in organisations. Many of their life domains were affected by studying medicine, and these were often mentioned in relation to time. Some were considered as problems, such as less sleep and rare chance of meeting family and doing activities with them, which students regretted. On a more positive note, they learned to build self-management ability to deal with the

limitations of time, such as acquiring studying strategies and being mindful in the present (e.g. Tables 4.18; 4.24). They had also been more discerning with regards to performing tasks in terms of their purposefulness, and on a grander and arguably more impressive level, the students learned to grow socially, for example by learning the ability to lead or empathise with others, and internally they learned to love themselves and build pride (see Section 4.5.4).

5.3.2.3. Personality and The Lived Experience of Well-being

Before expanding discussion on this section, I feel that it is important to remember many scholars' words of advice that personality is one of the key factors for understanding the well-being of people, even more than their circumstances (Abdel-Khalek & Lester 2010; Extremera et al. 2010; Garcia & Erlandsson 2011; Montasem et al. 2013; Tsaousis et al. 2007; Tuzgöl Dost 2006). That being said, in light of the methodology, no attempt at a causal relationship between participants' well-being and personality would be made. In other parts of this chapter, an intervention method may be suggested, as those other topics involve more modifiable contributors towards well-being compared to personality traits, e.g. places to live or work, or even individual behaviours.

Students reported that there were times, probably more during the first years in medical schools, when they felt overwhelmed by the changes and greater responsibilities they faced. Within these times the students experienced negative affect (NA), which some scholars contended as another term for neuroticism, and which relates to emotional instability and less satisfaction with life (SWL) (Emmons & Diener 1985; Garcia & Erlandsson 2011; Mazzucchelli & Purcell 2015; Heller et al. 2007; Páez et al. 2013; Tsaousis et al. 2007; Walker 2009). The result of these experiences may in part depend on the students' response towards the adversities, but this may also serve as a caution for medical schools to pay more attention towards the condition of their students during their introductory years in a medical setting, as it is conceivable that not all medical students are equally resourced for the said changes and adversities.

On the other hand, it is also clear from the findings that the students' attitude changed throughout their study years, where they reported socialising more and with people from different backgrounds, and they developed the awareness to be able to stand in other people's shoes. The students cultivated their aspects of extraversion or interpersonal competencies, which have also been shown to be

related to well-being to a great degree by improving the positive affect (PA) of happiness (Emmons & Diener 1986; Garcia & Erlandsson 2011; Heller et al. 2007).

While on the topic of PA, Nickerson et al. (2011) had warned about the possibility of a lesser degree of achievement where students having a high degree of PA due to illusions of excessive competencies, but it is also clear from the findings that participants in this study actually were very aware of both their past and present achievements and their being guarded regarding the list of potential failures either in the rest of their study time or future career. For example, there were mentions of doubt whether their admission into medical school was just blind luck, or fears that they might fail to graduate and even far thoughts of doing unintended harm to patients (e.g. Section 4.7.1). Moreover, Nickerson et al.'s suggestion that students with good PA might involve themselves more in socialising, which might injure their academic achievements, actually ran counter to the students' reports of their spending more time to study and as such lost time to interact with family, friends, and even connect with nature. The full extent of this finding is still to be seen, but in general good awareness of personal strengths and weaknesses, while altogether not being restrained by doubts, ruminations and over-criticism with self (cf. Gnilka et al. 2011; Robak et al. 2007; Yamaguchi & Kim 2015), can only be useful for a person's well-being as they become able both to improve on those strengths and to prepare for future contingencies, which within the realm of psychological well-being (PWB) respectively equate to personal growth and environmental mastery. Students' grateful attitude, a main structure of the findings, also enhances PWB aspects of mastery, autonomy, and relationship quality, which in turn will boost well-being (Wang 2020). This is fortuitous as it has been noted gratitude and SWB may reciprocally relate (Geng 2018). In other words, being grateful can be a self-reinforcing habit that maintains and even heightens one's well-being.

All in all, the students showed flourishing in environmental mastery, which involves the improvement of PA and SWB as a whole, and psychological flexibility, which is related to a decrease in NA.

Further extending on the relationship between the findings and the topic of PWB, students mentioned the stress they faced in studying medicine. Stress has been found in the literature to mediate the PWB aspects of autonomy, life purpose, and environmental mastery with students' psychological health and perfectionism. The findings conveyed developments in students' independence, purpose, and

competencies throughout their study years. The students' experiencing anxiety with their achievements, being inflexible with situations they faced, and being unable to experience fulfilment in the past and even present may harm their SWL and SWB and even contribute to depression and hopelessness (Abdel-Khalek 2010a; Gnilka et al. 2011; Wajsblat 2011; see also Section 4.2.1.1). Lew et al. (2019) had warned that depression and hopelessness contribute much towards being suicidal. Again, we should be cautious of the possibility of students' indicating their future fears, e.g. being seen as incompetent in the workplace or even harming patients, as a manifestation of them being over-critical of themselves. The other side of the equation is that the students to a great extent described their improving empathy and care for other people, which included family, colleagues, and patients too. The type of perfectionism which also considers the society's improvement instead of only personal achievement, has been shown to increase SWL (Çalışandemir & Tagay 2015). Yet again, it may be helpful if medical schools are able to identify maladaptive or adaptive types of perfectionism held by the students and which students are less able to respond well against stress and perfectionism issues, and subsequently place interventions which will promote better students' academic achievement and well-being in the future.

Even further into the subject of emotional intelligence, which is the opposite of emotional inflexibility and neuroticism which negatively alters well-being, the findings again are heartening for the participants in the senior undergraduate years. Alongside the developments in their life purpose, empathy with and learning to understand others, and being open to new situations and different people, the findings demonstrated developments in the students' ability to cope with academic and non-academic problems, learn problem-solving, and even more, both the acceptance of impermanence of relationships and being present in an activity (Tables 4.14; 4.18; 4.25). These show us a glimpse indicating more stability in the students' personality and emotion further as they grow, either when getting into an unwanted situation or when a sustained focus is needed when doing a task. This attitude of being mindful, which in turn further builds resilience, is vastly shown to ameliorate well-being. Scholars have suggested mindfulness as part of interventions in schools and the workplace, to enhance well-being and even potentially improve healthcare workers' treatment towards their clients (Akyurek et al. 2018; Bajaj & Pande 2016; Extremera et al. 2010).

In line with the findings on emotional intelligence discussed above, this research's findings are similarly encouraging in relation to the construct of Core Self-evaluation, which as I suggested can serve as some hub for existing theories of personality in relation to well-being. Topics of personal growth, finding of purpose, and development of knowledge and problem-solving skills within participants throughout the time they were in medical school have been discussed in this chapter, alongside self-acceptance, better abilities to cope with studying and life issues, emotional stability, and autonomy or independence. All these things are related to better self-evaluation, and altogether have extensively been shown to positively modify SWL and well-being, not least by the comprehensive absence of conflict among the students' attitudes, behaviour, values, goals, and purpose in study and life.

This all-embracing cascade of integration of a person's values, behaviour, and the person's strivings for goals and purpose in life, of which personal values themselves are an ingredient, is what Emmons (1986) proclaimed as the holistic lens to understand people's relationship with their happiness, and the one thing I contended would create the greatest possible happiness (see Section 2.3.3.2).

There are several comments that may be made regarding the students' values in life and how it progresses throughout their time in medical school. The most salient one is that the students identified more with the values of both benevolence and intimacy/transcendence, which means that the students related more with other people in relation to well-being. More impressively, students commonly shared the intent of being beneficial to others (see Section 4.2.1.3). This is an advantageous development, moreover with the collectivist culture prevailing in Indonesia. It was said earlier that aligning personal values, behaviour, and purpose contributes to optimal well-being, and it is conceivable that aligning this striving with the condition in the society will improve one's happiness even more; after eliding the said internal conflict within the person, then integration between the individual and environmental situation eliminates yet more potential conflict. That said, I see it as desirable at all times to give heed to Yu et al.'s (2016) advice to maintain balance between personal independence and harmony within the society, as the particularities of each personality, lifeworld, and the environment where one resides can be very diverse from each other and in different times. As such, it is better to cultivate both resources for personal independence and interdependence in the community, which again will result in the desired optimal well-being.

Another noteworthy finding in relation to well-being and personal values is the development or the existence of the needs for recognition and financial success within the students. The body of research observed the relation between these with issues of depression and anxiety.

With regards to The Dark Triad of personality (Aghababei & Blachnio 2015), it is reassuring that during participants journey through being medical students, they actually reported being more caring towards other people (Table 4.14), if not already being so before. This shows empathy, intimacy, and relatedness to others, and is inverse to the characterisations of the Dark Triad concept, e.g. insensitivity and disagreeableness. All in all this is hopeful, as showing empathy, intimacy, and relatedness –alongside low Psychopathy– has been shown to correlate with better well-being (e.g. Boulton et al. 2019; Wang 2020), while of course remembering scholars' (Hagedorn 1996; Sanjuán & de Lopez 2013) suggestion that one possible way to maintain happiness is through a healthy level of sub-clinical Narcissism, i.e. a tendency to explain life in a way that somewhat eases adjustment or benefits oneself.

The eclectic list of personality attributes found in Section 2.3.3.3 of Chapter 2, namely agency-communion balance, optimism, forgiveness, time structure, competency, adaptability, variable activities, hope, grit and zest, gratitude, coping abilities, and self-esteem have been discussed in various parts of this chapter, all associated with better happiness. The findings indicate that the participants have been flourishing regarding most of those characteristics and as such do not need further accounting. That being said, there was no report regarding self-enhancing humour or any humour at all within the students. Regarding this issue, it is possible that the culture of reluctance or the perceived need for mass harmony in general may repress the students from being more expressive in their daily activities, or that the participants did not consider humour as an important facet of their well-being report, or that the students in general indeed were not of humorous disposition. I found the last explanation less likely as the students in the interviews were relaxed and could actually get humorous at multiple times.

Finally, regarding the relationship between personality and well-being, recall that subjective happiness involves the components of affect and cognition. In this light, although each participant was well aware of the ups and downs of their daily life as a student and person, they also appeared to be building long-term understanding of themselves and the world around them, competencies in how to

manage their lives, and as well a more stable self and satisfaction with self and their surroundings (Tables 4.9 – 4.10; 4.18; 4.24 – 4.25; 4.28). These developments are hopeful towards their well-being. It can even be contended that because of the said gain in purpose of living and development of personal meaning regarding life, the participants were improving on their SWL and at least closer to the realisation of their eudaimonia. That said, it is also suggested that special care must be given for students who have more ambivalence and uncertainties regarding balancing between personal and communal obligations, e.g. career and familial, and also regarding choosing and finding their life goals.

5.3.3. Studying and Career in Medicine

5.3.3.1. Remarks on Studying

More understanding of the relationship between HE and someone's well-being is another issue of interest in the field (e.g. Hassel et al. 2011; Miller et al. 2015; Schnettler et al. 2015; Sharma et al. 2013; Yalçin 2011; Yamaguchi 2015). As mentioned elsewhere within this chapter (e.g. Section 5.3.1.3), the students considered that studying medicine was a rather gruelling endeavour, which took a lot of their energy and time, and was accompanied by much loss in chance to be with people close to them, less rest and leisure, and also financial expenditure. It has been shown in other parts of this chapter that over time the students have been developing ways to cope and manage their time and other resources in a bid to fulfil their obligations both as a student and member of society, but on the whole this finding at least to some extent extends Ahmed et al.'s (2009) observation that medical school plays a part in their students' anxiety. It is worth pointing out that all participants in this study were studying under the newer problem-based style curriculum instead of the more traditional lecture-based, and although it is still to be proven, there were signs that this newer teaching and learning environment contributed to more depression and low morale compared to its traditional counterpart (Tucker et al. 2015). All that being said, it was also discussed earlier within this chapter (e.g. Section 5.3.2) that going through medical school made the students more knowledgeable and kind to themselves and other people, and more accepting and resilient in dealing with life issues.

5.3.3.2. Students' Health and Faculty Interventions

Participants obviously considered health as a means to higher purpose in life (see Section 4.3.4; Tables 4.9; 4.33), without which they would be neither able to achieve, self-actualise, nor be useful to others. It is this purposefulness that made them express fear about health deterioration with time, not least because they thought they are more prone to this owing to their specific profession than people in general, either coming from the risks in working environment or the workload (see Table 4.35).

Reports of fluctuations in mental health –including signs of depression and suicidal ideations– were shared by both male and female students, contrary to what some of the body of research had indicated (Abdel-Khalek 2010b; Abdel-Khalek & Lester 2010; Akbağ & Ümmet 2017; de Vibe et al. 2013; Heiman 2008). Furthermore, the case is still contentious within the literature and it is also probable that the methodology and sampling of this study prevented representing the more general condition within the male and female population of medical students. It is important, however, to emphasise that members of the medical student population are not excluded from mental health issues, whether coming from personal and social troubles and more pertinently their emergent academic situation. As such, the HE system and the general public must also care for students' mental health.

In contrast to the growing data on the usefulness of faculty interventions for the well-being of students, aside from one report of mini-lectures on studying strategies in the first few semesters, there is a paucity in the student reports regarding medical schools' interventions towards increasing the students' physical and/or mental health. Considering students' differing make-up (e.g. higher neuroticism) in their capacity to deal with the perceived study load and other conditions within and out of the medical school environment, some students might be striving more than their peers to keep up with being a medical student. Adding to the issue in Indonesia were the rapid changes in curriculum which may contribute to stress and mental illness in students (see Section 1.2). Scholars have reminded us of growing health problems within HE students, which may come from the said academic and non-academic troubles and in turn worsen academic achievement, and the need for HE institutions to develop countermeasures against them (see Section 2.3.4.2). Feeling disengaged from the school environment may worsen students' well-being. A more practical suggestion from the literature (Diener et al. 1991) is conducting regular group discussions to reflect and maximise on positive experiences the

students acquired. Nothing more could be said regarding this issue at the moment apart from that we must be aware of the possible lasting effects of physical and mental health deterioration, even after students leave school and enter the professional environment and broader social situations.

5.3.3.3. Views on Potential Career and Income

Purpose in life enhances well-being, and being well enhances productivity and career (Disch et al. 2000; Durkin & Joseph 2009; Lew et al. 2019; Tay et al. 2015). It is encouraging to see that the students were continuing to refine their ideas and purposes with regards to their future career. Students mentioned being useful to society, paying back their parents to acknowledge how they have been cared for growing up, building a venture with colleagues, being specialists, aspiring to be politicians involved in healthcare policy-making, even becoming seafaring doctors. This decisiveness, which intuitively correlates with clearer purpose in life, behaviour management directed toward goals, and the more steady aspect of SWL, is related to better happiness (Disch et al. 2000; Durkin & Joseph 2009; Uthayakumar et al. 2010). The caveat is with regards to making money, also stated by some of the students, there may be negative implications towards the students' well-being (Camfield & Esposito 2014; Robak et al. 2007), although it is encouraging that the findings indicate that this attitude somewhat serves as a means towards more experiential or transcendental goals, e.g. contributing towards parents' and society's needs. There is also some traditional notion of gender role reported by the medical students identifying themselves as male, as they conveyed their being expected to provide for the family, i.e. wife and children, in the future. The result of this on the students' well-being remains to be seen. On the other hand, male and female students indicated anxiety regarding job and financial security in the future (see Table 4.35), but they were also hopeful of creating a happy future family and even leaving a respectable legacy for society (see Tables 4.31 – 4.32). It must be pointed out again though that in Indonesia the traditional notion of gender roles is still a view mostly held by the society, so students might feel that it is beneficial for their well-being to act along this line. Lastly, still Wajsblat (2011) remarked that people who can freely express their gender roles are generally happier than those who cannot.

5.3.4. Section Summary

To summarise Section 5.3 of this chapter, despite the revelation of numerous challenges the students met on their way of becoming doctors, and while paying caution to the body of research on increasing mental health issues in HE students' population, the findings imparted hope and inspiration as well. Students reported their growing up by developing coping abilities with issues in learning and working environment, managing time, learning problem-solving, and finding personal purpose will do well for them in their future career and even social endeavours. As well as students' personal self-flourishing, it must be balanced with the medical schools actively providing ways to facilitate that growth. That includes both the systematic application of curricular, faculty, and environmental interventions, and more research on the topic.

Details of the findings in relation to the research questions and literature, i.e. the meaning of well-being and its contributors, how participants' well-being changed between the past and the present, and the participants' future hopes and fears have been discussed above, and the rigour and possible limitations of those findings will be reported below.

5.4. Study Rigour and Limitations

5.4.1. Brief Remarks on Rigour

As reported in Section 3.5.3, as much relevant literature as possible had been reviewed (before October 2016), with some of the newer ones included as time and space allowed following an updated literature search in May 2020. Variable purposive sampling, prolonged field work, interview schedule trials and pilots were done to heighten the methodology's usefulness.

An account of the interview procedure was given in Section 3.4.2. Throughout the interviews, along with respect for participants I always maintained a peer attitude instead of as a senior or teacher. No students were coerced into participating in interviews or answering questions, and interviews were always carried out in places where the participants felt safe. Field notes, a research diary, and member-checking procedure were all utilised to enhance the quality of interview data analysis. Audio data recorded were transcribed, analysed, and reviewed as reported in Section 3.5, with a few examples also independently analysed by supervisors. My past experience as a medical student helped

minimise the possibility of phenomenologically interpreting the participants' accounts as opposed to describing them.

That said, there are possible limitations to this study, as reported below.

5.4.2. Limitations of The Study

Limited generalisation of the findings is the first potential restriction of this research. King et al. (2019) stated that the abundance of experienced sensations and information prevents one from attending to the fullness of their details, and Giorgi (2009, p200) also cautioned that analysis of an experience "can never grasp the totality of the original experience". As an exploratory study, its purpose is to achieve understanding of a phenomenon in a particular context, namely the well-being of members of medical students in Indonesian medical schools. As such, generalisability and establishing cause-and-effect are not the aims, or even possible for this research. On the other hand, this study aims for best case of transferability (see Sections 3.3 – 3.5).

As common to these types of studies, there is also the danger of interpretation, i.e. reading too much into the participants' narratives of their lives, and even misinterpretation of their account. This is minimised by interviewer and interviewees using the same native languages, meticulous care in transcribing and analysis, and my being of similar educational and career background to the respondents (see Section 3.4.2; 3.5.1 – 3.5.2).

As far as I saw students talked in a relaxed manner and with honesty. Owing to the self-report nature of interviews, there is a possibility of response bias or image management and power issues. Those issues were alleviated by inherent nature of phenomenological methodology, multiple rapport building measures, including respect, peer attitude, and my own honesty as interviewer (see Sections 3.5.3; 5.4.1; 5.5). Issues hindering introspection and understanding were minimised with probing, and rapport being maintained by allowing for participants' deliberation and asking for clarification. Participants' knowledge of my being their peer and not a member of teaching staff in schools where they study further helped mitigate all said problems (see Section 3.2). The possibility that students who participated in the interviews had for profit motives was attenuated by stating upfront that there would be neither academic nor non-academic benefits given for participating in the study.

Lastly, my involvement is acknowledged below as part of keeping the study's rigour.

5.5 Personal Reflection

Marshall & Rossmann (2016) stated that reflexivity helps in understanding the research and putting it within a context, and with regards to phenomenology it is also a proper attitude to take. King et al. (2019) further mentioned that in conducting interviews the researcher can learn about themselves as a person. As I entered the students' lifeworld and tried to understand their feelings and perceptions, I needed to separate my own and the students' reflexivity, while understanding that my previous experience of being a medical student and then a medical teacher was an advantage, as it equipped me with special sensitivity to the studied phenomenon (cf. Giorgi 2009). Langdridge (2007) also observed that the quality of the findings will increase by attempting to detach from the data through recognising and criticising our own preconceptions.

Before undertaking postgraduate research in Health Professions Education, I had been a member of the teaching staff in one medical school in Indonesia and a practising physician. I have a strong belief that education and health are essential to human beings and that there should be equality in access to both education and healthcare. Where I came from, medicine was a profession in which the complexity and demands were often not brought up. I observed how students experienced stress and lived in potentially depressing conditions, either academically, physically, emotionally, or financially, how they could become disillusioned with life as medical students and medical professionals, and how they thought that they had received incomplete information before they embarked on the career. I am interested in understanding how these issues could be remedied. Moreover, I have experienced both the reality of being a medical student before and the inherent fact that medical professionals meet other people in need. They both took part in shaping my personal inquiry in life. I am passionate when it comes to the issue of well-being and ways it may be improved; understanding happiness, and in effect why human beings decide to continue to live, has been a lifelong search of mine.

As far as I realised, I approached each interview and did the analysis and discussion with as curious and open a mind as possible. I also conceded where my previous suspicions or biases did not hold true for the participants, and kept aware of novel views the participants brought which I did not think of before. This

is also in line with the spirit of descriptive phenomenology itself (see Section 3.2.2). It is possible that the students' knowing my background as a medical professional and teacher helped in building rapport, openness, genuineness, and mutual understanding (see also Section 5.4.1). Toma (in Marshall & Rossmann 2016) observed that this sense of kinship can help increase data quality. As far as I was aware, the participants gave a sincere account of their lives as medical students. No power issues were demonstrated by the students: they neither feared me as the interviewer, nor glorified me as a more senior colleague. They said what they liked and did not like, wanted and did not want in their lives, academic or otherwise, with equal enthusiasm. Where I sensed hesitation from the participants I assured them they were free to recount their stories or not, and where emotional support seemed appropriate I provided it as necessary. Throughout this study I was humbled by the students' candour, ability to focus on their life experiences, and eagerness to share their life experience with me, where they showed how throughout, or despite, challenges in life they built their resilience and have been growing as individuals. The act of conducting the study, and my supervisors, taught me a lot regarding patience and managing expectations; the findings, and in effect the students, obviously instructed me abundantly regarding the what and how of well-being, i.e. happiness.

That said, one brief, but I believe really important, comment to bring here is that there was a report regarding unhappiness from a sexual orientation issue, which I could not include in the findings because at some point in the member-checking period the participant asked for that specific part of the interview to be removed from the data. Suffice it is to say that my impression was the participant's well-being had been severely affected by this issue for a long time, not only because of struggles with acceptance of self, but also that from others. It is to be seen whether the medical schools in Indonesia, and society in general, will handle this issue in an empathetic and caring manner in the future. Moreover, depression is an issue I have closely observed throughout the better part of my lifetime including in the medical school and as a medical professional; listening to the stories the students narrated was a heart-breaking experience at times.

I anticipate this study being useful to inform others with similar daimon, or spirit, with me, that is to improve the well-being of humans everywhere. This brings us to the next and last chapter, namely conclusion and recommendations.

6. CONCLUSIONS AND RECOMMENDATIONS

This study is another testament that well-being is a complex topic which penetrates all domains of an individual's life, and while we are still far away from grasping the whole meaning of it, we are on the way there nevertheless. The findings here extend the existing body of research while also enriching it by retrieving discoveries from a less common locality and demographic, and thus help contribute to the fuller picture. In particular, this study is the first of its kind in the context of medical students in Indonesia, and it helped address the Euro-American bias in the literature on well-being in the medical student population.

What follows is a brief summary of all the findings, how the findings relate to the greater landscape of the field of well-being, and possible recommendations for future endeavour, all drawn in relation to the study's advantages and limitations.

6.1 Summary

The enthusiastic participation of 46 students is encouraging, as it seems Indonesian medical students are eager to contribute towards better well-being and better education system where they live and learn.

The main findings from the study were their description of what well-being psychologically means for them, namely:

1. Sense of fulfilment, which comprises:
    1. Feeling happy
    2. Feeling satisfied and sense of achievement
    3. Having sense of purpose in life, which includes devotion to others
    4. Experiencing sense of growth
2. Sense of being enabled, which comprises:
    1. Possessing sense of agency, or feeling empowered/adequately resourced in the face of challenge
    2. Obtaining the proper rights and responsibilities
3. Acting grateful

What is most fascinating is how the students throughout the changes in their lives, for the most part, were able to build their own personal strength and purpose in life, and thus were on the right track to improve their well-being. Some of the strengths the students cultivated were time management ability and self-esteem, while the purposes that can briefly be mentioned here were personal career and sense of benevolence towards others. It would be interesting to know how they further develop in the future, which brings us to recommendations below.

6.2 Recommendations

6.2.1 Future Research

Phenomenological methodology is a great tool to obtain deep and rich understanding of human psychology, including its concept of well-being; yet while saturation indeed is not an emphasis within this particular methodology, time restriction is a great issue with phenomenological research, and should this study be replicated, it seems much better to do one with far fewer participants and/or multiple researchers. Moreover, it could also allow including more relevant data in the report and thus avoid the loss of some subtle nuances in the findings as I had experienced in relation to both time and writing constraints.

Studies involving medical students both in the first and second undergraduate years and in their internship will also bring more solid understanding on the topic on hand. As well, studies involving students in other health professions or allied health schools will do much good on that aspect. A more ambitious but still possible project would be following cohort(s) of medical students throughout their time studying in medical school.

If, during the time of this particular study, there was a well-being questionnaire validated within the Indonesian context, a future mixed-method study incorporating it may be a way to give a more holistic picture of the state of Indonesian medical students' well-being. Another possible path to explore is extending this study and starting to build a grounded theory on well-being, or building an instrument that may be specifically used to assess the well-being of students in the health professions area.

6.2.2 Curricular and Policy Implications

The nature of the study does not provide enough strength to translate into a basis for policy-making, but it is hoped that the findings will be useful in conjunction with other research on similar topics. Moreover, there are areas that the literature suggests as deserving more focus, in particular potential interventional measures to maintain and improve the well-being of medical students in Indonesia. As an example, evidence has been accumulating on benefits of positive emotion interventions and mindfulness programmes towards individuals' well-being within other settings, which may warrant their implementation within the Indonesian medical school environment. Fitting a specific learning module early within the curriculum, which provides ideas for the students on how to enhance their learning regulation and/or maintain their mental health and social life might also be worthwhile, alongside more large-scale efforts such as establishing offices in medical schools for psychological, learning, career, and financial counselling, and infrastructure facilitating various student activities.

To sum up, future studies of this kind are warranted, and more systematic well-being interventions for medical students are favourable.

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APPENDIX I. Databases and Formulae Used for Search on The Literature (in alphabetical order; a few databases have changed names and/or search engines since then)

CAMPBELL COLLABORATION (https://campbellcollaboration.org/component/jak2filter/?Itemid=1352&issearch=1&isc=1&category_id=101&ordering=publishUp)
(wellbeing OR “well-being” OR “quality of life” OR QOL) AND (hedoni* OR eudaimoni* OR satisfaction OR happiness OR worries OR pain OR hopes OR fears OR hope OR fear) AND (undergrad* OR “higher education” OR “tertiary education” OR “third level education” OR “post-secondary education” OR “postsecondary education” OR “post secondary education”) AND student* AND (phenomenolog* OR subjective) NOT (((primary OR secondary OR elementary) N4 (school OR education)) OR “high school”) NOT ((scale OR scales OR instrument OR instruments OR item OR items OR questionnaire OR questionnaires OR inventory OR inventories) N8 validat*) NOT ((patient OR patients) N8 (wellbeing OR “well-being” OR “quality of life” OR QOL))

COCHRANE LIBRARY (https://www.cochranelibrary.com/advanced-search)
(wellbeing OR “well-being” OR “quality of life” OR QOL) AND (hedoni* OR eudaimoni* OR satisfaction OR happiness OR worries OR pain OR hopes OR fears OR hope OR fear) AND (undergrad* OR (higher OR tertiary OR “third level” OR postsecondary OR “post-secondary” OR “post secondary” NEAR/4 education)) AND student? AND (phenomenolog* OR subjective) NOT (((primary OR secondary OR elementary) NEAR/4 (school OR education)) OR “high school”) NOT ((scale? OR instrument? OR item? OR questionnaire? OR inventory OR inventories) NEAR/8 validat*) NOT (patient? NEAR/8 (wellbeing OR “well-being” OR “quality of life” OR QOL))

EBSCOHOST (http://web.a.ebscohost.com.ezproxy.lib.gla.ac.uk/ehost/search/selectdb?vid=0&sid=f86f1dec-c4b5-4954-9307-2f99a14f7e89%40sessionmgr4007)
(Advanced Search: title, abstract, keyword/subject) (Apply related words; apply equivalent subjects) (British Education Index;CINAHL;Education Abstracts (H.W. Wilson);ERIC;Health Source: Nursing/Academic Edition;MEDLINE;Professional Development Collection;PsycARTICLES;PsycBOOKS;Psychology and Behavioral Sciences Collection;PsycINFO;SocINDEX with Full Text;Teacher Reference Center)
TI ((wellbeing OR “well-being” OR “quality of life” OR QOL) AND (hedoni* OR eudaimoni* OR satisfaction OR happiness OR worries OR pain OR “hopes” OR “fears” OR “hope” OR “fear”) AND (undergrad* OR (higher OR tertiary OR “third level” OR “post-secondary” OR “post secondary” OR postsecondary) N4 education)) AND student? AND (phenomenolog* OR subjective) NOT (((primary OR secondary OR elementary) N4 (school OR education)) OR “high school”) NOT ((scale OR scales OR instrument OR instruments OR item OR items OR questionnaire OR questionnaires OR inventory) N8 validat*) NOT (patient? N8 (wellbeing OR “well-being” OR “quality of life” OR QOL))) OR AB ((wellbeing OR “well-being” OR “quality of life” OR QOL) AND (hedoni* OR eudaimoni* OR satisfaction OR happiness OR worries OR pain OR “hopes” OR “fears” OR “hope” OR “fear”) AND (undergrad* OR (higher OR tertiary OR “third level” OR “post-secondary” OR “post secondary” OR postsecondary) N4 education)) AND student? AND (phenomenolog* OR subjective) NOT (((primary OR secondary OR elementary) N4 (school OR education)) OR “high school”) NOT ((scale OR scales OR instrument OR instruments OR item OR items OR questionnaire OR questionnaires OR inventory) N8 validat*) NOT (patient? N8 (wellbeing OR “well-being” OR “quality of life” OR QOL))) OR SU ((wellbeing OR “well-being” OR “quality of life” OR QOL) AND (hedoni* OR eudaimoni* OR satisfaction OR happiness OR worries OR pain OR “hopes” OR “fears” OR “hope” OR “fear”) AND (undergrad* OR (higher OR tertiary OR “third level” OR “post-secondary” OR “post secondary” OR postsecondary) N4 education)) AND student? AND (phenomenolog* OR subjective) NOT (((primary OR secondary OR elementary) N4 (school OR education)) OR “high school”) NOT ((scale OR scales OR instrument OR instruments OR item OR items OR questionnaire OR questionnaires OR inventory) N8 validat*) NOT (patient? N8 (wellbeing OR “well-being” OR “quality of life” OR QOL)))

EXPANDED ACADEMIC ASAP (now ACADEMIC ONEFILE) **(https://go-gale-com.ezproxy.lib.gla.ac.uk/ps/dispAdvSearch.do?userGroupName=glasuni&prodId=EAIM)**
LIMITS: Document Type ("Abstract" Or "Article" Or "Case study" Or "Chapter" Or "E-book" Or "Report" Or "Review")
Basic Search (wellbeing Or "well-being" Or "quality of life" Or QOL) And Basic Search (hedoni* Or eudaimoni* Or satisfaction Or happiness Or worries Or pain Or "hopes" Or "fears" Or "hope" Or "fear") And Basic Search (undergrad* Or (higher N4 education) Or (tertiary N4 education) Or("third level" N4 education) Or ("post-secondary" N4 education) Or ("post secondary" N4 education) Or ("postsecondary" N4 education)) And Basic Search ((student! N4 nursing) Or (student! N4 dental) Or (student! N4 dentistry) Or (student! N4 medical) Or (student! N4 medicine) Or (student! N4 "health profession") Or (student! N4 "health professions")) And Basic Search (phenomenolog* Or subjective) Not Basic Search ((primary N4 school) Or (secondary N4 school) Or (elementary N4 school) Or (primary N4 education) Or (secondary N4 education) Or (elementary N4 education) Or "high school") Not Basic Search ((scale! N8 validat*) Or (instrument! N8 validat*) Or (item! N8 validat*) Or (questionnaire! N8 validat*) Or (inventory N8 validat*) Or (inventories N8 validat*)) Not Basic Search ((patient! N8 wellbeing) Or (patient! N8 "well-being") Or (patient! N8 "quality of life") Or (patient!

OPEN GREY **(http://www.opengrey.eu)**
(wellbeing OR “well-being” OR “quality of life” OR QOL) AND (hedoni* OR eudaimoni* OR satisfaction OR happiness OR worries OR pain OR hopes OR fears OR hope OR fear) AND (undergrad* OR (higher OR tertiary OR “third level” OR postsecondary OR “post-secondary” OR “post secondary” NEAR/4 education)) AND student* AND (phenomenolog* OR subjective) NOT (((primary OR secondary OR elementary) NEAR/4 (school OR education)) OR “high school”) NOT ((scale OR scales OR instrument OR instruments OR item OR items OR questionnaire OR questionnaires OR inventory OR inventories) NEAR/8 validat*) NOT ((patient OR patients) NEAR/8 (wellbeing OR “well-being” OR “quality of life” OR QOL))

PROQUEST **(https://search.proquest.com/advanced?accountid=14540)**
(Advanced Search) (Anywhere except full text)
all(wellbeing OR “well-being” OR “quality of life” OR QOL) AND all(hedoni* OR eudaimoni* OR satisfaction OR happiness OR worries OR pain OR hopes OR fears OR hope OR fear) AND all(undergrad* OR ((higher OR tertiary OR “third level” OR “post-secondary” OR “post secondary” OR postsecondary) NEAR/4 education)) AND all(student?) AND all(phenomenolog* OR subjective) NOT all((((primary OR secondary OR elementary) NEAR/4 (school OR education)) OR “high school”)) NOT all(((scale OR scales OR instrument OR instruments OR item OR items OR questionnaire OR questionnaires OR inventory OR inventories) NEAR/8 validat*)) NOT all(((patient OR patients) NEAR/8 (wellbeing OR “well-being” OR “quality of life” OR QOL)))

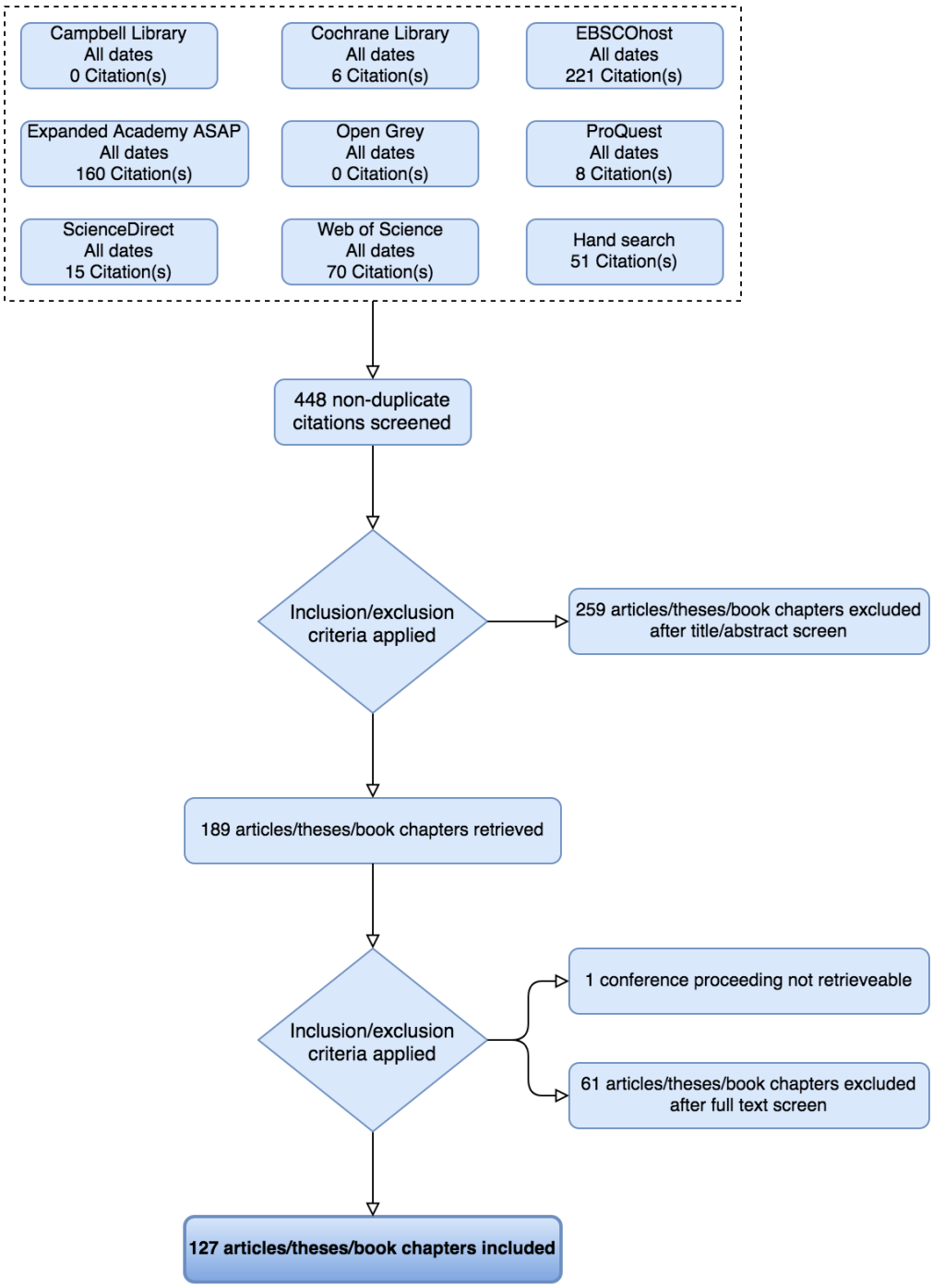
SCIENCEDIRECT **(https://www-sciencedirect-com.ezproxy.lib.gla.ac.uk/search/advanced)**
(Expert Search: title, abstract, keyword/subject) (Medicine & Dentistry, Nursing & Health Professions, Psychology, Social Sciences)
tak(wellbeing OR {well-being} OR {quality of life} OR QOL) AND tak(hedoni* OR eudaimoni* OR satisfaction OR happiness OR {worries} OR pain OR {hopes} OR {fears} OR {hope} OR {fear}) AND tak(undergrad* OR ((higher OR tertiary OR {third level} OR {post-secondary} OR {post secondary} OR postsecondary) W/4 education)) AND tak(phenomenolog* OR subjective) AND tak(student) AND NOT tak(((primary OR secondary OR elementary) W/4 (school OR education)) OR {high school}) AND NOT tak((scale OR instrument OR item OR questionnaire OR inventory) W/8 validat*) AND NOT tak(patient W/8 (wellbeing OR {well-being} OR {quality of life} OR QOL))

WEB OF SCIENCE (http://apps.webofknowledge.com.ezproxy.lib.gla.ac.uk/UA_GeneralSearch_input.do?product=UA&search_mode=GeneralSearch&SID=F3gelv7UNKnT3LwEJGd&preferencesSaved=)
(Advanced Search: title, topic, research area/subject) (Core, CCC, Medline, SciELO; English)
(TS=(wellbeing OR “well-being” OR “quality of life” OR QOL) OR TI=(wellbeing OR “well-being” OR “quality of life” OR QOL) OR SU=(wellbeing OR “well-being” OR “quality of life” OR QOL)) AND (TS=(hedoni* OR eudaimoni* OR satisfaction OR happiness OR “worries” OR pain OR “hopes” OR “fears” OR “hope” OR “fear”) OR TI=(hedoni* OR eudaimoni* OR satisfaction OR happiness OR “worries” OR pain OR “hopes” OR “fears” OR “hope” OR “fear”) OR SU=(hedoni* OR eudaimoni* OR satisfaction OR happiness OR “worries” OR pain OR “hopes” OR “fears” OR “hope” OR “fear”)) AND (TS=(undergrad* OR ((higher OR tertiary OR “third level” OR “post-secondary” OR “post secondary” OR “postsecondary”) NEAR/4 education)) OR TI=(undergrad* OR ((higher OR tertiary OR “third level” OR “post-secondary” OR “post secondary” OR “postsecondary”) NEAR/4 education)) OR SU=(undergrad* OR ((higher OR tertiary OR “third level” OR “post-secondary” OR “post secondary” OR “postsecondary”) NEAR/4 education))) AND (TS=student? OR TI=student? OR SU=student?) AND (TS=(phenomenolog* OR subjective) OR TI=(phenomenolog* OR subjective) OR SU=(phenomenolog* OR subjective)) NOT (TS=(((primary OR secondary OR elementary) NEAR/4 (school OR education)) OR “high school”) OR TI=(((primary OR secondary OR elementary) NEAR/4 (school OR education)) OR “high school”) OR SU=(((primary OR secondary OR elementary) NEAR/4 (school OR education)) OR “high school”)) NOT (TS= ((scale? OR instrument? OR item? OR questionnaire? OR inventory OR inventories) NEAR/8 validat*) OR TI= ((scale? OR instrument? OR item? OR questionnaire? OR inventory OR inventories) NEAR/8 validat*) OR SU= ((scale? OR instrument? OR item? OR questionnaire? OR inventory OR inventories) NEAR/8 validat*)) NOT (TS=(patient? NEAR/8 (wellbeing OR “well-being” OR “quality of life” OR QOL)) OR TI=(patient? NEAR/8 (wellbeing OR “well-being” OR “quality of life” OR QOL)) OR SU=(patient? NEAR/8 (wellbeing OR “well-being” OR “quality of life” OR QOL)))

SCIENCEDIRECT **(https://www-sciencedirect-com.ezproxy.lib.gla.ac.uk/search/advanced)**
Note: ScienceDirect's newer 'advanced' search engine is actually much weaker than the 2016 one. No multiple entries with Boolean operators, no wildcard support, even no proprietary syntax; even then, in the past it provided only 5 relevant search results, so in similar treatment with OCLC and Zetoc, further query with this database is not pursued

WEB OF SCIENCE **(http://apps.webofknowledge.com.ezproxy.lib.gla.ac.uk/UA_GeneralSearch_input.do?product=UA&search_mode=GeneralSearch&SID=F3gelv7UNKnT3LwEJGd&preferencesSaved=)**
(Advanced Search: title, topic, research area/subject) (Core, CCC, Medline, SciELO; English)
(TS=(wellbeing OR "well-being" OR "quality of life" OR QOL) OR TI=(wellbeing OR "well-being" OR "quality of life" OR QOL) OR SU=(wellbeing OR "well-being" OR "quality of life" OR QOL)) AND (TS=(hedoni* OR eudaimoni* OR satisfaction OR happiness OR "worries" OR pain OR "hopes" OR "fears" OR "hope" OR "fear") OR TI=(hedoni* OR eudaimoni* OR satisfaction OR happiness OR "worries" OR pain OR "hopes" OR "fears" OR "hope" OR "fear") OR SU=(hedoni* OR eudaimoni* OR satisfaction OR happiness OR "worries" OR pain OR "hopes" OR "fears" OR "hope" OR "fear")) AND (TS=(undergrad* OR ((higher OR tertiary OR "third level" OR "post-secondary" OR "post secondary" OR "postsecondary") NEAR/4 education)) OR TI=(undergrad* OR ((higher OR tertiary OR "third level" OR "post-secondary" OR "post secondary" OR "postsecondary") NEAR/4 education)) OR SU=(undergrad* OR ((higher OR tertiary OR "third level" OR "post-secondary" OR "post secondary" OR "postsecondary") NEAR/4 education))) AND (TS=student? OR TI=student? OR SU=student?) AND (TS=(phenomenolog* OR subjective) OR TI=(phenomenolog* OR subjective) OR SU=(phenomenolog* OR subjective)) NOT (TS=(((primary OR secondary OR elementary) NEAR/4 (school OR education)) OR "high school") OR TI=(((primary OR secondary OR elementary) NEAR/4 (school OR education)) OR "high school") OR SU=(((primary OR secondary OR elementary) NEAR/4 (school OR education)) OR "high school")) NOT (TS= ((scale? OR instrument? OR item? OR questionnaire? OR inventory OR inventories) NEAR/8 validat*) OR TI= ((scale? OR instrument? OR item? OR questionnaire? OR inventory OR inventories) NEAR/8 validat*) OR SU= ((scale? OR instrument? OR item? OR questionnaire? OR inventory OR inventories) NEAR/8 validat*)) NOT (TS=(patient? NEAR/8 (wellbeing OR "well-being" OR "quality of life" OR QOL)) OR TI=(patient? NEAR/8 (wellbeing OR "well-being" OR "quality of life" OR QOL)) OR SU=(patient? NEAR/8 (wellbeing OR "well-being" OR "quality of life" OR QOL)))

APPENDIX II. Summary Diagram on Literature Search



Note: 13 articles published after initial search were later included following a search repeat (5 May 2020)

APPENDIX III. Ethics Application Approval Letter

University of Glasgow | College of Medical, Veterinary & Life Sciences

[redacted]
Professor of Medical Cardiology
BHF Glasgow Cardiovascular Research Centre
College of Medical, Veterinary & Life Sciences
University of Glasgow, G12 8TA
Tel: 0141[redacted]
Email: [redacted]@glasgow.ac.uk

30th June 2016

Dear [redacted]

MVLS College Ethics Committee

Project Title: The Meaning of Quality of Life for Undergraduate Medical Students in Indonesia.
Project No: 200150171

The College Ethics Committee has reviewed your application and has agreed that there is no objection on ethical grounds to the proposed study. It is happy therefore to approve the project, subject to the following conditions

- Project end date: April 2017
- The data should be held securely for a period of ten years after the completion of the research project, or for longer if specified by the research funder or sponsor, in accordance with the University's Code of Good Practice in Research: (http://www.gla.ac.uk/media/media_227599_en.pdf)
- The research should be carried out only on the sites, and/or with the groups defined in the application.
- Any proposed changes in the protocol should be submitted for reassessment, except when it is necessary to change the protocol to eliminate hazard to the subjects or where the change involves only the administrative aspects of the project. The Ethics Committee should be informed of any such changes.
- You should submit a short end of study report to the Ethics Committee within 3 months of completion.

Yours sincerely

[redacted]
Deputy Chair, College Ethics Committee

APPENDIX IV. Request E-mail for Access to Medical Schools

On Thursday, August 11, 2016 1:09 PM, [redacted]@student.gla.ac.uk> wrote:

Kepada Yth.
[redacted]
Program Studi Pendidikan Dokter
Fakultas Kedokteran
Universitas[redacted]
di tempat

Dengan hormat,

Nama saya adalah [redacted], dan saya adalah seorang mahasiswa doktoral Health Professions Education (di Indonesia istilah Medical Education mungkin lebih dikenal) di University of Glasgow, Britania Raya. Saat ini saya sedang dalam tahun kedua studi saya. Saya bermaksud memohon kesediaan sekolah Bapak/Ibu untuk menjadi tempat dilakukannya wawancara satu demi satu dengan beberapa mahasiswa/i dari sekolah Bapak/Ibu dalam rangka memperoleh gambaran mengenai kualitas hidup mereka dari aspek akademik maupun non akademik.

Saya menemukan bahwa dalam literatur, kajian mengenai kualitas hidup mahasiswa/i kedokteran di Asia Tenggara, termasuk Indonesia, sangat minimal dibandingkan dengan hal serupa dari Eropa dan Amerika Utara. Penelitian telah menunjukkan bagaimana kualitas hidup mahasiswa/i dalam berbagai aspek, baik akademik maupun non akademik, dan hal-hal apa yang menjadi perhatian para mahasiswa/i, mampu memberi pengaruh pada bagaimana mereka belajar, bagaimana mereka bersikap, bagaimana hasil belajar dari tiap individu, bahkan kinerja mereka di masa depan di tengah-tengah masyarakat setelah melewati pendidikan kedokteran.

Hal ini membuat saya melihat pentingnya mempelajari dan menangkap gambaran keadaan kualitas hidup mahasiswa/i kedokteran di Indonesia, dan saya bermaksud untuk berusaha mendapatkan jawaban dari pertanyaan tersebut langsung dari tangan pertama, yakni mahasiswa/i kedokteran itu sendiri. Metodologi yang saya terapkan adalah fenomenologi, sebuah metodologi klasik yang menempatkan individu sebagai pelaku utama kehidupan dan menekankan pentingnya pengalaman hidup individu tersebut, dan metode pengambilan data yang saya gunakan adalah wawancara, yang sangat cocok dengan metodologi tersebut.

Wawancara yang akan dilakukan adalah dengan siapapun mahasiswa/i kedokteran di tahun ketiga dan keempat yang atas kemauannya sendiri menawarkan keikutsertaannya untuk membagikan pengalaman-pengalaman dan sudut pandangnya mengenai hidup yang dia jalani dan kaitannya dengan kualitas hidupnya sendiri. Undangan wawancara dapat terus dibuka hingga akhir Februari, sesuai perkembangan data yang diperoleh. Walaupun saya tak membatasi kesempatan dan jumlah mahasiswa/i yang ingin ikut serta, penelitian ini sendiri berpendekatan kualitatif, di mana dalam pendekatan ini ada konsep saturasi (yakni titik ketika data yang dikumpulkan tak lagi memberikan pola atau tema yang sama sekali baru dalam analisisnya). Ketika titik saturasi ini tercapai, maka proses pengambilan data akan dihentikan, dan tentunya saya juga akan menginformasikannya pada pihak sekolah dan para mahasiswa/i.

Melalui surat ini, perkenankanlah saya menanyakan kesediaan sekolah Bapak/Ibu untuk turut serta dalam memperkaya khasanah pengetahuan kita semua dalam hal ini dengan mengizinkan saya menyebarkan undangan terbuka wawancara kepada para mahasiswa/i program Sarjana Kedokteran di tahun ketiga dan keempat di sekolah Bapak/Ibu. Saya bermaksud menyebarkannya lewat poster cetak (yang akan saya kirimkan) di papan pengumuman di sekolah Bapak/Ibu, dan juga secara elektronik lewat halaman situs jejaring sekolah (jika tersedia). Surat undangan elektronik (yang juga akan saya kirimkan) pun telah saya siapkan untuk diberikan pada administrator sekolah agar administrator bisa menyebarkannya kepada alamat surat elektronik para mahasiswa/i di tingkat pendidikan tersebut, sehingga daftar alamat surat mereka tetap terjaga kerahasiaannya. Surat undangan ini akan menjelaskan dengan rinci mengenai prosedur wawancara yang akan dilakukan dan juga nomor telepon serta alamat surel saya, sehingga para mahasiswa/i dapat mengetahui terlebih dahulu apa saja yang akan dilakukan dalam wawancara sebelum memberikan persetujuannya untuk mengikuti wawancara. Wawancara ini tentu bersifat sukarela dan mahasiswa/i yang tertarik diundang untuk menyatakan niatnya membagikan pengalaman dan pandangan hidupnya melalui nomor telepon dan alamat surel saya. Tidak ada kriteria tertentu bagi para mahasiswa/i yang ingin ikut serta selain bahwa mereka adalah mahasiswa/i program sarjana kedokteran di tahun ketiga atau keempat.

Rancangan studi saya ini telah melalui prosedur pemeriksaan ketat dari College of Medical, Veterinary and Life Sciences University of Glasgow dan telah disetujui oleh Komite Etik dari College tersebut (surat persetujuan terlampir).

Rencana pelaporan dan penyebaran hasil dari studi ini adalah dalam bentuk tesis serta artikel jurnal di bidang terkait.

Besar harapan saya, agar para mahasiswa/i dari sekolah Bapak/Ibu yang terhormat bisa turut serta dalam studi ini, dan saya terbuka setiap saat terhadap setiap pertanyaan, diskusi, saran, dan komunikasi terkait dengan studi ini. Jika saya diminta menghubungi salah satu staf di sekolah Bapak/Ibu lewat surel, text messaging apps, telepon, ataupun Skype untuk memberikan informasi lebih lanjut, mohon saya diberi petunjuk dan saya akan dengan senang hati melakukannya. Juga jika ada dokumen yang dipandang perlu terkait dengan studi ini, saya bersedia menyediakannya.

Demikian surat ini saya sampaikan, dan saya mengucapkan terima kasih atas perhatian dan kerja sama yang diberikan.

Hormat saya,

[redacted]
Doctoral student
Health Professions Education
College of Medical, Veterinary and Life Sciences
University of Glasgow

[e-mail] [redacted]@student.gla.ac.uk
[mobile/whatsapp/telegram] +628[redacted], +447 [redacted]
[skype] [redacted]

APPENDIX V. Research Proposal for Access to Medical Schools
(by request)

The Meaning of Quality of Life for Undergraduate Medical Students in Indonesia

Proposal for Access
Professional Doctorate in Health Professions Education
[redacted]

School of Medicine
College of Medicine, Veterinary, and Life Sciences
University of Glasgow
2016

1. Research Context, Title, and Questions

Medical education in southeast Asia, the region that has become the new focus for global health, including Indonesia as its most active supplier country of professional medical practitioners is experiencing rapid transformation in recent years alongside developments in the broader socioeconomic domain (Acuin et al. 2011; Asante et al. 2014; Chongsuvivatwong et al. 2011; Deka 2011; Kanchanachitra et al. 2011; Tangcharoensathien et al. 2011). The most recent developments in the current Indonesian context are the decision from the government of the capital city of Indonesia to free Jakarta's future public undergraduate students from tuitions, in similar vein to the step undertaken by the public medical school in West Java, University of Padjadjaran, where it starts to exempt the medical students and residents of tuition fees (Rasmin 2010; Adityo 2016; Hendika 2015). This forward step is akin to the spirit of equality and widening participation that has been propagating in other higher education institutions including in the UK, in that more people from different socioeconomic statuses will have the chance to obtain tertiary education. Other, more profound contemporary transitions also include the fast growth of private medical schools, adoption of problem-based learning system and continuing medical education, establishment of laws governing the medical practice and education, and successive changes in professional competence regulation (Denura 2012; Konsil Kedokteran Indonesia 2012; Lestari 2012; Undang-undang Republik Indonesia Nomor 20 2013; Undang-undang Republik Indonesia Nomor 29 2004).

Much attention has been given to how the institutional and curricular affairs are regulated (e.g. Findyartini et al. 2015; Miller et al. 2015; Widyandana et al. 2011), but not so regarding the state of medical students' quality of life. It is not known whether Indonesian undergraduate medical students' quality of life is keeping up with the said development in medical education, even so with the pressure from the low and very unevenly distributed doctor/population ratio (37.2 from WHO's standard of 40 general practitioners (GPs) for every 100.000 people in year 2013, with the ratio in each individual Indonesian provinces vary between 8.9-151.5 GPs for every 100.000 people) and the general backdrop of the absolute number of people living in poverty (Kanchanachitra et al. 2011; Kementerian Kesehatan Republik Indonesia 2013). This ought to be a concern as several studies have repeatedly shown that education is

essential to one's quality of life, that medical students can experience motivational change throughout their academic years, that students' quality of life may have an impact in their academic motivation and achievement, and that faculty's attitude and academic burnout is correlated with the students' quality of life (Henning et al. 2011; Monk-Turner 2013; Pagnin & de Queiroz 2015; Tempski et al. 2015; Yalçin 2011). Lastly, it has been shown that low quality of life is correlated with depression in another demographic group (Hassel et al. 2011).

The points mentioned above make a study aiming to explore the Indonesian medical students' understanding of the concept of quality of life and their perceptions of the state of their quality of life relevant and timely (cf. Creswell 2007). This overarching aim is articulated in the following objectives:

1) Explore what quality of life means for the students of medicine in Indonesia.
2) Identify concepts, whether external or internal to a person, that contribute to personal perception of quality of life in the context of learning medicine in Indonesia.
3) Understand how medical students in Indonesia view and actively give meaning to the factors that contribute to their quality of life.

And the research questions are:

1) What are the ways in which Indonesian undergraduate medical students' define the quality of life?
2) What is the meaning that the students ascribe to the concepts they consider as significant in contributing to their quality of life?
3) What changes happen to the ascribed meaning throughout the students' study years?

2. Problem Overview

Although it has been researched for some time, there has been no real consensus among academics regarding what quality of life is and even how it should have been assessed, showing the complexity of the term and the tendency of the researchers to reduce it into easily operable proxies such as wealth (Assi et al. 2012; Boreham et al. 2013; Charlemagne-Badal et al. 2015; Cummins 2010; de Smedt 2013; Dodge et al.

2012; Ip & Shek 2013; Salvador-Carulla et al. 2014; Svensson & Hallberg 2011; Yamaguchi 2015). Food and Drug Administration (in Cummins 2010) and World Health Organisation (in Abdel-Khalek 2010), for example, summed it into how an individual positions aspects of their life in relation to an external situation within a specific culture, and Campion & Nurse (in Charlemagne-Badal et al. 2015) and Shah & Marks (in Dodge et al. 2012) offered having sense of meaning in life and belonging in a community while being resilient and content as the definition. There are also several other overlapping terms used inconsistently by scholars to explain this topic, such as well-being or happiness (Dodge et al. 2012; Monk-Turner 2013; Salvador-Carulla 2013; Yamaguchi 2015). Abdel-Khalek (2010) himself, alongside Miller et al. (2014), seemed to be of the persuasion that well-being is the subjective aspect of quality of life, and stated that this quality is not a discrete state, but rather a continuum between two opposite ends. Power (2013) proposed that instead of equating having quality life with happiness, we instead should see it as the flexibility in responding to what happens in life. Meanwhile, Dodge et al. (2012) offered a renewed definition for well-being as the balance between an individual's total resources and their life challenges, and added that most of the time studies in this area in fact only listed the dimensions instead of elaborating what quality of life is. In general, the body of research stated that there are two sides to the quality of life: the hedonic/affective (which highlighted the state of an individual's experience) and eudaimonic/cognitive (which emphasised the state of an individual's evaluation over the experience) (Dodge et al. 2012; Salvador-Carulla et al. 2014; Schnettler 2015).

The existing systematic review regarding quality of life critiqued the multiple definitions of and instruments to assess quality of life (Charlemagne-Badal et al. 2015). They observed that these definitions and instruments were usually specific in purpose and context, and concluded that quality of life is indeed a multifaceted topic where scholars shall put more attention to the values individuals give onto aspects of their life, i.e. their subjective view on the proxies quantitatively measured; an issue of which had been presaged by Cummins (2010), de Smedt (2013), and Ip & Shek (2013). Yamaguchi (2015) and Monk-Turner (2013) maintained how measurements and results in quality of life studies can seem to contradict each other, and Karlsson et al. (2013) observed that family and friends' views may be a factor in one's judging their own personal

quality of life. Those researchers agreed though, that education, employment, being connected with others, and physical health may strongly be correlated with quality of life, and that more attention shall be given to an individual's social aspects of life (instead of just economic ones). The tendency now is to reexamine the scholars' attitude of treating quality of life as a function of only material resources (Assi et al. 2012; Salvador-Carulla 2013). Many disciplines, ranging from economic, sociological, psychological, medical, and environmental, are interested in the subject, further emphasising the multidimensionality of quality of life, and a holistic approach toward the issue is the ideal one (Abdel-Khalek 2010; Charlemagne-Badal et al. 2015; Salvador-Carulla 2013).

It has been shown that culture and context should be taken seriously in considering the concept of quality of life. While the results of this study will be expected to contribute toward the improvement of definition of the concept of quality of life, the originality of this research is that the study is done within a dynamic context which is relatively rarely mentioned within the literature, i.e. (Southeast) Asian demogeography with Indonesia as an exploratory sample (cf. Boreham et al. 2013; cf. Schnettler et al. 2015). Also, while there has been some maintained attention toward the quality of life of higher education students and public in general (e.g. Hassel et al. 2010; Miller et al. 2014; Schnettler et al. 2015; Sharma et al. 2013; Yalçin 2011; Yamaguchi 2015), the state of undergraduate medical students' quality of life has not been receiving as much. Further, it is hoped that the results of the study in the future may develop into a tool to promote the students' quality of life throughout their academic years.

3. Research Design and Approach

3.1. Methodology

Yamaguchi's paper stated (2014) and Charlemagne-Badal et al.'s systematic review (2015) concluded that quality of life is a contextual and phenomenological experience. Although literature in this domain already exists, this study will be an assessment of quality of life in a novel context, and no matter how ubiquitously existing, one concept can mean different things to different people and in different cultural, professional, and situational backgrounds. The existing quantitative instruments also may not be suitable and need to be validated for employment in a different situation. Those reasons render

a rigid quantitative approach ineffective. A qualitative approach, which 'is pragmatic, interpretive, and grounded in the lived experience of people' (Marshall & Rossman 2016: 2) is needed. An explorative study to delve into complexities and experience and gain new insight is thus suitable, and imposing the inherent limitations of a fixed design will restrict the knowledge gained (Marshall & Rossman 2016; Robson 2002). May (2011) further asserted that how we conduct a social research is inseparable from the issue being studied, that the only findings that can be justified are temporal and situational, and Gillham (2005: 8) added that 'methods have to fit the research questions, and suit the kind of data that one is seeking to collect'. It is therefore appropriate to employ a phenomenological perspective toward the inquiry, to obtain particular aspects of the participants' mind, opinion, or experience, and gain an accurate account about how they view quality of life and relate it to their experience in undergraduate medical study (Brinkmann & Kvale 2013; Marshall & Rossman 2016; Smith & Osborn 2014). Smith and Osborn further remarked that phenomenology brings how people makes sense of their world together with the context and even with the issues originating from the novelty aspects that will be examined through a research. A mixed-methods approach was ruled out due to the aforementioned difficulties in using existing tools on quality of life, an expected benefit of the proposed study will be to inform the development of quantitative quality of life tools for use in the Indonesian context.

3.2. Sampling and Timeframe

In qualitative approaches, sampling is not determined to represent population, but instead its purpose is to gain rich data from the sources most relevant to the inquiry at hand (Cohen et al. 2011). The study will recruit participants from at least one public and one private medical school from each of the three levels of national accreditation (Badan Akreditasi Nasional Perguruan Tinggi 2016), with other reputation lists also used as reference (Konsil Kedokteran Indonesia 2016; QS 2016; Times Higher Education 2016), and at least two to five interviewees from each school. Creswell (2007) and Langdridge (2007) also have observed that a phenomenological study usually only needs a relatively very little number of participants (as small as five to six), although during the course of the study, it may move well beyond this stated number (Silverman 2010). Further effort will be taken as possible to ensure that the recruitment

will include schools from different geographic areas and range from well to less-resourced schools. These purposive criteria (instead of having twelve participants from one medical school, for example) are employed to establish the maximum variation modelling needed for rich description (Cohen et al. 2011; Creswell 2007; Langdridge 2007).

The fieldwork phase will start in 15 July 2016 and end in 31 March 2017. While the data collection time may look extensive with regards to the stated numbers of participants aimed, it is worth noting that the obtained data will be thick data, and that a qualitative research design is an iterative and emergent process, which means several things altogether: the data collection will run concurrently with the data analysis and with comparing to the existing literature; the collected data will inform the data analysis; and in turn the data analysis may influence the course and the number of subsequent data collection. Further, it is worth noting that the field researcher (AS) realises that there are existing practical constraints within this study which as Gillham (2005) exhorted should be seriously considered, most prominently in the limitations of time. Therefore while the study will try to find and explain as thorough answers to the research questions as possible by doing as many interviews as time allows and by exhausting the data in the analysis (cf. Schutt 2015), saturation is not a prime goal, so that this study will still be "reasonable in size and complexity so that it can be completed with the time and resources available" (Bogdan & Biklen in Marshall & Rossman 2016: 123) and should there be any unexplainable findings, as part of maintaining the research integrity it would be acknowledged (cf. Schutt 2015).

3.3. Data Collection Method and Data Analysis

To find answers to the research questions face-to-face in-depth semistructured interviews as the data collection method will be used. Interviews are expected to run for approximately forty five minutes, with a maximum time of ninety minutes, to recognise that participants may welcome the opportunity to expand on matters related to their quality of life. Interviews are feasible as the participants will be the learners studying in the higher education degree, and as such it is safe to assume that participants are well educated and are well able to elaborate and discuss the deeper meaning they ascribe to the concepts related to the research question. In addition, 'interviews are ideal'

(Braun & Clarke 2013: 50) for phenomenological inquiries and obtaining an understanding of 'what it is like', 'what their experience is', 'what meaning they make out of that experience' (Seidman 2006: 11), and are a 'very rich source of knowledge' (Brinkmann & Kvale 2013: 63). Interview method lends itself well in exploring the possible answers to the inquiry (cf. Schutt 2015; cf. Silverman 2010). Moreover, there are reasons for not doing distance interviews: to avoid the failure of establishing rapport with the interviewees, to avoid the limited elaboration of the topic and overall control of the interview, to avoid difficulties generating the verbal desciptions, and to avoid the loss of non verbal cues (Brinkmann & Kvale 2013; Fielding & Thomas 2001; Sarantakos 2013). Direct interviews will allow me to build trust with the participants, and convey the sense of valuing them. They also give chance for reassurance of the research purpose, and clarification and probing of the interview questions throughout the data collection phase, therefore fulfilling the accessibility, cognition and ethics, and motivational aspects needed in this method (Marshall & Rossman 2016; May 2011; Sarantakos 2013). All in all, doing face-to-face in-depth interviews is a part of the efforts to maintain the validity and authenticity of the study.

There will be an invitation email (Appendix B) with the participant information sheet (Appendix D) explaining about the intention and procedure of the research and interview, distributed by the medical school administrative staff to medical students in the clinical (i.e. third and fourth) years, alongside an invitation poster (Appendix E) placed in the school premises with a digital counterpart on the school's social website if available, asking for their participation. Interested students will be invited to contact the researcher (AS) through a telephone number or e-mail address to make known their willingness to participate.

AS will then make an appointment with each of the participants to conduct separate interviews. There will be one single interview for each participant, which will consist of taking informed consent in writing (Appendix K), and then the actual interview which will be audio-recorded with the participant’s permission. If a participant refuses to be audio-recorded from the outset or at any time during the interview, permission will be asked from him/her for AS to take notes during interview; also, the participants can withdraw their consent for participation at any time during interview and during data

analysis. Time length of the interview will be variable between participants, but it is expected that each interview will take forty five minutes to an hour and a half duration. Before interview, AS will:

a) reiterate the purpose of the study and give the participant the opportunity to ask questions,

b) state that AS will give the participant the opportunity to check the transcript of the interview,

c) state that after the study is finished, in the future the participant may contact AS if they are interested with the result of the study

d) state that the participation in the research will not affect participant's stance in the teaching and learning situation. There will be neither disadvantage nor discrimination after the research and their participation or refusal to participate will not affect their grades whatsoever, and

e) also ask if the participant agrees to be contacted again to identify peers who may be willing to participate in the study if time still suffices and the needs arise while no new participant comes forward. The identified person will be sent another invitation email (Appendix G) and information sheet (Appendix I). After the interview and member-checking, the name of participants will be deleted from the researchers' records and transcripts will be fully anonymised to assure participants' confidentiality. By this time, the participant's participation in the study is ended.

On the cther hand, in the event where students showing interest to participate are more than what resource limits of time and personnel can handle, participants will be randomly selected.

Interviews will be digitally audio-recorded to keep the richness of the conversation data as much as possible. The records will be saved in a password-protected personal computer. Audio-recording also facilitates further enrichment of data through interviewer's ability to take relevant notes during the interview and pay attention to non verbal cues, and audio-recording will make it easier to go back to original data for analysis purposes or recheck with regard to faithfulness of the study. It will then be personally transcribed by the field researcher for thematic analysis as Braun & Clarke (2013) and Giorgi (2009) laid out, assisted by Nvivo 10 software. After this, the

respective audio recording will be destroyed to further ensure participants' security. The transcription will also be sent back to each of the respective participants for member-checking and validation (Brinkman and Kvale 2015; Gillham 2005; Langdridge 2007; Marshall & Rossman 2016; Sarantakos 2013). All contact details, including their email addresses, will be removed after transcriptions have been returned from corresponding individual participants following validation, unless the participant wants the future report of the study sent to him/her. By then only the researchers will have access to the transcriptions.

4. Benefits Potential and Dissemination

A 50.000-word thesis will be written as the study report. Verbatim quotations will be used in the report but these will not identify individuals (all possibly identifying data will be removed within the report). Other than that, a short end of the report will be sent as an article to be published in a relevant journal, and related parties (including the participants and medical schools where the study is conducted) are welcome to have a copy of the report should they want it.

As stated above, the study is expected to lead to a greater understanding of how the students studying undergraduate medicine in Indonesia view the subject of quality of life and also how the experience of being medical students is related to their quality of life. This will potentially have a bearing on the curriculum of the school to improve the learning experience of the students and the teaching and learning environment overall.

The results from a phenomenological research can also be expanded for building further research or theory in the field and/or in new context (Charmaz 2014). Moreover, a specific instrument may be built from the accumulated findings in this specific context and be used to more easily assess the status of the quality of life of undergraduate medical students.

As such, no direct and immediate possible benefits toward the participants for taking part in this study is anticipated, other than personal satisfaction acquired from sharing personal thoughts, feelings, and experiences.

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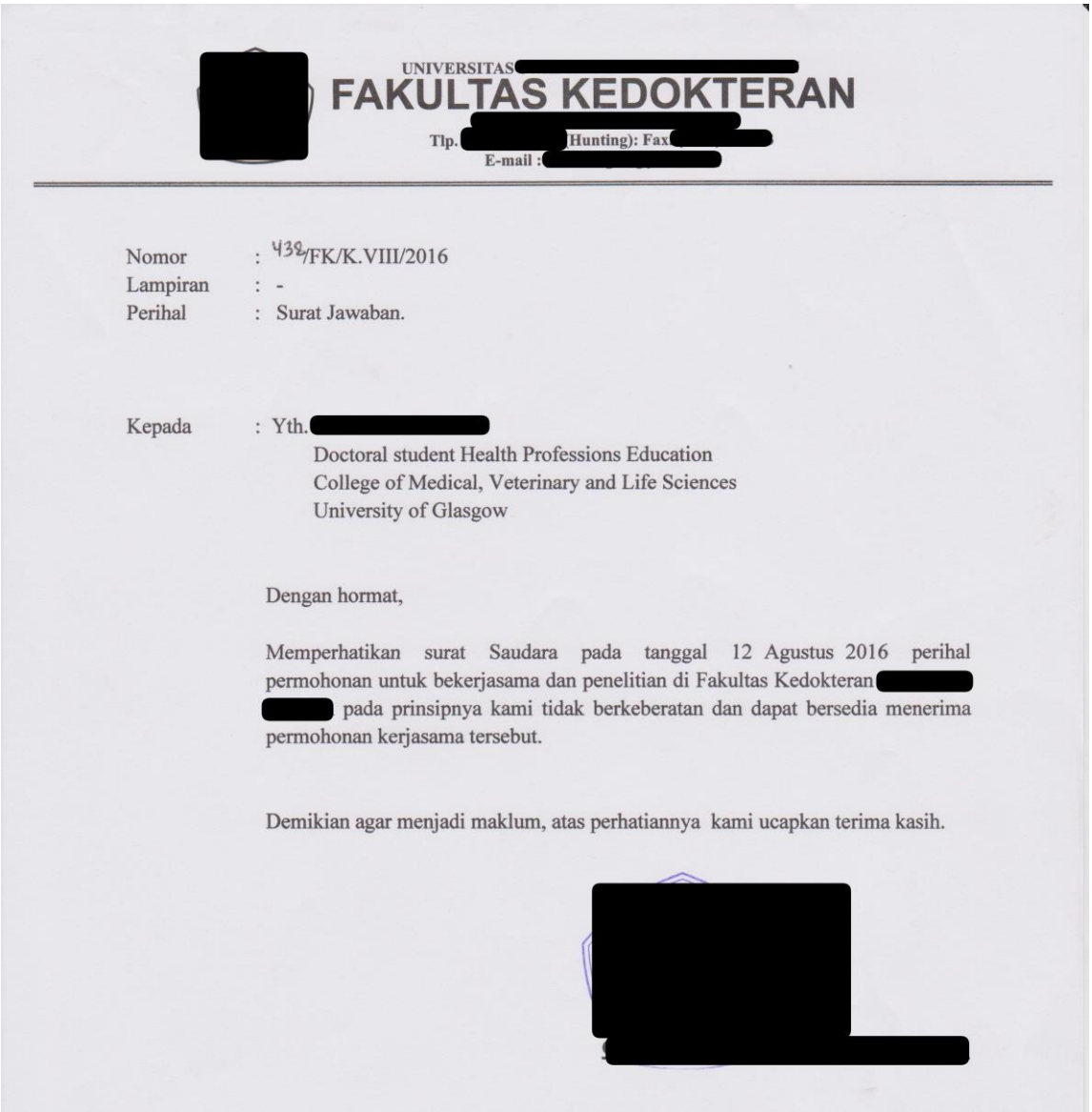
APPENDIX VI. Example Approval E-mail for Medical School Access



[redacted]
UNIVERSITAS [redacted]
FAKULTAS KEDOKTERAN
Tlp. [redacted] (Hunting): Fax [redacted]
E-mail : [redacted]

Nomor : 438/FK/K.VIII/2016
Lampiran : -
Perihal : Surat Jawaban.

Kepada : Yth. [redacted]
Doctoral student Health Professions Education
College of Medical, Veterinary and Life Sciences
University of Glasgow

Dengan hormat,

Memperhatikan surat Saudara pada tanggal 12 Agustus 2016 perihal permohonan untuk bekerjasama dan penelitian di Fakultas Kedokteran [redacted] pada prinsipnya kami tidak berkeberatan dan dapat bersedia menerima permohonan kerjasama tersebut.

Demikian agar menjadi maklum, atas perhatiannya kami ucapkan terima kasih.

[redacted]

Translation of body of the letter:

With esteem,

With regards to your letter dated 12 August 2016 re. request for collaboration and research within the Faculty of Medicine of University of _____, we have no objections in principle and can accept the request.

We wish that this be acknowledged, and we thank you for the attention.

APPENDIX VII. Interview Invitation Letter
(in Indonesian and English translations)

University of Glasgow | College of Medical, Veterinary & Life Sciences

SURAT UNDANGAN

Undangan - **The Meaning of Quality of Life for Undergraduate Medical Students in Indonesia**

Mahasiswa yang terhormat,

Saya menulis kepada Anda karena Anda adalah mahasiswa kedokteran di tahun klinis, dan semua mahasiswa tahun klinis di sekolah Anda diundang untuk ikut serta dalam studi saya mengenai kualitas hidup mahasiswa S1 kedokteran.

Saya mengundang mahasiswa untuk mendiskusikan pandangan mereka tentang kualitas hidup, serta persepsi dan pengalaman Anda tentang kualitas hidup terkait studi S1 Anda. Saya ingin mengajak Anda mengatakan kepada saya tentang hal-hal tersebut melalui wawancara tunggal. Informasi yang Anda berikan kepada saya akan digunakan untuk mengeksplorasi faktor-faktor yang berkontribusi pada kualitas hidup mahasiswa kedokteran dan juga makna pribadi dari faktor-faktor tersebut bagi mahasiswa kedokteran secara khusus, dan hasilnya dapat mempengaruhi pendidikan kedokteran Indonesia di masa depan. Tidak ada jawaban benar atau salah dalam studi ini – saya mengharapkan sudut pandang yang luas dan bervariasi. Keputusan Anda untuk ikut atau tidak dalam studi ini tak akan mempengaruhi posisi Anda sebagai mahasiswa di sekolah dalam hal apapun.

Sebelum Anda memutuskan untuk ikut serta atau tidak, penting bagi Anda untuk mengerti kenapa saya melakukan studi ini dan apa kaitannya dengan Anda. Mohon sediakan waktu untuk membaca dengan teliti lembar informasi yang terlampir, dan sediakan waktu untuk berpikir apakah Anda akan ambil bagian atau tidak.

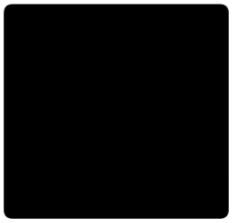
Wawancara dengan Anda, jika Anda memutuskan ikut ambil bagian, akan dilakukan di lingkungan kampus dalam jam kerja. Anda bisa menunjukkan keinginan Anda untuk berwawancara dengan menghubungi saya, [redacted], melalui nomor telepon/WhatsApp maupun alamat surat elektronik yang tersedia di lembar informasi.

Penting juga saya sampaikan bahwa jika jumlah mahasiswa yang tertarik ikut serta diwawancarai lebih banyak daripada yang dapat diakomodasi dalam waktu yang tersedia, peserta akan dipilih secara acak dari para mahasiswa tersebut.

Jika Anda memiliki pertanyaan apapun tentang studi ini, mohon hubungi saya. Nomor telepon dan alamat surel saya tertulis dalam lembar informasi dan saya akan sangat senang mendengar dari Anda dan mendiskusikan dengan Anda setiap pertanyaan yang Anda berikan.

Terima kasih banyak telah membaca surat ini.

Hormat saya,



Peneliti/Mahasiswa Doktoral
Pendidikan Profesi Kesehatan
Universitas Glasgow

University of Glasgow | College of Medical, Veterinary & Life Sciences

INVITATION EMAIL

Study Invitation - **The Meaning of Quality of Life for Undergraduate Medical Students in Indonesia**

Dear Student,

I am writing to you because you are a medical student in the clinical year, and all such students in your school are being invited to take part in my study of undergraduate medical students' quality of life.

I am inviting students to discuss about their views of the concept of quality of life, and their perception and experience of it in relation to their learning medicine. I would like to invite you to tell me your views in a one-off interview. The information you give me will be used to help explore the factors contributing to quality of life and the meaning of these to medical students in particular, and the results will have the potential to influence future medical education in Indonesia. There are no right or wrong answers in this study – I am keen to gain a wide variety of perspectives. Your decision whether or not to take part in the study will not affect your position as a student in the school in any way.

Before you decide whether or not you would like to take part, it is important for you to understand why I am doing this project and what it would involve for you if you decide to participate. Please take time to read the enclosed information sheet carefully, and take time to think about whether or not you would like to take part.

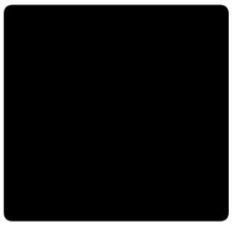
The interviews, should you decide to participate, will take place in university premises during working hours. You may express your interest in being interviewed by contacting me, [redacted], through the provided telephone/WhatsApp number or email address available in the information sheet.

It is worth pointing out that if more students express an interest in taking part in the interviews than can be accommodated in the timescale, participants will be selected at random from amongst those indicating interest.

If you have any questions about the study then please contact me. My phone number and e-mail address are written on the information sheet and I will be happy to hear from you and discuss with you any questions you may have.

Thank you very much for reading this letter.

Yours sincerely,



Researcher/Postgraduate Student
Doctorate in Health Professions Education
University of Glasgow

APPENDIX VIII. Interview Information Sheet
(in Indonesian and English translations)

University of Glasgow | College of Medical, Veterinary & Life Sciences

LEMBAR INFORMASI PESERTA

1. Judul studi

The Meaning of Quality of Life for Undergraduate Medical Students in Indonesia.

2. Paragraf undangan

Anda diundang mengambil bagian dalam sebuah studi. Sebelum Anda memutuskan, penting bagi Anda untuk mengetahui mengapa studi ini dilakukan dan apa yang akan dilakukan. Bacalah informasi berikut ini sebaik-baiknya dan diskusikan dengan orang lain jika Anda inginkan. Tanyakan pada saya jika ada yang kurang jelas atau jika Anda ingin informasi lebih lanjut. Ambillah waktu untuk memutuskan mengambil bagian atau tidak.

3. Apakah tujuan studi ini?

Kualitas hidup adalah salah satu hal yang berperan dalam pembelajaran seseorang. Sementara hasil penelitian dari Eropa dan dari situasi kehidupan yang lain tersedia mengenai hal ini, wawasan mengenai kualitas hidup mahasiswa kedokteran di Indonesia tidak ada. Memahami pandangan dan pengalaman mahasiswa kedokteran di Indonesia tentang kualitas hidup mereka akan berguna dalam mengisi ketiadaan ini. Studi ini juga akan meneliti aspek-aspek yang mungkin berkontribusi terhadap kualitas hidup, dan hasilnya dapat mempengaruhi desain kurikulum atau kebijakan pendidikan di masa depan. Studi ini berlangsung selama delapan bulan, dari 1 Juli 2016 sampai 28 Februari 2017.

4. Mengapa saya terpilih?

Anda terpilih karena Anda adalah mahasiswa S1 kedokteran di tahap klinis dari sekolah kedokteran di Indonesia yang telah memberi persetujuan akses untuk studi ini. Surat undangan dan lembar informasi ini dikirimkan pada semua mahasiswa S1 di tahap klinis.

5. Apakah saya harus ambil bagian?

Adalah pilihan Anda untuk mengambil bagian atau tidak. Jika ya, Anda akan diberikan lembar informasi ini untuk disimpan dan diminta menandatangani formulir persetujuan. Jika Anda mengambil bagian, Anda dapat mengubah pikiran dan memberitahukan pengunduran diri Anda kapan saja tanpa perlu memberi alasan. Misalnya, Anda dapat menghentikan wawancara kapan saja, atau setuju ikut serta dalam wawancara namun berubah pikiran, atau memutuskan pada akhir wawancara bahwa Anda tidak ingin apa-apa yang telah Anda katakan digunakan dalam studi.

Keikutsertaan maupun ketidakikutsertaan Anda tidak akan mempengaruhi nilai-nilai Anda dan juga tidak akan mengakibatkan kerugian akademik lain apapun atau diskriminasi terhadap Anda.

6. Apa yang akan terjadi jika saya ambil bagian?

Anda akan ikut serta dalam satu wawancara yang akan berlangsung sekitar empatpuluh lima menit dan tak akan lebih dari sembilanpuluh menit. Peneliti (saya: [redacted]) akan menanyakan sejumlah pertanyaan terbuka terkait pandangan Anda akan kualitas hidup. Wawancara akan berlangsung dalam bangunan sekolah kedokteran Anda atau – jika perlu – di tempat lain yang juga aman dalam kompleks sekolah.
Wawancara akan direkam seijin Anda dan ditranskripsi untuk analisis, dan Anda akan dikirimkan transkripnya untuk persetujuan akan akurasinya. Jika Anda memilih tak mengijinkan perekaman suara dalam wawancara, catatan tertulis akan diambil selama wawancara. Kerahasiaan dan anonimitas Anda akan dijaga. Sebelum wawancara, saya juga akan menanyakan kemauan Anda untuk dihubungi kembali bilamana perekrutan peserta masih dipandang perlu. Jika ya, Anda akan diminta membagikan rincian kontak mahasiswa yang mereka anggap akan tertarik ikut serta. Mereka akan dihubungi oleh peneliti lewat surel.

7. Apa yang harus saya lakukan?

Tidak ada persyaratan atau larangan sebelum ikut serta dalam studi ini. Yang dibutuhkan hanyalah jawaban-jawaban Anda.

8. Apa kerugian dan risiko dari ikut serta?

Selain waktu yang Anda berikan, saya tidak melihat ada lagi kerugian atau risiko bagi Anda, karena wawancara akan berlangsung di dalam sekolah, dalam jam kerja, dan dengan keamanan yang baik.

9. Apa keuntungan yang mungkin dari ikut serta?

Anda tidak menerima keuntungan langsung dari ambil bagian dalam studi ini, namun Anda mungkin akan menganggapnya menarik. Informasi yang terkumpul dalam studi ini akan memberi kita pengertian yang lebih baik tentang kualitas hidup mahasiswa di masa-masa belajar kedokteran.
Mungkin juga hasil dari studi ini akan mengarahkan perkembangan kurikulum atau kebijakan pendidikan, serta meningkatkan kualitas belajar-mengajar selagi Anda masih menjadi mahasiswa.

10. Apakah keikutsertaan saya akan tetap rahasia?

Semua informasi yang terkumpul mengenai Anda, dan jawaban-jawaban yang Anda berikan dalam studi akan dijaga tetap rahasia. Anda akan diidentifikasi menggunakan nomor identitas, dan setelah transkrip dikirim pada Anda, semua informasi mengenai Anda yang memuat nama Anda dan rincian lain, termasuk surel, akan dihapus sehingga Anda tak akan dapat dikenali dari situ. Jika Anda setuju untuk dihubungi kembali bilamana perlu untuk mengidentifikasi peserta

potensial lain untuk studi ini, nomor telepon/alamat surel Anda akan disimpan dalam sebuah daftar yang tak ada hubungannya sama sekali dengan transkrip-transkrip, untuk menjaga anonimitas hasil studi. Jika Anda tak menjawab undangan yang ada di tangan Anda saat ini, mungkin saja seorang mahasiswa lain menominasi Anda sebagai seseorang yang mungkin tertarik ambil bagian. Dalam hal ini, saya akan mengundang Anda ikut serta lewat surel dan, jika Anda setuju mengambil bagian dalam wawancara, transkrip Anda juga akan dikirimkan pada Anda setelah wawancara. Empat minggu setelah wawancara – terlepas dari apakah Anda mengomentari transkrip Anda atau tidak – keikutsertaan Anda dalam studi akan berakhir.

11. Apa yang akan terjadi pada hasil studi?

Studi ini adalah syarat menyelesaikan program doktoral Pendidikan Profesi Kesehatan, dan karena itu hasilnya akan diserahkan dalam bentuk tesis.
Sebuah artikel ilmiah juga akan dikirimkan untuk diterbitkan di jurnal *peer-reviewed* terkait, atau sebuah presentasi/poster akan diberikan dalam seminar atau konferensi pendidikan profesi kesehatan terkait. Anda tidak akan diidentifikasi dalam laporan/terbitan manapun.

12. Siapa yang mengatur dan mendanai studi ini?

Studi ini diatur oleh Kolegium Kedokteran, Kedokteran Hewan, dan Ilmu Hayati Universitas Glasgow sebagai bagian dari pemenuhan program doktoral peneliti. Badan penyandang dana sekolah peneliti adalah Lembaga Pengelola Dana Pendidikan.

13. Siapa yang telah mempratinjau studi ini?

Karya ini telah dipratinjau dan disetujui oleh Komite Etik Penelitian Kolegium Kedokteran, Kedokteran Hewan, dan Ilmu Hayati. Akses resmi juga telah diperoleh dari sekolah Anda.

14. Kontak untuk informasi lebih lanjut

Jika Anda memerlukan informasi lebih lanjut mengenai karya penelitian ini, mohon hubungi [redacted] melalui telepon/pesan di +628 [redacted] atau +447 [redacted], atau melalui surel di [redacted]@student.gla.ac.uk.
Anda boleh menyimpan lembar informasi ini dan tembusan formulir persetujuan yang telah ditandatangani sebagai acuan.

Terima kasih karena telah membaca informasi ini.

Tanggal: 13 Juni 2016 (versi 1.4.1)
(1 tembusan untuk peserta; 1 tembusan untuk peneliti)

University of Glasgow | College of Medical, Veterinary & Life Sciences

PARTICIPANT INFORMATION SHEET

1. Study title

The Meaning of Quality of Life for Undergraduate Medical Students in Indonesia.

2. Invitation paragraph

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

3. What is the purpose of the study?

Quality of life is one of several things that have a role in students' learning. While the body of research from Europe and from other setting exists regarding this, an insight regarding the quality of life of medical students in Indonesia is virtually non existent. It will be useful to understand Indonesian medical students' views and experience of their own quality of life to help illuminate this gap. This study will also seek to understand aspects that may contribute to the quality of life, and potentially help drive future curriculum design or educational policy. This study will run for eight months, from 1 July 2016 until 28 February 2017.

4. Why have I been chosen?

You have been chosen because you are an undergraduate medical student in your clinical year from an Indonesian medical school which has given approval of access for this study. This invitation letter and information sheet are being sent to all students in these years.

5. Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a consent form. If you do decide to take part, you can change your mind and make notice of your withdrawal from the study at any time without giving a reason. This means for example that you can stop the interview at any time, or you can agree to participate in the interview but change your mind, or decide at the end of the interview that you do not want what you have said to be used in the research study. Your participation or non-participation will not affect your grades in any way, and will not result in any disadvantage to you or discrimination against you whatsoever.

6. What will happen to me if I take part?

You will participate in a single interview that will last for approximately forty five minutes but will be no longer than ninety minutes. The researcher (myself: [redacted]) will ask a short list of open-ended questions related to your views of the quality of life. The interview will take place in your medical school building or, should the need arise, in another also secure place on school premises.
The interview will be recorded with your permission and transcribed for later analysis, and you will be sent the transcription for your approval of its accuracy. If you prefer not to have the interview audio-recorded then hand-written notes will be taken during the interview. Your confidentiality and anonymity will be guaranteed. Before interview, I will also ask of your willingness to be contacted again if the need arises, where recruitment to the study following the email invitation is not high enough. Then, you will be asked to share contact details with the researcher of any medical students that you believe would be interested in taking part. Anyone identified in this way will be contacted by the researcher using email.

7. What do I have to do?

There will be no prerequisites or restrictions before participating in this study. All that is needed are your answers.

8. What are the possible disadvantages and risks of taking part?

Besides your giving up time for the interview, I am not aware of any other disadvantages or risks to you as interviews will take place in the university, in office hours, and with good security.

9. What are the possible benefits of taking part?

You will receive no direct benefit from taking part in this study, although you may personally find it interesting. The information that is collected during this study will give us a better understanding of students' quality of life during their years in medical school.
It is possible, though, that the results from this study will inform curriculum development or educational policy and improve teaching and learning environment while you are still a student of the programme.

10. Will my taking part in this study be kept confidential?

All information which is collected about you, and responses that you provide, during the course of the research will be kept strictly confidential. You will be identified by an ID number, and after the transcript is sent to you, any information about you that contains your name and other personal details including emails will be destroyed so that you cannot be recognized from them. However, if you have agreed to be contacted again if the need arises to identify further potential participants for the study, your contact number/email will be saved in a list that has no link whatsoever with the transcripts, to maintain the study results' anonymity.
As such, if you do not respond to this invitation at the beginning, then it will be possible for another student to nominate you as someone who may be interested in taking part. In this

situation I will invite you to take part using email and, should you decide to take part in the interview, the transcript will be sent to you following this. Four weeks following the interview – whether you return comments on the transcript or not – your participation in the study will end.

11. What will happen to the results of the research study?

The research is a requirement to complete a Doctorate in Health Professions Education programme, therefore it will be submitted as the researcher's thesis.
An article will also be submitted for publication in a relevant peer-reviewed journal or a presentation/poster will be proposed for a relevant seminar or health professions education conference. You will not be identified in any report/publication.

12. Who is organising and funding the research?

The research is organised by College of Medical, Veterinary, and Life Sciences, University of Glasgow as a part of the researcher's doctorate degree completion. The sponsoring body throughout the researcher's academic study is the Indonesian Endowment Fund for Education.

13. Who has reviewed the study?

The project has been reviewed and approved by the College of Medical Veterinary and Life Sciences Research Ethics Committee. A formal access approval has also been acquired from your medical school.

14. Contact for Further Information

If you require any further information about the research project please contact [redacted] through phone/text at +628 [redacted] or +447 [redacted], or through email at [redacted]@student.gla.ac.uk.
You may keep this information sheet and a copy of the signed consent form for future reference.

Thank you for considering this information.

Date: 13 June 2016 (version 1.4.1)
(1 copy for subject; 1 copy for researcher)

APPENDIX IX. Interview Invitation Poster

Translation of text on the poster:

Top text bubble: Are you interested in sharing your personal views on your quality of life as a medical student? You are invited to participate in this study!
Bottom text bubble: In a face-to-face interview for up to 45 minutes we will together find out how our quality of life is as a medical student. --- Invitation for this study is open until the end of February 2017.
Left-aligned text: This study is acknowledged and approved by Medical, Veterinary and Life Sciences Ethics Committee, University of Glasgow, and the medical school/programme where you are studying in.
Main text: Are you a third/fourth year undergraduate medical student?
Bottom text: Contact me, _____, doctoral student of Health Professions Education, University of Glasgow at the e-mail address _____@student.gla.ac.uk or by phone/text message/WhatsApp +44 _____.

APPENDIX X. Interview Consent Form
(in Indonesian and English translations)

University of Glasgow | College of Medical, Veterinary & Life Sciences

CONSENT FORM

Judul studi: The Meaning of Quality of Life for Undergraduate Medical Students in Indonesia.

Nama peneliti: [redacted]

	Beri paraf
Saya konfirmasi bahwa saya telah membaca dan memahami lembar informasi bertanggal 13/06/2016 (versi 1.4.1) untuk studi di atas dan telah memperoleh kesempatan untuk bertanya.	☐
Saya memahami bahwa partisipasi saya sukarela dan saya bebas mengundurkan diri kapan saja, tanpa perlu memberi alasan dan tanpa mempengaruhi hak-hak akademik saya.	☐
Saya setuju mengambil bagian dalam studi di atas.	☐
Saya setuju mengambil bagian dalam wawancara tatap muka yang akan direkam-suara.	☐
Saya setuju dihubungi kembali untuk mengidentifikasi peserta wawancara potensial lainnya jika dibutuhkan di kemudian hari.	☐
Kutipan tak bernama akan digunakan dalam laporan/publikasi studi ini dan semua rincian yang bisa mengidentifikasi saya akan dihapus.	☐

_____	_____	_____
Nama peserta	Tanggal	Tanda tangan
_____	_____	_____
Nama pengambil persetujuan (jika berbeda dengan peneliti)	Tanggal	Tanda tangan
_____	_____	_____
Peneliti	Tanggal	Tanda tangan

*) coret yang tak perlu

(1 copy for subject; 1 copy for researcher)

College of MVLS Ethics Committee

v1.3

University of Glasgow | College of Medical, Veterinary & Life Sciences

CONSENT FORM

Title of Project: The Meaning of Quality of Life for Undergraduate Medical Students in Indonesia.

Name of Researcher: [redacted]

Please initial box

I confirm that I have read and understand the information sheet dated 13/06/2016 (version 1.4.1) for the above study and have had the opportunity to ask questions.	☐
I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my academic rights being affected.	☐
I agree to take part in the above study.	☐
I agree to take part in a face-to-face interview that will be audio-recorded.	☐
I agree to be contacted again to identify other potential interview participants in the future, if the need arises.	☐
Anonymised quotations will be used in relevant reports/publications and any detail that might identify me will be removed from these.	☐

Name of participant	Date	Signature
Name of person taking consent (if different from researcher)	Date	Signature
Researcher	Date	Signature

*) strike out the irrelevant one

(1 copy for subject; 1 copy for researcher)

College of MVLS Ethics Committee

v1.3

APPENDIX XI. Snowball Interview Invitation Letter (in Indonesian and English translations)

University of Glasgow | College of Medical, Veterinary & Life Sciences

SURAT UNDANGAN

Undangan - **The Meaning of Quality of Life for Undergraduate Medical Students in Indonesia**

Mahasiswa yang terhormat,

Saya menulis kepada Anda karena Anda adalah mahasiswa kedokteran di tahun klinis, dan semua mahasiswa tahun klinis di sekolah Anda diundang untuk ikut serta dalam studi saya mengenai kualitas hidup mahasiswa S1 kedokteran. Sejak surat undangan pertama terkirim, saya telah mewawancarai beberapa orang mahasiswa. Karena lebih banyak lagi peserta dibutuhkan, saya menanyakan kepada mereka mahasiswa-mahasiswa lain yang mungkin tertarik untuk ikut serta dan salah satu dari mereka memberikan nama Anda.

Saya mengundang mahasiswa untuk mendiskusikan pandangan mereka tentang kualitas hidup, serta persepsi dan pengalaman Anda tentang kualitas hidup terkait studi S1 Anda. Saya ingin mengajak Anda mengatakan kepada saya tentang hal-hal tersebut melalui wawancara tunggal. Informasi yang Anda berikan kepada saya akan digunakan untuk mengeksplorasi faktor-faktor yang berkontribusi pada kualitas hidup mahasiswa kedokteran dan juga makna pribadi dari faktor-faktor tersebut bagi mahasiswa kedokteran secara khusus, dan hasilnya dapat mempengaruhi pendidikan kedokteran Indonesia di masa depan. Tidak ada jawaban benar atau salah dalam studi ini – saya mengharapkan sudut pandang yang luas dan bervariasi. Keputusan Anda untuk ikut atau tidak dalam studi ini tak akan mempengaruhi posisi Anda sebagai mahasiswa di sekolah dalam hal apapun.

Sebelum Anda memutuskan untuk ikut serta atau tidak, penting bagi Anda untuk mengerti kenapa saya melakukan studi ini dan apa kaitannya dengan Anda. Mohon sediakan waktu untuk membaca dengan teliti lembar informasi yang terlampir, dan sediakan waktu untuk berpikir apakah Anda akan ambil bagian atau tidak.

Wawancara dengan Anda, jika Anda memutuskan ikut ambil bagian, akan dilakukan di lingkungan kampus dalam jam kerja. Anda bisa menunjukkan keinginan Anda untuk berwawancara dengan menghubungi saya, [redacted], melalui nomor telepon/WhatsApp maupun alamat surat elektronik yang tersedia di lembar informasi.

Jika Anda memiliki pertanyaan apapun tentang studi ini, mohon hubungi saya. Nomor telepon dan alamat surel saya tertulis dalam lembar informasi dan saya akan sangat senang mendengar dari Anda dan mendiskusikan dengan Anda setiap pertanyaan yang Anda berikan.

Terima kasih banyak telah membaca surat ini.

Hormat saya,

[redacted]

Peneliti/Mahasiswa Doktoral
Pendidikan Profesi Kesehatan
Universitas Glasgow

University of Glasgow | College of Medical, Veterinary & Life Sciences

INVITATION EMAIL

Study Invitation - **The Meaning of Quality of Life for Undergraduate Medical Students in Indonesia**

Dear Student,

I am writing to you because you are a medical student in the clinical year, and all such students in your school are being invited to take part in my study of undergraduate medical students' quality of life. Since I sent the initial invitation to you I have interviewed a number of students. As I require more participants, I asked those interviewed to identify some students who might be willing to participate and your name was put forward by one of those interviewed.

I am inviting students to discuss about their views of the concept of quality of life, and their perception and experience of it in relation to their learning medicine. I would like to invite you to tell me your views in a one-off interview. The information you give me will be used to help explore the factors contributing to quality of life and the meaning of these to medical students in particular, and the results will have the potential to influence future medical education in Indonesia. There are no right or wrong answers in this study – I am keen to gain a wide variety of perspectives. Your decision whether or not to take part in the study will not affect your position as a student in the school in any way.

Before you decide whether or not you would like to take part, it is important for you to understand why I am doing this project and what it would involve for you if you decide to participate. Please take time to read the enclosed information sheet carefully, and take time to think about whether or not you would like to take part.

The interviews, should you decide to participate, will take place in university premises during working hours. You may express your interest in being interviewed by contacting me, [redacted]

[redacted], through the provided telephone/WhatsApp number or email address available in the information sheet.

If you have any questions about the study then please contact me. My phone number and e-mail address are written on this information sheet and I will be happy to hear from you and discuss with you any questions you may have.

Thank you very much for reading this letter.

Yours sincerely,

[redacted]

Researcher/Postgraduate Student
Doctorate in Health Professions Education
University of Glasgow

APPENDIX XII. Snowball Interview Information Sheet (in Indonesian and English translations)

University of Glasgow | College of Medical, Veterinary & Life Sciences

LEMBAR INFORMASI PESERTA

1. Judul studi

The Meaning of Quality of Life for Undergraduate Medical Students in Indonesia.

2. Paragraf undangan

Anda diundang mengambil bagian dalam sebuah studi. Sebelum Anda memutuskan, penting bagi Anda untuk mengetahui mengapa studi ini dilakukan dan apa yang akan dilakukan. Bacalah informasi berikut ini sebaik-baiknya dan diskusikan dengan orang lain jika Anda inginkan. Tanyakan pada saya jika ada yang kurang jelas atau jika Anda ingin informasi lebih lanjut. Ambillah waktu untuk memutuskan mengambil bagian atau tidak.

3. Apakah tujuan studi ini?

Kualitas hidup adalah salah satu hal yang berperan dalam pembelajaran seseorang. Sementara hasil penelitian dari Eropa dan dari situasi kehidupan yang lain tersedia mengenai hal ini, wawasan mengenai kualitas hidup mahasiswa kedokteran di Indonesia tidak ada. Memahami pandangan dan pengalaman mahasiswa kedokteran di Indonesia tentang kualitas hidup mereka akan berguna dalam mengisi ketiadaan ini. Studi ini juga akan meneliti aspek-aspek yang mungkin berkontribusi terhadap kualitas hidup, dan hasilnya dapat mempengaruhi desain kurikulum atau kebijakan pendidikan di masa depan. Studi ini berlangsung selama delapan bulan, dari 1 Juli 2016 sampai 28 Februari 2017.

4. Mengapa saya terpilih?

Anda terpilih karena Anda adalah mahasiswa S1 kedokteran di tahap klinis dari sekolah kedokteran di Indonesia yang telah memberi persetujuan akses untuk studi ini, dan seorang mahasiswa yang telah ambil bagian telah menunjuk Anda sebagai seorang yang akan tertarik pula ikut serta dalam studi ini. Pandangan dan masukan Anda akan berguna untuk tujuan studi ini.

5. Apakah saya harus ambil bagian?

Adalah pilihan Anda untuk mengambil bagian atau tidak. Jika ya, Anda akan diberikan lembar informasi ini untuk disimpan dan diminta menandatangani formulir persetujuan. Jika Anda mengambil bagian, Anda dapat mengubah pikiran dan memberitahukan pengunduran diri Anda kapan saja tanpa perlu memberi alasan. Misalnya, Anda dapat menghentikan wawancara kapan saja, atau setuju ikut serta dalam wawancara namun berubah pikiran, atau memutuskan pada akhir wawancara bahwa Anda tidak ingin apa-apa yang telah Anda katakan digunakan dalam studi.

Keikutsertaan maupun ketidakikutsertaan Anda tidak akan mempengaruhi nilai-nilai Anda dan juga tidak akan mengakibatkan kerugian akademik lain apapun atau diskriminasi terhadap Anda.

6. Apa yang akan terjadi jika saya ambil bagian?

Anda akan ikut serta dalam satu wawancara yang akan berlangsung sekitar empatpuluh lima menit dan tak akan lebih dari sembilanpuluh menit. Peneliti (saya: [redacted]) akan menanyakan sejumlah pertanyaan terbuka terkait pandangan Anda akan kualitas hidup. Wawancara akan berlangsung dalam bangunan sekolah kedokteran Anda atau – jika perlu – di tempat lain yang juga aman dalam kompleks sekolah.
Wawancara akan direkam seijin Anda dan ditranskripsi untuk analisis, dan Anda akan dikirimkan transkripnya untuk persetujuan akan akurasinya. Jika Anda memilih tak mengijinkan perekaman suara dalam wawancara, catatan tertulis akan diambil selama wawancara. Kerahasiaan dan anonimitas Anda akan dijaga.

7. Apa yang harus saya lakukan?

Tidak ada persyaratan atau larangan sebelum ikut serta dalam studi ini. Yang dibutuhkan hanyalah jawaban-jawaban Anda.

8. Apa kerugian dan risiko dari ikut serta?

Selain waktu yang Anda berikan, saya tidak melihat ada lagi kerugian atau risiko bagi Anda, karena wawancara akan berlangsung di dalam sekolah, dalam jam kerja, dan dengan keamanan yang baik.

9. Apa keuntungan yang mungkin dari ikut serta?

Anda tidak menerima keuntungan langsung dari ambil bagian dalam studi ini, namun Anda mungkin akan menganggapnya menarik. Informasi yang terkumpul dalam studi ini akan memberi kita pengertian yang lebih baik tentang kualitas hidup mahasiswa di masa-masa belajar kedokteran.
Mungkin juga hasil dari studi ini akan mengarahkan perkembangan kurikulum atau kebijakan pendidikan, serta meningkatkan kualitas belajar-mengajar selagi Anda masih menjadi mahasiswa.

10. Apakah keikutsertaan saya akan tetap rahasia?

Semua informasi yang terkumpul mengenai Anda, dan jawaban-jawaban yang Anda berikan dalam studi akan dijaga tetap rahasia. Anda akan diidentifikasi menggunakan nomor identitas, dan setelah transkrip dikirim pada Anda, semua informasi mengenai Anda yang memuat nama Anda dan rincian lain, termasuk surel, akan dihapus sehingga Anda tak akan dapat dikenali dari situ. Empat minggu setelah wawancara – terlepas dari apakah Anda mengomentari transkrip Anda atau tidak – keikutsertaan Anda dalam studi akan berakhir.

11. Apa yang akan terjadi pada hasil studi?

Studi ini adalah syarat menyelesaikan program doktoral Pendidikan Profesi Kesehatan, dan karena itu hasilnya akan diserahkan dalam bentuk tesis.
Sebuah artikel ilmiah juga akan dikirimkan untuk diterbitkan di jurnal peer-reviewed terkait, atau sebuah presentasi/poster akan diberikan dalam seminar atau konferensi pendidikan profesi kesehatan terkait. Anda tidak akan diidentifikasi dalam laporan/terbitan manapun.

12. Siapa yang mengatur dan mendanai studi ini?

Studi ini diatur oleh Kolegium Kedokteran, Kedokteran Hewan, dan Ilmu Hayati Universitas Glasgow sebagai bagian dari pemenuhan program doktoral peneliti. Badan penyandang dana sekolah peneliti adalah Lembaga Pengelola Dana Pendidikan.

13. Siapa yang telah mempratinjau studi ini?

Karya ini telah dipratinjau dan disetujui oleh Komite Etik Penelitian Kolegium Kedokteran, Kedokteran Hewan, dan Ilmu Hayati. Akses resmi juga telah diperoleh dari sekolah Anda.

14. Kontak untuk informasi lebih lanjut

Jika Anda memerlukan informasi lebih lanjut mengenai karya penelitian ini, mohon hubungi [redacted] melalui telepon/pesan di +628[redacted] atau +447[redacted], atau melalui surel di [redacted]@student.gla.ac.uk.
Anda boleh menyimpan lembar informasi ini dan tembusan formulir persetujuan yang telah ditandatangani sebagai acuan.

Terima kasih telah membaca informasi ini.

Tanggal: 13 Juni 2016 (versi 1.4.1)
(1 tembusan untuk peserta; 1 tembusan untuk peneliti)

University of Glasgow | College of Medical, Veterinary & Life Sciences

PARTICIPANT INFORMATION SHEET

1. Study title

The Meaning of Quality of Life for Undergraduate Medical Students in Indonesia.

2. Invitation paragraph

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

3. What is the purpose of the study?

Quality of life is one of several things that have a role in students' learning. While the body of research from Europe and from other setting exists regarding this, an insight regarding the quality of life of medical students in Indonesia is virtually non existent. It will be useful to understand Indonesian medical students' views and experience of their own quality of life to help illuminate this gap. This study will also seek to understand aspects that may contribute to the quality of life, and potentially help drive future curriculum design or educational policy. This study will run for eight months, from 1 July 2016 until 28 February 2017.

4. Why have I been chosen?

You have been chosen because you are an undergraduate medical student in your clinical year from an Indonesian medical school which has given approval of access for this study, and a student already participating in this research has identified you as someone who might be interested in taking part in the study. Your views and inputs will be valuable for the purposes of this study.

5. Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a consent form. If you do decide to take part, you can change your mind and make notice of your withdrawal from the study at any time without giving a reason. This means for example that you can stop the interview at any time, or you can agree to participate in the interview but change your mind, or decide at the end of the interview that you do not want what you have said to be used in the research study. Your participation or non-participation will not affect your grades in any way, and will not result in any disadvantage to you or discrimination against you whatsoever.

6. What will happen to me if I take part?

You will participate in a single interview that will last for approximately forty five minutes but will be no longer than ninety minutes. The researcher (myself: [redacted]) will ask a short list of open-ended questions related to your views of the quality of life. The interview will take place in your medical school building or, should the need arise, in another also secure place on school premises.
The interview will be recorded with your permission and transcribed for later analysis, and you will be sent the transcription for your approval of its accuracy. If you prefer not to have the interview audio-recorded then hand-written notes will be taken during the interview. Your confidentiality and anonymity will be guaranteed.

7. What do I have to do?

There will be no prerequisites or restrictions before participating in this study. All that is needed are your answers.

8. What are the possible disadvantages and risks of taking part?

Besides your giving up time for the interview, I am not aware of any other disadvantages or risks to you as interviews will take place in the university, in office hours, and with good security.

9. What are the possible benefits of taking part?

You will receive no direct benefit from taking part in this study, although you may personally find it interesting. The information that is collected during this study will give us a better understanding of students' quality of life during their years in medical school.
It is possible, though, that the results from this study will inform curriculum development or educational policy and improve teaching and learning environment while you are still a student of the programme.

10. Will my taking part in this study be kept confidential?

All information which is collected about you, and responses that you provide, during the course of the research will be kept strictly confidential. You will be identified by an ID number, and after the transcript is sent to you, any information about you that contains your name and other personal details including emails will be destroyed so that you cannot be recognized from them. Four weeks following the interview – whether you return comments on the transcript or not – your participation in the study will end.

11. What will happen to the results of the research study?

The research is a requirement to complete a Doctorate in Health Professions Education programme, therefore it will be submitted as the researcher's thesis.
An article will also be submitted for publication in a relevant peer-reviewed journal or a presentation/poster will be proposed for a relevant seminar or health professions education conference. You will not be identified in any report/publication.

12. Who is organising and funding the research?

The research is organised by College of Medical, Veterinary, and Life Sciences, University of Glasgow as a part of the researcher's doctorate degree completion. The sponsoring body throughout the researcher's academic study is the Indonesian Endowment Fund for Education.

13. Who has reviewed the study?

The project has been reviewed and approved by the College of Medical Veterinary and Life Sciences Research Ethics Committee. A formal access approval has also been acquired from your medical school.

14. Contact for Further Information

If you require any further information about the research project please contact [redacted] through phone/text at +628 [redacted] or +447 [redacted], or through email at [redacted]@student.gla.ac.uk.
You may keep this information sheet and a copy of the signed consent form for future reference.

Thank you for considering this information.

Date: 13 June 2016 (version 1.4.1)
(1 copy for subject; 1 copy for researcher)

APPENDIX XIII. Interview Schedule
(in Indonesian and English translations)

Panduan Topik

i) Data kontekstual
Ini adalah untuk memberi gambaran umum pada para pembaca mengenai semua orang yang ikut serta dalam studi ini. Tidak ada datum manapun akan dihubungkan pada individu dalam penulisan (Anda tak akan diidentifikasi dari data ini).
a) Dapatkah Anda menceritakan sedikit tentang diri Anda, seperti usia dan jenis kelamin Anda, serta dari suku mana Anda berasal?
b) Di bagian mana dari Indonesia Anda tinggal?
c) Apa pekerjaan orangtua Anda?

1) Bagaimana Anda mendefinisikan "kualitas hidup" secara ringkas?

2) Sejauh yang Anda dapat pikirkan, hal-hal apa saja yang mempengaruhi "kualitas hidup" bagi Anda?
a) apa hal-hal "positif"/yang meningkatkannya? (Dengan contoh bila perlu, sebisa mungkin tanpa menggiring terwawancara)
b) bagaimana Anda mengurutkan (memprioritaskan) hal-hal "positif" tersebut dari yang lebih penting sampai yang kurang penting?
c) kenapa hal-hal "positif" tersebut penting untuk Anda?
d) apa hal-hal "negatif"/yang menurunkannya? (Dengan contoh bila perlu, sebisa mungkin tanpa menggiring terwawancara)
e) bagaimana Anda mengurutkan (memprioritaskan) hal-hal "negatif" tersebut dari yang lebih penting sampai yang kurang penting?
f) kenapa hal-hal "negatif" tersebut penting untuk Anda?

3) Sehubungan dengan menjadi mahasiswa kedokteran, adakah perubahan makna dari bagian-bagian kehidupan Anda selama ini?
a) adakah perubahan/perbedaan pada kualitas hidup Anda sejak memasuki kuliah kedokteran dan selama tahun-tahun kuliah?
b) perubahan-perubahan apa yang Anda anggap penting?
c) apa makna perubahan-perubahan tersebut untuk Anda?

4) Menurut Anda, bagaimana kualitas hidup Anda bisa lebih ditingkatkan lagi?
a) apakah harapan-harapan Anda di sepanjang sisa masa sekolah Anda?
b) apakah harapan-harapan Anda setelah lulus?
c) kenapa harapan-harapan tersebut penting untuk Anda?
d) apakah ketakutan-ketakutan Anda di sepanjang sisa masa sekolah Anda?
e) apakah ketakutan-ketakutan Anda setelah lulus?
f) kenapa ketakutan-ketakutan tersebut penting untuk Anda?

ii) Penutup
- adakah hal lain yang ingin ditambahkan?
- adakah hal yang ingin ditanyakan?
- simpulkan
- konfirmasi poin-poin utama
- periksa adakah topik yang terlewat

Topic Guide

i) Contextual data
This is to give a general description to the audience of all the people that participate in the study. No single datum will be connected to an individual in the report (i.e. you will not be identified from this information).
a) Could you tell me a little bit about yourself, such as your age, sex, tribe and ethnicities?
b) In which part of Indonesia do you live?
c) What about your parents' line of work?

1) What do you know about what "quality of life" is?
a) Do you think you are able to put a definition to "quality of life"?
b) What is your definition for "quality of life"?

2) As far as you can think, what are the contributing factors for the "quality of life" to you?
a) what are the enhancing ("positive") and impeding ("negative") factors?
b) which ones are more important and which ones less important either way?
c) what is the significance of those factors to you? (ie. why do you think those factors are important)?
d) do you think people in general see those factors the same way you see them?

3) With regard to being a medical student, is there any change in the significance of the aspects of your life throughout?
a) What changes, if any, have there been in your quality of life since coming to medical school, and during your years in medical school?
b) what changes do you consider important?
c) what is the significance of those changes to you?
d) as far as you can see, how do you think the qualities of life are similar/equal or different/unequal among the medical students?

4) How do you think your quality of life can be improved?
a) what are your hopes in your remaining undergraduate years?
b) what are your hopes after you graduate?
c) what is the significance of the hopes you have?

ii) Closing remarks
- is there anything else to add?
- is there anything to ask?
- summarise
- confirm major points
- recheck for missed topics

APPENDIX XIV. Request Letter for Member-checking/Validation (in Indonesian and English translations)

SURAT VALIDASI TRANSKRIP REKAMAN WAWANCARA

Mahasiswa yang terhormat,

Saya menuliskan surat ini pada Anda karena Anda telah ikut serta dalam studi saya tentang kualitas hidup mahasiswa S1 kedokteran.

Sebagai bagian dari menjaga kualitas hasil studi, saya mengirimkan transkrip (terlampir) wawancara untuk Anda periksa demi memastikan bahwa itu telah ditranskripsi dengan akurat sesuai jalannya wawancara. Anda bisa membaca transkrip tersebut dan menghubungi saya melalui nomor telepon atau alamat surat elektronik yang ada dalam lembar informasi untuk memberi tahu saya apakah transkrip itu telah memuaskan dalam pandangan anda, ataukah ada bagian manapun dari transkrip yang perlu saya periksa lebih lanjut.

Saya akan menunggu surel balasan berisi komentar, koreksi, atau tambahan dari Anda terkait transkrip tersebut dalam empat minggu ke depan, dan setelah itu (terlepas apakah Anda membalas atau tidak) saya akan menghapus semua rincian identifikasi dan kontak, termasuk surel, yang dapat dihubungkan kepada Anda. Berguna juga untuk disampaikan kembali di sini, bahwa meskipun kutipan teks akan digunakan dalam laporan sebagai bagian dari penjabaran temuan studi, semua nama dan data lain yang bisa mengidentifikasi akan dihilangkan dalam laporan demi melindungi semua pihak.

Jika Anda memiliki pertanyaan jangan ragu untuk menghubungi saya.

Terima kasih untuk waktu dan ketertarikan Anda.

Dengan hormat,

Peneliti/Mahasiswa Doktoral
Pendidikan Profesi Kesehatan
Universitas Glasgow

EMAIL FOR VALIDATION OF INTERVIEW TRANSCRIPT

Dear Student,

I am writing to you because you have participated in my study of undergraduate medical students' quality of life.

As part of maintaining the rigour of the study, I am sending the transcript (attached) of the interview for your review to ensure that it has been transcribed accurately according to the conduct of the interview. You could read the transcript and might contact me through the telephone number or email address provided in the information sheet to tell if the transcript has been satisfactory from your point of view, or if there is any part of it that warrants further attention from me.

I will wait for your replying with your comments, corrections, or additions with regards to the respective transcript during the next four weeks, after which time whether you will have replied or not, I will erase all identification and contact details, including emails that can directly be traced back to you. It is also worth reiterating that while verbatim quotations will be used in the reports as part of presentation of the findings, all names and other possibly identifying data will be eliminated in the report to protect all parties.

If you still have any questions then please do not hesitate to contact me.

Thank you very much for your time and interest.

Yours sincerely,

Researcher/Postgraduate Student
Doctorate in Health Professions Education
University of Glasgow

APPENDIX XV. Example Data (Transcript) Analysis Method with Descriptive Phenomenology

What follows is a cross-section of conducting a descriptive phenomenological analysis. While what will be presented is the most involved stage of analysis in descriptive phenomenology, and at the same time is interrelated with other aspects of the analysis (e.g. relating a unit of meaning to other ones in a transcript, relating descriptions to others found in other analysed transcripts (horizonalisation/structural description), or using imaginative variation to exhaust possible description or part of essence and include the most plausible ones; all these may be exercised reciprocally between all available data), I nevertheless attempt to make this presentation as linear and simple as possible.

1. Finding Units of Meaning

The first thing to do after a transcription is to dip ourselves in the data by reading the transcription, get a sense of what is being talked about by a participant, and giving quick, preliminary signs where a conversation seems to take a turn in topic, all while maintaining sensitivity to the research purpose/questions. By delineating those changes, we start to obtain units of meaning (or textural descriptions) between the signs. These units of meaning are the earliest form of phenomenological reduction. A short note is taken for each possible unit of meaning on what it possibly conveys, again by always relating it to the research purpose/questions. An example from a small part of a transcript with M13, discussing the changes he perceived in his life throughout medical school years while utilising the phenomenological attitude, is given below. In this presentation, a string of = sign (in red) indicated that a unit of meaning has been delineated above the sign. The short notes taken are also shown in red.

3. CHANGES IN MEANING

BETWEEN GETTING INTO MEDICAL SCHOOL, AFTER YOU JUST WENT IN, AND THE PRESENT, WHAT CHANGES IN ASPECTS OF M13'S LIFE THAT M13 FOUND MEANINGFUL?

Em, so, there are many changes. First, for me, about position. Position means that when we have more senior students, we have to respect them, especially when we were freshmen in the school, the youngest batch. We had to respect all our seniors. For me—especially those who were in campus, and if possible, the ones in the hospital. But then when we moved onto… higher levels, we are instead faced with two, two obligations, we have to res… respect those above us, and we also must be able to respect those below us. For me everyone will eventually be friends, which in medical profession are called colleagues. So, we have to have mutual respect, upwards and downwards. So if for example we just remember to respect upwards but forget to do the same downwards, it means we will lose our relationship with juniors. In my opinion that is the change with regards to social relationship with students here.

Relationship with seniors and juniors?
==========

With regards to em, studying, maybe that being a learner, the further [in medical school] I am the more I need to improve. How do you say, improve, e—first, the motivation must be kept. If our mood goes down we have to fix it. Sometimes it happens, because we—in my opinion, it—mood sometimes goes up, sometimes down. At those times we have to [keep our mood so] it may be in stable condition; that's why earlier I mentioned about stable emotional condition. So I have to be able to maintain mood, because of the long study time. So, to be able to study well certainly my mood needs to be well. That's how I see it.

More need to maintain motivation?
==========

IS THAT ALL? ANYTHING ELSE?

Em, other things that generally changed, hm—what else. Maybe em, our discipline. In my opinion it has to be consistent, which means neither increases nor decreases, like this: when we feel that we are already a senior, what has been our standard for discipline in the beginning must not change, because th—like—in my opinion discipline is our marking attribute. For example: em, when we're given task, for example, by someone when we were young, em, we did it because of the pressure, firstly it was pressure, secondly because we were tasked. So, if for example we are on top, when we are trusted to do something, because we feel we are on top, some may automatically [think]: "Oh well, no need to be disciplined, we are already on top!" So it mustn't be like that. Uhuh. When there is discipline, it must stay. That's how I see it, because people will only respect someone when they are disciplined, I mean disciplined in different things; time, promise, whatever, when what is tasked [must be] done well.

SO IT MEANS THAT THIS DISCIPLINE IS NOT JUST BEING CONSISTENT IN DOING SCHEDULES, BUT THERE IS A SENSE OF RESPONSIBILITY THERE.

Yes, not just consistency, but responsibility.

ANYTHING ELSE?

That's all in my opinion.

Emergence of personal responsibility?
==========

ACCORDING TO M13, WHY IS RESPECT TOWARDS SENIORS AND JUNIORS IMPORTANT?

For me [respect towards seniors and juniors] is important wh—because sometimes we need to build re—re— em, well, relationship. Our social relations need to be good, because not all the time we can stand alone, so sometimes what we need [is there] to—with either our seniors or juniors. As such, when there's a gap, we automatically em, first, we cannot be productive. Second, we em—like when in the workplace we need their help, it will be difficult because automatically for example—the younger students will also be doctors, so we need to collaborate. Yes.

Importance of maintaining good working relationship?
==========

I AM INTERESTED IN HOW M13 REGULATE MOOD STABILITY—

The stability of my mood. For me it's when—Firstly, I can be jaded. Uhuh, [I] can be jaded. Uhuh, [it's] normal. Hu—humans, humane for everyone to be fed up of one thing if it's done again and again continuously. For me, I have to find the antithesis of my boredom. For example, em, [when] I am bored studying; I—I try to read quotes from Soekarno *[ed.: father of the country of Indonesia and Indonesian first president]*, and also the views of other world figures. I ca—[The literature] sometimes talked about em—wa—em, something for example, em, that what a world figure [did] about something was not good. Oh, [but] actually I can [positively] change if I do better than that. So, as such I can improve, my mood. It's like we—as if a sick person looking for their medicine, if you get what I mean. The medicine, the medicine will cure us, right. Medicine for emotional stuff is hard to find. So. For me the medicine is we fight against [my] reaction to the jadedness. That negative reaction we fight with the antidote, a positive one. So there's some kind of encouragement from—for me, the—inspirational figures are the ones who may change my way of thinking. Why, because those people could think positively, why couldn't I do even more than that? Ee, so that's what invigorates my spirit, so that my mood increases again. For example if em, someone... em, he, for example he has a good will to change [from] bad things into good. Why can't I follow that [example] through what I am doing? That's an example. Simple: because I am tasked to study, why don't I focus on studying? So, maybe at another time, em, dec—[my mood] goes down again, I find yet another countermeasure. [It's] always like that.

Finding motivation from historical figures?
==========

So, besides my im—improving the mood, I a—sometimes also can add into [my] knowledge: "Oh, so that's the way of thinking of another person." Uhuh. It's like that for me. Because, all this time people couldn't find a medicine for emo—the worsening mood. Sometimes people just let it be. Huh, why letting the lowering mood? And it could result in negative behaviours. Uhuh. [Like] playing videogames all day long, it's already a neg—negative behaviour. Maybe—for me, maybe they need to be given an antidote to that. So if we can stimulate others to do, em, to fight against bad mood, basically it's even better. So people—we can encourage our friends when they're lazy, they're encouraged, we're encouraged, they're encouraged. Another way is we tell them, we show them we're indeed in high spirit. As such, people would be—how do you call it, well, influenced. "Oh, he's encouraged, [so] we're encouraged." It's like that. But when we—because [I] can cure [the bad mood]

from the [quotes of the world] figures, so em, that is what will build us. But we can build others as well, in my opinion. Yes, the main goal is being productive.

SO IT SEEMS WE MAINTAIN PRODUCTIVITY BY FINDING MOTIVATION.

Yes, motivation. Motivation.

Productivity from maintaining motivation?
==========

For me motivation doesn't always come from [the so-called] motivators. Why, why not always from motivators, [because] everybody has subjectivity. Motivators are good. But the person's subjectivity will—em, if we're attached to one person, our thinking will be subjective [too]. So if we want to be objective, we need to see through someone's thoughts. So. That thou—for example in the course of history a person's thought is declared 'positive'. So, on the other hand... em... how do you call it, em, people are against someone [else]. Ee, for example this person is considered negative through the course of history. But from a—we believe that every person born into this world has their po—positive attributes, right. So. So we take that negative person, we see what was considered negative from them and the possibilities of what... came out in a positive way of them. So, he's positive; however negative something is, we take the positive thoughts; how much more even can we take from a truly positive person! So we should never be subjective, [including] in im—improving motivation. So we—we of course shouldn't be a motivation-crazy person. So when our mood improves, it doesn't get too high. So we're not—if for example we are studying, if we—we improve mood by studying. Stuuuuuuudying all the time until midnight. Is it ideal? Like 12, 24 hours studying. That is not ideal either, right. When we stu—if by chance we see em, the motivation for people to work and work, work, work, work. Oh, yeah, but physiologically we need sleep, and other things. And those considerations we also learn from yet other people. That's what I mean. Yeah, balance.

Need to see from multiple views for balanced understanding of motivation?
==========

ARE THERE OTHER ADDITIONAL THINGS FOR WHY THIS MEANING OF DISCIPLINE AND RESPONSIBILITY CHANGED FOR M13?

Em, in my opinion, ee, they changed in that we have even bigger responsibilities. So the level of responsibility or discipline must be heightened. But one clear thing is that it must not decrease. Because—ah, when—when em, our mood is good, isn't it impossible that we don't do something? So whatever is—the responsibilities given to us, we do them well. So it's like, em, we need to do em, something productive. So. Problem is, if we weaken [in responsibility and discipline], automatically our QOL decreases too, for me. What changes is actually when the responsibility—eh, the tasks increase and our [sense] responsibility must adjust, but in no way less than what is needed [for the tasks].

Sense of responsibility increases acording to the tasks at hand?
==========

2. Transformation and Finding Structures

In attempting to sense even more what a participant tried to convey in their conversation, we can convert the pronouns with the subject's name, to elicit more clarity about their views, i.e. that they talk from their position on what they sense regarding phenomena in their lifeworld and experience. We immerse ourselves furthermore through rereading the data, and iteratively refine the emergent units of meaning. There's no hard limit on how many times we can do these transformations. We only need to keep in mind to try to find a description meaningful enough, i.e. neither too granular and unwieldy, nor too abstract and losing relationship, to the research purpose/questions (Giorgi 2009). The converted pronouns, and subject-verb agreement changes where needed, are also shown in red below.

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With regards to em, studying, maybe that being a learner, the further [in medical school] M13 is the more M13 needs to improve. How do you say, improve, e—first, the motivation must be kept. If our mood goes down we have to fix it. Sometimes it happens, because we—in my opinion, it—mood sometimes goes up, sometimes down. At those times we have to [keep our mood so] it may be in stable condition; that's why earlier M13 mentioned about stable emotional condition. So M13 has to be able to maintain mood, because of the long study time. So, to be able to study well certainly M13's mood needs to be well. That's how M13 sees it.

More need to maintain motivation?
==========

IS THAT ALL? ANYTHING ELSE?

Em, other things that generally changed, hm—what else. Maybe em, our discipline. In M13's opinion it has to be consistent, which means neither increases nor decreases, like this: when we feel that we are already a senior, what has been our standard for discipline in the beginning must not change, because th—like—in M13's opinion discipline is our marking attribute. For example: em, when we're given task, for example, by someone when we were young, em, we did it because of the pressure, firstly it was pressure, secondly because we were tasked. So, if for example we are on top, when we are trusted to do something, because we feel we are on top, some may automatically [think]: "Oh well, no need to be disciplined, we are already on top!" So it mustn't be like that. Uhuh. When there is discipline, it must stay. That's how M13 sees it, because people will only respect someone when they are disciplined, M13 means disciplined in different things; time, promises, whatever, when what is tasked [must be] done well.

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The stability of M13's mood. For M13 it's when—Firstly, M13 can be jaded. Uhuh, [I] can be jaded. Uhuh, [it's] normal. Hu—humans, humane for everyone to be fed up of one thing if it's done again and again continuously. For M13, M13 has to find the antithesis to M13 's boredom. For example, em, [when] M13 is bored studying; M13—M13 try to read quotes from Soekarno *[ed.: father of the country of Indonesia and Indonesian first president]*, and also the views of other world figures. M13 ca—[The literature] sometimes talked about em—wa—em, something for example, em, that what a world figure [did] about something was not good. Oh, [but] actually M13 can [positively] change if M13 does better than that. So, as such M13 can improve M13's mood. It's like we—as if a sick person looking for their medicine, if you get what M13 means. The medicine, the medicine will cure us, right. Medicine

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Finding motivation from historical figures?
==========

So, besides M13 im—improving the mood, M13 a—sometimes also can add into [my] knowledge: "Oh, so that's the way of thinking of another person." Uhuh. It's like that for M13. Because, all this time people couldn't find a medicine for emo—the worsening mood. Sometimes people just let it be. Huh, why letting the lowering mood? And it could result in negative behaviours. Uhuh. [Like] playing videogames all day long, it's already a neg—negative behaviour. Maybe—for M13, maybe they need to be given an antidote to that. So if we can stimulate others to do, em, to fight against bad mood, basically it's even better. So people—we can encourage our friends when they're lazy, they're encouraged; we're encouraged, [then] they're encouraged. Another way is we tell them, we show them we're indeed in high spirit. As such, people would be—how do you call it, well, influenced. "Oh, he's encouraged, [so] we're encouraged." It's like that. But when we—because [M13] can cure [the bad mood] with the [quotes of the world] figures, so em, that is what will build us. But we can build others as well, in M13 opinion. Yes, the main goal is being productive.

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studying. That is not ideal either, right. When we stu—if by chance we see em, the motivation for people to work and work, work, work, work. Oh, yeah, but physiologically we need sleep, and other things. And those considerations we also learn from yet other people. That's what M13 means. Yeah, balance.

Need to see from multiple views for balanced understanding of motivation?
==========

ARE THERE OTHER ADDITIONAL THINGS FOR WHY THIS MEANING OF DISCIPLINE AND RESPONSIBILITY CHANGED FOR M13?

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Sense of responsibility increases acording to the tasks at hand?
==========

After several transformation iterations, the notes on units of meaning usually develop into something more descriptive and more relatable to the research purpose/questions. For the sake of brevity and simplicity, the transcript is not shown again, and only notes on the units of meaning (previously in red) are presented next.

First Transformation	Mid-transformation	Finished Transformation (New "Structures")
Relationship with seniors and juniors?	M13 felt that going into medical school taught M13 to respect first his seniors, but later along the years also his juniors, because all relationship is important	M13 felt that going into medical school taught M13 to respect first his seniors, but later along the years also his juniors, because all relationship is important.
More need to maintain motivation?	M13 felt that studying medicine is a long journey, and the further he is in medical school, he needs to further increase and maintain the mood to study	M13 felt that studying medicine is a long journey, and the further he is in medical school, he needs to further increase and maintain both the mood to study and internal self-discipline; the discipline part in particular is a manifestation of responsibility as an adult, as being an adult we do things no longer because of external coercion but of own volition.
Emergence of personal responsibility?	M13 felt that he needs to further increase and maintain internal self-discipline; the discipline part in particular is a manifestation of responsibility as an adult, as being an adult we do things no longer because of external coercion but of own volition	
Importance of maintaining good working relationship?	M13 mentioned again that respect to seniors and juniors are important for good relationship, which is important for productivity at work and because sometimes they need to work together or need each other's help	M13 mentioned again that respect to seniors and juniors are important for good relationship, which is important for productivity at work and because sometimes they need to work together or need each other's help.

First Transformation	Mid-transformation	Finished Transformation (New "Structures")
Finding motivation from historical figures?	M13 saw that the further M13 goes through life responsibilities increase, and a good QOL is when one can meet the responsibilities, so M13 has to maintain the mood to be productive. M13 knew that humans can get bored from daily routines at times; M13 thought of great people in the past as examples to be followed, and M13 always continuosly searched to overcome the boredom by learning from the minds and quotes of notable historical figures to encourage and inspire M13 and maintain M13's mood to study	M13 saw that the further M13 goes through life responsibilities increase, and a good QOL is when one can meet the responsibilities, so M13 has to maintain the mood to be productive. M13 knew that humans can get bored from daily routines at times; M13 thought of great people in the past as examples to be followed, and M13 always continuosly searched to overcome the boredom by learning from the minds and quotes of notable historical figures to encourage and inspire M13 and maintain M13's mood to study. M13 also saw that learning multiple views from many people is a good thing because it helps M13 in staying realistic in balancing how much work is still wholesome work and avoids M13 from being trapped in one person's subjectivity. M13 further considered helping other people dealing with their lowering mood is a good thing, because people can find mutual inspiration through each other which helps them to maintain productivity. M13 through reading of other people's stories learns the different ways people think in, and found this has been helpful in encouraging others.
Productivity from maintaining motivation?	M13 further considered helping other people dealing with their lowering mood is a good thing, because people can find mutual inspiration through each other which helps them to maintain productivity. M13 through reading of other people's stories learns the different ways people think in, and found this has been helpful in encouraging others	
Need to see from multiple views for balanced understanding of motivation?	M13 also saw that learning from more people is a good thing because it helps M13 in staying realistic in balancing how much work is still wholesome work and avoids M13 from being trapped in one person's subjectivity	
Sense of responsibility increases acording to the tasks at hand?	M13 sums this section by again saying that the change M13 experienced is about discipline, a manifestation of responsibility, and that good QOL is achieved when personal responsibility meets the task in hand	

It can be seen from the previous example that through transformation, units of meaning can not only change in description, but each of them can also be further separated into several new units, or merged with others within a transcript, all in the spirit of finding the closest relation to the research purpose/questions.

3. Building The Essence

Here, as an example, I will first present structures found from two full transcripts analysed earlier, and the resulting developed essence.

F7	F8
F7 sees life as of quality when a person is being beneficial to others. F7 sees quality of life depends as well to how a person takes care of themselves. F7 asserted that internal motivation is important for well-being because it tells someone what their goals are and keeps them reaching for those goals. F7 acknowledged that support from close ones can act as motivator as well, albeit external. F7 equals having life goals with having purpose in life, and having purpose in life with actively being beneficial to others and achieving the goals. Non existence of either motivation, other people and their support, or life goals worsens quality of life for F7. F7 also stated that quality of life for her equals happiness. F7 viewed that a sense of gratitude is needed to be able to empathise with others' want and help them. That's why lack of sense of gratitude worsens quality of life for F7, as it hinders people from being beneficial to others. F7 sensed that being in medical school heightens her sensitivity for others she considers in a more difficult situation than she is. F7 thinks this is important for quality of life as it helps her to know when to help others.	For F8, quality of life means to live with freedom to choose and to be. F8 recognised that the environment can influence quality of life. An example of external influence F8 acknowledged is when her parents has different will with her. For F8, resolution may be achieved when parents give their opinion or wisdom, but she still make the decision herself. F8 sees that it can be contradiction, when she has to follow tradition and parents will, while she has differing opinion. F8 cannot deny it because F8 realised she does not live alone and F8 needs to consider others in doing things. F8 acknowledged other people's support as beneficial to F8's quality of life, because it provides F8 with assurance and self-confidence when making decisions. F8 sees restrictions from parents or environment/tradition as worsening quality of life, and it also puts F8 at hard situation (dilemma). F8 needs to think further and take other people into account. F8 noticed she studies more and doesn't delay. F8 noticed she values time more, because medical school curriculum is dense.

F7	F8
F7 sensed she's more diligent after in medical school, and it's because the environment is conducive for studying. F7 thought being more diligent is important as it pushes her to be on par with her colleagues in obtaining knowledge. F7 sees competition as a boost in obtaining knowledge, not a hindrance. F7 values support from environment and hopes it will always be available in the future for her. F7 also hopes that what benefits her quality of life (good competition, motivation, support, having goals, being grateful) will only grow and moreover help her benefitting life of others as well. F7 fears her quality of life worsens in the future because she could not help others with the knowledge she has/has not. F7 sensed that if it would happen, it would be as if all she had done before were ineffectual, even wasteful. F7 also viewed her quality of life can worsen when she doesn't get what she dreamed of. F7 also thought that living alone, or losing support from others, also will worsen her quality of life. F7 feels doing happy things helps her get rid of boredom and reminds herself of who she is. F7 also sees that not reaching goals worsens quality of life, particularly when she feels she has done everything she could toward that goal. It can even prompt F7 to rethink of her place in life.	F8 views that being a doctor is not something to be taken lightly. F8 senses that people will have expectations from her. F8 wants her study performance well because of two reasons: 1) she wants to understand the subject, and 2) because she doesn't want to have worse grades compared to her friends. F8 noticed growing up, she trusts her parents more. This is because she proves through time that what her parents said in the past is indeed true. F8 also noticed that there was a change in her attitude (with regards to learning) that enables her to prove her parents' words. As a result, F8's self-confidence improves. F8 hopes for a good journey for the rest of her study, with no remedials and possibly a cum laude. F8 considers remedials take lots of time, and possibly also money. Also, F8 likes the satisfaction from passing in the first try, and the more time for vacation or family without remedials. With cum laude, F8 hopes to make her parents proud in front of many people and F8 considers it a good reward for studying for years. F8 hopes to be a responsible doctor and not think of gaining rewards, and being able to update and apply the knowledge for the people. F8 thinks that the change in Indonesian health system with the arrival of universal health coverage may lessen the chance to live comfortably as a doctor, so she wants to have a sincere attitude. For F8 being a doctor is not just a job, but also a tool ready for religious devotion as it will take a large part of her time in life. F8 hopes she won't disappoint people as well, and succeed in present life and afterlife. F8 hopes that her being able to update her knowledge may benefit her patients. F8 fears she might not have the self-confidence and disappoint her patients by not being up to the task and doing unwanted harm to them.

Essence (in relation to research purpose & questions):

For F7 and F8, quality of life means being able to realise potential and goals, whether it be being able to make own decisions, being able to take care of own self, being able to help others, being able to finish medical school well, or being a professional doctor, i.e. do the best for the patients' well-being and without considering compensation. F7 and F8 consider personal motivation and support from family and close friends in order to realise their goals and boost self-confidence, and therefore motivation and support are important things for their quality of life. Other than that, sense of gratitude and sense of religious devotion in work also helps them in being beneficial to others, and as such it also improves their well-being. In academic life, F7 and F8 sense that they become more diligent in studying, in part because of the conducive and competitive surrounding. This newly obtained diligence also improve their well-being, as again it helps them getting closer to their goals. For F7 and F8, things that worsen their quality of life are the opposites of what improves their quality of life, i.e. not being able to realise potential and goals, losing motivation and support, failing either their loved ones or patients, and also being alone.

Drawing from the analysed part of the transcript of interview with M13 above, the renewed essence will look like something below, with the change highlighted in red.

Renewed essence (in relation to research purpose & questions):
For the participants, quality of life means being able to realise potential and goals, whether it be being able to make own decisions, being able to take care of own self, being able to help others, being able to finish medical school well, or being a professional doctor, i.e. do the best for the patients' well-being and without considering compensation. the participants consider personal motivation and support from family and close friends, and good working relationship as supportive toward realising their goals and boosting self-confidence; therefore, motivation and support are important things for their quality of life. Other than that, sense of gratitude and sense of religious devotion in work also helps them in being beneficial to others, and as such it also improves their well-being. In academic life, the participants sense that they develop more diligence and responsibility in studying, in part because of the conducive and competitive surrounding. This newly obtained diligence also improve their well-being, as again it helps them getting closer to their goals. For F7 and F8, things that worsen their quality of life are the opposites of what improves their quality of life, i.e. not being able to realise potential and

goals, losing motivation and support, failing either their loved ones or patients, and also being alone.

This process continues iteratively with all the acquired data. All in all, as elaborated in Section 3.2.3 in the body of the thesis, the essence built must in the end be psychologically sensitive to the research questions and give enough answer without being too pragmatic and mundane, nor too philosophical and non-relatable. Throughout analysing the 46 transcripts, what I found in trying to answer what happiness means to the students in Indonesian medical schools has been presented in Section 4.2 of the thesis.

APPENDIX XVI. Activities Improving QOL

Activity	Illustrative quote
Contemplation; learning from great people in the past; learning from past mistakes, and planning for the future	*By knowing ourselves, we know [...] what makes us happy [so] we can focus there [and] what to improve [...] It's more about exploring self and fixing and improving potential. (F18)* *When one can think [and] can look for the meaning of each event they experience everyday, it can be made a lesson and their QOL must be able to improve. (M9)* *When I'm jaded from studying, I read quotes from, say, Soekarno* [first president of Indonesia], *and what other world personages said […] so there's this boost from those inspirational characters that change my mindset, […] why can't I be more? It revives my enthusiasm. [Also,] it adds my knowledge […] If we want to be objective, we must see thoughts [of other people]. (M13)*
Fulfilling religious obligations (e.g. praying, being useful for others)	*So when I do* shalat [regular Islamic prayer ritual] *diligently, worship, read Quran, those things, everything is OK […] Whatever happens, it's OK, as long as I'm close to my God […] whatever happens, I surrender it all to Him […] So even when I fall, I don't fall hard. So there's this heart relief that this is just a worldly problem, it's OK. (F15)* *Praying. I mean, like when there's a problem I can't fix alone. For me it's a little relieving. Like being able to pour your heart out. Makes [me] relieved, because I feel accompanied. (F24)*
Gaining knowledge that enables problem-solving or wise life decisions, and the activity of problem-solving itself	*Gender equality notwithstanding, I feel that in eastern cultures head of the family is the fulcrum […] I mean we have to be able to face small and big problems. Especially when later I make a family […] If you don't develop your ability to solve problems from now, how will [you] solve problems in the future? Honestly, because I think I'm a man, I will be the fulcrum […] I'm also the hope of both my father and mother's family […] First grandchild must be dependable as an example of success for his younger relatives. (M15)*

Activity	Illustrative quote
Regular exercise and lifestyle	*Regular exercise and a well maintained lifestyle [is] actually effectual. I'm happier [and] can survive more when facing problems [that] I should be able to manage. [Regularity] builds mindset. (M12)*
Rest, vacation, hobbies, or recreation; these refresh from stress, tiredness and jadedness coming from studying; they also increase motivation and even remind the students of who they are	*Sleep. Yeah, rest. And vacation […] to avoid jadedness from campus situation. (F6)* *[…] some activities that remind ourselves who we are […] When travelling, sometimes there will be moments when we then know who we are along the road. (F7)*
Studying and education	*Because education can change someone's standards of living. How someone can get a feel for their own QOL, of what happiness is, how to obtain it and so on. It all can be achieved through adequate education. (M14)*
Treating self and others well, including helping others	*[Being useful to others is important] because to me it's the only source of happiness. (M7)*
Work/career	*If we don't have a job […] how will we appraise our QOL? By working, we will be regarded as having a quality, and by that quality we give something to others. [When] we are needed by others and we can give something to others, it can then be said that we have QOL. (M17)*

APPENDIX XVII. Personal Aspects Improving QOL

Topic (Meaning)	Illustrative quote
Achievement (Achieving goals/obtaining what is wanted; they serve as both success standard and further motivation)	*I need to have a distinctive personal mark. That's why [I always challenge myself.] People always pay for something they don't have [and] people with distinction is paid more by a company because they have more creativity. (F17)*
Exploration (Getting out of comfort zone and learning to know what activities gives oneself satisfaction)	*Knowing self [and] not staying in comfort zone, [because] when my life is too static, no growth, it's something to be worried about. [...] My studying [medicine] in another province was because I want to get out of comfort zone […] I'd be more independent, self-improving, facing the future. (F19)*
Faith (Belief in religious teachings and/or God)	*If we're close with God, believe in God [and] there's a God that always protects us [we] will be safer, more secure, comfortable [knowing our] life has been arranged by the One above. (F10)* *[Faith] is doing things within God's path [for us]; if we put an effort and pray we'll succeed in time. We must keep thinking positively. Faith must play a role, to prevent [one] becoming insane. As a balance [knowing] 'Oh, it's not meant for us.' or 'Ok, try again.' (F17)*
Freedom (Doing things whole-heartedly and not from coercion, which facilitates producing optimal results; also, by having the freedom to decide on something, students are also freely enabled to take responsibility for what they do)	*Also no pressure if [we] want to do something. If something is done out of coercion there will be heaviness in heart that in the end will make what we're doing non optimal. And in the end no happiness with what we did; even if it's good, but out of coercion there's also no satisfaction, no happiness in heart. (F4)* *[…] being capable to take responsibility. Being responsible with all we dream of. When we have to decide, we're able to know the consequences, the what and why coming from that choice […] By knowing between the good and bad, we're automatically free to take responsibility in accordance to what we believe, according to what we've done. (M10)*

Topic (Meaning)	Illustrative quote
Health and longevity (A means of productivity enabling daily activities, working, and achieving)	*The importance of health is more about how someone can be productive, be creative, do daily activities. [Those are] what can make us happy. (M14)* *Why long life? […] If we have a long life, at least we-- our impact toward others will be extended too. (M17)*
Internal motivation and determination (The willingness to grow, and willingness to sacrifice to progress, reach goals, and realise one's purpose)	*The most important is certainly motivation […] The desire from inside. [...] It's useless people telling us everything, encouraging us like crazy, when there's no desire from the inside. (F14)* *If we don't have a goal, we're confused of what to do. If we have motivation, a goal, we have direction, what to do one after another, and targets in life will be achieved. (M12)*
Open-mindedness (Knowing personal views, thoughts, abilities, limits, attitude, goals; and whether they need to be improved; all these serve multiple purposes: to avoid disorderly life, to evaluate self, to direct self-development, and to fulfill expectations and self-actualisation)	*Capability is related to willingness to grow. If we feel incapable, certainly we just stay in one place. What I mean with capability is we know our limits, and we know what to develop. (M11)*
Patience and emotional stability	*If I weren't patient, I'd dropout before the third year [...] In first semester I thought I wouldn't hang for long here. [...] It seems I thought: 'In one year you'd be dead-- after-- if not insane, you'd be dead. Not breathing.' (F24)* *If we're in a bad mood, I think we can't be productive [...] it blocks our brains or even makes them weird; [we may even] resort to doing drugs, crime, […] fights. So, counter-productive activities. (M13)*
Safe feeling (Having neither worries nor anxiety)	*I want to be safe psychologically too, no worry or anxiety or the likes. (F25)*

Topic (Meaning)	Illustrative quote
Self-acceptance (Focus on self, instead of comparing self to others, became the basis for motivation and self-improvement)	*Our friends are greater, [I] felt small [and I] was down, especially in the beginning [of medical school]. Later [I] know myself, where I was lacking. (F12)*
Structured life (Conducting a disciplined and scheduled life; having plans enables the students to create measurement and steps to achieve goals and balanced life)	*With routines, we can form habit, which in turn forms lifestyle. (F15)* *Doing things systematically, like what we do, starting in the morning, so that everything's balanced [is] important; we certainly have goals [to achieve] in life. (F16)*

APPENDIX XVIII. Aspects of Dysfunctional Relationship

Topic (Meaning)	Illustrative quote
Conflict with others (Problematic relationship, misunderstandings, conflicts, breakups, betrayal in the family, friendship, or dating; being let down after trusting; grudges and lack of forgiveness; feeling guilty; inability to establish communication, trust, cooperation, and mutual understanding; these disturb mood, bring sadness, and hamper cooperation for achieving goals)	*Seriously, I don't like conflict. If I have a fight with my friends, I can't concentrate in class the whole day. I'd be thinking, 'How did I wrong them? How to apologise to them?' Even more so with life partner, where we live together. It will occupy my mind. It's very overwhelming! (F9)* *Conflicts [are] very negative; mood free-falls throughout the day; hah, so sad. It can even continue the next day. (F20)*
Feeling chastised (Scolding by, restriction from, or contradiction with parents or tradition)	*Maybe it's restriction from our parents. For example, when parents say I want you to be as such, while in [my] heart 'I can't do that'; in my heart, I'm not so sure about that. But because parents' restriction, and because parents still think of Javanese tradition, 'What will our neighbours say?' (F8)* *If I was wrong, I'd accept being scolded, but if I felt I [did] right, I couldn't accept being scolded […] Seems my parents are of conservative type, so when according to them I'm wrong, I'll always be wrong.[…] It makes me feel bad. (F15)*

Topic (Meaning)	Illustrative quote
Feeling lonely and not enough within self (Seeing colleagues having dates, especially when they were in the same class and both were smart, because it makes one feel alone and without help when studying; furthermore, comparing self to others whether in background, lifestyle, or goals)	*But, [I] often envy seeing-- if there's a couple in the class, especially if one partner is smart, can teach. But me, not having a date, I struggle alone, basically. (F4)*
Feeling not enough for others (Rejection, lack of appreciation, support, and encouragement, or high expectations either from family, friends, partner, or other people; non-constructive feedback; bad opinion from others; these preoccupy student's mind, make one feel unappreciated, self-conscious and uncomfortable, and shut self down from other people)	*Again, we're social creatures. We'll surely think of how people see us […] If those people consider us bad, I will also feel down. We can't be optimal in doing our activities. We seal ourselves from people, if they consider us bad. (F10)*
Peer pressure (Having to follow what friends want when one does not want to do it (e.g. to keep getting along)	*We could be influenced [to do something] even when we don't want [to do it], because we want to maintain friendship. So I don't want to hurt their feelings, because they're my friends; so OK, I follow along once or twice. But sometimes it continues, [it becomes] habitual with them. (F15)*

APPENDIX XIX. Appraisal and Resilience Issues Negatively Affecting QOL

Topic (Meaning)	Illustrative quote
Complaining and complacency (Lack of gratitude, which also produced complaining, made one unable to empathise with and be beneficial to others; on the contrary, complacency might bring carelessness or regret; furthermore, staying in comfort zone might blind oneself from recognising their shortcomings)	*In the first semester, when I was given a lot of tasks, I always complained. Complaining is like negative energy. [I] became unable to do something productive or give impact to others […] So bad mindset certainly means bad QOL. (M9)*
Incompetent or not achieving (Feeling and seen as incompetent may make participants upset, and is uncomfortable and shameful for the respondents)	*Like when we'd learned, tried the best, but the grades were bad. It's like we're denied of our rewards or efforts. In the end we felt despair [as] what you wanted […] wasn't achieved. So you'd spent as much time, and papers to print texts and stuff; it's like a loss for me. [Repeating classes] is like a nightmare for me [...] I'm ashamed in front of my friends [and I] need to pay more tuition. (F15)*
Lacking control (Not having enough command of emotion (including holding grudges), infrastructure, and time, which makes them uncomfortable because they feel controlled by situation instead of the other way around)	*I feel low or less well when I can't manage time well. Bad health, inadequate sleep, it's all because our self management not being good enough […] When we can manage time well, our mind will focus on one thing [at a time]; thus we'll be wholly present in an event, or we'll do a job well, and the impact is our QOL increases. (M14)*

Topic (Meaning)	Illustrative quote
Lacking faith/religiosity (With lack of faith in and devotion to God, students feared there will be many trials and obstacles that cannot be overcome, make them feel failed, and worsen self-confidence and happiness)	*When my devotion is lacking quantitatively or qualitatively, I consider my QOL as decreasing too. Sometimes there's something, um, I say unlucky, I always tend to think of that. I already try* [emphasis] *as hard as possible, but I'm unlucky. I return [to that thought], there's power beyond us humans. That means God is involved. Unlucky, for example […] not passing […] practice exam, because of trivial stuff that I [already] know everyday but I failed [to do] in practice […] I'll go back [thinking], maybe my devotion is lacking. (M9)*
Pessimistic (Pessimism and listening to negative words made oneself unhappy and ungrateful, unproductive, lazy, and waste time; similarly, sense of failure without enough fortitude, self-confidence, acceptance, and patience brought discomfort, unrest, frustration, even suicidal thoughts)	*Like, hearing others or ourselves speaking negatively [or] being pessimistic with life […] I speak from experience; [it can be] depressing, and really, made our outlook of the world ugly. When our outlook of the world is bad, we might be-- unhappy and unable to enjoy life, unable to be grateful of the smallest things. [It's already] hard to find something to be grateful of, even harder if we're used to listening to bad stuff [and] we became really unproductive. (F20)*
Self-blame (Blaming self for undesirable events happening in life)	*Self-blaming is uncomfortable. I want it gone. If it's gone, I can do my duties well, […] like studying. (M12)*
Unconfident (Lack of self-confidence, which impedes self-actualisation)	*Someone's low self-confidence, feeling lacking, makes them unsure in showing up. It also makes them feel worthless. (F14)*
Undriven (Non existence of motivation or purpose, lack of discipline, laziness, procrastination, unwillingness to sacrifice, and despair as they prevent one from achieving goals; being coerced or sudden/unplanned changes in schedule, which may make one work unpurposefully, half-heartedly, irresponsibly, or suboptimally; not solving problems, which may pile up and worsen)	*The most important strength is [from within] ourselves […] If we don't want to sacrifice [some aspects of our life], our qualities will just be run-of-the-mill. (F17)*

APPENDIX XX. Intangible Changes in Students' Relationships

Topic (Changes)	Illustrative quote
Appreciation towards others (More appreciative towards what parents do and sacrifice for them, care for parents more; also respect for colleagues both senior and junior)	*[…] but now after living away, I appreciate [my parents] more, care more, I don't act brashly, basically don't have the audacity [to see them] disappointed. So I must study well. […] Do you want to be a run-of-the-mill doctor? I don't want that […] Maybe because I grew up and I realise what my parents do for me to study here; I know all they've done, I know how they… struggle, so I don't want to make them disappointed. [They] always facilitate my activities, even when they don't have that much. Also, [with] whatever related to education. So I see there, they pretty much love [me; also I can see from] whenever I was ill; [I] live far [from them] now [but] they always picked me up [and] dropped me. So I can see more, they love me a lot and they don't-- don't expect [from me]. I'm touched […] So I want to give them something from my own hard work. (F21)*
Discomposure (For some students that study outside their hometown, they might feel confused as to how to socialise with new people)	*The social environment is very different. [I] was from a village, and now [I'm] in the city. Sometimes I'm puzzled over how to act. I'm actually confused, like on how to mingle, it's very different with how it was in the village. (F16)*
Empathy (Students became more patient and considerate towards other people; more listening and more empathetic to others' difficulties)	*Beside me was someone with Down Syndrome, [a condition] I learned about from studying, [so] I respect [people with that condition] more. [Furthermore] I learned about [...] pregnancy and delivery. I [now] can value [...] a mother's struggle. (F19)* *I didn't care about people. Here I often meet patients, simulated patients, other people. Now maybe I've been touched, so if there's a sick or [troubled] person I want to help. […] How I behave, to the poor, the rich, everybody, never discriminate. So here I can feel I empathise. That's what I like most here. (M3)*

Topic (Changes)	Illustrative quote
Genuineness (Students valued genuine friendship more, not as just about having fun, but where they could be themselves, and as a support tool academically and otherwise)	*In the past friendship was about happy times. Going out together. Now it begins to be about supporting each other. Not only about being happy, now when there's a problem, we support. (F29)*
Giving (Students contributed more to the community)	*Like… more… being involved more in the community, like helping in the clinics. (F1)*
Learning socialising skills (Students learned to better socialise, respect others, and treat others well, be more open to people, be involved in more activities, tolerate situations more, are less selfish; those were perceived as important both to know and improve self, to maintain good relationship, and for their academic progress and productivity at work; one student mentioned that studying in a big city made them feel confused when trying to get along with others	*When we talk about social interaction with others, we learn how to treat someone […] As a medical student, it is to be learned, because later in the future as a doctor I can't avoid it. We have to give the best treatment to, serve as best as possible the patients whose personalities are of course variable. (M6)* *Now that I automatically stay [here], I must get along with friends [...] Want it or not I learn [this] language, try to understand them too, how their [way of] live is, how courtesy here works. (M10)*

APPENDIX XXI. Academic Achievement

Topic (Meaning)	Illustrative quote
Academically achieving smoothly (To study harder; to graduate soon without any resits, even obtaining cum laude; to have an internship as they wanted and learn through it; to pass national competence examination; those would become a reward, conviction, or justification for time spent, a mark of personal growth and professional responsibility by meeting the needs of the people, or fulfilment of parents' expectation and making them proud and happy)	*I wish no more remedials. I hope I graduate cum laude. [...] Besides wasting time, we need to pay for some remedials […] Cum laude is important, because […] I really want to make my parents proud. (F8)* *Better understanding of the rest to learn, indicated by satisfying grades, then graduating in time […] because [those are] indicators of my success in studying all this time. (F15)* *With internship, I actually expect to gain more [knowledge]. (F19)*

Topic (Meaning)	Illustrative quote
Studying further (Almost all students wanted to take a specialist degree, because they perceived people search for specialists rather than GPs; the degree will also give them a competitive edge and make them work better by having a focused field, or because their parents wanted them to do so, or as a personal reward for difficult experiences in studying medicine; students preferred specialisation in the field they love because it is something they will do for the rest of their life and because they want to take care of other human beings optimally; a few students look for a possibility to obtain postgraduate scholarship; a few students hoped to obtain that scholarship abroad, to challenge themselves and live in a country considered more orderly and open-minded, and to more easily support their parents financially, or because they perceived that specialist study in the country is rife with seniority attitude, involves bare or no compensation, irrelevant orders, and senior/teacher sycophancy)	*[I] want to live abroad […] taking MD* [medical doctor degree]. *Find a scholarship. Doesn't need to be MD; [it] can be researcher, [or] public health, or medical education. But I want it abroad. (M8)*

APPENDIX XXII. Career Achievement

Topic (Meaning)	Illustrative quote
Secure job (To work as a doctor, which means having a clear job and making money, and sufficient, unworrisome, and independent future life; acquiring plenty of clients, enough or proper salary, and good infrastructure as practitioner, as a reward in itself or a means to be even more beneficial to other people; a few students wanted to be medical teachers or policy makers; they thought that being involved in organisations was the most effective way to influence people and bring improvement; some aspired to be entrepreneurs, or create joint research/venture with colleagues to make a living instead from the illness of patients, and to eventually build a better community)	*I'm more-- interested in politics, and […] planning to be active in organisations after-- I work [because] we can't change something unless we-- we're handling the policy. (F25)* *Standardised salary, and sufficient infrastructure. Salary that humanises us. (F26)* *[I wish] with fellow doctors we create ventures, which doesn't depend on patients' illness [...] so we don't depend so much on our job as doctors [...] There's this stigma that doctors gain money from people being ill. (M14)*

Topic (Meaning)	Illustrative quote
Secure system (For more certainty in national policy regarding primary care, standard of medical qualification, and accreditation of medical schools; improvement in universal health care system for the comfort and benefit of both society and medical professionals; some students even mentioned going abroad because of the perceived hardship living as medical professionals in the country)	*[I wish the] healthcare system be better, so that doctors can have good job prospect [...] When laws don't support doctors, it means like nothing supports us, covers us [...] Chances to develop narrow because [of it]. (F15)* *[I] want a proper decision or policy soon regarding primary care doctor [certification], medical education national standard, medical school accreditation, [and] for the public [...] universal health coverage. (M14)*

APPENDIX XXIII. Harmonious Living

Topic (Meaning)	Illustrative quote
Harmony with family and friends (To be able to help improve the situation in their family; to be happy together with family, friends, other people and continue to have a mutually supportive relationship with them, which included parents seeing them graduate and graduating with colleagues of the same cohort)	*To be even better in supporting each other […] because friends and family are what makes me can go through life. Without them I couldn't be like this now. (F2)*
Harmony with future children (To have children who would be helpful)	*Having children is important for me because […] there'll be time we become old and frail. We'll need someone to help us. (M11)*
Harmony with partner (To get a compatible partner who would understand the perks of being a doctor, which they thought will result in fewer problems, and also to build a family that lives in a peaceful home and neighbourhood. A few students see marriage as an inherent part of living, and that creating a family is a part of learning about life and becoming the optimal self; yet another student wished to create a social institution with future spouse that cares for disadvantaged people)	*Finding a partner, life-partner […] I definitely can't live alone, I need a partner to support me, maybe that's one of the ways I'm improving my future life. […] A partner is important because after I leave parents I need someone I can trust [...] a friend to share; a friend to enjoy, well, maybe my success, and um, certainly to have children […] to continue what we've been working […] (M15)*

Topic (Meaning)	Illustrative quote
Harmony with patients (To be able to communicate well with patients)	*I've heard cases where an expert doctor couldn't communicate with patients despite their good competencies. So in such a case, the patients didn't feel better […] We have to broaden our connection so that we can learn how good communication is, how to understand each other, how to respond, so we can be better* [emphasis] *in treating patients. (F10)*
Harmony with people in general (That people will accept them more and be more understanding towards each other)	*I hope people can… also be patient, waiting for me; either in succeeding, either in the process […] supporting me […] still there for me […] You'll never know the weight of the process […] how they struggle with their life, their past, their future expectations […] I'm more accepting toward myself now compared to how it was in the past is an extraordinary result, an extraordinary achievement […] A result this significant, in my opinion is not disconnected from these people staying accompanying me. (F22)*

APPENDIX XXIV. Other Hopes

Topic (Meaning)	Illustrative quote
Lasting health (To stay healthy and have a long life, both to help others and to do as many good deeds as possible for the afterlife or to pay for karmas)	*Always healthy […] Health is important, not being ill, for productivity. [Regarding long life], I want to do good in this world. Maybe in my past life there were troubles, here I'm redeeming them all. [It] takes time. (F11)*
Maintaining well-being and its positive contributors (To still have the factors positive to their QOL, including having fun and do things one enjoys, in order to help others; to have more control in aspects of life and ability to cull non productive habits)	*I want to […] be able to attend classes and do activities in the morning, and sleep well in the night […] I'm happier if I do activities and work in the morning. Rest at night helps a lot. Helps increasing vigour. (M12)* *[I] hope I don't forget leisure, to have fun. Not forgetting things I enjoy, because [before] studying medicine I thought they weren't important, but they're actually very important [...] to avoid stress. Sometimes doing leisure actually improves performance [...] it's doing what we like by us, so we obtain inspiration* [emphasis] *easier! (F20)*
Managing time better and overcoming procrastination (Better in portioning time between study or work, leisure, relationship, and religious activities; also in order to stay mentally well)	*I feel I always procrastinate too much. [I] don't use [time] well. So I hope I can manage my time better, between study, entertainment [and] time for God […] That's how we won't be stressed. (F10)*
For future medical students (Students hoped that future doctors may also learn through process and not just results, especially with regards to compassion and the desire to help others)	*My hope for future doctors… don't focus on the results, because there are many things where the process is actually more important […] Maybe if I had never learned about affection here --not through lectures but learning holistically here-- maybe I'd never... help people in accidents. Not a big accident, someone fell, but I'd never know that I wanted to help them. That I have the desire to help […] I feel that if students can catch that more, it will affect them more, yeah, a similar effect [as I obtained]. (F22)*

Topic (Meaning)	Illustrative quote
Religiosity (To be more devout towards God, including through profession; to deepen understanding of one's religion; to pilgrim to Mecca with parents; to *moksha* (the highest enlightenment one can experience in life)	*I hope I can make myself closer to God, because I'm nothing without Him. […] As a doctor, we can only give treatment as best as we can do, the rest is on God's will, right? It's God who'll cure the patients. To treat His creation, I think we have to get closer to the Creator. […] If we are close to God, God will love us more, God will help us then to cure the patients. (F10)*

APPENDIX XXV. Situational Fears within Study and Career

Topic (Meaning)	Illustrative quote
At work (Unable to handle either themselves or a particular medical situation in real life, unable to help others or failing people's expectations in the profession, which would affect the quality of their work or even make them fail in taking professional responsibilities; these would make students feel useless and sorry for the patients, rob them of their self-confidence, negatively affect their colleagues' trust or society's opinion of them, necessitate harder effort in career compared to peers, jeopardise the profession and alma mater's image, or even involve malpractice accusation and legal threat. On the other hand, students also felt this fear because they attempted to put themselves in the patients' shoes)	*Public perception, teachers' perception, friends' perception, only know and expect 'Doctor's must be able of such and such!' When I can't meet those standards, I feel failed. (F18)* *Should I mistreat the patients, I'd feel sorry for them. Then if it's a grave issue, it can be malpractice. The public's mindset views doctors as capable of everything. But it actually makes me afraid! (F19)* *I always think of this in every lecture.* [small laugh] *What if there's trouble in the future, like malpractice [litigation]? I think about it a lot. Would it happen? […] That's what I fear. [I'd] lose [career and chance to help people] because of it. (F16)*

Topic (Meaning)	Illustrative quote
Competition (Competition, which may dispirit some students; not securing or being laid off job as some students perceived the workforce is saturated; unfair competition, nepotism, patriarchy, and seniority in medical profession which means one must make more effort to advance in career or degree; furthermore feeling unneeded in their profession because medical information is easily obtainable nowadays)	*[Limited] access to obtain better education and life […] like when only a specific group [of people] is granted access, or when the information isn't freely announced, or when the information is freely announced but I'm not qualified to enter. Or when I'm already in… will I survive? […] How do I face people, quote-unquote, wanting special treatment? (F26)* *[…] medicine here is hierarchical. Also the nepotism. I mean, [my] parents' background isn't in medicine […] So what I fear is like injustice. […] I have less there, so I must put more effort than those who have it there. (M8)* *For example being laid off […] I hear a lot [about people] spending much time studying, and in the end is [still] difficult to obtain a job. Unemployed. […] Why is it frightening? Because we don't have certainty [...] financially and socially. (M11)* *Job. Might be hard to get one. Also, maybe in the future years, society becomes more advanced, facilities become more advance, so they no longer need doctors. […] We're redundant* [emphasis]. *(M17)*
Further education (Being unable to take postgraduate or specialist degree, or having a specialisation not in the field a student like, because it would make them work halfheartedly and might endanger other people, even tantamount to tormenting self)	*I fear failing the qualifications wanted by the department I want to enter [or] if I get into a department I don't like, it'll mean torturing myself. (F15)*

Topic (Meaning)	**Illustrative quote**
Internship (Long wait for internship, rough internship (e.g. rumours of fights or being repeatedly scolded by teachers and hospital staff), not being able to meet teachers' expectations or patients' needs in internship, or failing to optimally accumulate knowledge in the internship)	*[I] fear not getting along well with colleagues in internship. There're [such] rumours. It'll be uncomfortable, and [I] won't enjoy [the process], where internship's also exhausting our energy and mind. Also, not getting along with people in the hospital. (F12)* *The internship process. I fear that. Fear of unable of doing it. Fear of being scolded there […] because I fear of being incompetent, then ashamed. (F27)* *Internship must… [we] don't just get slots. The fear is [I] won't quickly get [my turn], waiting too long, or even […] don't get enough knowledge from internship. […] If waiting too long for internship, [I fear I] forget [what I have studied]. (M4)*
The rest of undergraduate years (Academic results not as they wanted; failing small thesis; failing to absorb the needed knowledge/skills; not graduating cum laude, graduating late, or not graduating; these are against parents' and society's expectations, and means lower self-confidence, shame, or discouragement. This fear came from the thought of more time spent, more cost and burden for parents, and society's and parents' common habit of comparing people; one student actually stated this fear became part of their motivation)	*Failing small thesis, fearing the internship, fear… competence certification exam, as such. [I] fear if [I] fail, [it] will lower my spirit, lower my self-confidence […] lower motivation. Despair* [small laugh] *[and] no longer want to face life […] It becomes preoccupying. (F28)* *I fear failing to be a doctor, [also] whether I'm capable of internship […] I rather wish I die […] I'd be ashamed by myself, […] also people back in my hometown will ask questions […] Also, my mum wanted me to be a doctor. If I don't graduate, my mum's sacrifice during her life seemly is for nothing. [I] also wouldn't be able to help people if I don't become a doctor. [Time and] cost of living will also be wasted more. (M12)* *[I will be] ashamed to not graduate. […] many aspects of our culture is still about comparing […] It became rooted in children, that I must be better than [others]. (M16)*

APPENDIX XXVI. Personal Fears within Study and Career

Topic (Meaning)	Illustrative quotes
Health-related (Health risks involved in medical profession from either patients or workload, deteriorating health, or a short life, because that would mean less chance to either realise own dreams or improve other people's life)	*As doctors we surely will face many types of diseases. We're more prone to contract those infectious diseases. That's also a fear to me [...] If we get infected [from the hospital], we can't focus on patients. Instead, we'll worry about ourselves. (F10)* *I don't think the lifestyle I have as a medical student is a healthy one. So I fear I'd die quickly. Like, when I die, there, all my wishes vanished. Gone. (F23)*
Insolvency within studying (Not having enough funds to finish medical school or to be a specialist)	*Maybe there's something that... disturbs, em, family finance, then [I] cannot continue studying… it's rather scary. (M1)*
Insolvency at work (Having financial difficulties as a doctor and that there will be either not enough assurance for their education and health in the future. They felt that having to think how to pay for healthcare when sick makes situation worse; on the other hand, becoming either egotistical or materialistic; uncertainties from the implementation of universal health coverage especially regarding remuneration)	*I also worry about BPJS* [Indonesian's universal health care system]. *There's a rumour that doctors' salary is getting lower, meanwhile my parents still expect high on salary. [Moreover,] I worry about my long-term prosperity. […] In the future, when I'm all grown up, I don't want to live depending on my parents. [Furthermore,] our parents won't be with us forever. If we can't guarantee our own future, who else will? (F10)* *Money issue too […] I feared if I do like-- they say if a doctor is too kind… yeah, they won't be as rich […] Because I fear about-- my responsibility [to family]. (F29)*

Topic (Meaning)	Illustrative quotes
Professional incompetence (Difficult examinations or feeling incompetent at work, which will mean shame or lower self-confidence for them)	*[I] fear not passing national competence exam [which makes me feel] so incompetent! Incompetence [creates] feeling self-conscious. Then, like, shame [and] feeling bad about ourselves. (F12)* *[I] fear I can't readily apply [my knowledge] in internship or after becoming a doctor. Also, nowadays […] patients may sue [us] because of many things. [Also] if I'm not competent enough and harm the patient. [It] feels burdening […] People's mindset is that doctors must be able to do everything, but if [we] fail, [they] denigrate [our] name and stuff. (F13)*
Time management difficulties (Having even more difficulties managing time or priorities especially after they work in the future, which can mean missing time for self, family, or hobbies and failing to reach goals, and even becoming distant with loved ones, even more than when they are in medical school. One student felt that at that point suicide will be better)	*I'm still nothing, not even an intern, not even graduating, but already don't have time. What if I'm an intern, what if I'm a GP? […] Once becoming a specialist, will I have time for my family? […] I also need me-time. How to make myself-- my mood not as low. (F24)*

APPENDIX XXVII. Fears of Loss

Topic (Meaning)	Illustrative quote
Faith (Losing faith in God and bad things that will follow)	*I don't want to not… believe, because what I achieve until now wouldn't be achieved if I didn't pray So the fear, is, yes, I fear I'll forget God. (F23)*
Hope/drive (Losing hope or motivation; as they are the obligatory reason for one to do something, losing them means nothing else will help; something akin to this was failing to be open-minded and learn, or becoming arrogant after becoming a professional or gaining higher achievements; all these meant halted self-development Close to this is complacency or a system that promotes complacency, which participants thought will reduce one's usefulness to the society)	*I fear I'd become arrogant, because take it or not people see doctors [as] great figures, smart figures, know-it-all. (F24)* *If [my] motivation diminishes I can't-- I become lazy and stuff, unproductive, no longer giving impact. […] Also when the environment isn't conducive […] I can do 10, but because my work environment only requires me to do 5, in my opinion that lowers QOL. (M9)*
Own life (Having a shorter life than expected)	*[I] fear [I'll have] a short life. A lot. […] Haven't yet at the peak of [my] life and I'm cut. (M8)*
Social standing Losing respect from other people)	*Sometimes [people] regards us superficially […] I fear there are people who value us that way, and there are new people [who] meet them, and then those new people look down on us too. (M11)*

Topic (Meaning)	Illustrative quote
Parents and loved ones (Becoming distant with loved ones; also, parents or loved ones passing away before they become doctors. For some students this meant failing to make their parents happy, and even losing motivation and purpose of studying medicine; for the rest it meant feeling lonely, or losing financial support before they were able to be independent)	*Also, my biggest fear, if I may say, is losing people around me or me leaving them […] Un-- unimaginable, the feeling of loss […] Sad it seems […] lonely. (F29)* *But I wish it wouldn't happen, when I still study medicine, either of my parents passes away […] What's the point of studying medicine if I couldn't make my parents happy. Maybe that's the greatest [fear]. (M15)*
Way of life (Losing own way and control in life; being forced to change course of life either because of circumstances or intimidation; not obtaining their goals even after they try as best as they can, because then something in life may require changes; regrets in the future regarding their study and career choices, and questioning their place in life)	*My fear is like, as I grow old, I become like the [kind of] consultants, where like, I'm not an open-minded person […] I fear I don't realise that I change, all without I knowing it […] Like I don't know that I don't know. I... fear... becoming stagnant. Stagnant like, I feel like, 'I know everything already!' [or] I don't need to learn anymore,' [or] I no longer need to ask others' opinion.' That, but I don't realise it happens. (F23)* *If we change into [having] less good views or goals. That certainly lowers QOL. Especially when someone intimidates [us]. (M13)*