Journal of Research in Medical and Dental Science
2020, Volume 8, Issue 5, Page No: 159-163

Available Online at: www.jrmds.in
eISSN No.2347-2367: pISSN No.2347-2545

How did High Achievers Deal with Challenges: A Qualitative Study?

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ABSTRACT

Introduction: Medical students were bound to face academic and non-academic challenges in medical schools. Failures to deal with challenges could affect the well-being of students. This study aimed to explore the experiences of high achievers dealing with challenges in a medical school. It is postulated that high achievers also would be facing challenges like low achievers, but they manage the challenges better.

Methods: This was a case study with grounded theory-based analysis. Fourteen high achievers in their preclinical studies were interviewed to collect data on how they dealt with challenges in a medical school. Two coders coded the interview transcripts using QDA Miner lite and categorized the codes into themes. Discussions were held among the coders to resolve any discrepancies.

Results: Two themes emerged from the grounded theory-based analysis: help-seeking methods and stress-relieving methods. High achievers sought help from lecturers, peers, parents and religions. In addition, they allocated time for themselves to relieve stress and maintain a balance between their studies and well-being.

Conclusion: High achievers faced challenges, and they adopted help-seeking and stress-relieving methods to deal with the challenges. Their useful personal experiences may be considered by medical schools to develop structured guides for their students.

Key words: Undergraduate Medical Education, High achievers, Challenges in medical schools, Qualitative study

HOW TO CITE THIS ARTICLE: Chan Choong Foong, Nur Liyana Bashir Ghouse, Vinod Pallath, Nurul Atira Khairul Anhar Holder, An Jie LyeHow did High Achievers Deal with Challenges: A Qualitative Study?, J Res Med Dent Sci, 2020, 8(5): 159-163

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Received: 20/07/2020
Accepted: 24/08/2020

INTRODUCTION

Studying in medical schools sets challenges for students in managing long study hours and comparably less time for social life and leisure activities, acquiring the broad and difficult medical content within a stipulated learning time, facing the pressure of high-stakes examinations, and committing to little room for mistakes in clinical practices [1]. Failures to overcome these challenges could result in stress and burnout among medical students [2]. Stress among medical students may further lead to poor academic performance or take a toll on professional development including academic dishonesty or substance abuse [3-6]. Some students continue experiencing burnout when they become medical doctors [7]. Hence, methods to cope with these challenges are crucial for medical students [3].

Facing these challenges are unavoidable and in doing so, some students succeed exceedingly well in dealing with them and become high achievers while some students fail to overcome the challenges. Some low achievers avoid confronting the challenges and attribute their poor academic performance to external factors (e.g. exam was unfair, I was unlucky on the examination date) [8]. Despite some studies had been conducted on low achievers [8,9], there is a paucity of literature describing how high achievers deal with challenges in medical schools. A search using "medical students" and "challenges" returned 6058 results in the PubMed database, but a search using "medical students", "challenges" and "high achieving/ performing" only returned limited relevant past studies. Understanding experiences of high achievers are essential because they share common educational environment with those low achievers, and therefore the findings would be practical to inform the medical schools on implementing appropriate measures for their fellow batch mates who need help. This study aimed to explore the experiences of high achievers dealing with challenges in a medical school. It is postulated that high achievers also face challenges like low achievers do, but they manage the challenges better.

METHODS

Ethical consideration

Ethical approval has been obtained from the University of Malaya Research Ethics Committee (UM. TNC2/ UMREC-647). The researchers have also obtained written consent from the participants prior to the study.

Research design

This was a case study with grounded theory-based analysis [10]. The reporting of this study was guided by the Consolidated Criteria for Reporting Qualitative Research (COREQ) [11].

The case

This case consisted of Year 1 and Year 2 preclinical students from the University of Malaya Medical School, a public-funded institution in Malaysia. The undergraduate curriculum is horizontally and vertically integrated. High achievers were identified based on their performance in knowledge-based written examinations (Note: This assessment graded students from 0 to 100 marks; while other assessments graded students on a pass/fail criteria). Thirty-one students in the 90th percentile was qualified as high achievers. They were aged between 19 (Year 1) and 20 (Year 2) years old when the study was conducted. The researchers arranged a face-to-face introductory session with the students. They were introduced to the aims and procedures of the study. They were also informed that their participation in this study was voluntary and their anonymity was assured. A total of 3 male and 11 female high achievers gave their consent to participate in this study. In addition, an audit trail was maintained throughout the data collection process from September 2019 to November 2019.

The researchers were lecturers or researchers who work at the Medical Education and Research Development Unit, University of Malaya. They had no personal relationships with the participants prior to this study. NAKAH, one of the researchers, conducted semi-structured interviews to collect data on how these participants deal with challenges as a medical student. The interview sessions were carried out in an interview room of the Medical Education and Research Development Unit and the surrounding was quiet and calm. Student submitted information about their family background and motivation, and the researcher read the information prior to the interviews. Using this information, the researcher tried to build a good rapport at the beginning of the interviews. Then, in-depth interview questions targeted students' experiences and behaviours before, during, and after the teaching sessions were asked. The interview questions were open-ended, and no leading questions were asked to ensure genuine responses from participants [12]. Some initial questions asked in the interview were listed below:

What happened during the previous academic year? What did you do?

What did you do before/ during/ after attending teaching activities?

What did you do during the weekends? If you had a chance to talk to your juniors, what would be the most important advice that you want to tell them?

Students were prompted by the interviewer following their response to initial questions if the given information was insufficient, and some examples were:

How did you stay strong and manage your emotion?

How did you overcome the struggle?

Analysis

Each one-to-one interview lasted about 45 to 60 minutes and was recorded with a digital recorder. The voice recordings were transcribed verbatim. Qualitative analysis enables new meanings to emerge from participants' expression in their interviews, instead of from a predetermined framework by the researchers [13].Grounded theory based analysis was adopted (10) and the data analysis was done using QDA miner lite. The two coders, FCC and NLBG analysed the interview data individually. They read the data to familiarize themselves and obtain contextual sensitivity of what the Year 1 participants had experienced in the past year and identify students' actions and their rationale of doing these actions. Once an action was repeatedly identified and deemed to be relevant to the research question and objective, the action was coded. Relevant actions were categorized into themes. Next, the two coders compared their coding results. Codes and their interview excerpts were compared to verify the consensus. When a discrepancy arose, each coder articulated their reasons and discussed to resolve the discrepancy. The coders continued coding transcripts of Year 2 participants together using the Year 1 codes. As there was no emerging code, data saturation was assumed. Participants were not sought on giving feedback to the findings, but AJL reviewed the coding results.

RESULTS

Two themes emerged from the grounded theory analysis: (i) Help-seeking methods and (ii) Stress-relieving methods. Help-seeking methods were divided into sub-themes: (a) Sought clarifications from lecturers, (b) Discussed difficult content with peers, (c) Sought emotional support from parents, and (d) Sought religious support. Representative excerpts from the participants were presented in Tables 1-2 to indicate the themes and sub-themes. In the interview, students spoke in Malaysian English where the sentence structure and glossaries were influenced by their native language. Their excerpts were maintained as stated to preserve its cultural heritage.

Table 1: Representative excerpts for help-seeking methods.

Sub-themes	Representative excerpts
Seek clarifications from lecturers	P3: "If I do not understand a certain thing, or most of the time if I have something (that) I am not sure, I will ask the lecturer directly. If he left (the class,) then I will go to the department and ask, but (I will) email (to make) an appointment"
	P1: "Sometimes I am not sure, if I am understanding it the same [correct] way, (I will) email the lecturer to ask if I am understanding correctly? Because it is better to ask the lecturer, rather than to remember something in the wrong way, or just not understanding what I am learning. For me, it is important to understand what I am studying. So, I usually email to further understand or confirm that I am remembering it in the right way."
Discussion with peers	P1: "We have weekly questions… we do those questions and if we don't understand it or get it wrongly, we (will) sit down and discuss."
	P4: "Discussion with my friends. If I don't know, I can ask about it and we can have a discussion about it and hopefully, the answer that we come up is better. Because I feel I cannot do it on my own, sometimes it is very saturated or very difficult. Sometimes I remember, (but) they might not remember, so I can help that. Sometimes they remembered (and) I don't, so when we discuss we get the best of both worlds."
Seeking emotional support	P14: "I think one of the reasons behind (my success) is good family support. I will call my parents, especially my mom every day and share all my problems and experiences with her. That really made my day, because I am very close to my mom and she is my pillar of support. Usually, she will tell me no need to stress, you have done a good job. Maybe your family members cannot give you advice that can help you in academics, such as how to study, but they will give you a sense of security like someone is supporting you and someone is thinking (that) you are doing very well. For me, I think you need to have someone whom you can talk to... so that you feel like someone is supporting you."
Religious support	P3: "Because I trust in His power and the power of dua [prayers]. There are miracles and everything because when we pray, it is like a new spirit that opens your heart. It is a new vibe if we pray. There are positive vibes for me and (it is) easy for me to concentrate. If I have any problem before that, and if I pray I feel like "okay calm down and focus."
	P2: "I always believe that two things will lead me to succeed in life which are prayers and hard work. Nothing beats those two. Without lecturers, my friends, and all, I probably would not be able to succeed. But the two main things for me are my parents and prayers."

Table 2: Representative excerpts for stress-relieving methods.

Theme	Representative excerpts
Relieve stress	P4: "So what I do is, over the weekends, in the evening, I watch a movie. I always make sure I de-stress myself, especially during the weekends. Because I don't want to start the new week feeling stressed. Mondays are usually more stressful, so when it comes to Fridays, I try to de-stress myself."
	P6: "I feel that exercises and healthy diets help us feel better about yourself. We feel more confident. When we are exercising, it helps us to release stress and when we are on a healthy diet, we can stay energetic throughout the day and feel more efficient when we are studying."
	P13: "Because I study from Monday to Friday, so I need to recharge before coming back again to study [studying again] for the lectures, I just need to recharge."

Students adopted several help-seeking methods when they faced challenges in medical schools. Lecturers, peers, parents, and religious beliefs were their supporters. First, students sought clarifications from their lecturers if they were confused or "didn't understand" a medical topic after attending lectures. They believed that they should verify the concepts with someone who is knowledgeable about the concept, instead of making their assumptions. They either approached their lecturers immediately after the class or made appointments to meet the lecturers in person. In addition, if students felt shy to approach the lecturers in front of the class, they emailed the lecturers instead. Second, students held discussions (or studied in groups) with their peers. They read textbooks or watched medical-related videos together. Then, they discussed, shared, and verified their understanding of a medical concept or an assessment question. After teaching their peers, listening to peers' explanations, and making a summary of what was learnt as a group effort, students felt that they understood and remembered the concept better. Discussing with their peers helped students to recognize some information they have missed when they studied on their own. They were not shy to ask questions to peers, even though it might be a basic question, such as "what does this mean". Sometimes, they immediately asked peers who sat next to them when they failed to follow the lecturer's explanation during the class.

Third, students turned to parents for emotional support and words of encouragement. Phone or face to face conversations with parents helped students feel secure and supported and be assured that they performed well in their studies. Parents might not be able to give advice in academics, but they made students feel that they were not alone when dealing with challenges in medical schools. Fourth, students attributed their success to religious support. They sought support by praying and believing guidance from God. For them, studying hard is important but students addressed that praying has made them more optimistic, in return for helping them to calm down and focus on their studies. Prayers also opened their hearts and gave positive vibes to students.

Besides help-seeking, students took precautionary measures to be well balanced between their studies and well-being. To avoid breaking down and feeling stressed, they allocated some free time during weekends and planned social and leisure activities to relieve stress. Examples of the activities were spending time with family and friends, doing physical exercises, or watching movies. They acknowledged the importance of taking breaks when feeling overwhelmed and continued to study after a break. They viewed relieving stress as a 'recharge' before they return to their routine (e.g. attending classes, doing revisions). Meanwhile, physical exercises and healthy diets helped them to feel good about themselves, stay energetic and lead a stress-free lifestyle. As a result, they were more efficient in their studies.

DISCUSSION

The present study explored the experiences of high achievers dealing with challenges in a medical school. Key results of the study were as follows. First, the interviews revealed that high achievers faced challenges (e.g. difficult content, stress) in a medical school. These challenges were similar to those low achievers reported in past studies [8]. Second, high achievers adopted help-seeking and stress-relieving methods when dealing with these challenges.

An important finding is that the high achievers recognised limitations of themselves. They were aware of their shortcomings and realised that help-seeking could be advantageous, especially when dealing with challenges. They took an active role to seek help when needed. In the help-seeking process, lecturers were recognised as a reliable and trustworthy source of reference by students. Students perceived the explanation provided by lecturers to be useful based on their expertise and experiences. Whereas discussing concepts and questions with peers helped high achievers to gain a deeper understanding of the topic. Concurrently, to teach is to learn twice, it helped them further develop comprehension on the topic [14]. It possibly explains why these help-seeking methods were useful for high achievers.

Another important finding is that high achievers felt at ease after seeking emotional support from parents. This implies that parents have strong influences on students. Parental influence in Malaysian society could be a double-edged sword. Some Malaysian parents encourage their children to become medical doctors as the medical profession is regarded as a prestigious profession in the society, and the children follow the advice to show their devotion to their parents [15]. In the Malaysian cultures, parents are idolised and upheld for their contributions in bringing up their children, hence students value advice from parents. Meanwhile, in this present study, high achievers acquired strength from God, but European studies showed that religious coping among medical students generally could result in adverse feelings of helplessness and powerlessness [16]. The evidence is inconclusive; a possible Asian-Western difference requires further investigations of the cultural influence on the effectiveness of coping methods.

The results of the study indicated that high achievers recognised the importance of having a balance between their studies (increasing stress) and well-being (releasing stress). Encouragingly, these stress-relieving methods (e.g. physical exercises, watching movies) are positive events as compared to turning to substance abuse, which may be harmful to the students [16]. Besides, high achievers seemed to demonstrate growth mindsets as they showed courage, motivation, and initiatives in their studies. Students who have growth mindsets see challenges as opportunities to improve, because they believe that intelligence and problem-solving skills can be developed [17,18].

Based on the findings, several recommendations are suggested for future practices. First, medical schools could encourage students to seek help from lecturers. Help-seeking may be promoted by creating a non-threatening environment for students to ask questions during or after the classes [19]. Students might be shy to ask questions face-to-face. Therefore, online surveys may be used to collect questions anonymously on what students do not understand. Subsequently, lecturers could reply and record the responses to these questions. Second, medical schools could encourage students to seek help from peers. Peer to peer learning (e.g. problem-based learning, study group) or online peer to peer support [20] may be initiated to help students dealing with academic and non-academic challenges. Third, physical exercises could reduce the stress of study, hence medical schools may consider setting up facilitates for students to carry out physical activities to recharge. Medical student clubs may organise leisure activities such as explore races, treasure hunts, and sports days as an outlet for students to relieve stress. Furthermore, a preparatory intervention such as learning to learn (e.g. embrace imperfections, acknowledge intelligence is malleable) can be implemented as it is useful to verify and develop growth mindsets [17]. Reflection may be a useful to identify and rectify mindsets [21].

Several strengths can be identified in this study. COREQ checklist enables this study to report important aspects of the research, such as the study design and context, findings, analysis, and interpretations of data; it promotes comprehensive reporting of a qualitative study [11]. Next, the triangulation of coders enhances the credibility of the study; the transferability is justified by providing details of the medical school in which the participants were recruited; an audit trail of the data collection clarifies the dependability of the study. On the other hand, this study has limitations. First, challenges faced by high achievers (e.g., perceived stress and content difficulty) were not assessed using a quantitative measure. Their help-seeking and stress-relieving methods would be more convincing if measurements were available as supporting evidence to overcome those difficult challenges. Second, high achievers seemed to have growth mindsets, a future comparison between high and low achievers would be able to further clarify differences between them (whether low achievers have fixed mindsets that lead to avoidance of challenges), and these findings would reveal new opportunities for interventions.

CONCLUSION

The study has shown that high achievers faced challenges in medical school just like every student did but they used help-seeking and stress-relieving methods to deal with the challenges. They eventually managed to excel in examinations, suggesting that their help-seeking and stress-relieving methods were effective. Their useful personal experiences may be considered by medical schools to develop structured guides for their students.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

FUNDING

This study is supported by Geran Penyelidikan Tabung UMSC CA.R.E (PV045-2019).

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