

VU Research Portal

Motivation and academic performance of ethnic minority medical students

Isik, U.

2019

document version

Publisher's PDF, also known as Version of record

[Link to publication in VU Research Portal](#)

citation for published version (APA)

Isik, U. (2019). *Motivation and academic performance of ethnic minority medical students: 'Struggling and coping in the path from student to doctor'*.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

E-mail address:

vuresearchportal.ub@vu.nl

8

Summary

Summary

This thesis is about the motivation and academic performance of (medical) students from ethnic minorities. This thesis aims to enhance our understanding of the factors and experiences influencing the motivation and academic performance of ethnic minority students, and how motivation influences their academic performance. A systematic review of the relevant literature, as well as quantitative and qualitative studies were conducted to answer the specific research questions. With the findings we might develop interventions to stimulate and help medical students from different ethnic backgrounds to perform to their full potential.

Chapter 1 The introduction provides the justification for conducting the studies in this thesis. Diversity in medical workforce is essential for providing appropriate culturally competent care to ethnic minority patients and to meet the needs of a diverse population. However, ethnic minority students, including medical students, face difficulties in completing the medical study successfully and have been reported to underperform compared to the majority group. This phenomenon is not yet fully understood. The motivation of ethnic minority students, which is the key concept in this thesis, is elaborated upon. Motivation, an important factor in deep learning and academic success, is defined from the perspective of the Self-Determination Theory (SDT). SDT, used as a framework in the quantitative studies, distinguish autonomous (originates from genuine interest or personal endorsement) and controlled motivation (comes from internal pressure or external pressure or rewards). Autonomous motivation is the desirable type of motivation in comparison to controlled motivation because it is associated with deep learning, better academic performance, and less exhaustion. Moreover, SDT describes a hierarchical model of motivation with three levels; global (a global motivational orientation), contextual (motivational orientation related to the life context of the individual, such as education or work) and situational motivation (motivation pertaining to a particular time and place). In addition, the ethnically very diverse population in the Netherlands, in which the studies of this thesis are conducted, is considered. Reflecting on the role of the principal investigator in the research, we experienced that the ethnic minority background of the researcher on this research topic contributed to a better understanding of the participants. In addition, it may have empowered the participants to feel more comfortable and to be more open in sharing their feelings. The main research questions that informed this thesis were: What are the factors that influence the motivation of the ethnic minority students? What are the mechanisms? How does motivation influence their academic performance?

Chapter 2 This chapter presents a systematic review which explored the factors that influence the academic motivation of ethnic minority students. Factors that positively or negatively influence the academic motivation of ethnic minority could be categorized into

the following main categories: individual, family-related, school-related, and social factors. Examples of individual factors are well-being, self-efficacy and confidence, and personal characteristics and situations. Examples of family-related factors are family obligations, family support, and family background. Examples of social factors are discrimination/racism and peer influence/support. Examples of school-related factors are school/teacher support and academic achievement. From this review, it became apparent that more research into the factors included in this review is needed, because almost every factor reported in this review had only been identified in a single study. Moreover, little research has been conducted on this topic within higher education and no articles were found in medical education. Knowledge about the identified factors could be used for the development of appropriate interventions for the enhancement of motivation of ethnic minority students.

Chapter 3 This chapter describes a cross-sectional study aimed to compare two types of motivation (autonomous and controlled) of ethnic minority (Western and non-Western) and majority (Dutch) students, and their association with academic performance. The data for this study was extracted from an already existing longitudinal study called the Student Motivation and Success study. All students of a Dutch medical school were invited to complete a survey including the Academic Self-Regulation Questionnaire, measuring autonomous and controlled motivation. A total of 947 students filled in the questionnaire (38.6%). Findings showed that the autonomous motivation (acting out of true interest or personal endorsement) of non-Western students was higher than that of Dutch students in both preclinical and clinical education. Further, controlled motivation (acting out of pressure or for rewards) was higher in Western students than in Dutch students, only in preclinical education. Autonomous motivation was associated with a higher grade point average for Dutch (preclinical education), and Western students (clinical education) only. In conclusion, the results showed significant differences in the type of motivation and its association with performance between the ethnic majority and minority groups. The students from ethnic minorities in this study did not underperform compared to students from the ethnic majority. Further qualitative research is needed to uncover the found differences between the ethnic groups and the factors that might play a role in the relation between motivation and academic performance.

Chapter 4 The study described in this chapter investigated whether the type of study strategy, namely surface, achieving, or deep (the 'desirable' type) strategy, was a mediator between autonomous motivation and academic performance (GPA and clerkship performance), and whether these relations were different for students from different ethnic groups. Additional data was extracted from the longitudinal study, the SMS study, to investigate the role of study strategy in the association of motivation and performance (n = 947, response rate =

38.6%). We used Structural Equation Modelling to test the hypothesized model for the Dutch majority, Non-Western minority, and Western minority students: autonomous motivation has a positive association with academic performance through deep and achieving strategy, and a negative association with performance through surface strategy. We found that achieving study strategy was a mediator only between autonomous motivation and GPA for Dutch majority students. Further, autonomous motivation was positively related with surface, deep, and achieving strategy in all groups except for the Western minority students. The association between autonomous motivation and surface strategy was negative for the Western minority group. In addition, controlled motivation was positively associated with the use of surface strategy only for non-Western students. Dutch students seem to use achieving strategy to get high grades more often and non-Western students used deep strategy more often than achieving strategy. Autonomous motivation was positively associated with all three study strategies in all students. However, not all study strategies in turn were associated with academic performance. In addition, students with higher autonomous motivation were more likely to use achieving strategy, resulting in higher GPA. However, this was not the case for ethnic minority students. The Dutch majority students seem to use achieving strategy more effectively than the other ethnic groups. To conclude, further qualitative research into the findings is needed. Moreover, qualitative research into other factors influencing ethnic minority students' motivation and academic performance is needed to inform interventions aimed at helping these students to perform optimally.

Chapter 5 This chapter presents experiences playing a role in the motivation, performance and education of ethnic minority students. Medical ethnic minority students from VUmc School of Medical Sciences were invited to participate in this qualitative study. Six focus groups were conducted with preclinical students and clinical students separately. In total twenty six ethnic minority students (8 male, 18 female) participated in this study. The findings from the focus groups were categorized as follows: (1) the role of autonomy in the formation of motivation, including making their own study choice and the role of family, (2) interactions/'othering' in practice, like not fitting into the department team, (3) interactions/'othering' in the learning environment, like standing up for yourself, (4) influences on academic performance, like the role of family, and (5) intersections of culture and gender with being 'the other', based on ethnicity. In conclusion, ethnic minority students experience multiple factors influencing their motivation, academic performance and education, like lacking a role model, 'being the other' because of their ethnic background, and miscommunications. They seem to experience discrimination and cultural distance. Moreover, students indicated that their experiences are a process of growing awareness for them, for example they realized how their appearance influences people's perceptions. Autonomy and family expectations were of great influence in forming their motivation. In

addition, students' experiences could influence their motivation negatively at that specific moment (situational motivation), but in the longer term they learn to cope with this and continue to be autonomously motivated for their education and their goal to become a doctor (contextual motivation). We recommend a better representation of role models, for example specialists from ethnic minorities in teaching/mentoring roles in the education. Moreover, a culture needs to be created in the educational environment in which students and staff can discuss about their ethnicity differences.

Chapter 6 In the study in this chapter we aimed to gain insight into what medical ethnic minority students experience during their education and what they need to become or stay motivated and to perform to their full potential. Eighteen medical students from ethnic minorities enrolled at VUmc School of Medical Sciences were interviewed. Students' negative experiences were categorized as follows: (1) the effect of discrimination, (2) a lack of representation of ethnic minority role models, (3) no sense of belonging, (4) a lack of medical network, (5) differences and difficulties in cultural communication and language, and (6) examiner bias in clinical assessments. Ethnic minority students' support needs were categorized as follows: (1) creating more awareness about diversity and other religions, and a support group, (2) having visible ethnic minority role models (3) understanding for each other (ethnic minorities and ethnic majorities), (4) facilitating support in networking, (5) providing guidance in communication skills and overcoming language barriers, (6) having timely communication about students' performance, and (7) changing the clerkship grading. Ethnic minority students have negative experiences that influence their motivation and education. It is therefore important to support these students by creating a good and safe educational environment, so that they can be successful, e.g. students recommended an assertiveness training and creating opportunities to build and maintain networks.

Chapter 7 This chapter provides a general discussion about the research findings in this thesis. It describes a discussion on motivation and performance of ethnic minority medical students compared to ethnic majority students. Also factors and experiences influencing (medical) ethnic minority students' motivation and education investigated in this thesis are discussed. Different factors influence ethnic minority students' motivation, academic performance, and education, varying from lack of ethnic minority role models to experiencing discrimination. These negative factors could hamper them in performing to their full potential. Moreover, it includes a discussion on the support needs of ethnic minority students in their education, e.g. having visible ethnic minority role models. Further, this chapter discusses the strengths and limitations, such as the multi-method approach that strengthened this thesis and the low response rate of the quantitative studies that is a limitation. The practical implications of the thesis are also described, e.g. medical

schools need to offer medical students and staff cultural competency training to create more awareness about diversity and other religions. At the end of this chapter suggestions for future research and the conclusion of this thesis are provided. We have shown that the participants in our research generally know how to cope with negative experiences, which protects them from having a negative influence on their education and their principal goal of becoming a doctor in the long term. The conclusion of this thesis is that ethnic minority students have experiences that influence their motivation negatively, academic performance and education, thus medical schools should facilitate ethnic minority students in their education and create an optimal environment in which they can perform to their full potential.