Discussion and Conclusion: From the papers included in the thesis, we found that the literature describes training at home as a feasible method of acquiring laparoscopic skills. We then developed and explored validity evidence for the TABLT test and established a fair pass/fail level, went on to explore the immediate consequences of the pass/fail level. We conducted a randomised controlled trial and a mixed-method study to explore the use of take-home training. Based on our studies we found that training at home facilitates distributed learning, that self-rating guides course participants during unsupervised training, and that mandatory training requirements and testing strongly influence training patterns.

On learning in the clinical environment

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Introduction: The clinical environment is acknowledged as an important setting for learning within healthcare professional education programmes. Learning that takes place in a setting primarily designed for work is usually referred to as workplace learning. Socio-cultural views on workplace learning recognise the affordances of the workplace and the engagement of individuals to interdepend in a relational manner. Invitational abilities of workplaces as well as how individuals elect to engage in workplaces thus constitute the bases for workplace learning (Billett, 2001). The aim of the thesis was to explore workplace learning among undergraduate medical and nursing students.

Methods: The thesis adopted a socio-cultural perspective on learning and employed qualitative approaches embedded in an interpretative tradition of inquiry. Study I explored students’ experiences of clinical learning environments. Studies II and III analysed the interdependence between affordances and engagement by employing an ethnographic approach. Study IV identified teaching and learning regimes in the clinical environment. Data was collected with individual interviews and non-participatory observations in clinical practice. The analysis was performed iteratively and collaboratively in an interdisciplinary research group. In Sweden, medical and nursing students undertake clinical placements at publicly funded academic hospitals and primary care units.

Results: For medical students, workplace learning entailed access to a variety of activities in the role of a marginal member of healthcare. Students needed to navigate through authentic environments, to some extent, on their own. Thus, medical students adopted an adaptive approach to workplace learning. For nursing students, workplace learning involved being entrusted to take active part in, and hold responsibility for, patient care. As participants in practice, nursing students needed to negotiate their basic values with those of the workplaces. Nursing students hence adopted a hesitant approach to workplace learning. Workplace learning was built upon fundamentally varying perspectives on learning in the medical and nursing context respectively. The way in which workplace learning was practiced was therefore...
based on the epistemological assumptions in each context.

Discussion and Conclusion: The current arrangement of medical students’ workplace learning does not seem to support students’ active participation in practice. Nursing students’ workplace learning entailed active participation; however, with side effects due to the heavy focus on relational aspects of learning. The thesis alluded to limitations with the theoretical framework of communities of practice. Instead, workplace participatory practices are suggested to reflect the nature of workplace learning to a higher degree, not the least as student agency are addressed. In line with a shift in the understanding of learning, this thesis argues for an upgrading of students as a powerful stakeholder in workplace learning; so as not to view students as consumers of clinical education.


#9F3 (14)
Effects of medical school selection on the motivation of the student population and applicant pool

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Introduction: There is extensive research on medical school selection tools and their relation with future medical school performance. Fewer studies have examined effects of selection in terms of student motivation and engagement. This thesis aimed to generate insights into effects of selection on the motivation of the student population and the applicant pool. A national change from lottery-based to selection-based admissions allowed for investigation of the effect of the introduction of selection. Self-Determination Theory (1), which distinguishes between autonomous (from within the person) and controlled (from external reasons) types of motivation, formed the framework for this thesis.

Methods: Three quantitative and two qualitative studies were conducted, of which one study addressed effects of selection on the student population, two studies addressed effects of selection on the applicant pool, and two studies addressed both. Study 1 investigated the effects of selection on motivation and the effects of motivation on selection using ANCOVAs. Study 2, a multi-site study, investigated the effects of selection on the motivation, engagement and performance of the student population using regression analyses. Study 3 investigated students’ reasons for applying to a particular medical school, and their associations with motivation during the medical study using regression analyses. Study 4 investigated the suitability of statements on motivation for distinguishing between applicants. Study 5 investigated how motivation for studying medicine is formed among prospective applicants and how selection influences their motivation. An application paper provided a holistic view on selection-based versus lottery-based admissions, grounded in the findings from research.

Results: Study 1 indicated that selection does not yield a student population with better quality of motivation, and may have a temporary stimulating effect on student motivation. Study 2 suggested that selection does not yield a student population with better quality of motivation, engagement and performance. Study 3 reflected that a majority of students based their medical school choice on the selection procedure, which was not related with inferior motivation during the medical study. Study 4 indicated that written statements are unsuitable for use in selection because applicants tend to provide socially desirable answers. Study 5 showed that getting acquainted with the medical profession seems crucial for developing autonomous motivation, e.g. for helping people, but inequalities in access to healthcare internships can demotivate applicants.

Discussion and Conclusion: We found no benefits of selection in terms of quality of student motivation, engagement and performance. This raises the question whether selection, which is generally costly, should be replaced by lottery. Selection is aimed at increasing the quality of the student population, but research shows only small gains compared to lottery. Selecting students with the desirable motivation appears to be difficult. Furthermore, the diversity of the student population may be compromised, while the diversity of society increases. We advocate further research into the development of motivation throughout the medical study and the effects of selection on student diversity. This thesis brings to light that selection may not yield many benefits in terms of motivation, engagement and performance. Moreover, it may hamper student diversity.


#9F4 (19)
Learning processes and identity construction of newly qualified doctors: a narrative study

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Introduction: Medical internship is an essential but problematic part of the healthcare system. A vast literature has interrogated internship from the perspective of undergraduate medical curricula (preparedness) and competencies that newly qualified doctors (NQDs) might be expected to demonstrate. Historically, aspects of socialisation have also been studied extensively by psychologists and sociologists. While healthcare systems depend on NQDs to provide a service, especially in the public sector, little is known about their lived experiences. The aim of this study was a better understanding of how
medical graduates negotiate their learning experiences and construct their identities during medical internship in South Africa.

Methods: Using interpretive methodology, this qualitative study was underpinned by social constructionist thought. Theoretical framing included psychology- and sociology-based theories, for example, the work of Vygotsky and Bourdieu, and more contemporary theories of Situated Learning and Dialogical Self Theory. A purposive sample of six medical practitioners participated in the study. Written reflections from three years post-qualification were sociolinguistically analysed for narrative positioning. The same participants were interviewed face-to-face at six years post-qualification, enabling insight into professional development trajectories. Thematic content analysis and structural analytic methods were combined to draw inferences about identity construction; a relatively neglected subject in medical education.

Results: Ways of relating to others and to institutions, both pre- and post-graduation, were found to be a central theme in the narrative data. Learning processes were predominantly informal, implicit, serendipitous, and were mediated in relation to others in the clinical workplace. A synthesis of several ‘models’ of clinician was elicited based on how participants reported having negotiated learning experiences as NQDs. This study also suggests that the identities of NQDs are not rigidly organised, developing an understanding of multiple ‘I-positions’ in dialogical interaction within the self. Detailed descriptions of personal dispositions and aspirations revealed the importance of these in professional trajectories, how they changed over time, and what factors had enabled or constrained NQDs becoming the kind of practitioners they aspired to be.

Discussion and Conclusion: As learning processes during medical internship essentially involved significant others, increased awareness regarding senior clinicians’ influence on NQDs may promote more intentional and deliberate role-modelling practice. Individual and collective 'ways of being' in clinical workplaces provided insight into enablers and constrainers of positive identities, and how medical habitus is learned, resisted and/or perpetuated. A heuristic device is offered in the form of 'aspirational contours' towards better understanding the role of aspirations in shaping clinical practice. Strengthening the possibilities for positive identity constructions during internship would be a possible means of transforming medical culture to be more responsive to NQDs' learning needs and may also lead towards more patient-centred care. Further in-depth studies on the power differentials and identity development in various clinical contexts are recommended.