

Can we increase a mutual understanding between PhD students and their supervisors?

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Abstract—Can the discussions between a supervisor and PhD student on the basis of “Discussion Material for Newly Accepted PhD students and their Supervisors” (DM) be helpful to clarify their roles, expectations and duties? This study shows that DM can be recommended as a tool to increase a mutual understanding between a supervisor and PhD student, to create a common base for the supervision, and reduce the risk of potential conflicts.

Index Terms—supervision, PhD studies, communication in supervision

I. INTRODUCTION

PHD supervision is a complex process shared between supervisors and students. At the beginning of PhD studies different students would have different expectations as well as the expectations on the student would vary between supervisors. An important aspect of the introduction for a PhD study is to establish a common ground for working together. There is much literature giving advices on the supervision [1] and the major part is written to support supervisors [1], [2]. There exist papers, although less common, which focus on the student’s perspective [3], [4]. The papers on supervision deal commonly with supervision models [5]-[7], strategies for writing and publishing [8], and the enculturation of PhD students [2], [9]. Reference [1] describes three different models for supervision of which the *partner model* is preferred by the authors. This model makes it clear of what parties perceive as important. It also places the student in an active and responsible position [1]. Reference [10] reported a study where a questionnaire, SuperQual, was used to facilitate a discussion between supervisors and students. The results from it were positive.

The aim of the study was to investigate if the discussion between a PhD student and the supervisor based on a tool in a spirit of the *partner model*, called “Discussion Material

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for Newly Accepted PhD students and their Supervisors” (DM), clarifies and establishes for both parties their roles, expectations and duties. We aimed to evaluate how helpful the DM is and if it can be recommended as a tool to increase a mutual understanding, create a common base for the supervision, and reduce the risk of potential conflicts.

II. METHODS

The DM was developed at the Chemistry Department at Lund University. Its purpose is, as stated in the introduction of the DM, to “identify areas where the expectations of the PhD student and the supervisor on PhD studies differ”. The DM is recommended to be filled in by the student and supervisor independently prior to a meeting, during which the answers are compared and discussed. The DM covers several important aspects of a PhD study: general concept, supervision and research. Practical issues, such as working environment, finance, course, teaching etc. are also included. In each aspect, there are detailed questions and the answers are to be given on a scale between 1 to 5 and indicating the understanding of different levels of responsibility or expectations.

In this study, three students and their supervisors (i.e., in total six persons) were asked to read and fill in the DMs individually and carefully. After that the student and supervisor had a meeting where they compared their answers and discussed them. The participants’ answers of the DM were collected. After their meeting all of them were interviewed separately. The analysis is based on collected DMs’ answers, interviews, as well as on personal reflections. The students and their supervisors were selected as a convenience sample from the departments at Lund University where the authors are working. This influences the outcome and representativity of the study, which should be considered when describing the results and our conclusions.

III. RESULTS

On the basis of the interviews we observed differences, between the supervisors and the students, in expectations and understanding of the PhD study. However after the DM initiated discussions, they all seem to have reached certain level of understanding and agreement. The three interviewed couples of supervisors and PhD students considered the DM as a valuable tool.

For those three supervisors interviewed, we have found out that they were all open to discuss the PhD supervision.

All of them were also open to have frequent discussions with their PhD students, believed in shared responsibility for the PhD project and wanted to encourage the PhD students to become more independent by socializing and cooperating with other researchers. However we have also noticed that the supervisors showed different styles of supervising. This is understandable since these supervisors may have different characters, background and experiences. For example different supervisors gave their PhD students different levels of freedom: one supervisor gives his/her PhD student high level of freedom in deciding the thesis' content, type, and length; while another supervisor expressed that the supervisor should have strong influence.

The three interviewed PhD students all showed a high level of understanding of the conditions of PhD studies and what is expected from them. They all believed in shared responsibilities in carrying out research and publishing the results. One of the students believed in higher level of freedom in deciding on the content of her thesis than the other students. Interestingly the corresponding supervisor was also the one who gave higher freedom on this issue, most probably this agreement was built on earlier discussions.

During the interviews possible improvements of the DM were suggested. The suggested improvement regarded the introduction of the time aspect, i.e. the type of supervision changes over time and corresponds to the development of the PhD students from a more dependent to a more independent role. Answers from the PhD students to the same questions will be different at different stages of PhD study i.e. changing. Another suggestion was to introduce a question regarding the general PhD study plan, to make the students and their supervisors to aware of this, and to bring the content up for discussion. Nearly all the persons interviewed thought that the question regarding publicizing /property rights was difficult to understand and answer. This question needs to be formulated differently and the rights need to be clarified. It was also suggested to introduce a case study in the DM or a question regarding the worst case scenario "packed with anxiety and expectations" i.e. what to do if something goes wrong.

IV. CONCLUSIONS

To conclude, the DM can be used as a catalyst in improving the communication and understanding between a supervisor and a PhD student. The DM is helpful for clarification of expectations, duties and roles. It is not the questionnaire that is most important but the activity of filling in the questionnaire, and the following discussions between supervisor and student. Such discussions can facilitate the enculturation of PhD students into university community and shed light on some of the unspoken rules. We believe that such discussions minimize the risk of conflicts. Being open in discussions increases the transparency and facilitates cooperation. The three interviewed couples of supervisors and PhD students could see it as a valuable tool.

Some improvements of the DM were suggested: a) to include the time aspect in supervision i.e. change in time towards increasing independence of the PhD student, b) to

include questions about PhD study plan, c) improve question regarding publicizing /property rights, and d) consider the worse-case scenario i.e. what to do when things go wrong. In our opinion the questions do not have to be very clearly formulated. Keeping them at general level or leaving them slightly unclear or confusing may actually contribute to making the discussions more interesting and energetic.

We think that many would benefit if the DM, with some improvements, was added to the "studiehandboken" as a recommended material to use for all. It can also be useful to provide and discuss the DM during meetings arranged for teachers and supervisors at any institute.

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