

How to improve your supervisory skills

Jacob Andersen

Department of Drug Design and Pharmacology, Faculty of Health and Medical Sciences, University of Copenhagen

Introduction

The supervisor-student relationship has been described as “the most important channel of intellectual inheritance between one generation and the next” (Gurr 2001), and “supervision” has even been described as “the most important variable in a successful research process” (Dysthe & Samara 2006). Hence, it is widely acknowledged that supervision is an important factor within research processes. However, a supervisor at the university typically qualifies for the job on the basis of his or her achievements as a researcher, and the quality of supervision at the universities is thus largely determined by the accidental occurrence of natural supervisory skills (de Graff et al. 2011). Furthermore, several studies have revealed the vulnerability of the individualized supervisor-student relationship, including overdependence on the supervisor, lack of ownership and mismatch of personalities, and a major challenge in the supervisor/student relationship is the difficult balance between authority and independence (Dysthe & Samara 2006). Unfortunately, it has proven to be rather difficult to find evidence-based studies related to supervisory styles and changes of style over the supervisory period (Gatfield 2005). There can be huge variations in the scientific level, ambitions, personality and cultural background between students, and one of the important challenges for supervisors is therefore to adapt the supervision to each student and find an appropriate balance between support and control (Wichmann-Hansen et al. 2013) Due to this idiosyncratic nature of supervision, it is difficult to setup strict rules and guidelines for “good supervision” at the universities. In this report, differ-

ent supervisory “tools” that can facilitate open discussions between student and supervisor on the supervisory style and their supervisory relationship are presented. These tools can hopefully serve as operational guidelines for alignment of the students and supervisors expectations to the supervisory process and adjustment of the supervisory style during the supervisory period, and thus aid in improving supervision of students at the university. It is important to note, that if the supervisory period is restricted to a limited time period (< 6 months), it may seem irrelevant to spend too much time and effort on improving the supervision. The tools described herein are thus mostly relevant for supervision of 1-year master’s thesis students and PhD students.

Establishing a good relationship between student and supervisor

Several studies have found that dissatisfied students often have problems with their relationship to their supervisor (Gurr 2001). Hence, a good supervisory relationship seems to be important for keeping students satisfied and motivated. Accordingly, Wichmann-Hansen et al. (2007) found that successful supervision is highly dependent on establishment of a good and reliable relation between the student and the supervisor in the beginning of the progress. Unfortunately, meetings between supervisor and student are typically dominated by discussing the technical and theoretical aspects of the research project, and “soft issues” such as supervisory relationship are avoided. Due to the natural authority of the supervisor, it can be difficult for many students to introduce such subjects. Instead, the students can feel more comfortable discussing the supervisory relationship when the process is initiated by the supervisor. However, it can also be difficult for the supervisor to initiate the process in a purely face-to-face discussion. In the following, some supervisory tools that can be used to dilute the potential awkwardness in these discussions are being presented:

Written understandings and supervision contracts

The supervisor and the student have their own expectations and conceptions of “supervision”. If these expectations are not aligned from the beginning of the project, it can lead to frustrations, irritations and disharmony which eventually will develop into a far from optimal supervisory process. An efficient way of aligning expectations is through explicit and written informa-

tion such as a *written understanding* from the supervisor or a *supervision contract* between the student and the supervisor (Rienecker et al. 2005). In the written understanding, the supervisor can explicitly describe his or her supervisory style and expectations to the supervision process (see Rienecker et al. (2005) or Wichmann-Hansen et al. (2013) for examples of a written understanding). The written understanding is given to the student at the beginning of the project and gives a clear impression of the supervisor's approach and expectations to the process. The written understanding should not represent a definite offer for what the student can expect from the supervisor. Rather, it should serve as a starting point for discussions between the student and the supervisor about the supervisory style. This can then lead to the composition of a supervision contract, which is a mutual written agreement between the student and the supervisor concerning the supervisory process, and can include issues such as level of independency, feedback on written material, frequency of project meetings or other issues that the supervisor or student find important (Wichmann-Hansen et al. 2013). Some supervisors may find that written understandings and contracts are too formalized and time-consuming, but the approach offers an opportunity for the supervisor to explicitly align his or her expectations with the expectations of the student.

Supervision expectation questionnaire

A simpler model for alignment of expectations, which may be more readily accessible for busy supervisors and students, is a *supervision expectation questionnaire*. A supervision expectation questionnaire contains a list of key statements and/or questions concerning different aspects of supervision (Figure 20.1).

Read each pair of statements below and then estimate your position on each. For example, if you strongly believe that it is the supervisor's responsibility to insist on regular meetings, put a ring around "1" in the first statement. If you think it is definitely the student's responsibility, put a ring around "5".		
<i>The supervisor should insist on regular meetings with the student</i>	1 2 3 4 5	<i>The student should decide when she/he wants to meet with the supervisor</i>
<i>The supervisor should take over final writing-up of the thesis if the student is having difficulty</i>	1 2 3 4 5	<i>The writing of the thesis should only ever be the student's own work</i>
<i>A warm, friendly relationship between supervisor and student is critical for successful candidature</i>	1 2 3 4 5	<i>A warm, friendly relationship is inadvisable because it may obstruct objectivity for both student and supervisor during candidature</i>

Fig. 20.1. Examples of statements/questions that can be used in a supervision expectation questionnaire. Adapted from <http://researchsuper.cedam.anu.edu.au/stages-candidature/clarifying-expectations> (August 2013).

First, the student and supervisor must individually decide on their own responsibility of the listed statements in the questionnaire, which is followed by a comparison and discussion of their answers. In this way, the expectations are being explicitly discussed and aligned between the student and the supervisor. The statements in the questionnaire are defined by the supervisor and can include different subjects such as level of ambition, responsibility of the student, frequency of project meetings, scientific support, personal relations between supervisor and student etc. The supervisor can therefore use the questionnaire as a route to put emphasis on specific themes that he or she find important (Wichmann-Hansen et al. 2013).

Adjusting the supervisory style over the course of candidature

The successful student will typically develop from a state of relative dependency to competent autonomy over the period of candidature. Progress along this continuum should not be seen as consistent in either pace or direction. Periods of slow progress and of elevated levels of dependency are likely when new phases (such as data analysis or thesis writing) are initiated. Thus, there is a continuous need throughout the supervision period for the supervisor to find a balance between giving adequate, timely help and not interfering. Unfortunately, some supervisors may adopt a static supervisory approach, or, if it is altered, this may not be done in alignment with the growth and emerging needs of the student but on the basis of an "I know

what is best for the student” attitude, which can be hard for the student to challenge. Two supervisory tools that can be used for appropriate adjustment of the supervisory style over the course of candidature is presented in the following:

The supervisor/student alignment model

The supervisor/student alignment model can be used as a tool to facilitate discussions between supervisor and student to allow the student to develop competent autonomy over the course of candidature (Gurr 2001). The supervisor/student alignment model can be visualized as a two dimensional graph with the supervisory approach on the X-axis and the student development on the Y-axis (Figure 20.2).

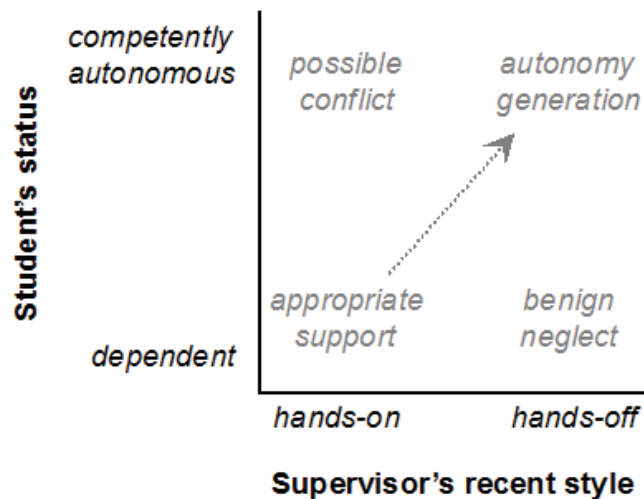


Fig. 20.2. Two dimensional representation of the supervisor/student alignment model showing outcomes for four combinations of student’s state and supervisor’s approach, and a hypothetical line showing the desired academic growth over the course of candidature. Adapted from Gurr, 2001.

In practical terms, the supervisor and the student must first individually place an “x” on the figure representing their perception of the current state of the relationship. This simple action is underpinned by careful reflection on both their own and the other party’s status on the appropriate axes. Hereafter, the supervisor’s and the student’s respective views of the relationship must be discussed at a dedicated supervisory meeting. If there are discrepancies between the views of the supervisor and the student, this can lead

into discussions to explore the basis for differences. This exercise can be repeated with appropriate intervals (dependent on the length of the project period; e.g. every 3 or 6 months), and the model can thus not only be used to align the expectation to the supervisory style but also be used to evaluate the academic growth of the student throughout the project. Students who have been exposed to this model generally find it useful and a beneficial facet of their supervision. Furthermore, the model initiated reflections about their academic growth and thus aided in pushing them towards competent autonomy during the supervisory period (Gurr 2001)

Supervisory management grid

The *supervisory management grid* describes four different supervisory styles which is dependent on the role of the both the student and the supervisor (Figure 20.3) (Gatfield 2005). As for the supervisor/student alignment model, the supervisory management grid can be used with appropriate intervals to facilitate discussions between supervisor and student about the types of supervision styles and the timing of their application, and thus be used as a tool to adjust the supervisory style over the course of the candidature.

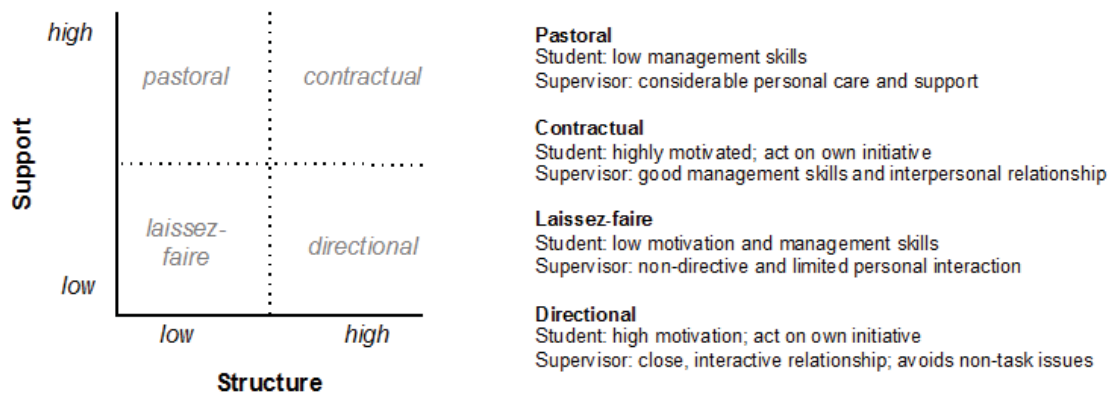


Fig. 20.3. Two dimensional representation of the supervisory management grid, showing the four different supervisory styles. Key words describing characteristics for the different supervisory styles are also shown. Adapted from Gatfield, 2005.

Partnership between student and supervisor

According to Dysthe & Samara (2006), the relationship between supervisor and student can be perceived in three different ways: *the teaching model*, *the apprentice model* and *the partnership model*. The teaching model is the traditional teacher-student relationship, where the teacher is the expert and the student is highly dependent on instructions from the teacher. In the apprentice model, the student is initially observing how to perform specific tasks and solve different issues, before he or she is allowed to work independently; initially with simple tasks and gradually with more and more demanding task as the student gets more experienced. As the name implies, there is a more symmetrical relationship in the partnership model, in which the student has a more responsible and active role. In this model, the supervisor and student explore different options and solutions together, and the student is encouraged to critically evaluate and reflect on the decisions and conclusions made during the process.

Due to experiences from their own schooling, many supervisors will have a tendency to act as “teachers”, and especially within natural sciences the relationship between student and supervisor can often be described according to the apprentice model (Wichmann-Hansen et al. 2013). However, it is recommended to aim for a partnership between supervisor and student (Dysthe & Samara 2006, Wichmann-Hansen et al. 2013). This will encourage students to take responsibility for their own teaching and allow them to actively contribute to problem definition and project design, which will strengthen the student’s independency, responsibility, ownership, and motivation (Krogh et al. 2013). The partnership model is a rather ambitious model that is highly dependent on the willingness and ability of the student to meet the required responsibilities. It is therefore important that the supervisor defines the respective roles of the two parties in the intended partnership and invites the student to take an active role from the beginning of the supervisory process. It is critical that the supervisor allows a certain degree of “student voice and choice” and avoids the “I know what is best for the student” attitude. Also, since the model is based on dialogue, the supervisor must master different questioning techniques (e.g. use open-ended questions to facilitate high quality teaching (Biggs 2003)) and use meta-communication (i.e. to communicate about your communication) to avoid misunderstandings and to increase the output of the supervision (Krogh et al. 2013). Thus, the partnership model is challenging but when it is successfully applied it can facilitate active participation of the students and

improve their independency, responsibility, critical thinking and reflections compared to the teaching and apprentice models.

Summary

To improve the chances of success in a supervisory process it is important that: i) the supervisor and student's expectations are aligned from the beginning of the project, and ii) the supervisory style is adjusted over the course of candidature. This can be achieved through open discussions and mutual written agreements between the supervisor and student (Figure 20.4). Furthermore, a responsible partnership with the student can help strengthen his or her independency, responsibility, critical thinking and ownership of the project.

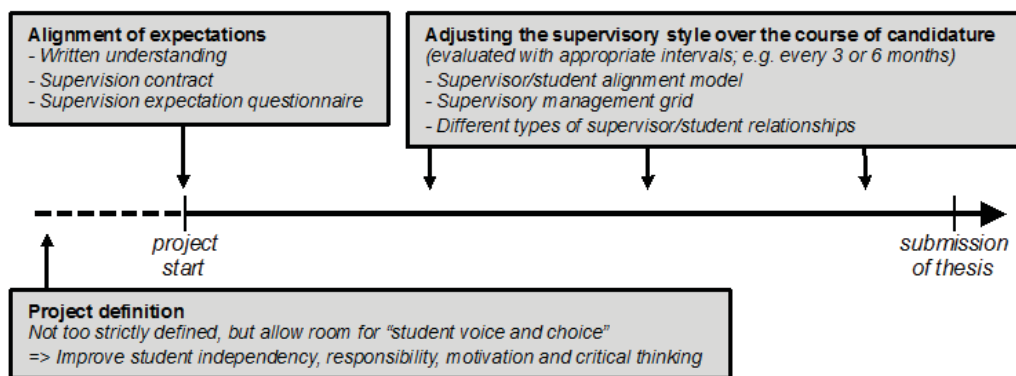


Fig. 20.4. Overview of the herein presented supervisory tools that can be applied to improve the supervisory process.

All contributions to this volume can be found at:

http://www.ind.ku.dk/publikationer/up_projekter/2014-7/

The bibliography can be found at:

http://www.ind.ku.dk/publikationer/up_projekter/kapitler/2014_vol7_nr1-2_bibliography.pdf/