

## **Trainer development in supervisory knowledge and skills is associated with improved trainee outcomes**

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Trainee outcomes can be categorised in a number of different ways. On the one hand these outcomes could mean clinical confidence, knowledge acquisition or defined objective measures (clinical performance indicators). On the other hand they could represent a 'type' of assessment by the trainee of the supervision experience, equivalent to "reaction" in Kirkpatrick's (1998) hierarchy.

The Kilminster and Jolly's (2000) review generated 19 references with regard to this topic. The authors state that 'training for supervisors is valuable and necessary' (Dunn, Bishop, & Bishop 1998;Lenton, Dison, & Haines 1994;Peel, Ramsden, & Proud 1996;Twinn & Davies 1996;Williams & Webb 1994). Further, they argue that training courses for educational supervisors should be 'based on the assessment of the supervisors' needs' (Challis, Williams, & Batstone 1998) or 'based on the understanding/ meaning of supervision' (Cerinus & Ferguson ;Coleman & Rafferty ;Diwan, Berger, & Ivy 1996;Millwater, Wilkinson, & Yarrow 1996;Morcom & Hughes 1996;Proctor 1994;Rafferty & Coleman 1996;Sellars & Francis 1996;Swain 1995) with one reference (Hartline 1993) referring to the trainees acceptance of supervisors based on their 'appropriate' knowledge of supervision. A paper from a psychologist's perspective (Hartline 1993) suggests that future educational supervisors will have to prove their 'quality' as educational supervisors by improving their skills through training. Barrow and Domingo (1997) investigated the effect of training on supervisory styles in speech therapy and audiology and found significant improvement in target supervisory behaviours in the intervention group compared with controls, but did not assess whether this made a difference to supervisee's practice or their client outcomes. Finally, there was one reference to an extensive training programme for Norwegian educational supervisors (Lycke, Hoftvedt, & Holm 1998).

How can the evidence from these papers be interpreted? The association between supervisory skills and improving trainee outcomes is mainly based on trainers and trainees' perspective of the supervisory experience. Researchers identify helpful supervisory skills from the trainers/ trainees by utilising postal survey's, critical incident analysis and interviews. Extrapolations are then made to support the training of supervisors in these particular skills. There is, however, one paper that has assessed a training program by surveying the participants undergoing supervisor education (Lycke, Hoftvedt, & Holm 1998). Within this Norwegian study, the investigators utilised postal surveys to participants in a supervisor education programme over an 11 year period. The aims of the training programme were to motivate consultants to supervise trainees, to provide them with essential supervisory skills and knowledge, and to encourage them to review their learning environments. The authors found that trainers reported better awareness of learners' needs and had a better understanding on how to improve communication and interpersonal skills.

It has been shown that developing effective clinical learning environments (in nursing) requires a degree of training in the domains of supervising clinical learning, the integration of theory and practice and the organisation of patient care (Twinn & Davies 1996). A recent paper exploring the impact of workplace assessments on educational supervision mentions the benefit of encouraging and developing the mentoring relationship of the educational supervisor role (through training). This has been shown to decrease the tensions between trainer and trainee when undertaking mentoring and objective appraisal

roles (Everett 2009). Recently appointed consultants in paediatrics feel under-prepared for the role of educational supervisor (Lenton, Dison, & Haines 1994). Similarly Twinn and Davies (1996) found that nurse practitioners also called for more training in supervisory skills, believing that this would improve relationships, teamwork and learning in the clinical environment.

Challis, Williams and Batstone (1998) interviewed consultants and PGME directors about the nature of educational supervision to the PRHO grade. The findings suggested a need for identifying motivated and high quality educational supervisors. They supported the formation of a modular programme focussing on supervisory skills. Using critical incident analysis, a study Cottrell et al (2002) suggested that the absence of training in these skills leads to poorer trainee outcomes. "Trainers recognise inadequacies in supervisory skills, but insufficient numbers of trainers have received supervision training and there is a lack of guidance from Royal Colleges (or any other sources) regarding the quantity, quality, structure and content of supervision offered to SpRs" (2002:1048).

Some more recent studies provide further evidence suggesting benefits from faculty development and point to areas likely to be beneficial. Utilising senior paediatric trainees in an anonymous questionnaire, investigators found that SpRs believed educational supervisors should be selected on the basis of their commitment to 'supervision'. They also supported a focused training program which trained supervisors in pastoral elements of supervision in order to improve their educational experience (Lloyd & Becker 2007).

Steinert et al. (2006) conducted a systematic review of faculty development initiatives designed to improve teaching effectiveness in medical education using BEME methodology (Harden 1999). Six RCTs and 47 quasi-experimental studies were reviewed. Overall satisfaction with faculty development programmes was found to be high, with participants reporting improved knowledge of pedagogy and teaching skills. Changes in teaching behaviour were self-reported and detected by students, but changes in organisational practice and student learning were not frequently measured. Key features associated with effectiveness were the use of experiential learning, feedback, enhanced peer relationships, use of established adult learning and teaching methods, and use of multifaceted methods within interventions.

Dewey et al. (2008) systematically reviewed RCTs for residents teaching skills programmes to assess their efficacy and identify possible methods for enhancing residents teaching skills within psychiatry. 13 trials were reviewed, of which five were assessed as of high quality, and these studies suggested that such programmes do enhance resident's teaching skills.

Notzer and Abramovitz (2008) conducted a non-randomised control group pre and post intervention study of the effect of an 8 hour intensive workshop on basic instructional skills on student evaluation of teaching using a four point Likert scale across five domains. The study, situated in an Israeli hospital education unit, demonstrated small but significant improvements in evaluation across all parameters compared with the control group, with "tutor availability to students" showing the largest change and possibly reflecting the workshop theme of "the learner as the focus of teaching". The authors argue that, as the training was mandatory for all faculty members, the non-randomisation of the control and intervention groups was unlikely to be a confounding factor. Whether Likert ratings, which are based on description, should be treated as interval data is debatable (Jamieson 2004), but the authors did apply non-parametric tests.

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