

## **Supervisees' and supervisors' experiences of group climate in group supervision in psychotherapy: Effects of admission procedure**

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The purpose of this study was to evaluate the effects of two different admission procedures (high school grades/scholastic aptitude test (SAT) versus high school grades/SAT + interview) to a program in professional psychology on students' and supervisors' experiences of the group climate in psychotherapy supervision groups during an eighteen-month clinical practicum. A self-rating scale constructed to measure experiences of group climate in group supervision in psychotherapy was used. The results showed that students who were admitted based on the alternative admission procedure reported that their supervision groups had a more beneficial climate compared to those who were admitted based on high school grades/SAT. The evaluation suggested that admission via interviews together with high school grades/SAT is a good alternative to traditional admission procedures.

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For several decades, there has been a considerable debate in Sweden on admission procedures to higher education. In Sweden, as well as in many other countries, high school grades in combination with a scholastic aptitude test (SAT) have been the main selection tool (Slack & Porter, 1980; Swedish Government Official Report 29, 2004; Wedman, 2000). From different sectors of society, critical voices have questioned the usage of tests of verbal and mathematics skills as selection tools for all types of education (Andersson & Grysell, 2002; Hunter & Samter, 2000; Selingo & Brainard, 2001; Swedish Government Official Report 29, 2004). As a result of the criticism against the traditional admission procedures, dental, medical and psychological programs in Sweden have been granted permission to use an alternative selection procedure, which includes individual interviews with the applicants.

This critique generally agrees with the stance taken by several other proponents (Caskey, Peterson & Temple, 2001; Denner, Salzman & Newsome, 2001; Elam & Andrykowski, 1991; Elam, Burke, Wiggs & Speck, 1998; Glick, 1994; Hoad-Reddick & Macfarlane, 1999; Lonka, Hindebeck & Scheinin, 2004; Lindblom-Ylänne & Lonka, 1999; Powis, 1994; Roding, 2001; Schmidt & Hunter, 1998; Tutton, 1994; Wedman, 2000), who

maintained that a well-structured interview is a valuable complement to the traditional admission procedures (high school grades and SAT). These authors even suggested that an individual interview may have a better prognostic value in terms of study and professional performance compared with an admission procedure that involve high school grades and scholastic aptitude test results only. Moreover, both in Sweden and in the United States, the Scholastic Assessment Test has been criticised for having a limited potential to counterbalance social and gender differences among the applicants (Breland & Minsky, 1978; Jencks & Crouse, 1982; Turnbull, 1968).

Success in university studies is a general criterion of an effective admission procedure. However, success is a vague concept, covering a range of ideas. Moreover, good test results may not always be enough. When the concept of construct validity was included in the psychometric nomenclature, the view on psychological/educational selection methods was expanded (Cronbach & Meehl, 1955; Messick, 1989; Roding, 2001; Wedman, 2000), and today, many contend that the evaluation of a selection instrument's quality and relevance should include an appraisal of the extent to which it addresses all important aspects (eg, Roding, 2001; Wedman, 2000).

As yet, few empirical studies have examined the effects of different admission selection procedures (Lonka et al., 2004; Ritzen, Holm, Nicolausson & Aberg, 1999; Roding, 2001; Soderberg & Aberg, 1999; Ogren & Sundin, 2005; Sundin & Ogren, submitted). In previous studies (Ogren & Sundin, 2005; Sundin & Ogren, submitted) of the effect of different admission procedures on professional skill and knowledge attainment the results suggested that students who were admitted to a professional psychology program based on an individual interview and high school grades/scholastic aptitude test were able to attain better psychotherapy skills and knowledge during their supervised practicum training compared to students who were admitted based on high school grades/scholastic aptitude test results only.

After graduation from a professional psychology program, former students are expected to have a well developed capacity to relate to others (eg, in teamwork and work with clients), considering that the work of a psychologist generally involves close interactions with other people. In consequence, in many countries, programs in professional psychology include supervised clinical practice (eg, American Psychological Association, 1996; 2000; the National Board of Health and Welfare [Socialstyrelsen], 1996), which involves close collaboration between the student and his or her supervisor, or with the supervisor and the other supervisees in the supervision group. In our previous studies (Ogren & Sundin, 2004; 2005), students admitted based on alternative admission procedures seemed to have a better capacity to develop a working alliance

with the supervisor and the supervision group than did their peers who were admitted based on high school grades/SAT.

During the clinical practicum, the role of the student implies a commitment to learn. In group supervision, the group ideally provides trainees with the opportunity to explore personal meanings and experiences through identifying with other group members, and alternatively, being provoked by group peers (Greenhalgh, 2000). At the same time, being a member of a supervision group entails sharing the supervisor's attention with the other group members. Group supervision is considered to be advantageous since the supervisees are exposed to a broad range of clinical material (Aronson, 1990; Hillerbrand, 1989; Lesser & Godofsky, 1983; Yogey, 1982). At the same time, the novice supervisee in group supervision is expected to take part in the other group members' clinical work, which sometimes may be a complicated and demanding task.

Thus, group supervision calls for a certain awareness of one's own needs and motives as well as those of other group members. This means that group supervision relies on each group members' capacity to interact with others, as well as his or her capacity to handle their own and the other group members' competitive and antagonistic feelings (Hawkins & Shohet, 2000). The supervisee's capacity to contribute to a favorable climate in the supervision group is often cited as crucial (eg, Bernard & Goodyear, 1998; Hawkins & Shohet, 2000). In addition, to help the trainees increase their self-awareness, the group supervisor has to handle group process issues (eg, Hawkins & Shohet, 2000).

Few published studies have examined the specific benefits and demands of group supervision empirically. Werstlein's (1994) study of four supervisees and one supervisor suggested that group climate is important for the work in the supervision group. A number of studies have showed that supervisees and supervisors at a basic training level wished that group dynamics had been more in focus during the group supervision (Boalt Boëthius & Ogren, 2000; Ogren, Aelman & Klawitter, 2001, Boalt Boëthius, Ogren, Sjøvold & Sundin, 2005). In a recent study (Ogren, Jonsson & Sundin, 2005), the results suggested that group climate in interaction with the group variable (supervisors versus supervisees), and individual differences between supervisors had a significant effect on which topics that were dealt with in the supervisory work. This finding indicated that supervisors presented higher ratings compared to supervisees. Also, supervisor style contributed to the explanation of choice of issues that the supervision group worked with.

In the present study, the effects of two different admission procedures (high school grades/scholastic aptitude test and high school grades/scholastic aptitude test + interview) on group climate, in terms of group dynamics and learning during group supervision will be examined in the end phase of the

group supervision. Since previous studies (Ogren & Sundin, 2005; Sundin & Ogren, submitted) of the effects of different admission procedures to higher education on knowledge and skills attainment during the clinical training course suggested that admission procedure is an important factor, this study aimed to investigate group climate in supervision groups where the students were admitted based on an alternative admission procedure compared to students who were admitted based on the traditional admission procedure. The present study also aims to replicate studies (Boalt Boëthius & Ogren, 2000; Boalt Boëthius et al., 2005; Ogren et al., 2001) that compared group supervisors' views on group climate during supervision with the supervisees' views. The inspection will be made through the analysis of ratings of group climate in the supervision completed by supervisees who were admitted to a professional psychology program based on two different admission procedures and their supervisors. The following question will be addressed.

Does admission procedure have an effect on supervisees' and supervisors' experiences of the group climate in the final phase of the group supervision?

## Method

### Participants

The sample used in this study included 109 supervisee ratings and 40 supervisor ratings that represented 40 supervisor groups. In all, 15 supervisors worked with the supervisees, and each supervisor had between 1 and 6 groups (mean = 2.67, SD = 1.91. Median was 2). All participants were Caucasian. The supervisees were students in the last two years of a five year professional psychology program at a Swedish university. This education was a combined undergraduate and master's level course. During the last two years of the program, the students completed supervised practicum training and didactic courses in the theory and method of psychotherapy and psychopathology. The clinical training took place in an on-site psychology clinic. Each student had one adult patient in individual psychodynamic or cognitive behavioral psychotherapy treatment and sessions were at a frequency of once a week for 18 months.

Direct supervision was delivered by a licensed psychologist who was an experienced psychotherapist and psychotherapy supervisor. The supervision groups met once a week for a two hour-session over a period of a year and a half. The primary role of the supervisor was to help the supervisees develop basic clinical skills and an emerging professional identity, and to assure the quality of their psychotherapeutic work.

The students who were asked to participate in this study were admitted to the program each year during a 6-year period; during the first three years

the selection process included high school grades/SAT and an individual interview. During the last three years the selection process included only high school grades/SAT. When the students were about to start the supervised practicum training, the teachers who organised the supervision groups had no knowledge about the admission procedure each student had been admitted through. In all, 124 students and their supervisors who worked in 44 supervision groups were asked to complete the questionnaire in the latter part of the supervision period.

From this data set, supervisee and supervisor ratings were selected when there was data from both the supervisor and at least one supervisee in a certain supervision group. The reason for this selection procedure was that the perspectives of both the trainee and the facilitator would be represented by the data. The result of this procedure was that 15 supervisee ratings were not used because their supervisors had not completed the ratings. Two supervisor ratings were not included in the data set because ratings from their supervisees were missing.

Approximately half of the supervisees (59 %) were admitted based on high school grades/SAT; the other half was admitted based on the interview procedure. Supervisees' mean age was 34 (SD = 6.23, median was 32, range from 24 to 47), 70 % were female. About two thirds of the supervisees received psychodynamic training and the remainder received cognitive behavioral (CBT) training. When supervisees were grouped according to admission procedures, no significant difference was found for age, sex, or psychotherapeutic orientation (PD or CBT). The supervisees had no previous experience of working as psychotherapists.

About half of the supervisors were male (53 %), and had a psychodynamic (PDT) orientation (55 %), the remainder had a CBT orientation. All supervisors were highly experienced (5-20 years) licensed clinical psychologists. All of them had completed a two-year training program in psychotherapy supervision and the average supervisory experience was 16 years. None of them adhered to a specific model of supervision.

### **Measurement instrument and procedures**

In this study, a questionnaire, *Group Climate in Group Supervision* (GCGS), was developed to assess the group climate in the supervision group (Ogren & Sundin, 2004). For the GCGS, seven items from a measure of group climate in group supervision, *Topics and Climate* (TAC) (Ogren et al., 2005) was used along with 16 newly formulated items. In all the GCGS includes 23 items (see next page).

The new items were developed in accordance to the following: 1) 32 items that dealt with group climate were formulated, based on literature studies

and the authors' clinical and supervisory experience; 2) Two seminars were arranged in which the authors along with experienced psychotherapists and group supervisors participated. During these seminars, many items were removed or reformulated using the following criteria for content validity: relevance, clarity, simplicity, ambiguity; 3) A pilot study was undertaken where a pilot group of supervisees ( $n = 100$ ) completed the rating scale. Factor analysis was conducted to determine the factors underpinning the scale. Principal axis factoring was used for extracting factors. Oblique rotation of factors was used, and a solution with three factors emerged. Subscales were created based on the factors. Internal consistency of the subscales was determined using Cronbach alpha. The results of the pilot study suggested that the measure was acceptable for use in further studies.

### **Group climate in group supervision**

This semester, the group climate has been characterised by

- 1 Sensitivity and interest in opinions that are articulated in the group
- 2 Competition and rivalry
- 3 Dependence of the supervisor
- 4 Openness for the peers' experiences in the client work
- 5 Insecurity towards the supervisor
- 6 Insecurity towards the peers
- 7 Interest in understanding how client material might be reflected in the group processes
- 8 Interest in pondering over group interactions
- 9 Interest in pondering over group processes
- 10 Security
- 11 Acceptance of differences in the group
- 12 Task-orientedness
- 13 Group-orientedness
- 14 Interest in supervisory interventions that concern group interactions
- 15 Plenty of space to develop one's personal style
- 16 Doubts against the supervisor
- 17 Fear of being exposed and critically examined
- 18 Distrust among peers
- 19 Plenty of space to ponder about the client work and the supervision
- 20 The group composition contributed to learning
- 21 The group composition contributed to a good work climate
- 22 The supervisory time was distributed according to needs
- 23 Qualitative changes of the group climate occurred

The GCGS was distributed to the supervisees and their supervisors at three measurement points; in the initial, middle and final part of the clinical training course. In this study, ratings from the final part of the course are used. The ratings were made on a 5-point scale ranging from (1) 'to a very little extent' to (5) 'to a very large extent'.

## Statistical analyses

Initial analyses showed that seven out of the 23 variables had 3 missing values each (1.3 %). There are several procedures that can handle missing values, however *multiple imputation procedures*, which assumes that the data are missing (MCAR), are often recommended (eg, Allison, 2000; Faris, Ghali, Brant, Norris, Galbraith, Knudtson & the APPROACH Investigators, 2002; Schafer, 1997). SPSS missing value analysis showed that these values were “missing completely at random” (MCAR) (Little’s MCAR test:  $\chi^2 = 21.810$ ,  $df = 16$ ,  $p = .149$ ). In this study, Schafer’s computer program NORM 2.03 (Schafer, 1999) was used to replace the missing values with values that the NORM suggested.

To examine if the factor solution obtained in the pilot study, an exploratory factor analysis (EFA) was computed. The size of the data set of supervisor and supervisee ratings ( $n = 139$ ) used in this study was too small to justify the use of EFA (Nunnally & Bernstein, 1994; Stevens, 2002), and therefore, we used the original data sets (133 supervisee ratings and 44 supervisor ratings), and, in addition, we used data collected from students ( $n = 28$ ) who attended a five year master’s level professional psychology program at a different university and their supervisors ( $n=7$ ). In all, 212 ratings were used in the factor analysis. First, the data was examined using cross tables, scatter plots, and correlations. The variables in the GCGS had moderate covariances ( $M = .37$ ,  $SD = .11$ , range from .28 to .49). Principal axis factoring was used to extract factors. Criteria for retention of factors were eigenvalue greater than 1 (Kaiser’s criterion), and Cattell’s scree test. The initial factor solution was followed by an oblique rotation since it was assumed that the items were correlated.

The factor analysis suggested a three factor solution, which explained 55.9 % of total variance. There was no indication for an item to be removed, as the general measure of the intercorrelations between the items was high, KMO was .88. The extracted factors accounted for 31.2 %, 18.2 %, and 6.5 % respectively, eigenvalues were 7.17, 4.18, and 1.51 respectively. The first factor had 15 item loadings above  $|.40|$ . Of these, nine items had positive loadings (1, 4, 10, 11, 15, 19, 20, 21, and 22) and six items had negative loadings (2, 5, 6, 16, 17, and 18). This subscale was labeled *Trust and acceptance*. The second factor had six positive loadings above .40 (7, 8, 9, 13, 14, and 23). This subscale was named *Group learning*. The third factor had six item loadings above  $|.40|$ . Five of these were positive loadings (2, 5, 6, 17, and 18), and one item had a negative loading (10). This subscale was labeled *Distrust and rivalry*. Two items did not have loadings above  $|.40|$  (3 and 12). The three subscales had acceptable internal consistencies ( $\alpha = .91$ ,  $\alpha = .88$ , and  $\alpha = .85$  respectively).

The effect of admission procedure and differences in the means of supervisor and supervisee ratings of group climate were tested with the multivariate procedures of General Linear Modeling. The Pillai Trace test has been found to be a robust multivariate test statistic (Olson, 1976) and for that reason it was selected for this study. All data analyses were performed using SPSS version 11.5 (SPSS, Inc., Chicago IL).

In a preliminary analysis, the model included the factors admission procedure (high school grades/SAT; interview), group (supervisee; supervisor), orientation (PT; CBT), and supervision group. To examine possible interaction effects, supervisees' age and sex were included as covariates. The analysis of the three variables (*Perceived Trust and acceptance*; *Group learning*; and *Distrust and rivalry*) based on supervisee and supervisor data revealed that no interaction involving orientation; supervisees' age; and sex were found for any variable. Therefore, orientation and supervision group, as well as the covariates were removed prior to subsequent analyses

Post hoc comparisons were computed with Bonferroni corrected independent group t-tests.

## Results

The means and standard deviations of the supervisee and supervisor ratings for the three variables, divided according to admission procedure, are shown in table 1.

**Table 1: Supervisee and supervisor ratings of perceived trust and acceptance, perceived group learning, and perceived distrust and rivalry, grouped according to admission procedure**

	Admission	Group	Mean	SD	N
Trust and acceptance	High school grades/SAT	supervisee	1.32	.82	64
		supervisor	1.45	.61	22
	Interview	supervisee	1.79	.43	45
		supervisor	1.65	.40	18
Group learning	High school grades/SAT	supervisee	2.17	.97	64
		supervisor	2.87	1.02	22
	Interview	supervisee	2.77	.76	45
		supervisor	3.12	.88	18
Distrust and rivalry	High school grades/SAT	supervisee	1.12	.83	64
		supervisor	1.18	.77	22
	Interview	supervisee	.79	.67	45
		supervisor	1.04	.68	18

The GLM revealed that Admission procedure was significant, Pillai's Trace (3,105)=6.624,  $p < .001$ , indicating that Admission procedure influenced



participants' experiences of *Trust and acceptance*,  $f(1,107)=10.709$ ,  $p<.001$ , and *Group learning*,  $f(1,107)=11.350$ ,  $p<.001$ . The effect on *Distrust and rivalry* was not significant, however. Post hoc comparisons were computed with an adjustment of p level for multiple comparisons (.05/6=.008) indicated that supervisees who were admitted based on grades and SAT had lower ratings on *Trust and acceptance*  $t(100)=3.865$ ,  $p<.001$ , and *Group learning*,  $t(106)=3.593$ ,  $p<.001$  compared to supervisees who were admitted on the alternative admission procedure. No significant difference was obtained for *Distrust and rivalry*. There was no significant difference between the supervisors, grouped according to their supervisees' admission procedures.

Both the Admission procedure X Group (supervisee; supervisor) interaction and the Admission procedure X Supervision group interaction were significant (Pillai's Trace (6,212)=4.489,  $p<.001$  and, Pillai's Trace (114,321)=2.251,  $p<.001$  respectively), which indicated that these variables modified the effect of Admission procedure. The interaction between Admission procedure and Group modified the effect on *Group learning*, Pillai's Trace (2,107)=8.717,  $p < .001$ , whilst neither Trust and acceptance nor Distrust and rivalry were significant. The interaction between Admission procedure and Supervision group modified the Admission procedure's effect on *Group learning*,  $f(38,107)=3.941$ ,  $p < .001$ , *Trust and acceptance*,  $f(38,107)=1.971$ ,  $p<.004$ , and *Distrust and rivalry*,  $f(38,107)=3.953$ ,  $p<.001$ .

## Discussion

The results of the multivariate analyses of supervisee and supervisor ratings suggested that the admission procedure that included an individual interview had a positive effect. Students who were admitted based on the alternative procedure perceived that their supervision groups had a more beneficial climate compared to those who were admitted based on high school grades/SAT. The former group of students presented significantly higher ratings of trust and security in the supervision group, and they rated a significantly higher degree of interest and curiosity of the other group members' clinical material. In reverse, these students experienced a significantly smaller amount of competition and rivalry in the supervision group. The supervisors' ratings underscored the differences between the two groups of students to an even higher degree. Thus, the data revealed a clear difference between the group climate in groups where the supervisees were students admitted based on the alternative admission procedure and group climate in groups where the supervisees were students admitted based on the traditional admission procedure.

These results could be interpreted to mean that the admission procedure which is based on a combination of formal demands (high-school grades

and/or scholastic test) and interviews identified students that were unsuitable and/or not sufficiently motivated for the studies. An advantage with the individual interview is that the interviewer can aid the student who feels that a program in professional psychology may not be what they are looking for to find an education that is more appropriate for him/her. Perhaps even more important, an admission procedure that includes an interview might strengthen the admitted students' professional self confidence and "self efficacy beliefs" (Lonka et al., 2004; Pajares, 1996). There are a number of alternative explanations to these findings. This study did not control for factors which may have an impact on students' experiences of group climate, such as the students' motivation, previous experience of university studies, and social support networks. It is also possible that the interview procedure selected students who were more articulate and able to interact well in a group situation. A third problem is that the supervisors did not use a common model of supervision. Therefore, there is a clear need to replicate these findings using similar methodologies and comparable samples.

Other findings in this study are in line with previous findings, which lend support to the present study. Thus, the present study results, which suggest that supervisors tend to present more extreme (either higher or lower) ratings of group climate than their supervisees, are in line with previous findings (Ogren & Sundin, 2005). Similar studies of knowledge attainment suggested that supervisors gave higher ratings of their novice supervisees' ability to learn psychotherapeutic skills compared to the supervisees themselves (Ogren & Sundin, 2005; Sundin & Ogren, submitted), and supervisor ratings of issues that were in focus in the supervisory work were significantly higher than the supervisee ratings (Ogren et al., 2005). These findings suggested that supervisees are unable to evaluate their knowledge attainment and to discriminate between different foci of attention during their supervision to the same extent as supervisors. A reasonable explanation is that the average supervisor can evaluate the supervisees' abilities and skills, and identify focus of attention in the supervision context relatively easily compared to the average supervisee who has no previous experience of psychotherapy supervision. In addition, the fact that the supervisor works within the frames of a university program, and thus acts as a teacher and evaluator of the students' work, he/she probably tends to be more alert to the course items.

A weakness of this study was that group climate was assessed by participants in the groups only while no observer ratings were obtained. However, the aim of the study was not to obtain accurate knowledge about the interactions and dynamic in the supervision groups. Rather we wished to get an understanding of how comfortable and efficient the supervisees felt in the supervisory situation. In Belar's and colleagues' (Belar et al., 2001) view, self-evaluation of one's knowledge and competencies and self-

study is an appropriate means to acquiring new knowledge and skills. In similar studies, evaluation of the group climate may encourage the novice supervisees' knowledge about themselves in relation to others and capacity to maintain group dynamics. Furthermore, the supervisors were highly experienced clinical psychologists who had supervised a great number of students over the years. It is reasonable to assume that they were able to assess these supervision groups fairly well.

A pertinent question is whether the supervisors were familiar with the procedure through which his or her supervisees were admitted to the program. If the supervisors had this knowledge, and were positive to the alternative admission procedure, their ratings of group climate in the supervision groups might have been biased. However, the fact that the supervised clinical practice occurs during the last 18 months of a five-year program suggests that, even if the supervisors knew which students were admitted based on the different admission procedures at the time, it is unlikely that each of the supervisors would have access to this piece of information more than three years later. Furthermore, most supervisors had more than one supervision groups, and sometimes they had one or more group that included students who were admitted based on the alternative admission procedure and one or more group with students admitted based on the traditional admission procedure.

This study suggested that admission via interviews together with high school grades/SAT is a good alternative to traditional admission procedures. Admission procedures to professional programs in psychology, dentistry, and medicine is an often debated issue, however, it has more seldom been evaluated in empirical research. More empirical studies of the outcome of different admission procedures are needed.

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