Article

Effect of group leaders on doctors' learning in Balint groups

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Abstract

Objective: Although effective Balint leadership is viewed as essential for good Balint practice, nearly no quantitative research is available regarding the importance of the person of the group leader in Balint group outcome. This study aims to identify Balint group leaders' impact on "typical Balint" learning processes in Balint groups.

Method: A total of 1460 medical doctors in 352 Balint groups in Germany, Austria, and Switzerland were investigated. Based on the three learning dimensions of the Balint Group Session Questionnaire, statistical analyses were conducted to identify differential effectiveness in Balint leadership.

Results: On the basis of the mean scores of the Balint Group Session Questionnaire items across all group participants of each group leader, the 80 certified Balint group leaders were clustered into two groups of more and less effective leaders by a hierarchichal cluster analysis. Mixed model analyses revealed that the effectiveness of the person of the Balint group leader was the most predictive factor for learning effects.

Conclusions: Training for Balint group leaders should take into account that effective learning processes in Balint groups are strongly related not only to the method itself but also to the person of the group leader.

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Introduction

Since Michael and Enid Balint introduced their group method more than 50 years ago in Great Britain, "Balint groups" (BG) have been established nearly worldwide as a training method for medical doctors and psychotherapists. The International Balint Federation (IBF) started in 1972 as an association of meanwhile 27 national Balint Societies.

Originally aimed at facilitating and improving the daily work of general practitioners, BGs soon proved to be helpful as a general training method for psychodynamic reflection and understanding treatment processes in general medical practice. According to this, Balint intended to support the personal development of medical doctors by using their perceptions and feelings as an instrument in understanding patients' concerns and their relationship with their doctor.

Growing research findings about positive effects of Balint work on participating doctors[1–11] stand in contrast to the observation that little has been done to identify and communicate the essential characteristics of effective Balint group leadership style,[12] for example, whether more effective leadership can be discriminated from less effective leading styles. Brock and Stock[13] investigated Balint seminars that were held among family practice residencies in the United States. Most of the 115 studied groups were led by family physicians, psychologists, and social workers. The leaders themselves rated two residents' achievements: an increased understanding of feelings generated when working with patients and an enhanced sense of professional self-worth.

Merenstein and Chillag[14] did not find support for the theoretically assumed role of leaders in BGs in a qualitative study. Although the extensive study used several interview and observer perspectives, only 12 BGs were involved. The authors discuss their small empirical basis and the unique setting as a possible explanation for their negative findings.

In a quantitative study, Johnson et al.[15] found essential leadership variables: creating a safe group climate, moving the group toward a new understanding of a specific doctor–patient relationship, protecting the presenter from interrogation, encouraging open speculation by group members, avoiding premature solutions, and tolerating silence and uncertainty.

With the exception of the Johnson et al.'s study, BG research suffers from too diverse research topics, methodologically weak studies, and only very few quantitative studies using valid instruments.[12]

This is surprising, because Balint himself stated that the group leader was a hallmark in Balint work:

> Perhaps the most important factor is the behavior of the leader of the group. It is hardly an exaggeration to say that if he finds the right attitude he will teach more by his example than by everything else combined.[16]

Using a newly developed questionnaire for BG participants (Balint Group Session Questionnaire, BGSQ), this study aims to identify Balint group leaders' impact on learning processes in BG.

Method

Study participants

A total of 107 Balint group leaders certified by the Balint societies in Germany, Austria, and Switzerland administered the BGSQ in one of their BG at the end of a group session; 1460 medical doctors in 352 BGs filled out the brief questionnaire.

Measure

The newly developed BGSQ[10] consists of 17 questions (see Figure 1 for the English version) resulting in a three-scale version. Scale 1 is labeled "Reflection of Transference Dynamics in the Doctor–Patient Relationship" and comprises five items (items 2, 10, 13, 15, and 16), scale 2 is named "Emotional and Cognitive Learning" and comprises four items (items 5, 6, 9, and 11), and scale 3 is named "Mirroring of the Presented Case in the Dynamic of the Group" and comprises three items (items 4, 7, and 12). All scales show a satisfactory internal consistency (Cohen's α of scale $1 = 0.81$, α of scale $2 = 0.82$, and α of scale $3 = 0.71$). Each of the 17 items must be answered by using a Likert-type scale with six answer categories ranging from "doesn't apply at all" to "totally applies" (see Figure 1). So far, the questionnaire has only been used in the German version.

Besides the BGSQ, we included several basic demographic variables such as doctors' basic professional orientation, their degree of professional experience, their age and sex, their degree of Balint group experience, if they presented an own patient case in the session, and doctors' participation status (voluntariness vs. commitment), and we included leader-related variables (age, sex, general professional experience, and degree of experience with conducting BG).

Statistical analysis

All statistical calculations were carried out by using IBM SPSS Statistics 23.0.

To control for group leaders' potentially differential effectiveness, all questionnaire items of all group members of each Balint group leader were averaged and then cluster analyzed (hierarchical cluster analysis).

To control for multilevel effects (several individuals from the same group session that was run by the same group leader), mixed model analyses were used with one of the three scales of the BGSQ as a dependent variable and

Figure 1. Balint Group Session Questionnaire©.

the following independent variables: leader effectiveness clusters, status (voluntary vs. committed participation), basic medical profession of the participants (somatic vs. psychotherapeutic/psychosomatic/psychiatric orientation), case presentation (yes or no), and degree of professional experience of the group leaders. To test the influence of the person of the group leader, random effect test was calculated.

Response Options:

0 = strongly disagree   1 = mostly disagree   2 = agree somewhat   3 = mildly agree
4 = agree   5 = strongly agree   (Please choose only one response option per question.)

In today's Balint session...

	0	1	2	3	4	5
7. ...I developed different perspectives on the case and therefore gained an entirely new view of the doctor-patient relationship	0	1	2	3	4	5
8. ...I recognized how much the course of treatment is influenced by my own subconscious reactions	0	1	2	3	4	5
9. ...I received important insights and inspiration for my future work with patients	0	1	2	3	4	5
10. ...the group recognized that reactions on the part of individual group members were triggered by the patient case	0	1	2	3	4	5
11. ...the doctor's own part in the course of treatment and in the doctor-patient relationship was made a subject of discussion	0	1	2	3	4	5
12. ...I had an "aha moment" regarding something I had not noticed before: patients' expectations and how they affected my own therapeutic actions	0	1	2	3	4	5
13. ....I was made aware of how very much therapeutic relationships are shaped by previously unnoticed emotion	0	1	2	3	4	5
14. ...I came to understand how very much my own opinion about the patient affects the patient's course of treatment	0	1	2	3	4	5
15. ....I enjoyed the work on the doctor-patient relationship	0	1	2	3	4	5

Did you answer all of the questions above?

Here is a space for comments you may have concerning important impressions or events that occurred during today's session:

_____

_____

_____

Thank you very much!

Figure 1. Continued

Results

Table 1 shows sociodemographic data of participating doctors.

Nearly two-thirds of the participants were females. Their median age was 44 years with an average professional experience of nearly 15 years and a median of 1 year's experience with Balint group participation. Approximately 57% of all doctors had none or up to one year experience with BG. The remaining 43% had a mean of 9.9 years' experience with BG with a median of 6 years.

Table 1. Demographic data (total sample; N = 1460 participants).

N (%)	
Sex	
Female	948 (65.3)
Male	504 (34.7)
Missing data	8 (0.5)
Age	
Mean	43.9
Median	44.0
Professional experience (in years)	
Mean	14.9
Median	13.0
Experience in Balint groups (in years)	
Mean	4.5
Median	1.0
Medical specialization	
General practitioner	479 (32.8)
Internist	200 (13.7)
Psychiatrist	198 (13.6)
Gynecologist	170 (11.6)
Others	413 (28.3)
Case presenter	
Presenter	352 (24.1%)
No presenter	1090 (74.7%)
Missing data	18 (1.2%)

Most doctors were general practitioners (N = 479; 32.8%), followed by internists (N = 200; 13.7%), psychiatrists (N = 198; 13.6%), and gynecologists (N = 170; 11.6%). The remaining were medical specialists in various disciplines. In total, doctors in 27 different medical disciplines took part. Fifty-three percent of all participants were urged by their employers to participate.

Table 2 shows the basic information on the group leaders.

Sociodemographic data from the group leaders were available for N = 80, thus representing 74.8% of all group leaders. Their median age was 60.4 years with a professional experience of 32.1 years on average and a median of 15 years as a Balint group leader and a median of 304 conducted Balint group sessions in the past. Main component analysis with varimax rotation of the mean scores from 80 Balint group leaders resulted in a one-factor solution with an eigenvalue of 1.97, explaining 65.6% of the common variance.

By using the dendogram output from a first cluster analysis, a two-cluster solution of the 80 cases was suggested. Table 3 shows the differences between the two resulting clusters on the three scales of the questionnaire.

Table 2. Group leader characteristics.

Age M	N	Sex		Professional experience (in years) M	Experience with conducting Balint groups (in years) M (Median)	Number of conducted Balint groups M (Median)
		Female	Male			
60.4	80	37	43	32.1	16.6 (15)	513 (304)

Table 3. Group leaders' differential effectiveness and participants' scale scorings.

Scale	Leader effectiveness	N	M	Std	p	ES[a]
Reflection of transference dynamics in the doctor–patient relationship (Scale 1)	Low	951	3.31	.90	.0001	.51
	High	574	3.74	.74		
Emotional and cognitive learning (Scale 2)	Low	951	3.02	1.03	.0001	.40
	High	574	3.42	.92		
Mirroring of the presented case in the dynamic of the group (Scale 3)	Low	951	3.10	1.05	.0001	.51
	High	574	3.61	.93		

[a]ES (effect size) (Cohen's *d*).

Participants rated all three scales highly significantly higher in groups of more effective group leaders compared to fellows in groups of less effective group leaders. The effect sizes vary from moderate (scale 2) to strong (scales 1 and 3).

Tables 4 to 6 show the results of the mixed model analyses for each of the three scales of the BGSQ.

The effects of scale 1 ("Reflection of Transference Dynamics in the Doctor-Patient Relationship") were significantly predicted only by the effectiveness of the group leaders. Group participants of more effective Balint Group leaders score significantly higher on scale 1 (T = −2.986; p < .010) compared to their fellows in groups of less effective Balint group leaders. Regarding the person of the group leader, a multilevel effect did not occur (Wald Z = 1.005; p < .315), suggesting that there was no effect of group leaders due to the numbers of their group participants.

The effects of scale 2 ("Emotional and Cognitive Learning") were again predicted significantly by the effectiveness of the group leaders (T = −2.571; p < .017). Participants who presented their own case also scored highly

Table 4. Mixed model parameter estimates for the prediction of outcome.

Variable	Estimate	SE	t	Significance	95% CI lower	95% CI upper
Intercept[a]	3.95	.34	11.495	p < .0001	3.24	4.67
Leader effectiveness cluster (higher vs. lower effectiveness)	−.52	.17	−2.986	p = .010	−.89	−.15
Status (voluntary vs. committed participation)	.10	.11	.948	p = .344	−.11	.32
Medical profession (somatic vs. psychological orientation)	−.01	.12	−.051	p = .960	−.25	.23
Case presentation (yes vs. no)	−.15	.12	−1.198	p = .232	−.41	.10
Professional experience (group leader)	−.00	.01	−.070	p = .945	−.02	.02

Estimates of covariance parameters

Parameter	Estimate	SE	Wald Z	Significance	95% CI lower	95% CI upper
Residual	.79	.07	11.891	.0001	.67	.93
Group leader	.04	.04	1.005	.315	.01	.26

Dependent variable: *Reflection of transference dynamics in the doctor–patient relationship.* CI: confidence interval; SE: standard error.
[a]Intercept reflects estimated mean of T-outcome scores.

significantly higher on scale 2 compared to group members who did not present their own case in the session (T = 3.695; p < .0001). Once again, a leader's multi-level effect because of many group members in a group run by the same group leader did not occur (Wald Z = 1.610; p < .108). Furthermore, group participants who were obliged to join a Balint group training scored highly significantly higher on scale 2 (T = 2.638; p < .009).

Table 6 shows which variables were predictive for scale 3 scores ("Mirroring of the Presented Case in the Dynamic of the Group"). Again, group leaders' differential effectiveness highly significantly predicted scale 3 scores (T = −4.200; p < .0001), and doctors' basic orientation (somatic orientation or psychological orientation (psychotherapy, psychosomatics, and psychiatry)) significantly predicted scale 3 scores (T = −2.398; p < .017). Doctors with psychological orientation scored significantly higher on scale 3 compared to their fellows working in somatic disciplines. As in the prior mixed model analyses, there was no leader's multilevel effect because of many group members in a group run by the same group leader (Wald Z = 1.437; p < .151).

Table 5. Mixed model parameter estimates for the prediction of outcome.

Variable	Estimate	SE	t	Significance	95% CI lower	95% CI upper
Intercept[a]	2.89	.41	7.061	$p < .0001$	2.06	3.72
Leader effectiveness cluster (higher vs. lower effectiveness)	−.54	.21	−2.571	$p = .017$	−.98	−.11
Status (voluntary vs. committed participation)	.33	.12	2.638	$p = .009$	.08	.57
Medical profession (somatic vs. psychological orientation)	−.01	.14	−.073	$p = .941$	−.28	.26
Case presentation (yes vs. no)	.52	.14	3.695	$p < .0001$	.24	.80
Professional experience (group leader)	.01	.01	1.067	$p = .296$	−.01	.03

Estimates of covariance parameters

Parameter	Estimate	SE	Wald Z	Significance	95% CI lower	95% CI upper
Residual	.95	.08	11.987	.0001	.81	1.12
Group leader	.07	.04	1.610	.108	.02	.24

Dependent variable: *Cognitive and emotional learning*. CI: confidence interval; SE: standard error.
[a]Intercept reflects estimated mean of T-outcome scores.

Discussion

Michael Balint developed his group method by presuming that leaders of the groups were the main effective learning factors for practicing physicians.[16]

The lack of research on Balint leadership to date has the consequence that Balint group leadership skills must be learned through observation of more experienced leaders[15] without having scientific proof of the underlying helpful factors.

Whereas learning effects of BG have so far been assigned to the effects of the method itself, this study is one of very few with results that demonstrate impressively the importance of the person of the group leader in each of the learning dimensions identified by the BGSQ.

Balint work in international groups reveal that the worldwide spreading of BG led to different Balint cultures and caused a diversity in leadership styles. In view of this development, the task force of the IBF recently generated a consensus paper regarding the principles and concepts that underlie Balint group work and demanded the definition of Basic Balint Concepts.[17] However, so far, little has been done to identify and communicate the essential characteristics of effective Balint group leadership.[12,15,17]

Table 6. Mixed model parameter estimates for the prediction of outcome.

Variable	Estimate	SE	T	Significance	95% CI lower	95% CI upper
Intercept[a]	4.15	.39	10.533	$p < .0001$	3.34	4.96
Leader effectiveness cluster (higher vs. lower effectiveness)	−.85	.20	−4.200	$p = .0001$	−1.27	−.43
Status (voluntary vs. committed participation)	−.01	.12	−.100	$p = .920$	−.25	.22
Medical profession (somatic vs. psychological orientation)	−.31	.13	−2.398	$p = .017$	−.57	−.06
Case presentation (yes vs. no)	−.10	.14	−.753	$p = .452$	−.37	.17
Professional experience (group leader)	.00	.01	.191	$p = .850$	−.02	.02

Estimates of covariance parameters

Parameter	Estimate	SE	Wald Z	Significance	95% CI lower	95% CI upper
Residual	.89	.07	11.945	.0001	.76	1.05
Group leader	.06	.04	1.437	.151	.02	.25

[a]Intercept reflects estimated mean of T-outcome scores.
Dependent variable: *Mirroring of the presented case in the dynamic of the group.* CI: confidence interval; SE: standard error.

Although our results cannot differentiate the influencing factors in Balint group leadership by sociodemographic characteristics of the person of the group leader or the leader's years of experience in leading a Balint group, the findings of this study are in line with findings in group research that emphasize the person of the group leader in training groups of future group therapists.[18] There is also a good agreement with the growing literature regarding the importance of the therapist in psychotherapy.[19,20]

As the results of this study demonstrate, it is not the person of the group leader of BG alone that is moderating the learning effects of the group participants. Depending on the learning dimension, other variables come into play. Reflections of transference dynamics in the doctor–patient relationship seem to be particularly related to the person of the group leader. Participants of BG are explicitly invited to identify with the doctor presenting a case, but it seems essential that leader interventions are helpful or even necessary to promote awareness of the transference dynamics related to the presented case.

The cognitive and emotional learning is also substantially influenced by the person of the group leader but far more by the fact that doctors present their own patient case in the group. This result validates a basic theoretical postulation of Balint's group work philosophy.[16] Doctors present their own patient case

with the goal to better understand aspects of the doctor–patient relationship in order to improve that relationship, the compliance of the patient with treatment and last but not least the treatment outcome. Although all group members have substantial learning gains on average by listening to a fellow doctor's presentation of a patient case and experiencing the dynamic in the group that is caused by the case vignette, the presenting doctors themselves benefit far more from this process. Also in group therapy, self-disclosure is well known to be an effective factor that is particularly related to emotional learning processes. Our findings are also in line with Kutter's assumption that emphasizes the importance of self-experience in Balint group work.[21]

Another basic assumption of Balint group work is that the presented case is being reflected in the dynamics of the group; this is called parallel processes or "mirroring" in the group dynamic.[22] Balint's assumption refers to the basic psychoanalytic theory that human encounters bear transference and countertransference issues that determine the climate as well as the fate of that encounter. In case of doctors' relationship with their patients, the nature of the encounter and relationship between the two parties is crucial for the outcome of the medical treatment.

Our results show that the person of the group leader in BG highly significantly impacts the learning of the group participants regarding mirroring of the presented case in the dynamic of the group, as has been elaborated for supervision processes before.[23–25] Presumably, the group leader raises the awareness of the group members of the dynamics in the group caused by the presented case vignette. Experienced participants of BG perform with higher scores on this scale compared to Balint novices,[11] but the leader interventions might be particularly important for the latter group.

The surmounting impact of the Balint group leader might also be important to explain another interesting finding in Balint research. Somatic doctors benefit significantly more from joining a Balint group than their colleagues who have experience with psychological aspects of the human encounter (psychiatric, psychotherapeutic, psychosomatic medical professions).[11] One can speculate again whether the group leader interventions might be more important for those who are scarcely trained in psychodynamic reflection.

This study found further support for the value that BGs have in the training of medical doctors by furthering greater understanding of the patient–doctor relationship. On the other hand, it became clear that specific leadership styles or personality facets of group leaders in BGs seem to play a significant role in the learning processes of medical doctors in BGs. The results of this study prove that "effective" leaders of BGs significantly foster learning processes of group participants and that "less effective" group leaders do not. Thus, BG leaders are not helpful per se. Johnson et al.[15] found some characteristics of effective BG leaders such as protecting the group atmosphere and members in the group and facilitating the group discussion. Tschuschke and Greene[18] found that the most

effective group leaders in therapy training groups were judged as those who kept control of the group process and were "idealized" by group participants. Idealized group leaders were perceived as more charismatic, decided, not vague, creative, inspiring, supportive, spontaneous, "brilliant," and engaged. Not effective group leaders were seen as self-centered, obstructive, vague, not flexible, manipulative, controlling, not inspiring, and not engaged.

Our results support the hypothesis that effective BG leaders particularly foster "typical Balint" goals such as doctors' learning about transference issues from the patient to the doctor and increasing consciousness of how strongly a patient can influence interpersonal processes (mirroring the case in the group dynamic).

However, this study did not identify variables that discriminate between less effective and more effective group leaders. Future research should address group leaders' behavior in BGs in more detail.

The findings of our study are based on a large sample of 1460 medical doctors participating in 352 different BG led by 107 certified Balint group leaders. It is one of the first quantitative studies to investigate the effects of Balint group work and the influence by the leader of the group at once. Whereas our findings confirm that the role of Balint group leadership should be considered an effective ingredient regarding the learning dimensions of the BGSQ, we were not able to identify underlying variables of the observed effects. A research tool aiming specifically at the group leader's intervention techniques may be essential for an objective identification of relevant factors in leadership. Although qualitative research to date has tried to identify and communicate the essential characteristics of effective Balint group leadership by means of expert knowledge,[3,15,17] an empirical validation of these theoretical assumptions is still missing. Further research using questionnaires dedicated to leading style and specific leader interventions is needed.

This study confirms central assumptions of Balint group work and emphasizes the importance of the group leader specifically. The dimensional structure of the BGSQ can be used in further research to identify contributing factors of effective leadership in BG.

Declaration of Conflicting Interests

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