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ABSTRACT

The Supervisory Working Alliance Inventory (SWAI) developed by J. F. Efstation, M. J. Patton, and C. M. Kardash (1990) was further evaluated for its psychometric properties and relationships with the Personal Reactions Scale--Revised (PRS-R) developed by E. L. Holloway and B. E. Wampold (1984), the only other measure of the relationship in counselor supervision. The original factor structure of the SWAI was replicated on a sample considerably different from the one reported in the initial study. A sample of 65 supervisors (34 males and 31 females) and 88 trainees (20 males and 68 females) from university staffs returned completed instruments, which were supplemented by data for an additional 30 supervisors and 30 trainees from a university counseling center. Results suggest the suitability of the SWAI for use with participants of differing backgrounds and experiences. Correlations with the PRS-R indicate that the SWAI measures the supervisory relationship over more dimensions than the PRS-R, most notably focusing on trainees' understanding of clients. Two tables present means, standard deviations, factor loadings, eigenvalues, and variance for the two SWAI versions. (SLD)

The Supervisory Working Alliance Inventory:

A Validity Study

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Abstract

The Supervisor Working Alliance Inventory (SWAI: Efstation, Patton, & Kardash, 1990) was further evaluated for its psychometric properties and relationships with the Personal Reactions Scale-Revised (PRS-R: Holloway & Wampold, 1984), the only other measure of the relationship in counselor supervision. The original factor structure of the SWAI was replicated on a sample considerably different from the one reported in the initial study, suggesting its suitability for use with participants of differing background and experience. Correlations with the PRS-R indicate the SWAI measures the supervisory relationship over more dimensions than the PRS-R, most notably focusing on trainees' understanding of clients.

Efstation, Patton, and Kardash (1990) reported the development of the Supervisory Working Alliance Inventory (SWAI), designed to measure some properties of the relationship in counselor supervision. Items for the SWAI were based on Greenson's (1967) ideas about the working alliance in psychoanalysis. Initial factor analyses of the SWAI produced three factors for the supervisor version (Client Focus, Rapport and Identification), and two for the trainee version (Rapport and Client Focus). Adequate concurrent and discriminant validity evidence was obtained from correlations of SWAI scales with scales of the Supervisory Styles Inventory (SSI; Friedlander & Ward, 1984). Additionally, some SWAI scales were significant predictors of counselor-trainee outcomes as measured by the Self Efficacy Inventory (SEI; Friedlander & Snyder, 1983). While these initial results were encouraging and suggested the appropriateness of using the SWAI in research, lack of knowledge about the instrument's factorial stability limited its usefulness in counselor training.

This study examines whether the factor structure of the SWAI can be replicated upon a second sample of counselor supervisors and trainees, and investigates further the relationship between the SWAI and other measures of counselor supervision.

Staff members at 14 universities were asked to participate anonymously in an investigation of psychometric properties of the SWAI. Copies of both supervisor and trainee forms of both the SWAI and the Personal Reactions Scale (PRS-R: Holloway & Wampold, 1984) were mailed to the staff members, with instructions for distribution to supervisors and trainees willing to participate. No attempt was made to acquire data from current or past supervisor-trainee dyads.

A first sample of 65 supervisors and 88 trainees returned completed forms. Thirty four males and 31 females comprised the group of supervisors, whose mean age was 38.8 years (SD = 6.8), and whose ethnicity was white (89%) and Afro-American (11%). The supervisors' highest degree obtained included master's (28%) and doctorate (72%). They currently worked in academic departments (25%), university counseling centers (43%), U.S. Veterans Administration Medical Centers (22%), and other settings (10%). The supervisors had practiced an average of 10.1 years (SD = 6.7), and had supervised an average of 7.6

years (SD = 7.1).

Twenty males and 68 females comprised the group of trainees, whose mean age was 30.8 years (SD = 7.1), and whose ethnicity was white (90%) and Afro-American (3.4%), Hispanic (2.4%), Asian (3.4%), and other (1.1%). Trainees' highest degree obtained included bachelor's (43%), master's (55%), and doctorate (2%). They were currently training in academic departments (28%), university counseling centers (31%), U.S. Veterans Administration Medical Centers (16%), and other settings (25%). The trainees possessed an average of 3.2 semesters of practica (SD = 2.7), .65 semesters of intern experience (SD = 1.1), and 1.3 years of professional practice (S = 2.3).

To this sample, an additional sample of 30 supervisors and 30 trainees from a midwestern university counseling center (demographic information unavailable) was entered into the data set. Data from this sample were used in factor analyses of the SWAI, but were not used in estimation of concurrent validity.

All participants completed the SWAI and the PRS-R. Each measure has a form for supervisors and for trainees. Because the SWAI has been described elsewhere, we will not repeat that information here. The PRS-R measures, in a 12-item parallel format, the climate of supervisory interviews along three factorially-derived dimensions: Evaluation of Supervisor (Trainee), Evaluation of Self as Supervisor (Trainee), and Level of Comfort in the Interview. Items are rated on 5-point Likert scales from not characteristic of my present feelings (1) to highly characteristic of my present feelings (5). Internal consistency reliabilities (alpha), obtained from 140 supervisors and 141 trainees, were, for three supervisor scales, .83, .72, and .78, and the three trainee scales, .89, .71, and .76. We chose the PRS-R as a measure to which to estimate the concurrent validity of the SWAI, because it is the only extant measure that considers the supervisory relationship.

Scores from both versions of the SWAI were subjected separately to principle components analysis. The Kaiser-Meyer-Olkin measure of sampling adequacy (Kaiser, 1974) was .67 for the supervisor version and .90 for the trainee version, suggesting that both data sets were appropriate for analysis.

Means, standard deviations, and factor loadings for each item for the supervisor's and trainee's versions are presented in Tables 1 and 2, respectively.

Six factors from the supervisor version met the Kaiser-Guttman retention criterion of eigenvalues greater than 1 and accounted for 59% of the variance. Three factors from the trainee data set emerged with eigenvalues greater than 1 and accounted for 61% of the variance. However, as in the original study, when both of the present data sets were subjected to Cattell's scree test, only three factors from the supervisor version and two factors from the trainee version emerged. The three-factor and two-factor solutions were then subjected to orthogonal (varimax) rotation, following the same procedure as Efstation, Patton, and Kardash (1990).

The factor structure found for each version closely resembles that reported by Efstation, Patton, and Kardash, (1990). In this study, for the supervisor version, factor 1, named Identification, accounted for 20% of the known variance. Factor 2, Rapport, and factor 3, Client Focus, accounted for 13% and 8% of the known variance, respectively. Efstation, Patton, and Kardash (1990) reported Client Focus as the strongest factor, followed by Rapport and Identification. Each factor accounted for 19%, 9%, and 8% of the known variance, respectively. Thus, the same three factors emerged but in a different order.

Next, in this study, for the trainee version, two factors, named Rapport and Client Focus, emerged and accounted for 43% and 11% of the known variance respectively. Similarly, Efstation, Patton, and Kardash (1990) reported Rapport as the first factor, accounting for approximately 30% of the known variance, followed by Client Focus, accounting for approximately 8% of the known variance.

Both versions of the PRS-R were subjected to the same analysis as the SWAI, which was also identical to that undertaken by Holloway and Wampold (1984) to generate the PRS-R. Analysis of the data set in this study failed to replicate the three factor solution reported by Holloway and Wampold (1984) for both supervisor and trainee versions. Only one strong factor emerged for both versions, which we labeled Evaluation of Trainee for the supervisor version and Evaluation of Supervisor for the trainee version. These were treated as single scales for the estimation of convergence and discrimination with the

SWAI. To us, the single scales describe the internal, affective reaction of the supervisor or trainee to the other in the session.

Standardized internal consistency reliabilities (alpha) were calculated on our data set for the factor-derived scales of the supervisor and trainee versions of the SWAI as follows: supervisor scales: Client focus, .67, Rapport, .64, and Identification, .79 (n= 90); and trainee scales: Client Focus, .82, and Rapport, .91 (n = 113). Efstation, Patton and Kardash (1990) reported the following coefficient alphas for the supervisor scales: Client focus, .71, Rapport, .73, and Identification, .77; alphas for the trainee scales were: Rapport, .90, and Client Focus, .77 (N = 178).

Correlations of the supervisor scales of the SWAI (n = 91) with the supervisor scale of the PRS-R (n = 65) were: Client Focus, r = .15, p = .22, Rapport, r = .34, p = .006, Identification, r = .65, p = .000. Correlations of the trainee scales of the SWAI (n = 114) with the trainee version of the PRS-R (n = 87) were: Rapport, r = .85, p = .000, and Client Focus, r = .52, p = .000.

Similar to the original study of the SWAI (Efstation, Patton, & Kardash, 1990), the cross factor analysis yielded three-factor and two-factor solutions for the supervisor and trainee versions, respectively. Although two of the factors for the supervisor version (Client Focus and Identification) emerged in reverse order of importance, the factor solutions were, nevertheless, replicated in this validation study. Thus, factor stability across studies suggests that valid inferences from the SWAI may be drawn from the perceptions and experiences of samples of supervisors and trainees of varying experience levels.

Evidence for the concurrent validity of the SWAI includes the following observations. Correlations between the supervisor forms of the SWAI and PRS-R suggest discrimination: Client Focus taps a unique task dimension, and Rapport taps a dimension of facilitative conditions for trainee disclosure that overlaps only slightly with the PRS-R. In contrast, the correlation between Identification and the PRS-R suggests convergence: Identification taps a dimension of assessment of the trainee's cognitive and affective comfort with the model the supervisor provides, which seems to correspond to the internal, affective reactions measured by the PRS-R. Thus, it seems that the SWAI provides a more differentiated

look than the PRS-R at supervisors' perceptions of the supervisory relationship.

Correlations between the trainee forms suggest convergence, in that both Rapport and the PRS-R measure affective reactions of trainees toward their supervisors. In contrast, Client Focus again is measuring a unique task variable, indicating discrimination from the PRS-R and evidence for a more complex description of the supervisory relationship.

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Table 1
Means, standard deviations, factor loadings, eigenvalues, and variance explained for the Supervisor's Version of the SWAI

Item	M	SD	Factor Loading		
			C. Focus	Rapp.	Ident.
1. My trainee understands client behavior and treatment technique similar to the way I do.	4.35	1.14	.83	-.10	-.06
15. My trainee identifies with me in the way he/she thinks and talks about his/her clients.	4.48	1.08	.74	.12	.15
14. My trainee appears to be comfortable working with me.	4.92	.82	.68	-.28	.12
18. In supervision, my trainee is more curious than anxious when discussing his/her difficulties with clients.	4.88	1.42	.65	-.04	.05
11. During supervision, my trainee seems able to stand back and reflect on what I am saying to him/her.	5.51	1.04	.62	.17	-.01
9. My trainee consistently implements suggestions made in supervision.	5.18	.97	.53	.16	-.06
16. I stay in tune with my trainee during supervision.	5.62	.79	.49	.38	.33
22. I make an effort to understand my trainee.	6.40	.76	.07	.67	.41
17. In supervision, I place a high priority on our understanding the client's perspective.	5.93	.90	-.13	.64	.18
20. I encourage my trainee to take time to understand what the client is saying and doing.	6.00	1.03	-.13	.61	.28
5. I encourage my trainee to talk about the work in ways that are comfortable for him/her.	6.07	.91	.37	.60	.00
2. I welcome my trainee's explanations about his/her client's behavior.	6.34	.82	.28	.55	.24
12. I encourage my trainee to formulate his/her own interventions with the client.	5.94	.95	.27	.54	-.13
8. I am tactful when commenting about my trainee's performance.	6.00	1.13	.03	.51	.02
7. During supervision, my trainee talks more than I do.	4.97	1.23	.06	-.29	.18
6. I help my trainee stay on track during our meetings.	5.29	1.07	.04	.00	.70
23. I teach my trainee through direct suggestion.	5.23	1.19	-.01	-.09	.67
4. I help my trainee work within a specific treatment plan with his/her client.	4.83	1.38	.17	-.02	.62

19. My trainee works with me on specific goals in the supervisory session.	4.88	1.27	.07	.17	.51
10. When correcting my trainee's errors with a client, I offer alternative ways of intervening with that client.	6.21	.77	-.01	.49	.50
21. I facilitate my trainee's talking in our sessions.	5.77	.95	-.04	.23	.42
13. My style is to carefully and systematically consider the material my trainee brings to supervision.	5.26	1.30	-.01	.03	.38
3. In supervision, I expect my trainee to think about or reflect on my comments to him/her.	6.16	1.05	.02	.28	.38
Eigenvalue			4.66	2.96	1.86
Percentage of variance			20.3	12.9	8.1

Note. N= 90.

Table 2
Means, standard deviations, factor loadings, eigenvalues, and variance explained for the Trainee's Version of the SWAI

Item	M	SD	Factor Loading	
			C. Focus	Rapp.
8. My supervisor makes the effort to understand me.	5.40	1.54	.77	.14
19. My supervisor helps me talk freely in our sessions.	5.62	1.32	.73	.46
15. My supervisor encourages me to formulate my own interventions with the client.	5.50	1.37	.72	.19
14. My supervisor encourages me to talk about my work with clients in ways that are comfortable for me.	5.70	1.34	.71	.35
11. My supervisor welcomes my explanations about the client's behavior.	5.93	1.12	.69	.20
3. My supervisor is tactful when commenting about my performance.	6.04	1.23	.68	.13
7. I feel comfortable working with my supervisor.	5.85	1.28	.68	.44
12. In supervision, I am more curious than anxious when discussing my difficulties with clients.	5.27	1.26	.66	-.33
13. My supervisor stays in tune with me during supervision.	5.69	1.30	.58	.43
5. My supervisor treats me like a colleague in our supervisory sessions.	5.54	1.45	.57	.37
4. My supervisor encourages me to take time to understand what the client is saying and doing.	5.36	1.37	.48	.25
17. In supervision, my supervisor places a high priority on our understanding the client's perspective.	5.[illegible]	1.37	.23	.74
2. I work with my supervisor on specific goals in the supervisory session.	4.90	1.52	-.05	.68
1. My supervisor's style is to carefully and systematically consider the material I bring to supervision.	5.24	1.37	.20	.67
6. My supervisor helps me to work within a specific treatment plan with my clients.	4.67	1.52	.15	.66
10. I feel free to mention to my supervisor any troublesome feelings I might have about him/her.	4.91	1.86	.21	.66
18. I understand client behavior and treatment technique similar to the way my supervisor does.	4.98	1.37	.45	.62

9. When correcting my errors with a client, my supervisor offers alternative ways of intervening with that client.	6.12	1.17	.44	.60
16. My supervisor helps me stay on track during our meetings.	5.18	1.48	.42	.60
Eigenvalue			8.17	2.04
Percentage of variance			43.0	10.8

Note. N= 113.