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Barriers to Implementing Treatment Integrity Procedures: Survey of Treatment Outcome Researchers

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Treatment integrity refers to implementing interventions as intended. Teatment integrity is critically important for experimental validity and for drawing valid inferences regarding the relationship between treatment and outcome. Yet, it is rarely adequately addressed in psychotherapy research. The authors examined barriers to treatment integrity implementation by surveying psychotherapy researchers. Results indicate that lack of theory and guidelines on treatment integrity procedures, as well as time, cost, and labor constraints, were regarded as strong barriers. The lack of general knowledge about treatment integrity and the lack of editorial requirement for reporting integrity procedures were also perceived as barriers to its implementation. However, psychotherapy researchers indicated awareness of the importance of treatment integrity for the experimental validity of a study and did not regard lack of its appreciation as a barrier for implementing integrity procedures. Further, a higher number of endorsed barriers predicted lower adequacy of treatment integrity procedures in the authors' own research. Recommendations for improving how integrity is addressed include journal and editorial enforcement of treatment integrity implementation, funding for integrity procedures, and provision of specific guidelines.

Keywords: treatment integrity, fidelity, adherence, competence, barriers

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Treatment integrity is defined as delivery of an intervention as intended (e.g., Vermilyea, Barlow, & O'Brien, 1984). Treatment integrity encompasses three different aspects: treatment adherence (the degree of utilization of the specified procedures), therapist competence (the level of the therapist's skill and judgment), and treatment differentiation (whether treatments differ from each other along critical dimensions; e.g., Waltz, Addis, Koerner, & Jacobson, 1993). A breakdown in any of these aspects may compromise treatment integrity and the validity of inferences drawn about the relationship between treatment and outcome (for further discussion, see Perepletchikova, Treat, & Kazdin, 2007). For example, an examination of interventions for offender rehabilitation, the Martinson report (Martinson, 1974), failed to include evaluation of the treatment integrity levels; this resulted in erroneous conclusions. After reviewing research, Martinson concluded that no interventions (e.g., psychotherapy, vocational training, work release) for rehabilitating criminal offenders worked consistently. Yet, when the Panel on Research on Rehabilitative Techniques evaluated Martinson's pessimistic view, it found that few of the intended interventions were actually held with the offenders (Sechrest, White, & Brown, 1979). The tested interventions were not implemented with adequate integrity, and, therefore, Martinson's interpretations of their outcomes were premature and unjustified.

Despite its critical significance for drawing valid inferences about intervention effects, treatment integrity has received surprisingly little attention. For example, in a recent examination of the quality of available psychotherapy research (Perepletchikova et al., 2007), less than 4% of the evaluated randomized controlled trials adequately implemented treatment integrity procedures. Examination of the barriers to implementation of integrity procedures may provide some clues as to concerns researchers have regarding treatment integrity and may offer insights into the possible strategies to improve how integrity is addressed. There were two objectives in the current project: (a) to examine the extent of perceived barriers to treatment integrity implementation and (b) to examine the relationship between perceived barriers and actual implementation of treatment integrity procedures by researchers.

Method

Literature Search Procedures

We surveyed corresponding authors of randomized controlled trials published in the most influential psychiatric and psychological journals. Procedures for identifying the journals for review and criteria for journal and article selection are outlined at Perepletch-

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ikova et al. (2007). Overall, 147 articles were identified. They were distributed as follows: *Archives of General Psychiatry* (22 articles), *American Journal of Psychiatry* (9 articles), *British Journal of Psychiatry* (19 articles), *Journal of the American Academy of Child and Adolescent Psychiatry* (16 articles), *Journal of Consulting and Clinical Psychology* (75 articles), and *Journal of Clinical Psychiatry* (6 articles).[1]

Participants

We contacted 147 corresponding authors of the identified articles via email and asked them to participate in an online survey on a secure website (surveymonkey.com). Out of 147 contacted researchers, 55.10% ($n = 81$) responded by completing at least one demographic item on the survey.[2] Of these responders, 91.36% ($n = 74$) completed at least one item regarding barriers to treatment integrity implementation. This group constituted the final sample. Respondents were 50.51 years of age ($SD = 9.40$, range = 32–79 years) on average, and 67.60% ($n = 50$) were male. The average number of years responders were in the treatment outcome research field was 19.78 ($SD = 9.32$, range = 0–46 years). Of those responding, 79.70% ($n = 59$) held research degrees (in North America, PhD; in England, DM and MD) and 20.30% ($n = 15$) held nonresearch degrees (in North America, MD, PsyD, MSW; in England, MB, BS). With regard to theoretical orientation, 67.60% ($n = 50$) endorsed skill-building approaches (e.g., cognitive–behavioral) and 32.40% ($n = 24$) endorsed non-skill-building approaches (e.g., psychodynamic, humanistic).

Measures

The Barriers to Treatment Integrity Implementation Survey (BTIIS) was developed to assess possible impediments to addressing integrity of psychosocial interventions. Items on the BTIIS were generated by contacting experts in the field of treatment integrity. The BTIIS consists of 30 questions rated on a scale from 1 to 6 (*Always Disagree* to *Always Agree*). Total scores range from 30 to 180. Higher scores indicate more perceived barriers. The items on the survey encompass the following five domains of possible impediments to treatment integrity implementation: The lack of appreciation of treatment integrity barrier (Domain A; 4 items) includes the lack of awareness of the importance of treatment integrity and recognition that the experimental validity of a study may be rendered questionable without manipulation checks on treatment delivery; the lack of general knowledge about treatment integrity barrier (Domain B; 8 items) includes the lack of knowledge about treatment integrity procedures for adequately monitoring and documenting treatment delivery; the lack of theory and specific guidelines on treatment integrity procedures barrier (Domain C; 7 items) overviews the lack of the general theory and established tradition in the social and behavioral sciences on treatment integrity and specific guidelines on establishing, assessing, evaluating, and reporting integrity procedures; the time, cost, and labor demands barrier (Domain D; 5 items) evaluates the time limitations, labor constraints, and funding barriers to addressing integrity procedures; and the lack of editorial requirement barrier (Domain E; 6 items) addresses the lack of the requirement for implementing, assessing, evaluating, and reporting treatment integrity procedures in order for a study to be published (see Table 1 for examples from each barrier domain). These domains were derived conceptually. Items with mean ratings of ≤ 3 were considered "not barriers"; items with mean ratings >3 and ≤ 4 were considered "barriers"; items with mean ratings of >4 were considered "strong barriers."

The Implementation of Treatment Integrity Procedures Scale (ITIPS) was developed to evaluate the extent to which researchers implement treatment integrity procedures in the four domains of integrity (i.e., establishing, assessing, evaluating, and reporting integrity) as well as the two main aspects of treatment integrity (i.e., treatment adherence and therapist competence). The ITIPS consists of 22 items, rated on a 4-point scale. Total score ranges from 22 to 88. Higher scores indicate more adequate implementation of integrity procedures. The adequacy of treatment integrity procedures reported in each article was rated by two independent raters using a manual specifically developed for the purpose of examining treatment integrity in psychotherapy research. Please refer to Perepletchikova et al. (2007) for information on the data collection procedures, internal consistency of the ITIPS, rater training, interrater reliability, and criteria for establishing adequacy of the treatment integrity procedures.

Data Evaluation Procedures

The analyses for perceived barriers were performed on the study level. The analyses on the relationship between perceived barriers and actual implementation of treatment integrity procedures were performed on the treatment level, due to the nested data structure. In the present data set, treatments were nested within studies and differed on the adequacy of the implementation of the treatment integrity procedures. The number of observations at the study level ranged from 1 to 3 (i.e., there were 1 to 3 treatments per study). Utilization of the ordinary least squares regression procedures under these conditions violates the independence assumption and deflates the estimated standard errors (Heck & Thomas, 2000). Analyses were performed using hierarchical linear modeling (HLM; Bryk & Raudenbush, 1992) with HLM Version 6.01 software. The two-level version of HLM was utilized.

The intraclass correlation (ICC), a measure of intracontext dependency, was computed for the treatment integrity variable, which was measured by the total score on the ITIPS ($M = 38.84$, $SD = 13.12$, range = 22.00–64.00). The ICC in the present study was .92. This indicated that 92% of the total variance in the treatment integrity scores was between study, whereas about 8% of the variance was within study. An indirect test of the significance of the ICC rejected the null hypothesis that between-study variability was zero, $\chi^2(63, N = 64) = 1{,}105.49$, $p < .0001$ (Heck & Thomas, 2000). Thus, it clearly was necessary to use analytic procedures that are appropriate

[1] Supporting materials, such as the list of the evaluated randomized controlled trials and employed measures (Implementation of Treatment Integrity Procedures Scale and Barriers to Treatment Integrity Implementation Survey), can be obtained from the corresponding author or from the treatment integrity website. The address of the website is www.treatmentintegrity.com

[2] There were no significant differences between responders and nonresponders on the variables of interest: degree to which treatment integrity is addressed in their research (total score on ITIPS), $t(145) = 1.87$, *ns*; mean number of years in treatment outcome field, $t(145) < 1.00$, *ns*; research versus nonresearch degree, $\chi^2(1, N = 147) = 1.16$, *ns*; and theoretical orientation, $\chi^2(2, N = 131) = 3.97$, *ns*.

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Table 1
Mean Item Ratings for Barriers to Treatment Integrity Implementation Survey

Barrier domain	Survey item	*N*	*M*	*SD*
A	25. Once the training of the therapists is completed, supervision and monitoring of treatment implementation does not justify the time and labor costs.	72	2.03	1.01
A	27. The cost of implementing integrity procedures outweighs the possible benefits.	72	2.25	1.05
A	8. Report of the treatment integrity procedures is not considered to enhance the credibility of the treatment outcome results.	73	2.32	1.05
B	13. Once established, adherence and competence are believed to be stable and not to fluctuate over time.	73	2.52	1.20
A	1. Treatment integrity is not regarded as imperative for ensuring adequate experimental control.	74	2.66	1.37
B	11. Treatments are not sufficiently manualized to permit adequate integrity implementation.	72	2.94	1.17
B	10. The requirements of internal review boards hinder implementation of integrity procedures (e.g., limiting how data are handled and linked to specific therapists, pushing for audio instead of videotaping).	72	2.97	1.26
B	17. Therapists resist close supervision and monitoring of treatment implementation.	73	3.04	1.21
E	4. Because there are no specific requirements for reporting integrity, just mentioning that integrity was monitored without providing quantitative information is regarded as sufficient.	73	3.38	1.31
B	28. It is generally believed that integrity procedures can be implemented primarily with behavioral interventions but not with other approaches, such as psychodynamic or interpersonal treatments.	73	3.38	1.40
E	3. Journal editors do not require the description of integrity procedures for the article to be accepted.	73	3.44	1.17
B	24. Treatment manuals are not widely employed because they are thought to limit therapist flexibility in addressing clients' problems and tailoring of treatment to the individual needs.	70	3.50	1.35
B	20. Performing manipulation checks on the integrity of treatment implementation may be risky, as adherence and competence may be lower than desired (e.g., credibility of results may be compromised by reporting low levels of integrity).	73	3.52	1.30
E	19. Limited journal space precludes adequate report of integrity procedures.	73	3.71	1.39
E	26. Most treatment outcome research articles are accepted without integrity being adequately addressed.	73	3.73	0.93
E	5. Careful implementation and assessment of integrity are not necessary to get a study published.	74	3.74	1.17
B	23. Treatments are presumed to be effective if significant changes on the dependent measures are obtained regardless of the integrity level of intervention implementation.	73	3.77	1.30
C	21. There are no established criteria or principles by which treatment integrity may be judged.	73	4.08	1.23
C	9. The definition of treatment adherence in the literature is ambiguous.	73	4.10	1.02
C	15. The guidelines for evaluating psychometric properties (validity and reliability) of the treatment integrity measures are unclear.	73	4.12	1.14
D	7. Insufficient resources due to the constrained funding from grants hinder the adequate implementation of integrity procedures.	73	4.14	1.42
E	30. There is a lack of editorial insistence/enforcement on the need to implement integrity procedures.	73	4.21	0.94
C	2. There is an inconsistency in the terminology of the aspects of treatment integrity (e.g., treatment adherence, therapist competence, treatment differentiation).	74	4.46	0.89
C	29. Therapist competence is not clearly defined in the literature.	73	4.49	0.92
C	14. There are no conventional criteria that specify acceptable levels of treatment integrity.	73	4.53	1.13
D	22. High labor costs may preclude researchers from employing or training integrity raters.	72	4.54	1.03
C	6. The literature does not agree as to what is the appropriate method of integrity assessment.	73	4.70	0.83
D	16. It is expensive and time consuming to provide direct training of therapists (e.g., viewing therapy tapes, providing feedback, having regular meetings with staff, role-playing techniques).	73	5.11	1.02
D	12. Designing and validating integrity measures is labor intensive and time consuming.	72	5.17	0.87
D	18. There is a considerable time requirement in obtaining accurate representation of integrity data (collection of data across therapists, situations, cases, and sessions).	72	5.25	0.85

Note. Items with mean rating of ≤3 are considered "not barriers," items with mean rating >3 and ≤4 are considered "barriers," and items with mean rating of >4 are considered "strong barriers." A = lack of appreciation of treatment integrity; B = lack of general knowledge about treatment integrity; C = lack of theory and specific guidelines on treatment integrity procedures; D = time, cost, and labor demands; E = lack of editorial requirement.

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for nested data structures. Analyses were performed on 64 studies (10 studies were removed from the original data set due to missing data) that comprised 90 treatments.[3]

Results

Perceived Barriers

To examine perceived barriers to treatment integrity implementation, we examined the mean rating of each barrier on the BTIIS (see Table 1). Total scores for the survey ranged from 65 to 141 ($M = 110.95$, $SD = 13.25$, $\alpha = .80$). All ratings over 3 indicate perceived barriers, and 23 of the 30 survey items (76.67%) were rated greater than 3. There are 7 items (23.33%) in the not barriers category, 10 items (33.33%) in the barriers category, and 13 items (43.33%) in the strong barriers category. The number and percentage of items in each category from five barrier domains are presented in Table 2.

[3] Of the 90 examined treatments, 7.8% ($n = 7$) were process oriented (e.g., psychodynamic, humanistic, client-centered), 25.6% ($n = 23$) were supportive–educational (e.g., nondirective counseling, motivational enhancement, supportive–expressive therapy), and 66.7% ($n = 60$) were skills-training interventions (e.g., cognitive–behavioral therapy, parent training, exposure therapy).

Table 2
The Number and Percentage of Items in Each Category by Five Barrier Domains

Variable	Lack of appreciation of treatment integrity	Lack of general knowledge about treatment integrity	Lack of theory and specific guidelines on treatment integrity procedures	Time, cost, and labor demands	Lack of editorial requirement
Mean score (*SD*) and range	9.18 (3.18) 4.00–17.00	25.63 (5.16) 13.00–37.00	30.43 (54.60) 14.00–39.00	24.17 (3.81) 11.00–30.00	22.17 (4.37) 11.00–30.00
Not barriers	4 (100%)	3 (37.5%)	0	0	0
Barriers	0	5 (62.5%)	0	0	5 (83.33%)
Strong barriers	0	0	7 (100%)	5 (100%)	1 (16.66%)

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Association Between Perceived Barriers and Treatment Integrity

We predicted that the adequacy of the treatment integrity implementation would be inversely related to the number of perceived barriers. In the HLM equation specified, treatment integrity was used as an outcome variable and barriers to the implementation of treatment integrity procedures (total score on the BTIIS, $M = 111.83$, $SD = 12.66$, range = 65.00–141.00) were used as a predictor variable. The equation was specified as follows:

Level 1: treatment integrity

$$= \beta_0 + \beta_1(\text{barriers to implementation}) + r$$

Level 2: $\beta_0 = \gamma_{00} + u_0$

$$\beta_1 = \gamma_{10}$$

The results indicated that higher number of perceived barriers was associated with lower adequacy of treatment integrity procedures, $t(62) = -2.04$, $p < .05$, $r^2 = .02$.[4]

Discussion

This project evaluated perceived barriers to addressing treatment integrity and the relationship between perceived barriers and the actual implementation of treatment integrity procedures. Results indicate that (a) authors tended to appreciate the importance of treatment integrity for experimental validity of a study; (b) authors indicated that lack of general knowledge about treatment integrity and lack of editorial requirement for adequately addressing integrity are barriers to its implementation; (c) authors suggested that lack of theory and specific guidelines on integrity procedures, as well as time, cost, and labor demands, are strong barriers to treatment integrity implementation; and (d) degree of perceived barriers predicted actual implementation of treatment integrity procedures by the psychotherapy researchers.

The results of the survey indicate that treatment integrity is regarded as important in testing intervention efficacy and may point to venues for enhancing attention to integrity procedures. Many of the perceived barriers can be addressed by providing specific recommendations and considerations regarding integrity procedures, amending funding needs, and requiring the editorial enforcement of integrity procedures for study publication. Multiple recommendations have been provided for addressing integrity (e.g., Gresham, Donald, MacMillan, Beebe-Frankenberger, & Bocian, 2000; Perepletchikova & Kazdin, 2005; Waltz et al., 1993). However, results of this study suggest that authors do not regard currently available guidelines. Several factors may limit utilization of these guidelines. First, available recommendations may be fragmented (i.e., they may focus on some aspects of treatment integrity but not all). For example, recommendations in Bellg et al. (2004) primarily outlined ways to establish treatment integrity (e.g., training of therapists, delivery of intervention); ways to assess, evaluate, and report integrity were not elucidated. To briefly address this concern, we summarized available guidelines in checklist form in Table 3. Second, available recommendations usually do not take into account a step-by-step approach to evaluating and reporting treatment integrity (e.g., publishing data on psychometric properties of integrity measures separately from the main report). A gradual approach to addressing integrity has to be taken into account when one provides guidelines on integrity procedures or identifies treatments as empirically supported. Finally, some articles outline general guidelines and do not provide specific instructions of how and what to do (e.g., McIntyre, Gresham, DiGennaro, & Reed, 2007). There is a need for a critical and comprehensive review of treatment integrity that provides detailed instructions on procedures in all domains of treatment integrity (i.e., establishing, assessing, evaluating, and reporting integrity) in a flexible manner (i.e., that allows for gradual evaluation and publication of integrity data).

Further, training in treatment integrity procedures may be offered through national research agencies. For example, the National Institute of Health's Office of Behavioral and Social Sciences Research offers training in conducting randomized clinical trails. Training in implementing treatment integrity procedures may be offered through similar mechanisms for psychotherapy development researchers by the National Institute of Mental Health.

In order for the implementation of integrity procedures to be justifiable and realistic, several issues require consideration. Researchers indicated that cost constraints are a strong barrier to adequately addressing integrity. Funding is a complex issue, and once funding is secured, it may be subject to budget cuts and threatened due to political agendas (see Kazdin, 2008). It appears that there are no separate or specific funds allocated for implementing treatment integrity procedures. Further, grant applications do not include specific sections devoted to detailing how treatment integrity will be addressed. Although grant proposals with the

[4] The r^2 value was computed with a method articulated by Snijders and Bosker (1999).

Table 3
Recommended Treatment Integrity Procedures Checklist

Procedure	Specific strategies
	Establishing treatment integrity
Definition of the aspects of integrity	Clearly specified treatment adherence as the degree of utilization of the specified procedures and avoidance of proscribed procedures
	Clearly specified therapist competence as the level of therapist's skill and judgment
Treatment is operationally defined	Provided explicit description of procedures, tasks, instructions, and activities (e.g., manual)
	Stated number of treatment sessions
	Stated length of treatment contact
	Described therapeutic agents
Training of therapists	Utilized direct strategies (e.g., role-playing, modeling, rehearsal, and periodic booster sessions)
	Supplemented direct training with indirect strategies (e.g., provided didactic instructions about the intervention and written materials describing the rationale, scripts, tasks, and activities)
Supervision of therapists	Viewing therapy tapes, providing regular feedback, role-playing on how to approach difficult situations, troubleshooting
	Assessing treatment integrity
Assessed treatment adherence	Direct assessment of protocol adherence (e.g., observations, videotaping)
	Supplemented observations with indirect assessment (e.g., therapist self-reports; interviews with clients; permanent products, such as completed homework and data collection sheets)
Assessed therapist competence	Direct assessment of therapist skill of treatment delivery (considered number of sessions completed, extent of client progress, client difficulty, and sensitivity of approach in a manner consistent with the prescribed procedures)
	Indirect assessment of therapist skill of treatment delivery
Psychometric properties of integrity measures	Adherence measure is valid and reliable
	Competence measure is valid and reliable
	Evaluating treatment integrity
Data representation	Collected integrity data across treatment phases, therapists, situations, sessions and/or cases
Integrity rating	Trained raters in treatment components and manual
	Assessed interrater reliability
Controlled measure reactivity	Controlled for adherence measure reactivity (e.g., all sessions are video- or audiotaped)
	Controlled for competence measure reactivity (e.g., all sessions are video- or audiotaped)
	Reporting treatment integrity procedures
Reported implementation of integrity procedures	Reported procedures for establishing integrity (as outlined above)
	Reported procedures for assessing integrity (as outlined above)
	Reported procedures for evaluating integrity (as outlined above)
Reported treatment integrity levels	Treatment integrity is reported in terms of overall integrity (i.e., integrity of treatment components across sessions)
	Treatment integrity is reported in terms of component integrity (i.e., integrity of implementing each treatment component across sessions)
	Treatment integrity is reported in terms of session integrity (i.e., integrity of all treatment components within each session)
	Reported data on therapist treatment adherence levels and therapist competence levels
Provided numerical data is informative of treatment integrity levels	Data are represented as percent integrity; can be easily converted into percent integrity; or constitute a specific number within a clearly defined range

highest level of methodological rigor, such as treatment integrity procedures, get more favorable reviews, allocated funds do not seem to be sufficient to cover costs. Funding of research often is a matter of compromise. The best methodological practices must be included in the grant application, but occasionally budget cuts at the final funding stage, before the grant begins, or additional cuts along the way can lead to changes in the research design. One cannot easily delete one of the comparison groups or toss out the post or pretreatment assessment. Other facets of the design, such as treatment integrity procedures, follow-up assessment, and reliability checks, may be potential candidates for deletion.

Providing richly elaborated treatment protocols, training and supervising therapists, developing and validating assessment inventories, videotaping treatment sessions, training raters, and coding and analyzing data require a substantial investment of finances, labor, and time. Allocating funds that are specifically devoted to treatment integrity procedures, while requiring that research proposals include an outline of how integrity will be addressed, may provide a strong incentive for researchers to implement integrity procedures more adequately. Also, specially allocated funds may ensure that treatment integrity is not on the list of potential candidates for deletion from research design due to funding con-

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straints. Another important funding consideration is a cautious approach to cost effectiveness of procedures. Some methods that are time efficient and economical (e.g., training therapists via didactic instructions instead of providing opportunities for practice and feedback; relying on therapists' self-reports instead of videotaping sessions) are likely to be of weak ability to measure integrity accurately (for further discussion, see Perepletchikova et al., 2007).

Researchers perceive lack of editorial requirement as a barrier to treatment integrity implementation. The cost and labor demands may continue to outweigh the benefits of addressing treatment integrity if studies can be published without adequate implementation of integrity procedures. Editorial insistence may serve as a powerful motivation for researchers to adhere to treatment integrity regulations. Further, approval of grants and publication in major journals may become dependent on whether integrity is sufficiently addressed. Adequate implementation of treatment integrity procedures may also be monitored by the institutions' human investigation committees (HICs) or institutional review boards (IRBs). Currently, HICs and IRBs do not require data on compliance with integrity procedures in their continual review of research protocols. A requirement to submit evidence on maintenance of treatment integrity for annual reviews may further encourage implementation of integrity procedures.

Cost and labor demands in implementing treatment integrity procedures are highlighted by the equivocal results on the association between treatment integrity and treatment outcomes (for further discussion, see Perepletchikova & Kazdin, 2005). Treatment integrity may not necessarily relate to treatment effectiveness, and significant effects can be demonstrated with low integrity levels. Indeed, low integrity levels indicate not that treatment is weak but that the treatment is different from that originally intended. Deviations from treatment protocol may actually better suit the treated population as more effective techniques are incorporated.

Gresham (1997) outlined four possible scenarios of the relationship between treatment integrity and outcome: (a) treatment integrity is high and changes on the dependent measures are observed; (b) integrity is high and there is a lack of treatment effect; (c) integrity is low and intervention effects are not noted; and (d) integrity is low and changes on the dependent measures are demonstrated. Most psychotherapy research falls into the last scenario (e.g., Perepletchikova et al., 2007; Schlosser, 2002). Yet, in this scenario, valid inferences on what produced the effect cannot be drawn. On the other hand, when desired outcome is not achieved, treatment integrity can elucidate the confounding influences that may have interfered with results (e.g., poor therapist training) and thus preclude rejection of potentially efficacious treatments. The key issue to recognize is that, regardless of its relationship to outcome, treatment integrity is essential to empirical research, as it demonstrates that the implemented intervention closely approximates the intended treatment that is claimed to have produced the obtained results.

Researchers indicated that one of the concerns in evaluating integrity is a possibility that credibility of the obtained results is compromised if integrity is found to be low. Monitoring treatment integrity allows researchers to know exactly what was done. Thus, when treatment effects are obtained with low integrity, researchers can add the description of the implemented intervention to a detailing of the intended procedures (e.g., which treatment components were added to the original treatment or were not employed). Such study can provide pilot data on the modified intervention and thereby encourage further efficacy research as opposed to just questioning obtained results with the intended intervention due to low integrity levels.

Results from this study should be interpreted in light of its limitations. The response rate for the survey was just over 55%. Those who responded to our survey may differ in some ways related to the variables of interest (e.g., respondents could be more interested in treatment integrity), and this possibility could limit generalizability of the obtained results. Results indicated that perceptions of barriers were indeed related to the degree of treatment integrity implementation. Yet, the question remains as to whether removal of barriers would lead to increased treatment integrity implementation. This question can be addressed by comparing treatment integrity in treatment outcome studies published in journals that differ in their requirements for reporting and comparing studies funded from sources that differ in the degree of allocated funds for treatment integrity implementation. Another way to answer this question would be to conduct a study in which researchers are randomly assigned to conditions that differ in barriers to implementation of treatment integrity procedures (e.g., particular budgets, checklists) and are asked to design a treatment outcome study. The degree to which integrity is addressed in the study designs could then be compared. Treatment integrity is critical if valid inferences are to be drawn about interventions and mechanisms of change. Ethical and professional responsibilities of the psychotherapy field demand amendments to the continually demonstrated neglect of treatment integrity.

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