The impact of client treatment preferences on outcome: a meta-analysis

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CRD summary
The authors concluded that there was a small effect on treatment outcome, in favour of participants who were matched to their preferred psychological treatment, compared with those who were not. This conclusion reflected the evidence presented, but the limited literature search and lack of reporting of review processes make its reliability unclear.

Authors' objectives
To evaluate the effect of preference of the participant for psychological treatment on the outcome.

Searching
PsycINFO and ProQuest were searched, for studies published in English, from 1967 to October 2007. Search terms were reported. Seven relevant psychology journals and the reference lists of retrieved articles were searched and a citation search was performed in PsycINFO to identify further studies. The authors stated that unpublished studies were included, but did not state how they were identified.

Study selection
Eligible for inclusion in the review were studies that assessed participant preferences for psychological treatment, prior to treatment, and examined the outcome effect of matching or not matching participants to their preferred treatment. Studies were excluded from the review if they had a non-clinical sample, studied a variable unrelated to a clinical problem, examined preferences other than treatment preferences, or did not match at least some of the participants to their preferred treatment.

Participants varied between studies and included those with alcohol addiction; depression; chronic pain; social phobia; snake phobia; cocaine abuse; obesity; agoraphobia; schizophrenia; and assertiveness problems. The mean age of participants was 42.5 years and 65% were male. Treatment options varied but were most commonly psychotherapy, behavioural therapy, or pharmacotherapy. Primary outcome measures also varied and included scores on the Beck Depression Inventory, Barrett-Lennard Relationship Inventory, California Psychotherapy Alliance Scale, Hamilton Rating Scale for Depression, Hopkins Symptom Checklist-20 Depression, and Social Phobia Anxiety Inventory, and the percentage of heavy drinkers, number of panic attacks per week, rating of assertiveness, weight loss, employment, number of days of cocaine use in last 30 days, and stable housing.

The authors did not state how many reviewers selected studies for the review.

Assessment of study quality
The authors did not state how they assessed study quality, but did mention the variation in quality as a limitation of their review.

Data extraction
The data were extracted to calculate effect size statistics and 95% confidence intervals. The authors did not report how many reviewers extracted the data.

Methods of synthesis
A pooled weighted effect size was calculated using a random-effects model. The pooled weighted effect size was also converted into an odds ratio, and a fail-safe N was calculated to determine the number of non-significant non-published studies needed to dilute the results of the meta-analysis. Statistical heterogeneity was assessed using the Cochran Q statistic and the $I^2$ statistic. Subgroup analysis on study design was performed using a fixed-effect model.

Results of the review
Twenty-eight studies were eligible for inclusion in the review and 26 were included in the meta-analysis (2,356
participants). Study designs included randomised controlled trials (RCTs, eight), partially randomised preference trials (PRPT, six), match or no-match studies (nine), and assigned treatment studies (three).

The effect size of treatment preference on outcome was negligible for six studies, \((r<0.10)\), small for 12 studies (\(r=0.10\) to 0.23), medium for five studies (\(r=0.24\) to 0.36, one a negative effect) and large for three studies (\(r>0.37)\). Overall there was a small, but statistically significant weighted effect size of treatment preference on outcome (\(r=0.15, 95\% \ CI 0.09\) to 0.21). Statistically significant heterogeneity was present \((Q=17.14, p<0.05; I^2=47.48\%)\). The fail-safe N was 291, which means that 291 unpublished studies with non-significant results would be required for the results of the meta-analysis to be not statistically significant.

Patients who received their preferred treatment were half as likely to drop out of treatment compared with clients who did not receive their preferred treatment (OR 0.58, \(p<0.05\); 10 studies). Subgroup analyses by study design showed that the effect sizes were statistically significantly lower in PRPTs \((r=0.07, 95\% \ CI 0.01\) to 0.14; six trials) compared with RCTs \((r=0.20, 95\% \ CI 0.12\) to 0.27; eight trials) and match or no-match studies \((r=0.20, 95\% \ CI 0.11\) to 0.28; nine studies).

**Authors' conclusions**
There was a small effect on treatment outcome, in favour of participants who were matched to their preferred treatment, compared with those who were not matched.

**CRD commentary**
This review addressed a clear research question and the inclusion criteria were adequate. The search was limited to studies published in English in two databases, which means that relevant studies might have been missed. The authors did not state whether study quality was formally assessed and the reliability of the data included in the review is unclear. The number of reviewers who selected studies and extracted the data was not reported and these processes might be subject to reviewer error or bias.

The authors’ conclusion reflected the evidence presented, but a limited number of databases were searched and there was a lack of formal study quality assessment and reporting of the review processes, which mean that its reliability is unclear.

**Implications of the review for practice and research**
**Practice:** The authors stated that clinicians should include client preferences in the decision process for treatment.

**Research:** The authors stated that further research was needed to explain why this outcome effect in favour of clients who received their preferred treatment was observed.

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This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.