

Supplement 1

Table 1: Checklist - Transparent Reporting of Evaluations with Nonrandomized Designs (TREND) Statement

Paper section	Item No.	Descriptor	Reported?	
Title and abstract				
Title and Abstract	1	• Information on how units were allocated to interventions.	<input checked="" type="checkbox"/>	Title, abstract
		• Structured abstract	<input checked="" type="checkbox"/>	
		• Information on target population or study sample.	<input checked="" type="checkbox"/>	Title, abstract
Introduction				
Background	2	• Scientific background and explanation of rationale.	<input checked="" type="checkbox"/>	INTRODUCTION
		• Theories used in designing behavioral interventions.	<input checked="" type="checkbox"/>	METHODS, Supplement 2
Methods				
Participants	3	• Eligibility criteria for participants, including criteria at different levels in recruitment/sampling plan (e.g., cities, clinics, subjects).	<input checked="" type="checkbox"/>	METHODS, Participants, paragraph 1, Assignment method
		• Method of recruitment (e.g., referral, self-selection), including the sampling method if a systematic sampling plan was implemented.	<input checked="" type="checkbox"/>	METHODS, Design and setting, paragraph 1
		• Recruitment setting	N/A	
		• Settings and locations where the data were collected.	N/A	
Interventions	4	• Details of the interventions intended for each study condition and how and when they were actually administered, specifically including:	<input checked="" type="checkbox"/>	METHODS, Intervention, Supplement file 2
		○ Content		
		○ Delivery method: how was the content given		
		○ Unit of delivery: how were the subjects grouped during delivery?		
		○ Deliverer: who delivered the intervention?		
		○ Setting: where was the intervention delivered?		
		○ Exposure quantity and duration: how many sessions or episodes or events were intended to be delivered? How long were they intended to last?		
○ Time span: how long was it intended to take to deliver the intervention to each unit?				

		<ul style="list-style-type: none"> ○ Activities to increase compliance or adherence. 		
Objectives	5	<ul style="list-style-type: none"> ● Specific objectives and hypotheses. 	<input checked="" type="checkbox"/>	INTRODUCTION, paragraph 5
Outcomes	6	<ul style="list-style-type: none"> ● Clearly defined primary and secondary outcome measures. 	<input checked="" type="checkbox"/>	METHODS, Outcomes, paragraph 1
Sample Size	7	<ul style="list-style-type: none"> ● How sample size was determined and, when applicable, explanation of an interim analyses and stopping rules. 	<input checked="" type="checkbox"/>	METHODS, Sample size
Assignment method	8	<ul style="list-style-type: none"> ● Unit of assignment (the unit being assigned to study condition, e.g., individual, group, community). 	<input checked="" type="checkbox"/>	METHODS, Participants
		<ul style="list-style-type: none"> ● Method used to assign units to study conditions, including details of any restrictions (e.g., blocking, stratifications, and minimization). 	<input checked="" type="checkbox"/>	METHODS, Assignment method
		<ul style="list-style-type: none"> ● Inclusion of aspects employed to help minimize potential bias to non-randomization (e.g., matching). 	<input checked="" type="checkbox"/>	METHODS, Assignment method
Blinding (masking)	9	<ul style="list-style-type: none"> ● Whether or not participants, those administering the interventions, and those assessing the outcomes were blinded to study condition assignment. And if so, statement regarding how the blinding was accomplished and how it was assessed. 	<input checked="" type="checkbox"/>	DISCUSSION, Limitations, paragraph 1
Unit of analysis	10	<ul style="list-style-type: none"> ● Description of the smallest unit that is being analyzed to assess intervention effects (e.g., individual, group, or community). 	<input checked="" type="checkbox"/>	METHODS, Analyses, paragraph 3
Statistical methods	11	<ul style="list-style-type: none"> ● Statistical methods used to compare study groups for primary methods outcome(s), including complex methods of correlated data. 	<input checked="" type="checkbox"/>	METHODS Analyses, paragraph 3
		<ul style="list-style-type: none"> ● Statistical methods used for additional analyses, such as subgroup analyses and adjusted analysis. 	<input checked="" type="checkbox"/>	METHODS Analysis, paragraph 3 and 4
		<ul style="list-style-type: none"> ● Methods for imputing missing data, if used. 	N/A	
		<ul style="list-style-type: none"> ● Statistical software and programs used. 	<input checked="" type="checkbox"/>	METHODS, Analysis, paragraph 4
Results				
Participant flow	12	<ul style="list-style-type: none"> ● Flow of participants through each stage of the study: enrollment, assignment, intervention exposure, follow-up analysis (diagram). 	<input checked="" type="checkbox"/>	Figure 1
		<ul style="list-style-type: none"> ○ Enrollment: the numbers of participants screened for eligibility, found to be eligible or 	<input checked="" type="checkbox"/>	Figure 1

		not eligible, declined to be enrolled, and enrolled in the study.		
		○ Assignment: the number of participants assigned to a study condition.	<input checked="" type="checkbox"/>	Figure 1
		○ Allocation and intervention exposure: the number of participants assigned to each study condition and the number of participants who received each intervention.	<input checked="" type="checkbox"/>	Figure 1
		○ Follow-up: the number of participants who completed the follow-up or did not complete the follow-up (i.e., lost to follow-up), by study condition.	<input checked="" type="checkbox"/>	Figure 1
		○ Analysis: the number of participants included in or excluded from the main analysis, by study condition.	<input checked="" type="checkbox"/>	Figure 1
		• Description of protocol deviation from study as planned, along with reasons.	N/A	No deviations
Recruitment	13	• Dates defining the periods of recruitment and follow-up.	<input checked="" type="checkbox"/>	RESULTS, Recruitment, paragraph 1. METHODS, Analyses, paragraph 2.
Baseline Data	14	• Baseline demographic and clinical characteristics of participants in each study condition.	<input checked="" type="checkbox"/>	Table 1
		• Baseline characteristics for each study condition relevant to specific disease prevention research.	<input checked="" type="checkbox"/>	Table 1
		• Baseline comparisons of those lost to follow-up and those retained, overall and by study condition.	N/A	
		• Comparison between study population at baseline and target population of interest.	<input checked="" type="checkbox"/>	(see 21)
Baseline equivalence	15	• Data on study group equivalence at baseline and statistical methods used to control for baseline differences.	<input checked="" type="checkbox"/>	Table 1
Numbers analyzed	16	• Number of participants (denominator) included in each analysis for each study condition, particularly when the denominators change for different outcomes; statement of the results in absolute numbers when feasible.	<input checked="" type="checkbox"/>	Table 3, Supplement 4.
		• Indication of whether the analysis strategy was “intention to treat” or, if not, description of how non-compliers were treated in the analysis.	<input checked="" type="checkbox"/>	RESULTS, Table 3, paragraph 6 and 7, Supplement 4
Outcomes and estimation	17	• For each primary and secondary outcome, a summary of results for each estimation study condition, and the estimated effect size and a	<input checked="" type="checkbox"/>	Table 3, Supplement 4

		confidence interval to indicate the precision.		
		<ul style="list-style-type: none"> • Inclusion of null and negative findings. 	N/A	
		<ul style="list-style-type: none"> • Inclusion of results from testing pre-specified causal pathway through which the intervention was intended to operate, if any. 	N/A	
Ancillary analyses	18	<ul style="list-style-type: none"> • Summary of other analyses performed, including subgroup or restricted analyses, indicating which are pre-specified or exploratory. 	<input checked="" type="checkbox"/>	RESULTS, paragraph 8
Adverse events	19	<ul style="list-style-type: none"> • Summary of all important adverse events or unintended effects in each study condition (including summary measures, effect size estimates, and confidence intervals). 	<input checked="" type="checkbox"/>	Table 3, Supplement 4 RESULTS, Secondary outcomes
Discussion				
Interpretation	20	<ul style="list-style-type: none"> • Interpretation of the results, taking into account study hypotheses, sources of potential bias, imprecision of measures, multiplicative analyses, and other limitations or weaknesses of the study. 	<input checked="" type="checkbox"/>	DISCUSSION, paragraph 1-3, 7-10
		<ul style="list-style-type: none"> • Discussion of results taking into account the mechanisms by which the intervention was intended to work (causal pathways) or alternative mechanisms or explanations. 	<input checked="" type="checkbox"/>	DISCUSSION, paragraph 1
		<ul style="list-style-type: none"> • Discussion of the success of and barriers to implementing the intervention, fidelity of implementation. 	<input checked="" type="checkbox"/>	DISCUSSION paragraph 2, Implications
		<ul style="list-style-type: none"> • Discussion of research, programmatic, or policy implications. 	<input checked="" type="checkbox"/>	DISCUSSION Implications
Generalizability	21	<ul style="list-style-type: none"> • Generalizability (external validity of the trial findings) taking into account the study population, the characteristics of the intervention, length of follow-up, incentives, compliance rates, specific sites/settings involved in the study and other contextual issues. 	<input checked="" type="checkbox"/>	DISCUSSION Generalizability
Overall Evidence	22	<ul style="list-style-type: none"> • General interpretation of the results in the context of current evidence and current theory. 	<input checked="" type="checkbox"/>	DISCUSSION Implications