

TREND Statement Checklist

Paper Section/ Topic	Item No	Descriptor	Reported on Page Number/Line Number	Reported on Section/Paragraph
Title and Abstract				
Title and Abstract	1	• Information on how unit were allocated to interventions	2/34-39	abstract/2
		• Structured abstract recommended	2-3/27,34,44,54	abstract/1-4
		• Information on target population or study sample	2-3/44-56	abstract/3-4
Introduction				
Background	2	• Scientific background and explanation of rationale	3/62-73	introduction/1
		• Theories used in designing behavioral interventions	3-4/74-87	introduction/2
Methods				
Participants	3	• Eligibility criteria for participants, including criteria at different levels in recruitment/sampling plan (e.g., cities, clinics, subjects)	4/93-106	methods/1
		• Method of recruitment (e.g., referral, self-selection), including the sampling method if a systematic sampling plan was implemented	4/93-106	methods/1
		• Recruitment setting	4/105-106	methods/1
		• Settings and locations where the data were collected	4/105-106	methods/1
Interventions	4	• Details of the interventions intended for each study condition and how and when they were actually administered, specifically including:	4-5/110-120	methods/2
		o Content: what was given?	4-5/110-120	methods/2
		o Delivery method: how was the content given?	4-5/110-120	methods/2
		o Unit of delivery: how were the subjects grouped during delivery?	4-5/110-120	methods/2
		o Deliverer: who delivered the intervention?	4-5/110-120	methods/2
		o Setting: where was the intervention delivered?	4-5/110-120	methods/2
		o Exposure quantity and duration: how many sessions or episodes or events were intended to be delivered? How long were they intended to last?	4-5/110-120	methods/2

		<ul style="list-style-type: none"> o Time span: how long was it intended to take to deliver the intervention to each unit? 	4-5/110-120	methods/2
		<ul style="list-style-type: none"> o Activities to increase compliance or adherence (e.g., incentives) 	NA	NA
Objectives	5	<ul style="list-style-type: none"> • Specific objectives and hypotheses 	5/124-133	methods/3
Outcomes	6	<ul style="list-style-type: none"> • Clearly defined primary and secondary outcome measures 	5/124-133	methods/3
		<ul style="list-style-type: none"> • Methods used to collect data and any methods used to enhance the quality of measurements 	5/124-133	methods/3
		<ul style="list-style-type: none"> • Information on validated instruments such as psychometric and biometric properties 	5/124-133	methods/3
Sample Size	7	<ul style="list-style-type: none"> • How sample size was determined and, when applicable, explanation of any interim analyses and stopping rules 	5/117-119	methods/2
Assignment Method	8	<ul style="list-style-type: none"> • Unit of assignment (the unit being assigned to study condition, e.g., individual, group, community) 	NA	NA
		<ul style="list-style-type: none"> • Method used to assign units to study conditions, including details of any restriction (e.g., blocking, stratification, minimization) 	4-5/110-117	methods/2
		<ul style="list-style-type: none"> • Inclusion of aspects employed to help minimize potential bias induced due to non-randomization (e.g., matching) 	NA	NA
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; if so, statement regarding how the blinding was accomplished and how it was assessed. 	NA	NA
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) 	NA	NA
		<ul style="list-style-type: none"> • If the unit of analysis differs from the unit of assignment, the analytical method used to account for this (e.g., adjusting the standard error estimates by the design effect or using multilevel analysis) 	NA	NA
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 	5/137-143	methods/4
		<ul style="list-style-type: none"> • Statistical methods used for additional analyses, such as a subgroup analyses and adjusted analysis 	5/137-143	methods/4
		<ul style="list-style-type: none"> • Methods for imputing missing data, if used 	5/137-143	methods/4
		<ul style="list-style-type: none"> • Statistical software or programs used 	5/137-143	methods/4
Results				
Participant flow	12	<ul style="list-style-type: none"> • Flow of participants through each stage of the study: enrollment, assignment, allocation, and intervention exposure, follow-up, analysis (a diagram is strongly recommended) 	NA	NA
		<ul style="list-style-type: none"> o Enrollment: the numbers of participants screened for eligibility, found to be eligible or not eligible, declined to be enrolled, and enrolled in the study 	NA	NA

		<ul style="list-style-type: none"> o Assignment: the numbers of participants assigned to a study condition 	NA	NA
		<ul style="list-style-type: none"> o Allocation and intervention exposure: the number of participants assigned to each study condition and the number of participants who received each intervention 	NA	NA
		<ul style="list-style-type: none"> o 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 	NA	NA
		<ul style="list-style-type: none"> o Analysis: the number of participants included in or excluded from the main analysis, by study condition 	NA	NA
		<ul style="list-style-type: none"> • Description of protocol deviations from study as planned, along with reasons 	NA	NA
Recruitment	13	<ul style="list-style-type: none"> • Dates defining the periods of recruitment and follow-up 	NA	NA
Baseline Data	14	<ul style="list-style-type: none"> • Baseline demographic and clinical characteristics of participants in each study condition 	6/149-153	results/1
		<ul style="list-style-type: none"> • Baseline characteristics for each study condition relevant to specific disease prevention research 	6/149-153	results/1
		<ul style="list-style-type: none"> • Baseline comparisons of those lost to follow-up and those retained, overall and by study condition 	6/149-153	results/1
		<ul style="list-style-type: none"> • Comparison between study population at baseline and target population of interest 	6/149-153	results/1
Baseline equivalence	15	<ul style="list-style-type: none"> • Data on study group equivalence at baseline and statistical methods used to control for baseline differences 	NA	NA
Numbers analyzed	16	<ul style="list-style-type: none"> • 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 	NA	NA
		<ul style="list-style-type: none"> • Indication of whether the analysis strategy was “intention to treat” or, if not, description of how non-compliers were treated in the analyses 	NA	NA
Outcomes and estimation	17	<ul style="list-style-type: none"> • For each primary and secondary outcome, a summary of results for each estimation study condition, and the estimated effect size and a confidence interval to indicate the precision 	6/157-164	results/2
		<ul style="list-style-type: none"> • Inclusion of null and negative findings 	NA	NA
		<ul style="list-style-type: none"> • Inclusion of results from testing pre-specified causal pathways through which the intervention was intended to operate, if any 	NA	NA
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 	NA	NA
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) 	6/168-174	results/3

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 	6-7/178-191	discussion/1
		<ul style="list-style-type: none"> • Discussion of results taking into account the mechanism by which the intervention was intended to work (causal pathways) or alternative mechanisms or explanations 	7/192-210	discussion/2
		<ul style="list-style-type: none"> • Discussion of the success of and barriers to implementing the intervention, fidelity of implementation 	7-8/211-223	discussion/3
		<ul style="list-style-type: none"> • Discussion of research, programmatic, or policy implications 	8/224-235	discussion/4
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 	8/236-239	discussion/5
Overall Evidence	22	<ul style="list-style-type: none"> • General interpretation of the results in the context of current evidence and current theory 	8-9/243-249	conclusion/1

From: Des Jarlais, D. C., Lyles, C., Crepaz, N., & the Trend Group (2004). Improving the reporting quality of nonrandomized evaluations of behavioral and public health interventions: The TREND statement. *American Journal of Public Health*, 94, 361-366. For more information, visit: <http://www.cdc.gov/trendstatement/>

Article information: <https://dx.doi.org/10.21037/atm-22-77>

*As the checklist was provided upon initial submission, the page number/line number reported may be changed due to copyediting and may not be referable in the published version. In this case, the section/paragraph may be used as an alternative reference.