

ESI 2.1: Comparing the RANAS approach to systematic behavior change with KAP surveys

Most behavior change interventions in the Water, Sanitation and Hygiene (WaSH) sector are preceded and followed by a Knowledge, Attitudes and Practice (KAP) survey to inform and evaluate the interventions. While there

are similarities between KAP surveys and the RANAS approach, the two approaches differ in several crucial aspects.

Comparison of KAP surveys and the RANAS approach		
KAP surveys	RANAS approach	Advantage of the RANAS approach
Limited scope of potential behavioral factors: <ul style="list-style-type: none"> • Knowledge • Attitudes 	Broad scope of potential behavioral factors: <ul style="list-style-type: none"> • Risk factors (knowledge) • Attitude factors • Norm factors • Ability factors • Self-regulation factors 	Scope is in line with the existing scientific evidence that has proven that knowledge and attitudes are neither the only nor the most important determinants of behavior.
Different surveys do not define knowledge, attitudes, and practice consistently. Therefore survey questions, even for the same behavior and population, vary significantly.	Risk, attitudinal, norm, ability and self-regulation factors and behavioral outcomes have been precisely defined. This allows the consistent formulation of survey questions. Cf. Methodological Fact Sheet 3.	Consistent survey questions maximize the comparability between surveys.
Data analysis is limited to calculating frequencies or mean values of knowledge, attitudes and practice in a target population.	Data analysis is based on doer/non-doer analysis comparing the frequencies or mean values in potential behavioral factors between doers and non-doers in a target population. Cf. Methodological Fact Sheet 5.	Doer/non-doer analyses allow determining the behavior steering factors in a target population. These are the factors to be tackled within interventions.
Do not imply a method to derive interventions based on the results.	Provides clear instructions to select interventions based on the results. Cf. Methodological Fact Sheet 4.	Instead of at discretion, interventions are selected systematically and data-based, i.e. tailored to the target population.
Have not been scientifically tested.	Has been scientifically tested.	Its capacity to explain behavior and to reliably inform interventions has consistently been demonstrated.
Evaluate interventions through before/after analysis.	Evaluate interventions through before-after control trials.	Allows identification of the interventions' impact on behavior change.

Electronic supplementary information 2.1

In sum, while causing negligible additional costs over those of KAP surveys, the RANAS approach has the advantages of (1) considering a broad range of precisely defined behavioral factors, (2) providing a systematic and data-based method of selecting interventions, and (3) evaluating their impact conclusively.