

# What is the extent of theory in computer-based sexual health promotion interventions?

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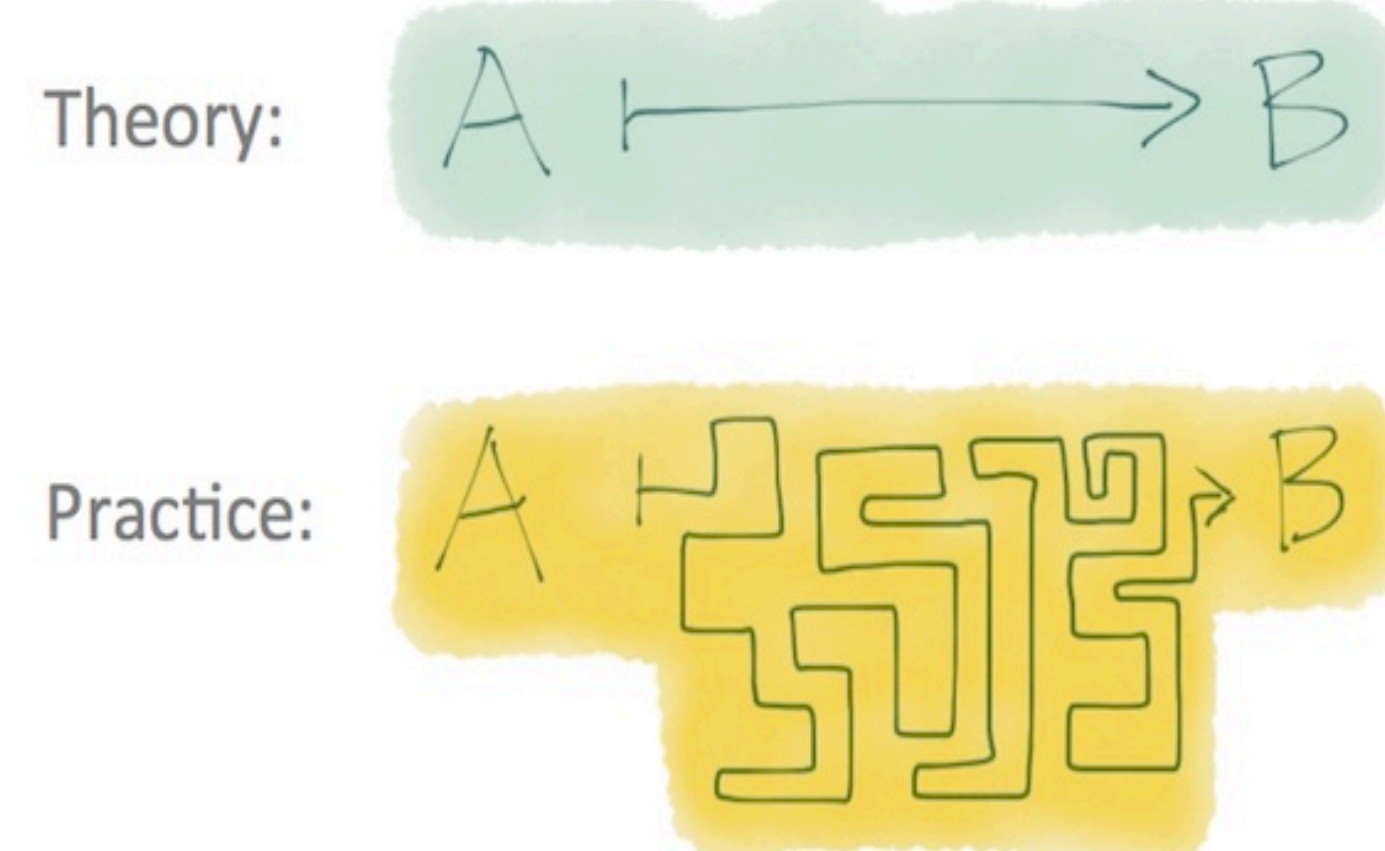
## BACKGROUND

Sexual health is a critical component of health and well-being that remains a public health challenge. To date, many sexual health interventions have had mixed success at preventing sexually transmitted infections (STIs) and HIV/AIDS.<sup>1</sup>

One strategy in ensuring greater success of sexual health interventions is to use behaviour change theory as a guide for the development and implementation of interventions. Behaviour change theory allows for greater understanding of the intrinsic and extrinsic factors that influence an individual's motivations for change.<sup>2,3</sup>

Studies have shown that interventions are more likely to succeed when theory is used in the development and implementation process.<sup>2,3</sup> However, many researchers continue to use theory as a loose framework without explicitly applying or testing it.<sup>4</sup>

Currently, it is unknown how behaviour change theory is used in computer-based sexual health interventions.



## OBJECTIVE

To examine a recent systematic review on computer-based sexual health promotion interventions to determine the extent of behaviour change theory use to inform, develop, and test the interventions.

## METHODS

We conducted an in-depth secondary analysis of a Cochrane systematic review and meta-analysis on computer-based interventions for sexual health promotion<sup>1</sup>. Studies included in the review examined the effects of self-help interactive computer-based interventions (ICBIs) for sexual health promotion.

The quality of the systematic review was assessed using the PRISMA 2009 checklist.<sup>5</sup>

The extent and type of theory use was assessed using the Theory Coding Scheme (TCS) – a reliable method for assessing the extent to which behavioural interventions are theory-based.<sup>4</sup>

Two independent reviewers used the TCS to code the fifteen primary studies.

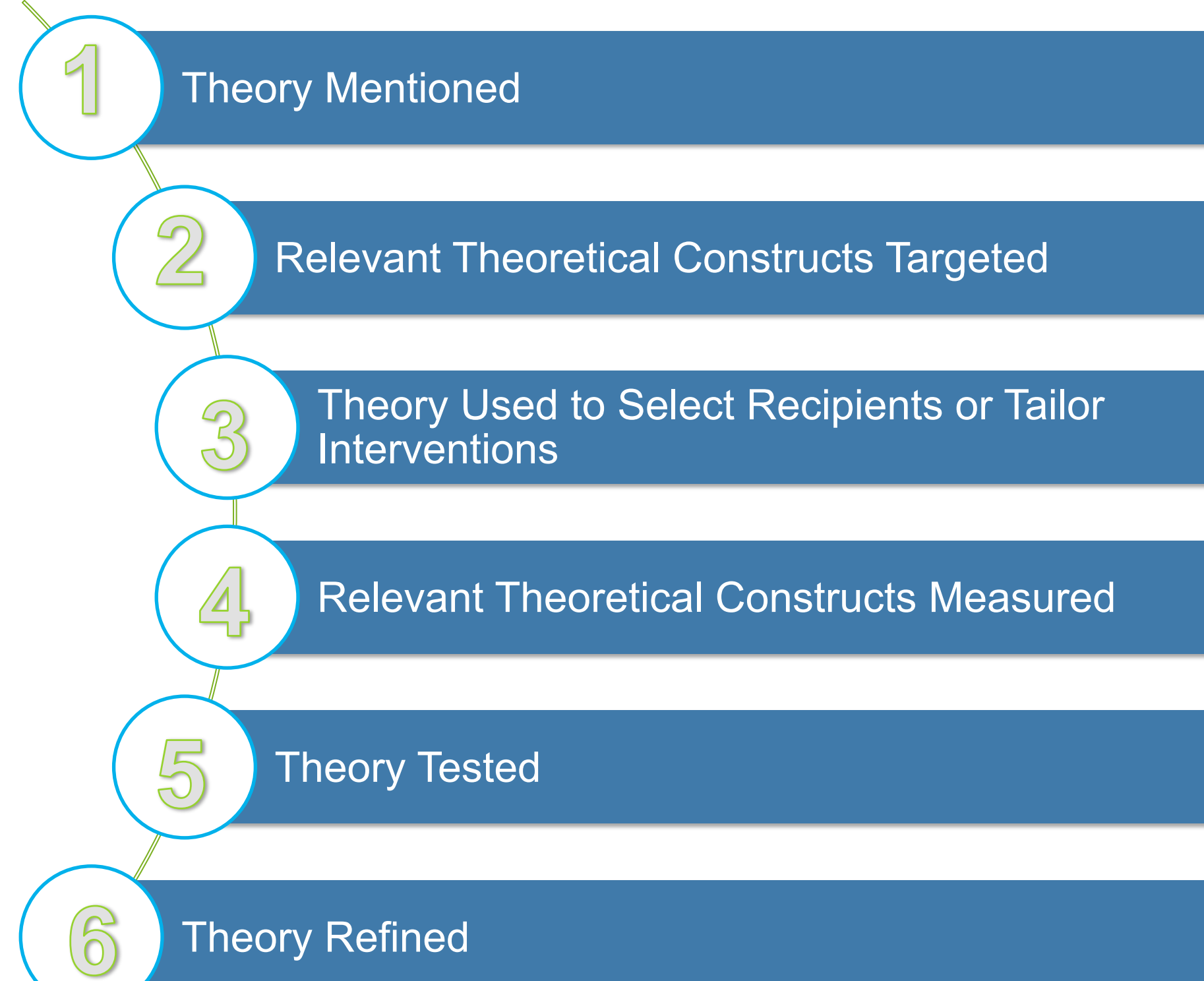


Figure 1. Six categories of the Theory Coding Scheme.

## ANALYSIS

The percentage of studies that were coded “yes” for each item on the TCS was calculated to assess the extent to which studies used theory to inform, develop, and test the interventions.

Data were extracted and grouped according to the six categories of the TCS (Figure 1).

## RESULTS

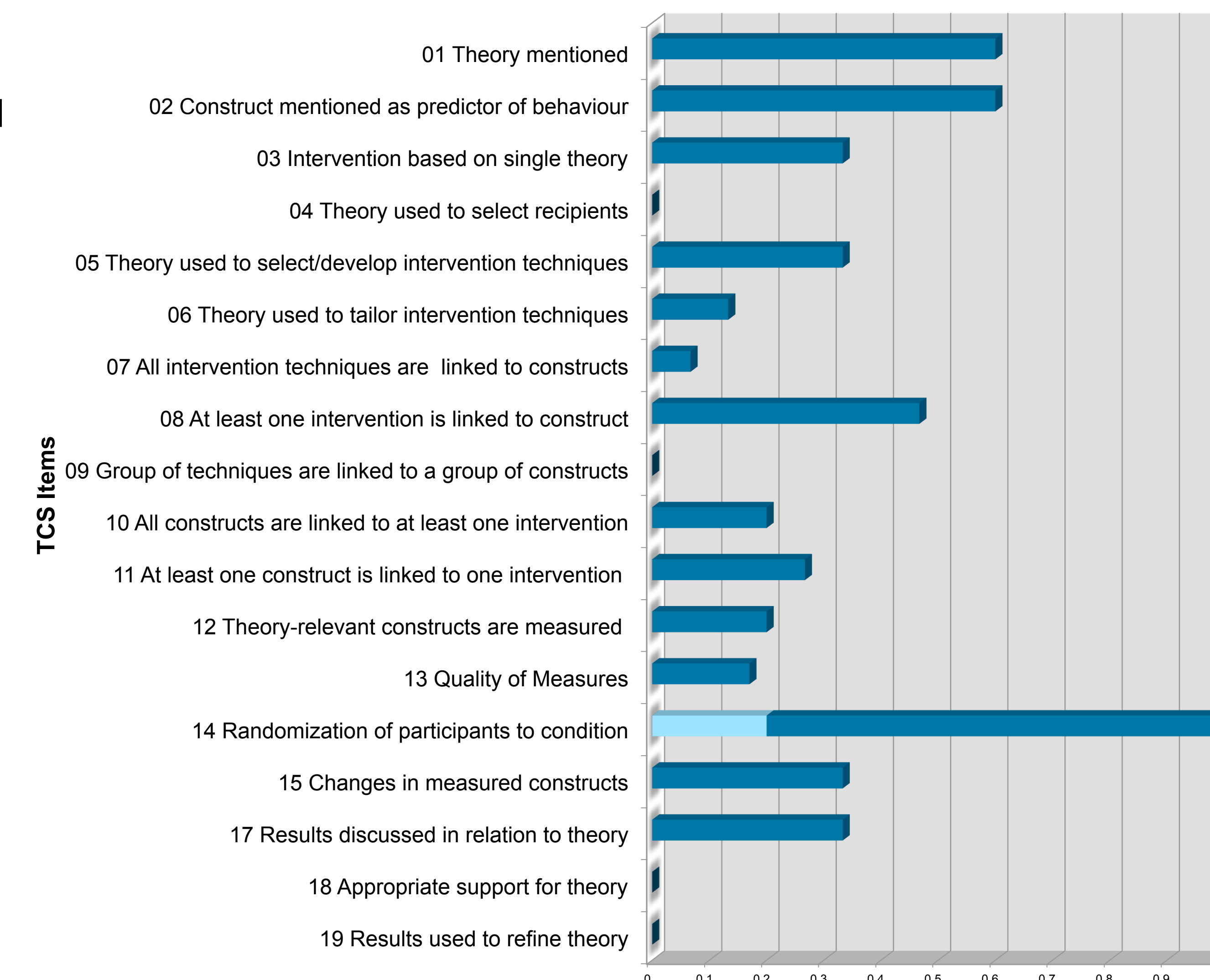


Figure 2. Percent of studies that coded yes to each TCS item. Light blue = Percentage of studies that described random allocation and randomization testing.

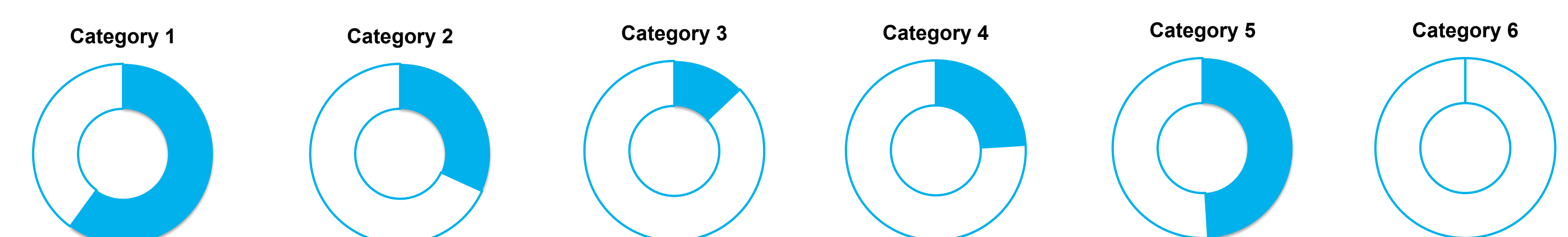


Figure 3. Percent of items coded yes by TCS Category.

## DISCUSSION

TCS provided a useful method for examining the use of theory in intervention studies on sexual health promotion. The coding of theory in these studies suggests that behaviour change theory is not used extensively in the development or testing of computer-based sexual health interventions.

Health intervention researchers can use the TCS in multiple ways:

1. Systematic measure of theory
2. Guide to ensure theory is used in study
3. Guide for writing results of intervention studies

When conducting behaviour change intervention research, further efforts are needed to develop explicit links between the theory, mechanisms of action, and study outcomes. Such efforts would advance our understanding of the factors that influence an individual's motivations for behaviour change and aid in improving the effectiveness of health behaviour interventions.

## References

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