**Rationale for agent rules:** *Why did you give the agents these rules?*

Assumption development was based on studies drawn from the scientific literature.

In order to…. [ stuff here that I couldn’t decide on]

*[Explanation of theories of petty, etc. \*\*\*]*

**Networks Rationale:**

Researchers have repeatedly identified that social networks are crucial in examining the spread of different types of infections, as well as attitudes – many of these have specifically been on STDs like HIV/AIDS during the early 90s or whatever. However, difference between a social network and a infection spread network, may not coincide.

**My major inspiration source explanation…?/research background**

Couldn’t find any research articles/scholarly theories specifically geared towards development of attitudes and/or knowledge regarding safe sex and condom usage, so I used existing literature relating to attitude development/certainty in general. The majority/Most of my assumptions were derived from the work of Tormala and Rucker (2007), who reviewed existing literature about attitude certainty over the past XX years, and additionally proposed a model of [something]. ... metacognitive/multifactor model of attitude certainty attributional logic model

In trying to address the question “How do people’s perceptions of their own responses to persuasive messages affect attitude certainty?” (pg. ???) The authors propose/take an approach that "focused on the metacognitive factors that shape attitude certainty" (475). Through their research, which "focused primarily on the way attitude certainty is influenced by people’s encounters with persuasive messages" (p. 475), they "[suggest] that people "form attribution-like inferences about their attitudes" (475) and can become either more or less certain of their attitudes following an encounter with a persuasive message, depending on their perceptions of their response to that message and the situation in which it occurs." (p. 476). 🡪 reference the “appraisals” terminology??

By "focus[ing] on two forms of attitude certainty: attitude clarity and attitude correctness." (p. 482), the authors "… have proposed a multifactor model of attitude certainty, suggesting that the general state of attitude certainty … might reflect a number of different certainty- type assessments." (p. 482)

"Furthermore, we posit that these effects can occur in the absence of any differences in the structure of people’s attitudes or the underlying content of their cognition" (p. 475)

"… That is, regardless of whether people actually were resistant to or persuaded by a message, or whether their resistance or persuasion was correct or impressive in some way, they can become more or less certain of their attitudes when their subjective assessment of their message response leads them to a positive or negative appraisal, respectively." (p. 476)

However, I changed some of the terminology in order to be more clear, and also chose to focus more on attitude than certainty… kind of made it my own in a way that was easier to understand. Transition to my choice of attitude, certainty, justification, and how they are defined and justified, and influence likelihood.

**Parameters influencing safe sex likelihood 🡪 (Attitude, Certainty, Justification) Rationale:**

**Terms Tormena and Rucker used and equivalents to how I used them in my model….?**

Tormala and Rucker define attitude certainty as “the sense of conviction one has about one’s attitude, or the extent to which one feels confident or sure about one’s attitude.” (p. ???, 2007)

Types of attitude certainty:

Attitude Clarity

Attitude Correctness

Terms:

Petrocelli et al. (2007)… determined/reasoned/found through (analysis of surveys or something?) "… [attitude] clarity and [attitude] correctness could be measured separately, and each appeared to explain unique variance in global feelings of attitude certainty." (Petrocelli et al. 2007, p. 482)

Petrocelli et al. (p. 483)

Increased clarity: "repeatedly expressing the same attitude should facilitate the subjective sense that one knows what one’s attitude on a topic is"

No change to correctness: "without making that attitude seem any more correct or valid."

Increased correctness: "believing that other individuals share one’s attitude should bolster one’s sense that that attitude is valid or justified"

No change to clarity: "without making it seem any more one’s own."

**Certainty Rationale/Explanation** *(actually the focus of/studied by tormala/rucker)*

[One reason that?] attitude certainty is/has been of interest in research/scientific/scholarly literature in part because (one of) the most notable consequence(s) of attitude certainty is attitude-behavior correspondence...since/and/as "it is well established that high certainty attitudes are more predictive of behavior than low certainty attitudes (…)." (p. 487), (and?) "as attitude certainty increases, attitudes become increasingly likely to guide behavior (...). " (p. 473)

Furthermore/Additional [important] consequences of attitude certainty include…

Additionally/furthermore, "attitude certainty [also?] has important implications for the durability and impact of an attitude.", (p. 473) including "an attitude’s tendency to resist persuasive attack, an attitude’s general persistence or stability over time, and people’s motivation to process new information. (p. 473)"

"Attitude certainty is considered to be a dimension of attitude strength" (p. 469) and in general, "strong attitudes are more likely to guide behavior, more likely to resist influence attempts, and more likely to persist across time" (p. 470)

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Chose mesosystem terminology based on Bronfenbrenner’s word, but not his theory (include this in rationale section or include in parameter section??) Some articles, especially the Hispanic one, suggest heavy family influence.

Other studies have explored the internet and other media. The general consensus seems to be that multimedia is the way to go (for interventions/adjusting behavior), but direction to these resources should ideally come from trusted people/role models in their lives… i.e. parental influence (mesosystem slider) still most important according to research I found.

**Justification Rationale/Explanation Knowledge/Justification:**

The feeling of greater knowledge "has been shown to foster greater attitude certainty (e.g., Smith, Fabrigar, MacDougal, & Wiesenthal, forthcoming)." (p. 471).

"Smith et al. (forthcoming) recently demonstrated that ... The more consistent one’s underlying [attitude-relevant] knowledge, the more certain one is of one’s attitude." (p. 472)

**Rationale for effects of behaviors in model:** *🡪 make more sense to do this alongside description of agent rules???*

**Actions involved in Talking to others:**

**Repeating self 🡪 Increased certainty**

As indicated in Tormala and Rucker’s (2007) review of attitude certainty, repeating one’s attitude to others has been shown to increase attitude certainty (p. 471).

"Petrocelli et al. reasoned that … repeated expression might increase feelings of attitude clarity but not correctness as repeatedly expressing the same attitude should facilitate the subjective sense that one knows what one’s attitude on a topic is without making that attitude seem any more correct or valid." (p. 483)

"repeated attitude expression, for instance, affects attitude certainty but not attitude ambivalence (Petrocelli et al., 2007)." (p. 485)

**Increased certainty 🡪 Less willing to listen to new info and/or change**

"…attitudes held with high certainty are more likely than attitudes held with low certainty to resist persuasive attacks or other influence attempts (…)." (p. 473)

"attitudes held with greater certainty are more persistent over time than attitudes held with less certainty (Bassili, 1996; see also Bizer et al., 2006)." (p. 474)

"high certainty tends to be associated with decreased information processing activity compared to low certainty (Edwards, 2003; Tiedens & Linton, 2001; Weary & Jacobson, 1997)." (p. 474)

"Conversely, uncertainty indicates that people do not have sufficient knowledge, and scrutinizing additional information offers one way to acquire knowledge and restore or establish certainty." (p. 474)

**Social consensus/similar attitudes**

Tormala & Rucker (2007) noted/observed/pointed out/summarized/concluded based on their research that…. People tend to be more certain of their attitudes when they believe other people hold similar attitudes. This may be because "attitude consensus, or perceived social support for one’s attitude," (p. ???), [also referred to as "social consensus" (p. 472) or "response similarity" (p. 480)] "is thought to signal that all the evidence points to the same attitude, which boosts attitude certainty if one holds that attitude oneself." (pp. 472-473) …"In essence, people infer validity from social consensus" (p. 472)

"When one’s own response matches (mismatches) the responses of others, one forms more positive (negative) response appraisals, producing higher (lower) levels of attitude certainty." (Tormala & Rucker, 2007, pp. 480-481)

"Petrocelli et al. reasoned that … attitude consensus, or perceived social support for one’s attitude, might influence feelings of attitude correctness but not clarity. The rationale in this case is that believing that other individuals share one’s attitude should bolster one’s sense that that attitude is valid or justified, without making it seem any more one’s own." (p. 483)

**Talking to others / Getting infected:**

As Tormala and Rucker summarized/noted through their review of literature, "people tend to be more certain of their attitudes when those attitudes are formed through direct (e.g., first hand interactions) rather than indirect (e.g., second hand viewing or reading) experience.” (Tormala & Rucker, 2007, pp. 470-471)

**Likelihood / Impact of factors**

description of coming up with the formula for likelihood, deciding on attitude, justification, certainty, etc. possibly include a chart

**Formula:**

* "univalent attitudes tend to be more resistant to persuasive attack (…) and more predictive of attitude-relevant behavior (…) than their ambivalent counterparts." (p. 485)
* "Participants’ attitudes were more resistant to this attack when they were high rather than low in clarity, as well as when they were high rather than low in correctness." (p. 484)
* "perhaps people become more certain of their newly changed attitudes when they believe those attitudes have been changed by strong, and thus valid, arguments." (p. 478)

**Why I chose the parameters I did for testing/data analysis**

(this is a good transition between rationale for model parameters and research, because research should have informed what stats I could reasonably use to model real life and get meaningful simulation results that could imply something about the world)

Females have better health practices, have more to lose from unprotected sex (pregnancy OR sti)

Reference the guiding question, and why that made me choose testing params I did