**Evolution of Model:**

I had originally been primarily interested in seeing how an STI that is symptomatic for only one gender travels through the population and potentially reaches some sort of stable state. However, based on the feedback I have received, I think I will focus more on the sexual attitudes and behaviors of agents in relation to the spread of STIs. Hopefully this will also more clearly distinguish my model from the AIDS or Virus model, which was a concern that both the TA and I had. I still need to find some supporting articles/other research in order to root some of the assumptions of my model.

Turtles will move around randomly mostly within a specified area, in order to try to recreate circles of friends or divisions of populations. This has not yet been implemented, but the NW extension or links may be used to confine movement. 🡪 got rid of movement, they stay in one place

network connections could potentially be a reasonable way to model friend circles, which could influence behavioral choices and attitudes towards sex and using protection.

Rather than having turtles generate a network, just generate it for them to simplify.

Mostly discrete social circles, with some social butterflies that have links to members of other social groups. [repeat sentence from above] (in creating this functionality, used Sophia sullivans final project on modeling commons as a starting point, then adjusted breeds and other parameters as necessary).

-- Determining what factors inform/influence attitudes towards safe sex (and consequently behaviors), and to what extent they do so [potential options: attitudes of parents/friends/sexual partners, infection history of self or friends, education/awareness of safe sex practices]

(duplicated from above)

🡪 Implementing (or deciding whether it is valid to implement) whether a particular gender is symptomatic of an STI, therefore becoming aware of it, getting treated, and potentially changing their future behaviors 🡪 originally this was up in the air, but I considered it essential for what I wanted to model, as symptomaticness of stis can play a big role (citation???) especially for young adult minds that Ihave not fully developed and may not see positive

Since sexual partner links will break any sort of link between 2 turtles when the relationship ends (rather than going back to being friends), turtles also have the chance/opportunity to make more links than their original number – this helped fix/account for all links between genders breaking and becoming discrete, gender-segregated friend groups, which isn’t realistic.

;; The initial number of friends that an agent had (num-friends)

;; is used as a maximum number of friend links to create

;; Otherwise, the agents will keep making way too many friends (eliminated the movement/shifting of positions)

;; and if updating layout is enabled, will keep moving closer,

;; and all cluster in middle of screen

* + Every agent, coupled or not, gets a chance to make a friend on each tick. everyone should attempt to make friends on each tick as well, because otherwise, all the sexual partner links break, then it becomes single-sex clusters and nothing cool happens

Limitation/assumption or evolution progress?? Not sure

cliques aren’t formed on the basis of shared attitudes (but would they really, in real life? Possibly based on education received, but it was hard to accurately do that through my implementation)

gender balance (or not balance?) cliques?? no, it is randomized

**decided to eliminate:**

* It will be assumed that if the agent detects symptoms, they get checked by a doctor, are diagnosed, and are gradually cured of the infection. (clarify this!! – duplicated above)

turtles also don’t randomly get tested, nor is likelihood of getting tested based on gender – this is better covered by other models (aids)

Additionally, there is a chance that a turtle will randomly get tested, despite whether they are currently symptomatic – this probability may also be impacted by their attitudes towards safe sex…. No, took this out

vocality - used certainty instead for simplification. but could be an extension? this model assumes that the agents are willing to talk about the sensitive topic of safe sex behaviors with their peers, which may not be true at all se

If a turtle is closely linked to another turtle of the appropriate gender to mate with, there is a probability they will mate. 🡪 got rid of strength of relationships

-- Investigating whether a female being on birth control is a valid parameter that might impact whether she chooses to engage in safe sex 🡪 didn’t find any supportive research

was interested in media/environment influences - since a lot of articles written during time that hiv/aids was exploding, prior to that condom use/protection/safe sex more about preventing pregnancy…. but left as extension for user

-- Implementing likelihood of proper use of sexual protection based on statistics, and consequently different potential rates of transmission

If the coupled turtles use protection, there is a probability of using it correctly – if protection is used correctly, it is assumed that the disease will not be passed on. If the protection is used incorrectly or no protection is used, there is a higher probability that the infection will be passed to the partner of the agent. 🡪 couldn’t find stats for std prevention, just pregnancy, this could be an extension \*\*

***Evolution of equation***

* rather than whole change happen only fraction of change - dampening
* First bug: realizing that including certainty was making negative people eventually go up to positive 🡪 certainty only impacts how much their **attitude/likelihood???** will change by talking to peers 🡪 **attitude/likelihood???** (change?) is a function of certainty, so updated **attitude/likelihood???** only depends on previous attitude and justification
* Second: distinguishing between likelihood and attitude
* likelihood higher than either attitude or justification alone…?? - can't force numerical score though (????) \*\*\*
* Third: incorporating if attitudes are too different
* Making sure the likelihood went in the right direction, dealing with scales 0-100 when maybe should’ve done -50 to 50 or -100 to 100
* Dealing with 0’s in equations