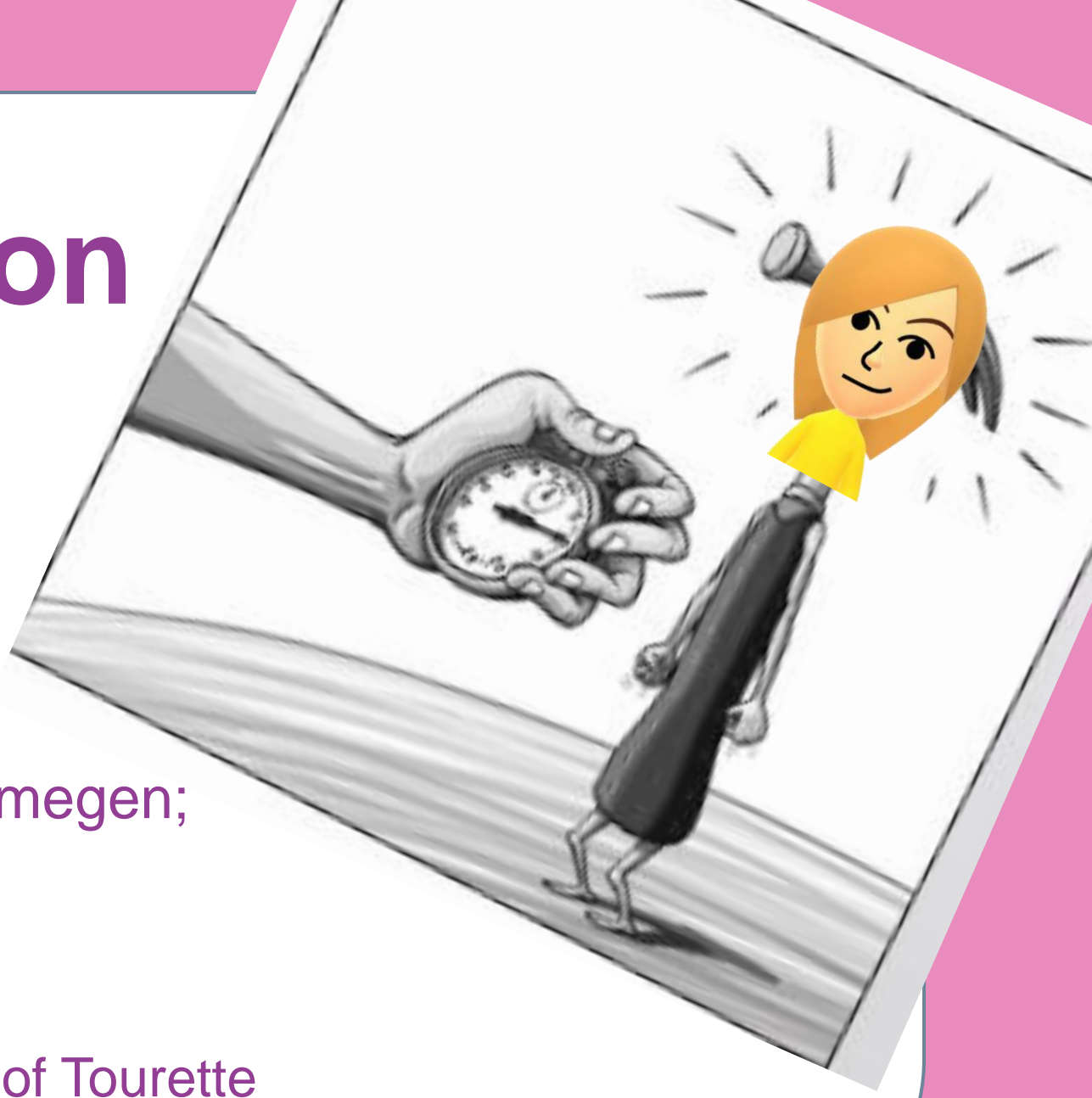


Working Mechanisms of Exposure and Response Prevention in the treatment of tic disorders

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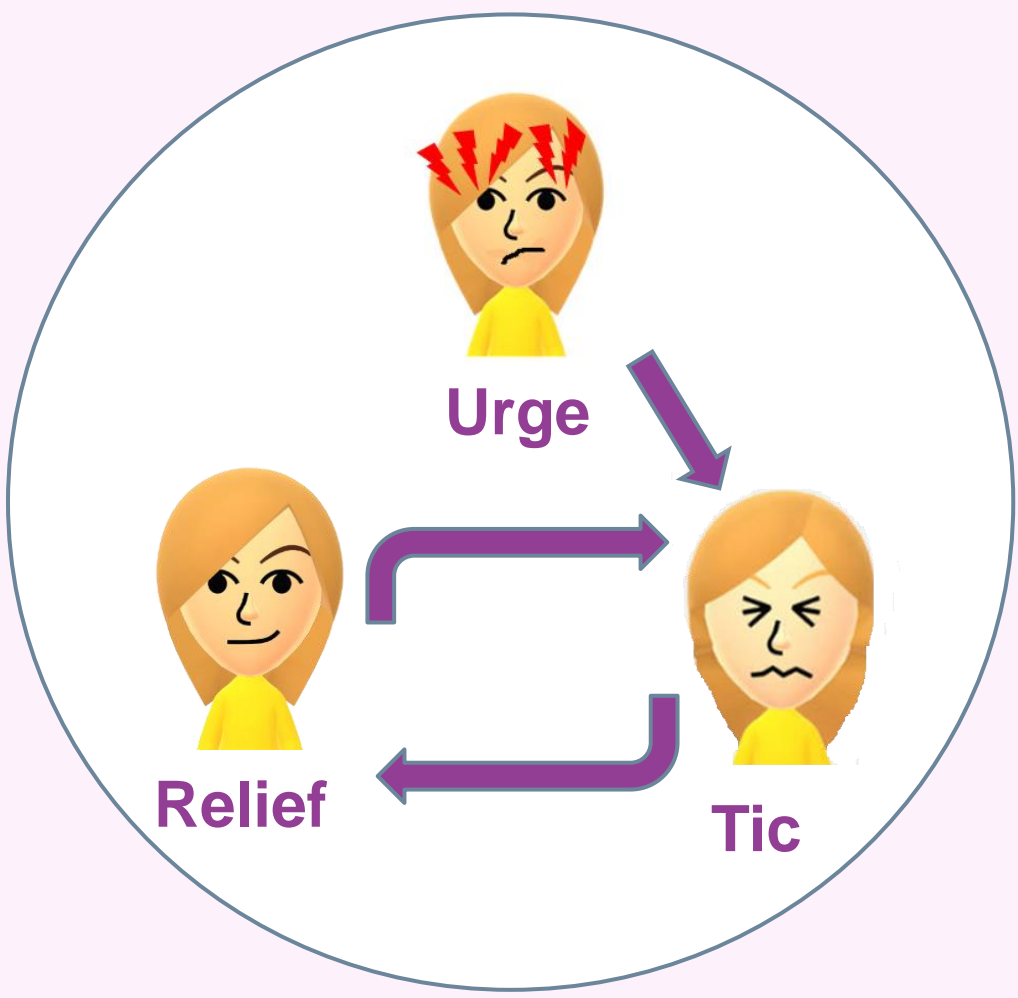
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van de Griendt JMTM, van den Berg NME, Verdellen CWJ, Cath DC, Verbraak MJPM. Working Mechanisms of Exposure and Response Prevention in the Treatment of Tourette Syndrome and Tic Disorders Revisited: No Evidence for within-Session Habituation to Premonitory Urges. *Journal of Clinical Medicine*. 2023; 12(22):7087. <https://doi.org/10.3390/jcm12227087>

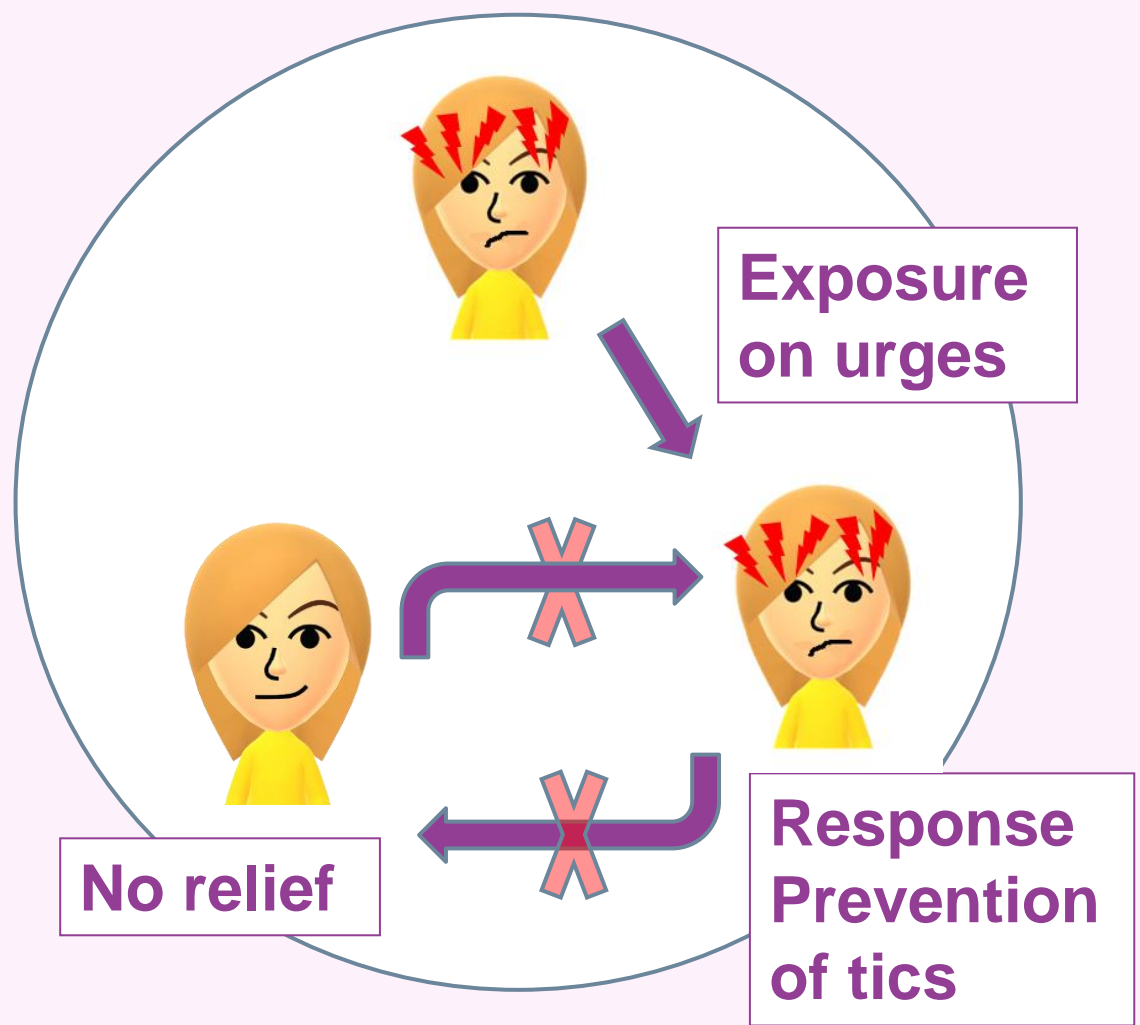


INTRODUCTION

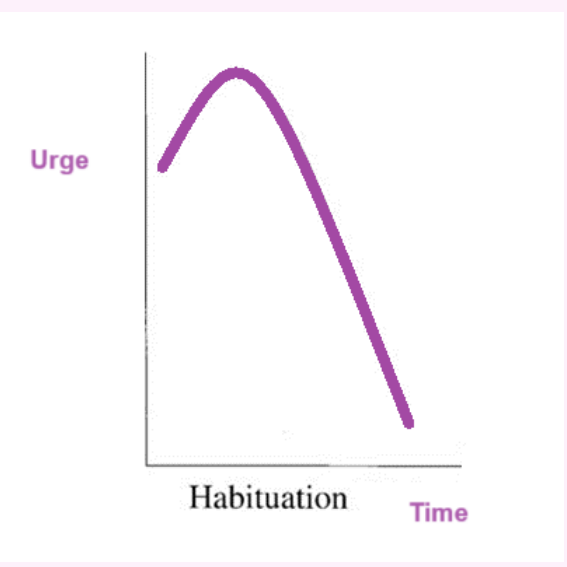
Negative reinforcement cycle of tics



Exposure and Response Prevention (ERP)



But what happens to the urge during ERP?
Hypothesis: raise & decline

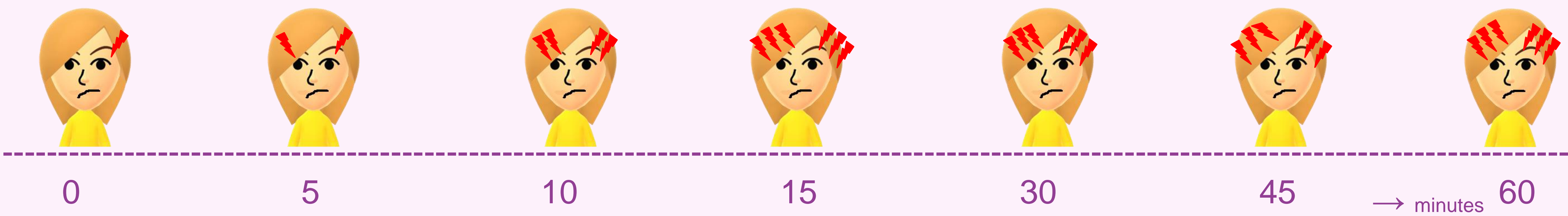


METHOD

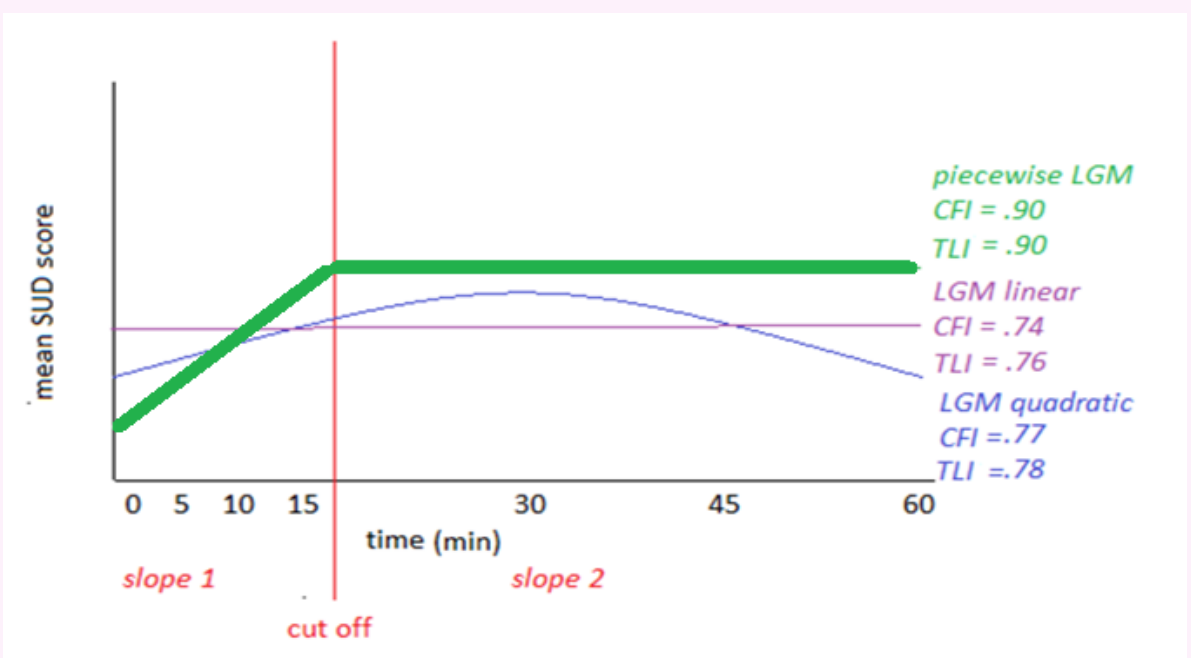
N=29 TS/CTD Age = 7-59 years (M18.0) 10 ERP sessions (60 mins) 7 timepoints (0-5-10-15-30-45-60 mins)
Up to 7 urges Urges on SUD Scale (0-4) > 10.000 measurement points Latent Growth Modeling

RESULTS

Average urge severity of all patients over all sessions



Latent Growth Modeling: most evidence for Piecewise model. An initial rise in urge severity during the first 15 min of sessions was followed by a stabilization for the remaining 45 min at this increased level.



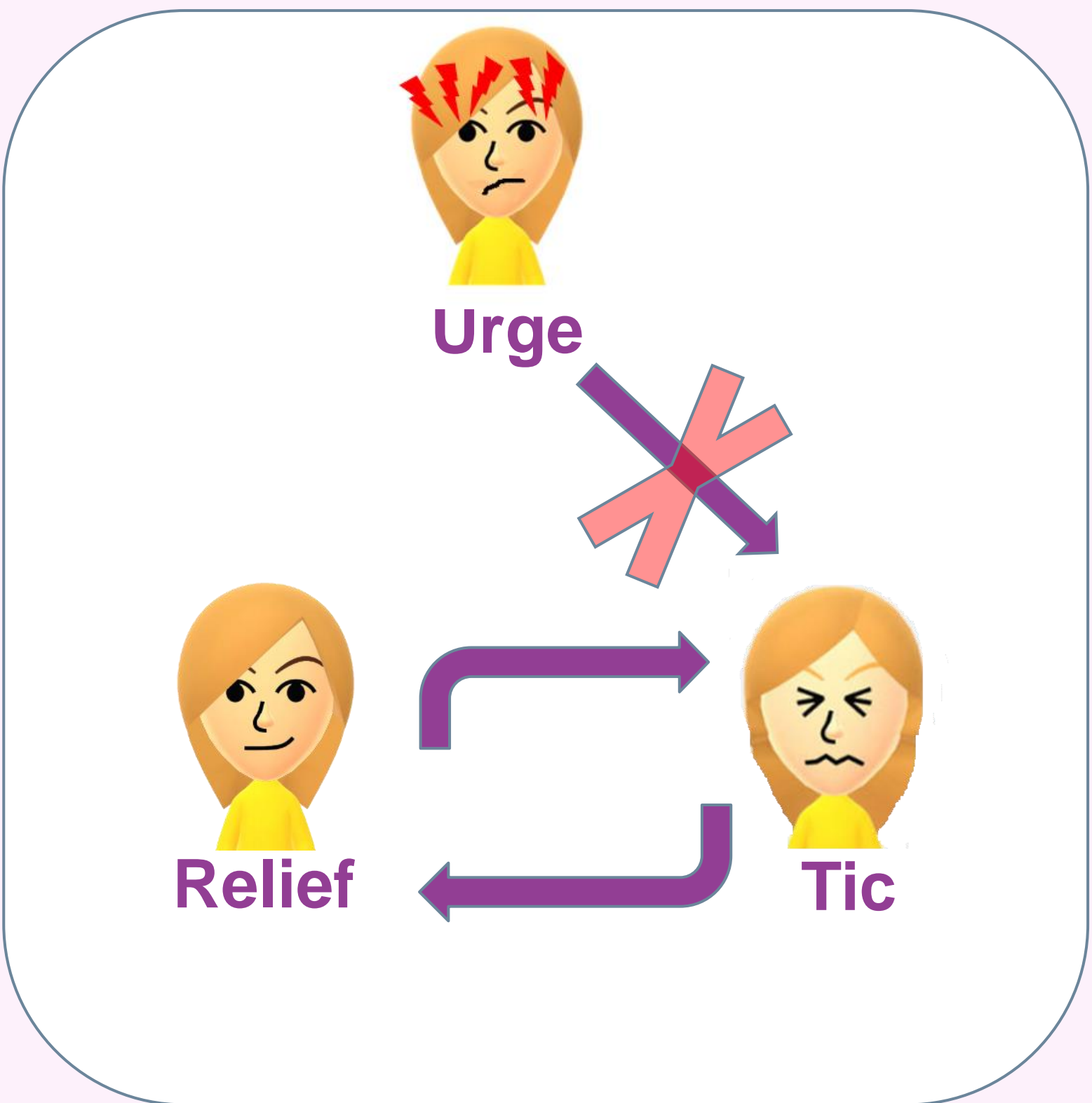
CONCLUSION

The results of this study did not support the habituation hypothesis; after a raise, urges stayed high and stable.

ALTERNATIVE HYPOTHESES

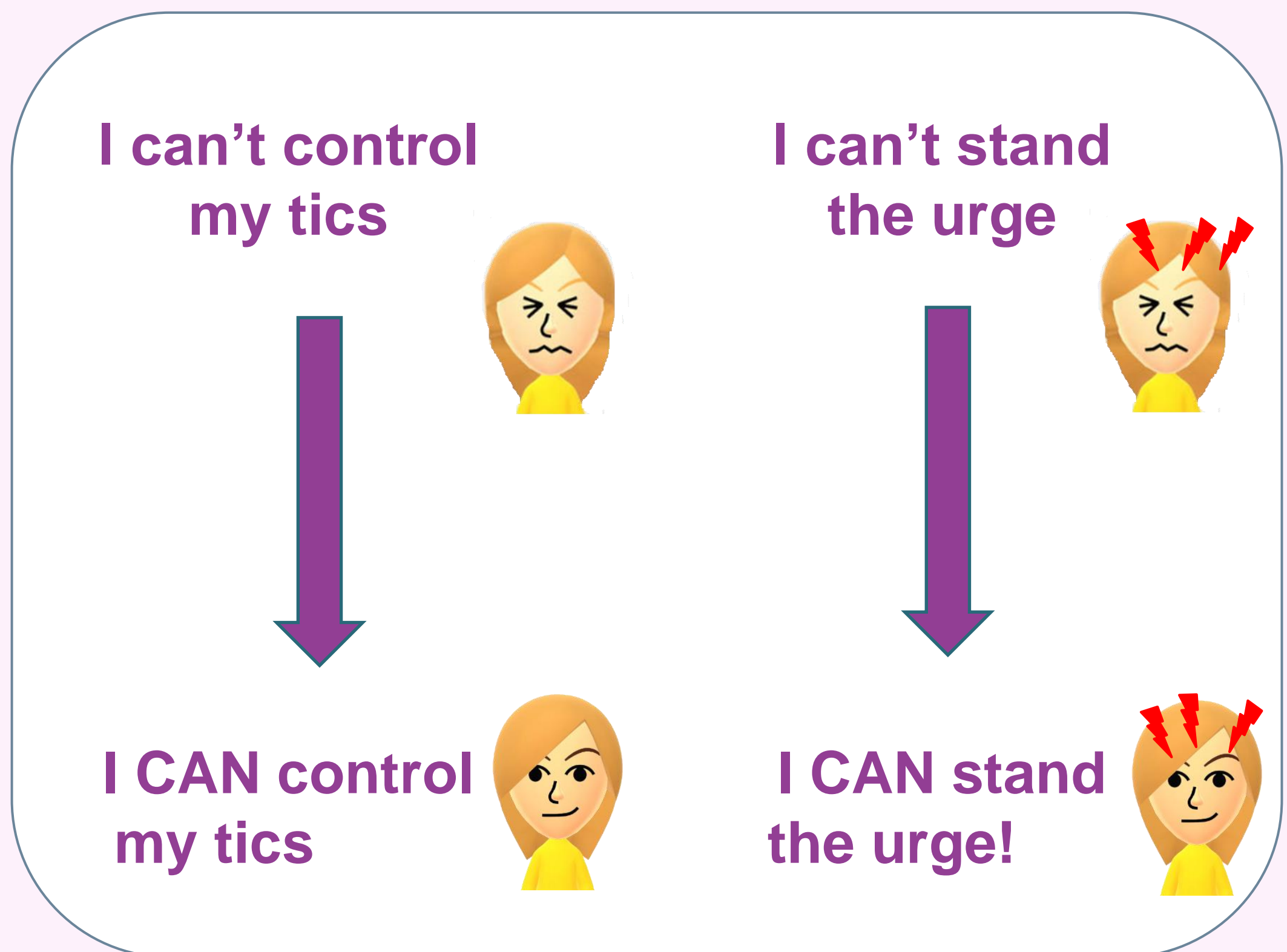
Instrumental Learning

Urge is (partly) independent of the tic; tic might be relieving in itself.



Disconfirmation of beliefs

Patients learn that they are competent to control their tics, even with high urges.



Inhibitory learning

A new pathway (urge-no tic) is learned next to the old one (urge-tic)

