

# Critical Review: Improving the Efficacy of Games for Change Using Personalization Models

This essay forms a critical review of Orji et al. [2017].

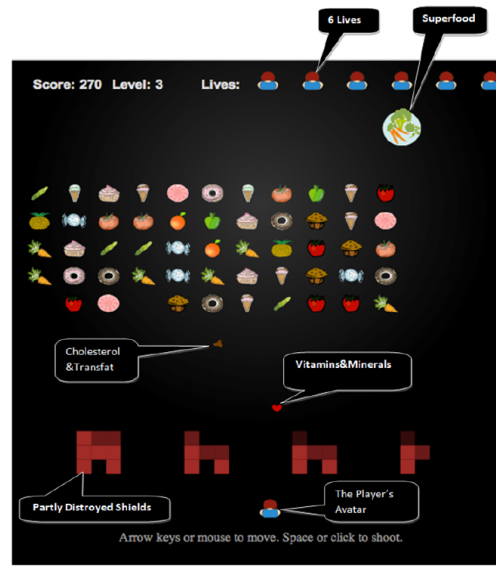


Figure 1: “Junk Food Aliens” (JFA): A persuasive game designed to change gamer behaviour towards healthy eating.

Table 1:  $\beta$  values: Strength of motivation of different players that result from different strategies.

Strategies Gamer type	CMPT/ CMPR	COOP	CUST	PERS	PRAS	SEMT/ SUGG	SIML	REWD
Achiever	-	.15	-	-	-	.10	-	.10
Conqueror	.25	-	-	.12	-	.12	.14	-
Daredevil	-.10	-	-	-	-	-.14	.11	-
Mastermind	.12	-	.10	.12	-	.14	.12	-
Seeker	.10	-	.19	.11	.10	-	-	-
Socializer	.11	.17	-.12	-	-.12	-.13	-	-
Survivor	.17	-.20	-.13	-	-	.27	-	-.14

CMPT/CMPR = competition and comparison, COOP = cooperation, CUST = customization, PERS = personalization, PRAS = praise, SEMT/SUGG = self-monitoring and suggestion, SIML = simulation, REWD = reward.

Level 4 Game Performance Leaderboard		
Rank	Player Name	Score
1st	Jean	950
2nd	Charles	886
3rd	June	785
4th	Rita	557
5th	Heather	531

Figure 2: Competition-based version of JFA.

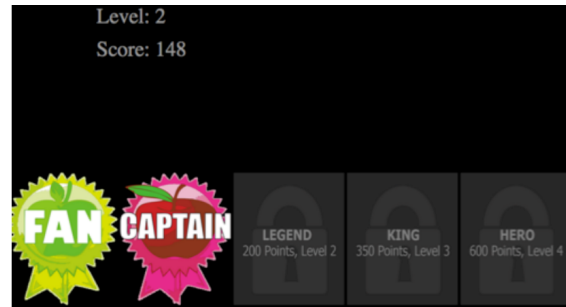


Figure 3: Reward-based version of JFA.

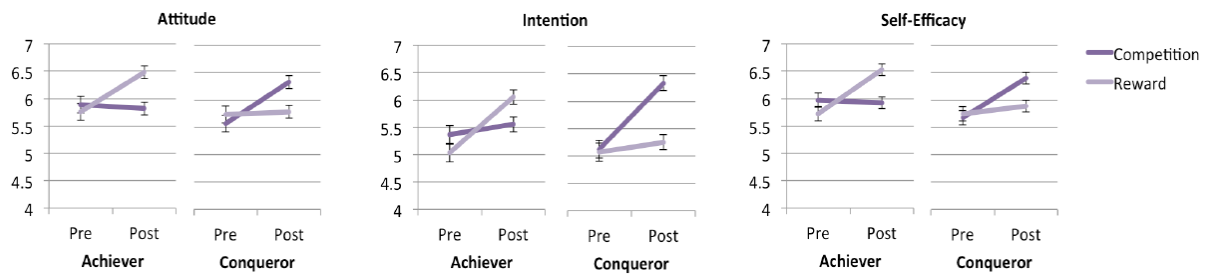
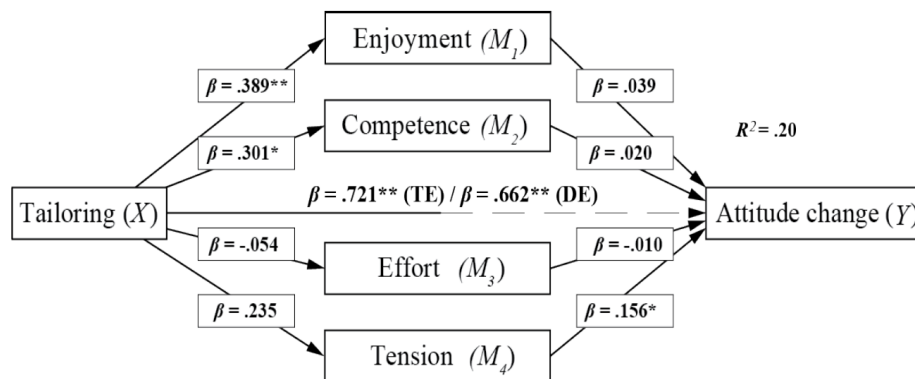
Figure 4: Mean values  $\pm$  SE for Attitude, Intention, and Self-Efficacy by Gamer type (Achiever, Conqueror) and Game version (Competition, Reward).

Figure 5: Parallel mediation model of tailoring on attitude change with play experience as mediator.

## References

Rita Orji, Regan L. Mandryk, and Julita Vassileva. Improving the efficacy of games for change using personalization models. *ACM Trans. Comput.-Hum. Interact.*, 24(5):32:1–32:22, October 2017. ISSN 1073-0516. doi: 10.1145/3119929. URL <http://doi.acm.org/10.1145/3119929>.