



Social Affect and Individual Differences in Lexical Entrainment

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In a nutshell

- ➤ What we know: Speakers tend to reuse words that a partner has used before (e.g., using the word *bunny* after a partner use *bunny*, i.e., Lexical Entrainment). This behaviour has been suggested to make communication easier (Clark, 1996); for instance, people tend to reuse words that their partner has heard before (and thus can understand) vs names that their partner has not heard before (i.e., Partner Effects; Brennan & Clark, 1996; Horton and Gerrig, 2002).
- ➤ What we want to know: But are Partner Effects in Lexical Entrainment only about making communication easier? Reusing a partner's word could also show pro-sociality (e.g., van Baaren, 2003), and as such it could interact with how speakers feel about their partner (i.e., Social Affect, Williams et al., 2000), which can in turn depend on Individual Differences in susceptibility to social influences (e.g., more cooperative or agreeable people might entrain more than neurotic people, who are prone to social anxiety, e.g., Gill et al., 2004; Newby et al., 2017).
- > What we predict: If partner effects in lexical entrainment have a pro-social component, participants should entrain to different extents to a partner with whom they have a previous non-linguistic relationship vs a partner with whom they have no previous relationship. In particular, partner effects should vary depending on whether a previous relationship with a partner is positive or negative. If these effects are mediated by individual differences in pro-sociality, partner effects should be predicted by personality traits (e.g., agreeableness and neuroticism)
- > What we found: Partner effects in lexical entrainment have a pro-social component that is mediated by personality traits. People entrain more often with new partners vs previous partners, particularly after being socially excluded by their previous partner. And this effect is mediated by Neuroticism: When people are socially excluded, more neurotic individuals are less likely to entrain than less neurotic individuals.

Procedure: 120 native speakers of British English tested with 2x2 between-participants factorial design

1. Experimental Manipulations

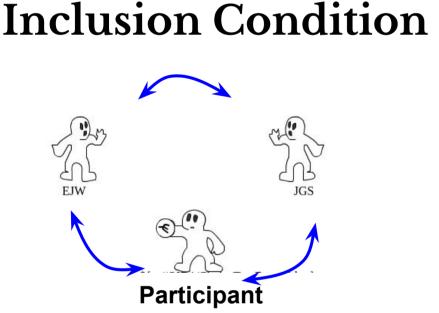
Social Affect

Partner Identity

Exclusion Condition

HBS AJR

Participant



Same Partner Condition

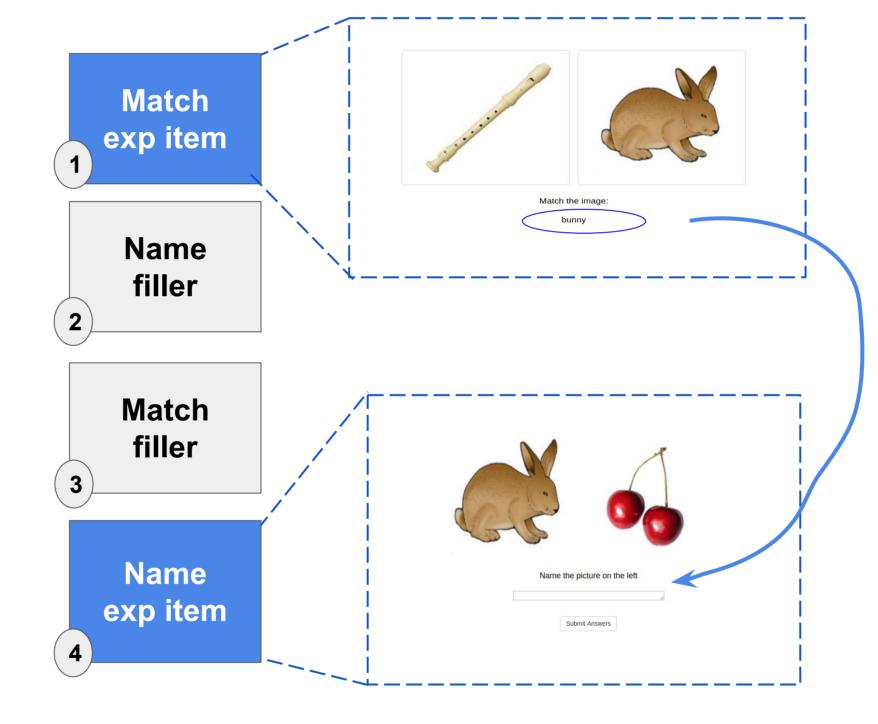
"Welcome back! Now you will play another online game.
You will be playing with someone you played the previous game with"

New Partner Condition

"Welcome back! Now you will play another online game. You will be playing with someone you haven't played before"

2. Lexical Entrainment Measure

Partner named targets before participants, always using a disfavoured name (*bunny* vs rabbit). And we measured whether participants used the same name as partner.



> Experimental Manipulations check

3. Personality Measure

- ➤ Big five (John et al., 1991) in next day session:
 - Neuroticism
 - Agreeableness
 - Extraversion
 - Openness
 - Conscientiousness

Materials Design

➤ Naming Task: create pairs of favoured and disfavoured labels (n=60)



➤ Rating Task: rate acceptability of disfavoured names (n=60)



Results

Entrainment Effect

Task Experiment Pre-Test Experiment Task Experiment Pre-Test

Figure 1 shows the difference between the percentage of use of dispreferred labels during the naming task (primed answer, red line) and during a spontaneous pre-test (spontaneous response, blue dotted line).

➤ Participants used the dispreferred label 35% of the time (SD=24%), and this tendency was above chance (V=1, p<.0001).

Partner Effect and Social Affect

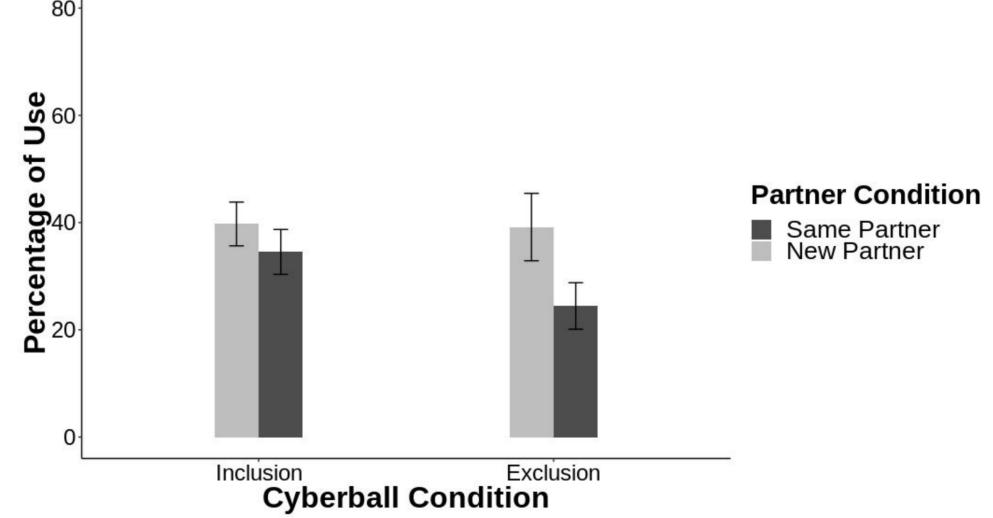


Figure 2 shows percentage of use of disfavoured names across Social Affect Conditions and Partner Conditions.

- > Participants entrained more often to a new partner (M=40%, SD=26%) vs an old partner (M=30%, SD=22%; B=.3, p=.035).
- ➤ Participants who were socially excluded entrained more often to a new partner (M=39%, SD=30%) vs someone who had socially excluded them (M=25%, SD=21%; B=.5, p=.03).

Personality

> Neuroticism.

- Participants who scored higher in Neuroticism entrained more often than those who scored lower (Beta:-.28, p=.045).
- o Importantly, Neuroticism predicted entrainment in the social exclusion condition (Beta:-.66, p<.01) but not in the social inclusion condition (Beta:.08, p>.05).
- > No Effect of Agreeableness.

Conclusions

- Taken together, these findings demonstrate that lexical entrainment is affected by social situational factors, and implicate a pro-social component to entrainment effects.
- > Strikingly, effects of social exclusion on speakers' tendency to lexically entrain are mediated by individual differences in Neuroticism.

References

1. Brennan, S. E., & Clark, H. H. (1996). Conceptual pacts and lexical choice in conversation. Journal of Experimental Psychology: Learning, Memory, and Cognition, 22(6), 1482. 2. Clark, H. H. (1996). Using language. 1996. Cambridge University Press: Cambridge, 952, 274-296. 3. Gill, Alastair J., Annabel J. Harrison, and Jon Oberlander. "Interpersonality: Individual differences and interpersonal priming." Proceedings of the Annual Meeting of the Cognitive Science Society. Vol. 26. No. 26. 2004. 4. John, O. P., Donahue, E. M., & Kentle, R. L. (1991). The big five inventory versions 4a and 54. 5. Newby, J., Pitura, V. A., Penney, A. M., Klein, R. G., Flett, G. L., & Hewitt, P. L. (2017). Neuroticism and perfectionism as predictors of social anxiety. Personality and Individual Differences 106, 263 267. 6. Van Baaren, R. B., Holland, R. W., Steenaert, B., & van Knippenberg, A. (2003). Mimicry for money: Behavioral consequences of imitation. Journal of Experimental Social Psychology, 39(4), 393-398. 7. Williams, K. D., Cheung, C. K., & Choi, W. (2000). Cyberostracism: effects of being ignored over the Internet. Journal of personality and social psychology, 79(5), 748.