# Psychological variables as supplements for dialectical systems

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This paper provides an insight from two psycholinguistic studies on persuasion that aim to supplement the strategic moves in dialogue games with effective tools of expertise, argument strength, message discrepancy and affect in the case of bilinguals speakers. Two dialectical systems by Snaith et al. (2018) and Janier et al. (2016) serve as a motivation for the rules specification that are to co-exist with the subtleties of these psychological factors in the cases of implicit and explicit post-message evaluations. A Likert scale was applied in both studies to measure premessage attitudes. LexTALE and Language History Questionnaire showed that study participants - native speakers of Polish, were highly proficient in English. They were recruited from the population of the students at the Faculty of English at Adam Mickiewicz University in Poznań. Study 1 used persuasive priming by argument strength and expertise. A modified version of the Implicit Association Test (IAT) and the Single-Item Evaluation Technique (SIET) created in the E-Prime software were used to measure postmessage implicit and explicit attitudes respectively. Recent experimental research has demonstrated that the experimental manipulation of persuasive conditions such as source expertise and strength of the message affects explicit evaluations of the message (Tormala, Briñol, & Petty 2006, Clark et al. 2012, Smith et al. 2013). Smith et al. (2013) showed that not only explicit but also implicit evaluations are affected more strongly when the message is presented by a source with high expertise than when it is presented by a source with low expertise (Smith et al. 2013). In the study performed by Smith et al. (2013), high expertise conditions vs. low expertise conditions were considered while the content of the message was kept constant. Some earlier studies proved, however, that the perceived expertise of the source is not a decisive variable in the explicit evaluation of the persuasiveness of a message (e.g. Bohner, Ruder, & Erb 2002). The use of the weak argument condition (vs. the strong argument condition) changes the effectiveness of the high expertise condition. Moreover, Clark et al. (2012) shows that the addition of a message discrepancy variable motivates greater processing of the proattitudinal message. Also, the low expertise, strong argument and proattitudinal message condition has been found more effective in explicit evaluation studies than the high expertise, strong argument and proattitudinal message condition. Implicit evaluation of the source expertise, message strength and message discrepancy have not been studied up to date. Study 1 investigated whether the implicit evaluations might be modulated in the same way as explicit evaluations by source effects, message strength and discrepancy effects. A junk food scenario using a pragmatic argumentation scheme was applied. 285 participants took part in the study. Each person participated in one of eight experimental conditions. The study showed that in both counterattitudinal and proattitudinal conditions persuasion was effective for implicit evaluations. A 8 (group) x 2 (message compatibility) Repeated Measures Anova with message compatibility as

a within-subject variable, and group as a between-subject variable was run to analyse the implicit evaluations in the IAT task. Main effect of message compatibility was highly significant p=.000, with experimental effect size, $\eta^2$=.338. Explicitly participants sticked to their premessage positions. Study 2 checked implicit and explicit evaluations due to message valence priming (cf. Smith & De Houwer, 2015). 160 participants took part in the study. Two types of affective priming were used, i.e. priming by negative message valence and priming by positive message valence. In the positive priming condition, a text about positive effects of junk food consumption was used. In the negative priming condition, a text about negative effects of junk food consumption was applied. A 2 (health) x 4 (group) Repeated Measures Anova with health as a within-subject variable, and group as a between-subject variable was run to analyse the explicit evaluations in the SIET task. A significant main effect of group (p=.002) was revealed in the SIET task but no health effect. The result shows that direct affective priming didn't influence explicit evaluations. A 4 (group) x 2 (message compatibility) Repeated Measures Anova with message compatibility as a within-subject variable, and group as a between-subject variable was run to analyse the implicit evaluations in the IAT task. A highly significant main effect of compatibility in the IAT task (p < .001) indicated that persuasion occurred in the case of negative message valence priming but not in the case of positive message valence priming. The implications of the findings of study 1 and study 2 will be presented for application in dialectical systems for multi-party goal-setting and dispute mediation dialogues that could handle critical, bargaining and therapeutic types of mediation.

[1]     G. Bohner, M. Ruder and H. Erb. When expertise backfires: Contrast and assimilation in persuasion. *British Journal of Social Psychology*, vol. 41, p. 495-519, 2002.

[2]     J. K. Clark, D.T Wegener, M. M. Habashi and A.T Evans, "Source Expertise and Persuasion: The Effects of Perceived Opposition or Support on Message Scrutiny", *Personality and Social Psychology Bulletin vol.*38, no.1,p. 90–100, 2012.

[3]     M. Janier, M. Snaith, K.Budzynska, , J. Lawrence, and C. Reed, "A System for Dispute Mediation: The Mediation Dialogue Game" in Baroni, P., Stede, M. & Gordon, T. (eds) Proceedings of the Sixth International Conference on Computational Models of Argument (COMMA 2016), IOS Press, Potsdam, p. 351-358, 2016.

[4]     C.T Smith and J. De Houwer, "Hooked on a feeling: Affective anti-smoking messages are more effective than cognitive messages at changing implicit evaluations of smoking", *Frontiers in Psychology*, vol.6, no. 1488, 1-13, 2015.

[5]     M. Snaith, D. De Franco, T. Beinema, H. Op den Akker and A. Pease, "A dialogue game for multi-party goal-setting in health coaching", in Proceedings of the Seventh International Conference on Computational Models of Argument (COMMA 2018), IOS Press, accepted for publication, 2018.

[6]     C. T Smith, J De Houwer and B. A. Nosek, "Consider the source: Persuasion of implicit evaluations is moderated by source credibility", *Personality and Social Psychology Bulletin*, vol.39, 193-205, 2013.

[7]     Z. L Tormala, P. Briñol,., & , R. E. Petty, "When credibility attacks: The reverse impact of source credibility on persuasion", *Journal of Experimental Social Psychology*, vol. 42, p. 684-691, 2006.