

## **Fostering Creativity in Organizations: Designing Positive Interpersonal Work Environments**

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The ability to perform creatively plays an important role in gaining a competitive advantage in many areas of business management, and is often associated with personal and organizational success (Miron, Erez, & Naveh, 2004). For many years creativity has been considered a "gift" that one is either born with or not. Thus, it has been generally believed that creative managers and employees are born not made. In her seminal work on creativity in organizations Amabile has gone beyond the skills and inherent characteristics of individuals and pointed to the critical role of the work environment in facilitating or hindering creativity (Amabile, 1983, 1996, Amabile et al., forthcoming). In this symposium we focus on the prominent dimension of encouragement of creativity. This dimension operates at multiple levels in organizations going through the broad organizational culture, supervisory support, and peers encouragement (Amabile, 1996, Amabile et al., forthcoming).

The four presentations in this symposium unfold the importance of positive interpersonal work environments in encouraging creativity in organizations. In the first presentation, Itzhakov and his colleagues reveal the role of listening on creative outcomes in negotiation. They hypothesize and find that when negotiators are under the impression that the other party listens to them in an empathic, attentive and non-judgmental manner, their positive affect increases as well as their trust in the other party, enabling a fruitful process of creatively crafting value for both sides. In the second presentation, Arieli and her colleagues present an organizational intervention developed to constitute a positive non-judgmental environment among team members, and consequently establish positive affect, and awareness to others. They show that this intervention improves the novelty and complexity of the ideas

generated. In the third presentation, Rubel-Lifschitz and Sagiv study the influence of power differences between team members on creative performance. They hypothesize and show that power differences decrease mutual creative performance, especially in tasks requiring extensive social interactions. Furthermore, power differences (vs. equality) influence the working process developed among team members. Delving deeper into the working process in teams, in the last presentation Amit emphasizes the importance of studying the creative synchronization process among team members as means of facilitating team effectiveness, even when the team outcomes do not necessarily require creativity.

Varying in methods, level of analysis, and context, the four presentations offer rich evidence on the importance of interpersonal relations as a crucial element of organizational encouragement of creativity. Following the presentations, Teresa Amabile, a distinguished researcher and one of the pioneers in the research of creativity in organizations, will provide insights and lead the discussion.

### **Increasing the Pie: The Effect of High Quality Listening on Creativity in Negotiation**

Guy Itzhakov, *Ono Academic College*, Sharon Arieli, *The Open University of Israel*, Shirli Kopelman, *Michigan State University*

Being an efficient negotiator is known to require good listening skills. For example, sales people in the financial industry who are perceived by their customers as good listeners sell more (Bergeron & Laroche, 2009). On the other hand, negotiators who are poor listeners miss numerous opportunities in their counterpart's words. Poor listeners are likely to understand and retain only about 50 percent of a conversation. This relatively poor percentage drops to an even less impressive 25 percent retention rate 48 hours later (Ramsey & Sohi, 1997).

While good listening is often recommended by practitioners, listening and its consequences has so far received little attention in negotiation studies. Previous work has shown that good listening increases speakers' psychological safety (Castro, Kluger, & Itzhakov, 2016). Psychological safety is crucial for creativity, because creativity involves risk-taking, experimentation, and frequent failure (Hennessey & Amabile, 2010).

In the current work we test the effect of listening perception on negotiation outcomes. We hypothesize that perception of good listening will increase the party's positive feelings and trust in the other party, which in-turn will simultaneously mediate the effect on solution's creativity. That is, when one party perceives that the other party listens in an empathic, attentive and non-judgmental manner, this party will experience more positive feelings and more trust in the other party. This should enable the party think in a creative manner thereby eliciting outcomes that co-create value for both sides ("win-win").

In the first experiment ( $N=151$ ), participants read a scenario where they were asked to imagine themselves in a role of a bakery owner who needs to sell the bakery and negotiates with a potential buyer. At the beginning of the scenario participants read details about the bakery and the reasons that led the owner to sell it. In the last paragraph we manipulated the description of the listening behavior of the potential buyer. Participants read about a buyer who demonstrated either good, moderate, or poor listening behavior. For example participants in the good listening-perception condition read the following description:

"... During the conversation, the phone rang a number of times but the buyer chose not to answer it, and was attentive to you and to what you had to say. You felt that the buyer made an effort to understand you and your point of view. Throughout the conversation, the buyer asked questions and showed interest in what you said. Moreover, the buyer created a positive atmosphere that enabled you to express yourself fully."

Participants in the good listening condition reported the highest level of listening, trust, and positive affect in comparison to participants in the moderate and poor listening condition. Moreover, these participants received the highest ratings of value creation in their outcomes for the negotiation. Value creation was measured by the average score to participants' ideal outcome in the negotiation, given by two independent coders.

In Study 2 ( $N=193$ ) we manipulated listening perception (good/poor) and party's role (buyer/seller) using scenarios. Results of Study 2 replicated those of Study 1, and indicated that the effect of listening perception on positive feelings, trust, and value creation is independent of the party's role. Moreover, value-creation was measured by coding of participants ideal outcomes (as in Study 1), and a creativity self-report. Our model was supported using both measures.

In sum, the current study is one of the first studies to empirically test the effect of listening in negotiation. We hope that our research will open new opportunities for exploring the potential of listening for better understanding in the fields of negotiation and conflict resolution and the important role of positive interpersonal relations on creative outcomes.

## **Psychological Safety, Group Diversity and Creativity**

Sharon Arieli, *The Open University of Israel*; Tammy Rubel-Lifshitz, Andrey Elster, Lilach Sagiv, *The Hebrew University of Jerusalem*; Bjørn Z. Ekelund, *Human Factors AS, Norway*

Psychological safety is an interpersonal climate in which individuals feel safe to speak up and express their opinions and ideas (Edmondson, 1999). This environmental condition was identified as important to innovation and creativity (Edmondson & Mogelof, 2006). In the current research we study the role of a safe and non-judgmental environment in overcoming the challenges of group diversity.

Diverse groups may potentially build on their diverse ideas and knowledge facilitating creativity. However, research that studied the associations between group diversity and creativity has yielded contrasting results, and showed that gaining creative benefits among diverse teams requires careful management of the group process (Hennessey & Amabile, 2010). In this project we study whether experiencing group diversity in a psychologically safe environment increases creativity among team members.

We studied this research question using an organizational intervention named Diversity IceBreaker (DIB) that was developed by Bjørn Z. Ekelund, and was successfully implemented in multiple organizations in Europe and the US (Ekelund, 2010). The intervention incorporates self-revealing and humoristic interpersonal interactions attempting to arouse questions about diversity. The non-judgmental environment developed through the intervention was found particularly empowering in cross-cultural settings (Romani, 2013). We reasoned that the intervention creates psychologically safe environment, and studied its impact on participants' emotions, and their attitudes towards others (Study 1a-b), as well as on their performance in idea generation (Study 2).

### **Studies 1a-b: DIB as a tool to build a positive and relational environment**

Study 1a (N=211) followed a before and after design. As hypothesized, positive affect increased ( $t(210) = 2.42, p < .05, \text{Cohen's } d = 0.33$ ) and negative affect decreased ( $t(210) = -2.56, p < .05, \text{Cohen's } d = 0.35$ ) after the 2 hour intervention, as well as participants' trust and tolerance (trust:  $t(210) = 1.86, p < .05, \text{Cohen's } d = 0.26$ ; tolerance:  $t(210) = 3.06, p < .05, \text{Cohen's } d = 0.42$ ).

In Study 1b (N=82), the participants social identity was assessed, either prior or following the intervention. As hypothesized, participants' identity included more relational terms when assessed following the intervention than prior to the intervention  $t(80)=2.03,$

$p < .05$ , *Cohen's d* = 0.44. The intervention did not change the extent to which participants described themselves in individualistic terms.

## **Study 2: Creativity in idea generation**

Participants (N=72) performed creativity tasks either prior or following the intervention. The idea generation tasks included solving a marketing problem and proposing ideas for improving their program of study. In both tasks the quantity of ideas was similar in both experimental conditions (prior and after the intervention), whereas the quality of ideas was improved following the intervention. In the marketing problem the ideas generated after the intervention were more novel and scarce ( $t(70) = 1.694$ ,  $p < .05$ , *Cohen's d* = 0.405). In the program of study task the ideas were evaluated on three orientations (helping people, increasing efficiency, and applying innovation), with complex ideas incorporating more than one orientation. As hypothesized, the results indicated that the ideas generated following the intervention were more complex ( $t(70) = 2.35$ ,  $p < .05$ , *Cohen's d* = 0.56). In addition, the students were more likely to volunteer to present their ideas in a strategic faculty meeting when asked following the intervention than prior to the intervention ( $t(70) = 1.68$ ,  $p < .05$ , *Cohen's d* = 0.40).

In sum, the 2-hour Diversity IceBreaker intervention created a friendly and open atmosphere increasing individuals' well being, and sensitivity to others (Studies 1a-b), and improving their creativity in idea generation (Study 2).

## **Collaboration, Power and Dyadic Creativity**

Tammy Rubel – Lifschitz and Lilach Sagiv, *The Hebrew University of Jerusalem*

Creativity is often defined as the generation of novel ideas that are useful and appropriate (Amabile, 1983, 1996), and is considered crucial for organizational performance, success, and longer-term survival (e.g., Anderson, De Dreu, & Nijstad, 2004; West, 2002;

Zhou & Shalley, 2003). To promote creative performance, organizations often encourage individuals to work with others and bring together different types of expertise, knowledge and skill (for a recent review see Anderson, Potočnik, & Zhou, 2014; for meta-analytical studies see Hülshager, Anderson, & Salgado, 2009; Rosing, Frese, & Bausch, 2011). Though ample research has examined creativity at the individual, team and organizational level, only few studies directly investigated the impact of power on dyadic creative performance.

Power may affect creative processes and outcomes in different ways. Because power reduces the constraints that normally affect thought and behavior, it can enhance creativity by allowing individuals to freely express novel thoughts and ideas (Keltner et al., 2003; Galinsky et al., 2015). Accordingly, individuals primed with high-power exhibited higher creative performance than individuals primed with low-power (Galinsky et al., 2008). Whereas power seems to strengthen creativity in individual tasks, power may also *reduce* creativity in collaborative tasks by impairing the dyadic interaction. Powerful individuals tend to decrease their social attention and increase their use of stereotypes (e.g., De Dreu & Van Kleef, 2004; Fiske, 1993). Moreover, possession of power decreases accuracy in estimating the interests and emotions of others (Keltner & Robinson, 1997; Anderson & Berdahl, 2002). We therefore hypothesize that in dyadic collaborations, power will decrease mutual creative performance, particularly in tasks that require extensive social interaction. Specifically, we expect that dyadic power differences will impair the interactive process that leads to a mutual creative outcome.

These hypotheses were investigated in two experimental studies. Participants in Study 1 were 148 students, randomly assigned into dyads. Dyads created either a poster (high-social interaction) or a slogan (low social interaction) advertising their institution. To manipulate power, half of the dyads were told that in case they win, they could decide together how to divide a cash reward (equal-power). The rest were told that in case they win s/he would

decide how to divide the reward (power differences). Following the task completion, the participants voted for the most creative product, and two expert judges rated the creativity of each outcome. As hypothesized, the products of equal dyads were rated as more creative in the highly interactive poster task, but not in the less interactive slogan task, among expert judges ( $F(1, 74) = 4.008, p < 0.05$ ) and among students ( $F(1, 74) = 5.08, p < 0.05$ ).

Study 2 (N=120) focused on the dyadic work-process. As in Study 1, participants were randomly assigned into equal and unequal dyads and engaged in a creative and interactive task. A neutral observer, blind of the research hypotheses, was assigned to each of the collaborating dyads. The observer closely documented the dyadic work-process, focusing on verbal and non-verbal communication. After task completion, each participant filled a personal questionnaire, reflecting on the dyadic work process. Finally, the creativity of the dyadic outcomes was assessed by students and by expert judges. The findings indicate that, as hypothesized, power influenced dyadic interactive and creative processes. The practical and theoretical implications of these findings are discussed.

## **Subjective Value in Teams and Creative Problem Solving in Sync**

*Adi Amit, The Open University of Israel*

A classic line of research on creativity compared the creativity of individuals and groups, pointing to factors that increase or hinder the quantity and quality of creative outcomes by groups (compared to individuals). To perform such a comparison, research focused on creative outcomes. However, creative group (or team) work requires creativity in the synchronous inter-individual process. Hargadon and Bechky (2006) have introduced the term "collective creativity", arguing that organizational creativity is influenced, among others, by a collaborative process of multiple team members. Focusing on teams, I will address the necessity of creative processes of collaboration as means of increasing team



effectiveness. Specifically, drawing on the assumption that conflict breeds creativity, I will present a model of subjective value in teams, adapted from the multi-facet model of subjective value in negotiations (Curhan, Elfenbein, & Xu, 2006). I will stress that the five, subjective factors in the model (instrumental, self, process, relations & leader) contribute substantially to team viability, above and beyond the objective performance of the team.

I suggest that the subjective value individuals derive from teamwork constitutes five facets: (a) value derived from the teams' accomplishments on the goals/tasks (*instrumental*); (b) how the team performs its tasks (*process*); (c) the functional and emotional components of the inter-personal (non task-related) interactions among team members (*relations*); (d) the economic and psychological benefits a team member derives from the team including feeling of worthiness and of appreciation (*self*); and (e) the personal and professional behavior of the (formal or non-formal) leader of the team (*leader*).

In Study 1 (N=111) I extracted the factors people value in teamwork, confirming the relevance of the five factors in both work and personal related teamwork. I then developed a scale for measuring the five-facets and tested it with factor analysis and multidimensional scaling (Study 2, N=135). Finally, I focused on creative problem solving of the inter-individual synchronization. In study 3 (N=79) the participants performed a collaborative task in teams of two (playing a game on a Wii console) requiring creative synchronization. To encourage performance, participants' personal rewards were linked to their joint performance (i.e., to their score on the game). Dyadic analysis (non-distinguishable) confirmed that subjective value in teamwork predicted willingness to work together on a future task (i.e., team viability) beyond actual objective performance ( $\mu = 0.55$ ,  $t(37.108) = 2.77$ ,  $p < .009$ ), and that the relations facet is the most substantial predictor ( $\mu = 0.73$ ,  $t(32.801) = 2.43$ ,  $p < .021$ ) even when prior familiarity is controlled for.

## References

- Amabile, T. M. (1983). The social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology*, 45, 357–376. doi: 10.1037/0022-3514.45.2.357
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior*, vol. 10: 123-167. Greenwich, CT: JAJ Press
- Amabile, T. M. (1996). *Creativity in context*. New York, NY: Westview.
- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of management journal*, 39(5), 1154-1184.
- Amabile, T. M., & Pratt, M. G. (2016). The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning. *Research in Organizational Behavior*, 36, 157-183.
- Anderson, C., & Berdahl, J. L. (2002). The experience of power: Examining the effects of power on approach and inhibition tendencies. *Journal of Personality and Social Psychology*, 83, 1362–1377. doi: 10.1037//0022-3514.83.6.1362
- Anderson, N., Potočnik, K., & Zhou, J. (2014). Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of Management*, 40, 1297-1333. doi: 10.1177/0149206314527128
- Bergeron, J., & Laroche, M. (2009). The effects of perceived salesperson listening effectiveness in the financial industry. *Journal of Financial Services Marketing*, 14(1), 6-25.
- Castro, D. R., Kluger, A. N., & Itzhakov, G. (2016). Does avoidance-attachment style attenuate the benefits of being listened to? *European Journal of Social Psychology*, 46(6), 762-775.
- Curhan, J. R., Elfenbein, H. A., & Xu, H. (2006). What do people value when they negotiate? Mapping the domain of subjective value in negotiation. *Journal of Personality and Social Psychology*, 91(3), 493-512.
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative science quarterly*, 44(2), 350-383.
- Edmondson, A. C., & Mogelof, J. P. (2006). Explaining psychological safety in innovation teams: Organizational culture, team dynamics, or personality. *Creativity and innovation in organizational teams*, 109-136.
- Ekelund, B. (2010). Diversity Icebreaker in conflict management. In EFPSA journal / summerschool documentation. December 2010.
- Fiske, S. T. (1993). Controlling other people: The impact of power on stereotyping. *American Psychologist*, 48, 621-628. doi: 10.1037//0003-066X.48.6.621
- Galinsky A. D., Magee, J.C., Gruenfeld, D. H., Whitson J. A., & Liljenquist K. A. (2008). Power reduces the press of the situation: Implications for creativity, conformity, and dissonance. *Journal of Personality and Social Psychology*, 95, 1450–1466. doi: 10.1037/a0012633
- Galinsky, A. D., Rucker, D. D., & Magee, J. C. (2015). Power: Past findings, present considerations, and future directions. In M. Mikulincer, P. R. Shaver, J. A. Simpson & J. F. Dovidio (Eds.), *APA Handbook of Personality and Social Psychology, Volume 3: Interpersonal Relations* (pp. 421-460). Washington, DC: American Psychological Association. doi: 10.1037/14344-016
- Hargadon, A. B., & Bechky, B. A. (2006). When collections of creatives become creative collectives: A field study of problem solving at work. *Organization Science*, 17(4), 484-500.
- Hennessey, Beth A., & Amabile, T.M. (2010). Creativity. *Annual Review of Psychology* 61: 569–598.
- Hülshager, U. R., Anderson, N., & Salgado, J. F. (2009). Team-level predictors of innovation at work: A comprehensive meta-analysis spanning three decades of research. *Journal of Applied Psychology*, 94, 1128-1145. doi: 10.1037/a0015978
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, 110, 265–284. doi: 10.1037/0033-295X.110.2.265
- Keltner, D., & Robinson, R. J. (1997). Defending the status quo: Power and bias in social conflict. *Personality and Social Psychology Bulletin*, 23, 1066–1077. doi: 10.1177/01461672972310007
- Magee, J.C., Galinsky, A.D., & Gruenfeld, D.H. (2007). Power, propensity to negotiate, and moving first in competitive interactions. *Personality and Social Psychology Bulletin*, 33, 200-212. doi: 10.1177/0146167206294413

- Miron, E., Erez, M., & Naveh, E. (2004). Do personal characteristics and cultural values that promote innovation, quality, and efficiency compete or complement each other? *Journal of Organizational Behavior*, 25(2), 175-199.
- Ramsey, R. P., & Sohi, R. S. (1997). Listening to your customers: The impact of perceived salesperson listening behavior on relationship outcomes. *Journal of the Academy of Marketing Science*, 25(2), 127-137.
- Romani, L. (2013). Diversity Icebreaker for Cross-Cultural Management Teaching: Much More Than Breaking the Ice!. *Academy of Management Learning & Education*, 12(3), 534-536.
- Rosing, K., Frese, M., & Bausch, A. (2011). Explaining the heterogeneity of the leadership-innovation relationship: Ambidextrous leadership. *The Leadership Quarterly*, 22, 956-974. doi: 10.1016/j.leaqua.2011.07.014
- West, M. A. (2002). Sparkling fountains or stagnant ponds: An integrative model of creativity and innovation implementation in work groups. *Applied Psychology*, 51, 355-387. doi: 10.1111/1464-0597.00951
- Zhou, J., & Shalley, C. E. (2003). Research on employee creativity: A critical review and directions for future research. In J. J. Martocchio & G. R. Ferris (Eds.), *Research in Personnel and Human Resources Management* (pp. 165-217). Oxford, England: Elsevier Science Press. doi: 10.1016/S0742-7301(03)22004-1