Play and Productivity
Enhancing the Creative Climate at Workplace Meetings with Play Cues

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The authors investigate the links between playfulness and creative organizational climates established by other research, using play cues—objects and sweets—they provide participants halfway through workplace meetings. Their findings suggest such cues significantly enhance the creative climate and playfulness in workplace meetings without risking meeting productivity. **Key words:** adult playfulness; creative climate; organizational behavior; play and productivity; workplace meetings

The average employee spends more than six hours a week in scheduled meetings. Supervisors spend twice as much time in formal meetings, and in larger organizations, managers spend more than 75 percent of their time preparing and executing meetings (Rogelberg et. al. 2010). Given the sheer abundance of meetings in today's workplaces, meetings are a useful starting point for empirical investigations of how organizational playfulness might be enhanced.

We intend to explore the benefits of encouraging play in workplace meetings. Some research associates organizational play with increased creativity (Mainemelis and Ronson 2006), but experimental studies of organizational play remain rare. In one of our previous studies, we asked creativity consultants and play advocates how they used play in organizations and invited them to share their ideas about how play might benefit creativity (West, Hoff, and Carlsson 2013). We found that practitioners often use playful props or cues to encourage play with their organizational clients. Building on this finding, we set out to investigate how playful cues introduced in workplace meetings affect their creative climate, playfulness, and productivity.

Definitions of Play

As Brian Sutton-Smith (1997) noted, play proves an elusive concept, one easily

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experienced but difficult to capture theoretically. Stuart Brown (2009) defines play as an absorbing and intrinsically motivated activity, apparently purposeless, that provides enjoyment and a suspension of self-consciousness. Organizational behaviorists like Charalampus Mainemelis and Sarah Ronson (2006) have suggested that play can best be understood as a behavioral orientation superimposed on work tasks. Play does not need to be completely separated from work because even work tasks can be executed playfully. Understood as an orientation toward a task, the type of activity becomes less important than how we frame and perform it. A playful approach, then, involves an intentional reframing of a situation or a task to make it more enjoyable (Barnett 2007; Glynn and Webster 1992). Thus, play does not need to be confined to specific, predetermined activities. Just about any activity, including those we do everyday at work, can—with a playful approach—be transformed into play (Sutton-Smith 1997). A corporate email might, for example, become playful when the sender attaches a silly image adding an unexpected twist to the message. In a recent investigation of organizational play, we expanded on our previous definitions of play and characterized it as being fun, frivolous, imaginative, voluntary, and, in some way, bound by structure or rules (West, Hoff, and Carlsson 2013).

Further complicating matters, we believe playfulness can be viewed both as a state and a trait. As a trait, playfulness over time seems a relatively stable aspect of personality, but as a state, playfulness appears a frame of mind strongly influenced by context. Shen, Chick, and Zinn (2014) argue that existing conceptualizations of playfulness as a trait often conflate characteristics of playful behavior with the dispositional qualities of individuals. State-level variables such as feeling happy and overt behavior such as laughing become confused with trait variables such as intrinsic motivation and curiosity. Shen, Chick, and Zinn suggest a conceptual model of adult playfulness as a trait that consists of the three subdimensions: fun-seeking motivation, a lack of inhibition, and spontaneity. Research shows that playfulness as a trait and as a state have different relationships with outcome variables. Playfulness as a state is, for example, more influential than trait playfulness on job performance and job satisfaction (Yu et. al. 2007). A recent investigation of organizational play found measures of playfulness as a personality trait to be stable over time, whereas state measures of playfulness increased after a workplace play initiative (West, Hoff, and Carlsson 2015).

Organizations can use play instrumentally to promote creativity, building collaborative relationships and increasing intrinsic motivation. When they apply play to achieve organizational goals (such as creativity), its ambiguity becomes

apparent. This ambiguity of intentionality has lead scholars of organizational play to develop the concept of "serious play," one purposefully applied to meet organizational objectives. They define the concept as a situation in which participants accept the ambiguity of intentionality and engage in play to achieve serious results (Statler, Heracleous, and Jacobs 2011).

Play and Creativity in Adults

Studying exceptionally creative individuals, Csikszentmihalyi (1996) identified playfulness as an important aspect of the creative personality: "There is no question that a playfully light attitude is typical of creative individuals" (61). Playful individuals seem to be aware of their potential for creative and new productions; Proyer (2012b) found adult playfulness associated with higher self-estimates of ingenuity. In a recent survey-based investigation with over fifteen hundred adult respondents, Bateson and Martin (2014) found a positive relationship between self-rated playfulness and creativity as measured by the Alternative Uses Task.

Several experimental studies with university students have investigated the effect of various types of play on creative performance. Hutton and Sundar (2010) found that college students performed better on a creativity test after playing a video game; and high-arousal levels together with a positive mood resulted in greater scores of creativity. In another study, college students increased their scores of creativity after playing imaginative role-playing games (Karwowski and Soszynski 2008). Psychology students who first performed a writing task imagining themselves as seven-year-olds, scored higher on a test of creativity than a control group. The study suggested that thinking of oneself as a child, even for a short period of time, facilitates playful and creative thinking processes (Zabelina and Robinson 2010). Also working with student participants, Glynn (1994) found that simply framing a work task as play rather than as work increased creativity. This implies that play also can be important for creativity in organizations.

Play and Creativity in Organizations

Playfulness proves an essential aspect of a creative organizational climate (Ekvall 1996), and it encourages a creative work environment (Starbuck and Webster 1991; Deal and Key 1998). The proponents of serious play have found that play,

even when adapted to business contexts, enhances creative thinking in the most serious of business settings (Statler, Roos, and Victor 2009; Statler, Heracleous, and Jacobs 2011). Maintaining an innovative climate over time can be a complex challenge, and research suggests that team play may be beneficial to sustaining team innovation in large organizations (Dougherty and Takacs 2004). Playful representational modeling methods have been reported to facilitate collaborative ideation in heterogeneous interdisciplinary groups. In the two case studies reported, workshop participants played and tinkered with art supplies and plastic building blocks to create visualizations in the early stages of an innovation process (Schulz et al. 2015). One study identifies organizational playfulness as a crucial element of the organizational culture of exceptionally innovative companies (Nussbaum 2013). Companies such as LEGO group, Google Inc., and IDEO LLC explicitly value and encourage a playful workplace to foster innovation. The video game developer Valve Corporation uses its playful workplace to recruit new employees, assuring them that play is deeply rooted in its company culture. (Valve 2012).

Creative Climate in Teams and Meetings

The importance of organizational climate factors for creativity has been well established (Hunter, Bedell, and Mumford 2007; Hülsheger, Anderson, and Salgado 2009). West's (1990) widely cited theory of team climate for innovation consists of four factors that facilitate team innovation: *vision* (group members share and are committed to clearly defined objectives); *participative safety* (a nonjudgmental climate in which group members participate in decision making and feel free to propose new ideas without fear of being criticized); *task orientation* (a general commitment to excellence amongst group members that emphasizes accountability and continuous improvement of procedures); and *support for innovation* (an expectation and active support from the organization for innovative behavior). Based on this model, reliable measures have been developed to assess team climate for innovation (Anderson and West 1998). However, because these existing climate measures do not focus on meetings, researchers developed new meeting-specific measures for fostering and encouraging creativity and innovation (Agypt, Rubin, and Spivack 2012).

Play as a Facilitator of Organizational Creativity

The connection between creativity and play may occur not only because of the associations made during play, but also because play develops a mental flexibility characterized by a search for variation and novel solutions (Vandenberg 1978).

Organizational researchers have suggested that play promotes creativity by giving employees a legitimate excuse to behave in new ways (March 1976). Play may also foster creativity by increasing engagement in work tasks by stimulating the cognitive, affective, and motivational elements relevant to such creativity and by diverting attention from work tasks when play builds social networks and establishes psychological safety (Mainemelis and Ronson 2006).

Elsewhere, we have suggested that play promotes organizational creativity via the mediating factors of openness, intrinsic motivation, and collaboration (West, Hoff, and Carlsson 2013). In that study, we found that play fosters a climate of openness to new ideas and perspectives and benefits creativity by exercising an attitude of nonjudgment among team members. The importance of an open climate for team creativity has been well documented by researchers of group creativity (Kohn, Paulus, and Choi 2011). Furthermore, we found that play increases engagement and participation which fits the extensive research establishing a strong link between intrinsic motivation and organizational creativity (Amabile and Pillemer 2012). We and others have also proposed that play may establish a spirit of collaboration essential for group creativity (Paulus, Dzindolet, and Kohn 2012; West, Hoff, and Carlsson 2013).

Productivity and Play in Organizations

Employees often do not regard meetings as productive or effective, and thus they sometimes dread these encounters (Allen et al. 2012). Unproductive meetings may also lead to decreased job satisfaction and well-being at work (Rogelberg et al. 2010). Given to the frivolous nature of play, we can understand that businesses do not always welcome it in organizational contexts, such as meetings where they relentlessly pursue efficiency and focus on results. When managers perceive play as a waste of time, they begin to deem it a threat to organizational productivity. Many organizations view play as the opposite of productive work and see playfulness, therefore, as something to be managed, minimized, and controlled (West 2014). However, play advocates have suggested that play may in fact enhance productivity in the workplace by making work tasks more fun and engaging (DeKoven 2014). Advocates of organizational play have argued that play and having fun at work leads to enhanced productivity because playful activities allow employees to develop cognitive, social, and emotional capacities conductive to a productive work environment (Starbuck and Webster 1991; Statler, Roos, and Victor 2009; Owler, Morrsion, and Plester 2010).

Encouraging Playfulness

Still, play remains surprisingly uncommon in most organizations (Statler, Roos, and Victor 2009). Although most organizational leaders are convinced that a fun work environment increases creativity and promotes group cohesiveness, they also report that there is too little fun in their work environment (Ford, Newstrom, and McLaughlin 2004). While research on promoting organizational play remains scarce, anecdotal claims from motivational speakers and business consultants who advocate play suggest that it is possible to promote play in the workplace (Meyer 2010; Stewart and Simmons 2010; West 2011).

In our earlier study, we interviewed consultants who employ playful techniques with organizational clients, and we derived from these interviews a number of encouragers of play (West, Hoff, and Carlsson 2013). For one, organizations can convey implicitly permission to play by using contextual cues. These include playful props such as games, toys, sweets, or simply the playful rearrangement of furniture to make a meeting more informal. These cue participants that new, more playful rules temporarily apply. One consultant described how she uses candy to cue a playful environment "I have always got sweets of various kinds with me—adults still associate 'sweeties' with children and somehow giving them sweets also gives them permission to let their 'inner children' out to play" (13).

Aim and Hypotheses

Drawing on previous research about the use of play to promote organizational creativity—and how to encourage such play in the workplace—we investigate whether play cues influence the creative climate, playfulness, and productivity of work meetings. We expect that participants in play-cued meetings will, compared with participants in a nonplay-cued control condition, report an increase in experienced meeting creative climate, playfulness, and productivity.

Method

Participants

In total, we studied 164 participants in eighteen meeting groups. The participating groups came from eleven different organizations that included teams from sales and marketing and from software development, managers from human

resources, and some social workers. More than half (59 percent) of the participants in both the intervention and control groups came from large, international, information technology (IT) corporations. The intervention group consisted of 123 individual participants that formed thirteen meeting groups. The control group comprised forty-one individuals in five meeting groups. The size of the meeting groups varied between seven and fourteen participants, with an average of nine individuals in each meeting group.

When booking a meeting room at a conference facility, we offered meeting organizers a conference room free of charge in exchange for participating in the study. We told the meeting organizers that the study concerned meeting satisfaction and that participation would not interfere with their meeting agendas. The selection criteria for participation established that the meeting be scheduled for between two and four hours, and that the meetings include a fifteen-minute, midmeeting coffee break. The age of participants ranged from twenty-five to sixty-five years, with an average age of 42.5 (SD = 8.9), and no significant differences in age between the intervention and control groups. Male participants roughly equaled the number of females, with 51 percent men and 49 percent women. The two groups were also relatively gender balanced with only slightly more women in the control group (54 percent) and slightly more men in the intervention group (52 percent).

Measures and Materials

We measured meeting creativity climate, playfulness, and productivity with a short questionnaire we designed for this study. We conducted the study with real work groups during scheduled meetings, and we kept the number of items to a minimum to avoid interfering with meeting agendas.

Meeting Creativity Climate. Drawing on previous research about creativity enhancing play in organizational settings, we developed a short measure to assess the creative climate of the meeting using five criteria: collaboration, openness of meeting, openness to new ideas, engagement, and participation. The seven-point Likert scale, for example, ranged from "low collaboration" to "high collaboration." Cronbach's alpha was .72.

Playfulness. Two items assessed the level of playfulness. The first item asked participants to assess their own playfulness during the meeting, and the second focused on the playfulness of the group. We used a seven-point scale from "serious" to "playful" to measure both. For this assessment, we considered playfulness as a state rather than a personality trait.

Meeting Productivity. We assessed the participants' sense of the meetings' productivity using a single measure that rated the productivity on a seven-point Likert scale from "unproductive" to "very productive."

Play Cues and Control Condition. Play cues (including playful props or childish sweets) invite people to engage in play; they explicitly signal that play is permissible. We randomly selected play cues for each meeting and placed one of the following on the conference table: colorful childish sweets; colorful toy guns (along with ample foam dart ammunition); self-adhesive mustaches for each participant (along with a envelope that contained instructions for applying them); instructions to play a "silly meeting game" in which participants throw up their hands while shouting "life is fantastic" when they notice other participants touching their faces during the meeting (i.e., resting heads on hands or adjusting eyeglasses). The control group received a conventional conference facility bowl of fruit and dark chocolate.

Design and Procedure

Designed to investigate authentic workplace meetings in natural work settings, the study used a modern meeting room at a conference facility. We randomly assigned participating groups to either a play-cued or a control condition. We briefed the participants about the investigation before we allowed them to consent to the study without fully disclosing the exact research focus. After the first or second hours of their meeting, we asked participants to answer the questionnaire before taking a fifteen-minute break. During the break, we placed either the play cues or the control cues in the room. After they had met for another one or two hours, we asked participants to complete the same questionnaire again before the ending of the meeting. Finally, we debriefed participants about the aims and details of the study.

Results

Statistics

We chose a nonparametric statistical technique for testing our hypothesis because our data did not meet the criteria for parametric techniques. Nonparametric methods do not assume normal distribution of data and use the median

scores rather than the mean for the analysis. For all three analyses, we used the Wilcoxon Signed Rank Test, designed for use with repeated measures. Effect sizes were calculated with $r = Z/\sqrt{N}$, (Pallant 2013).

Results

Meeting creativity climate. The intervention group that received the play cues showed a significant increase in meeting creativity climate from a median of 29 to 30 [z = -2.71, p = .007] with a small effect size (r = .15). The control group did not change significantly [z = -.01, p = .994].

Playfulness. The intervention group showed a statistically significant increase in playfulness from a median of 8 to 10 [z = -6.76, p = <.001], with a moderate effect size (r = .37). The control group's playfulness did not change significantly [z = -1.60, p = .11].

Productivity. The intervention group showed a significant increase in experienced meeting productivity from a median of 5 to 6 [z = -3.41, p = .001] with a small effect size (r = .19). The control group's meeting productivity did not change significantly [z = -.97, p = .331].

Although the nonparametric statistical technique we chose uses median values (figure 1), we also provided the means and standard deviation data to better explain the findings (figure 2).

Discussion

We aimed first to investigate the relationship between play and the creative climate in organizational meetings. We found a modest increase in the creativity climate of the meeting for the play-cued group, which supports previous research linking organizational playfulness to an improved creative climate (Bateson and Martin 2013; West 2014). Our earlier research proposed that play fosters creativity by encouraging a sense of openness, increasing intrinsic motivation, and establishing and maintaining collaborative relationships—which are all important for group creativity (West, Hoff, and Carlsson, 2013).

Although our findings are statistically significant, we must acknowledge the small effective size of our results. Many of our participants were IT professionals from international corporations with highly stressful performance-based work environments, which could conceivably have dampened the effect on the creative climate measure because high levels of stress in the workplace have

	Playcued Group (n = 123)		Control (n = 41)	
	Before	After	Before	After
Meeting creativity climate	29	30	28	28
Playfulness	8	10	8	8
Productivity	5	6	5	5

Figure 1. Median scores before and after intervention

	Play-cued Group (n = 123)		Control (n = 41)	
	Before	After	Before	After
Meeting creativity climate	28.08 (4.08)	29.25 (3.85)	28.00 (3.02)	28.20 (2.96)
Playfulness	7.68 (2.22)	9.50 (2.60)	7.34 (1.71)	7.71 (1.68)
Productivity	5.43 (0.88)	5.76 (0.88)	5.37 (1.09)	5.12 (1.10)

Figure 2. Mean and standard deviation scores before and after intervention

generally been associated with decreased organizational creativity (Amabile, Hadley, and Kramer 2002).

Secondly, we wanted to assess the impact of play cues on playfulness in authentic workplace meetings. As expected, participants in the play-cued group reported an increase in playfulness, whereas the control group did not. These results support findings from previous studies, which have identified contextual play cues as a means of encouraging playfulness in work settings (West, Hoff, and Carlsson 2013). We placed the play cues in the room without any obligation for the meeting participants to playfully engage with them. This voluntary aspect of play is a crucial and defining feature of play, according to Huizinga (1949): forced play is not play. Play differs from managed fun and other deliberate actions by management to promote a fun organizational culture. By nature, play and fun are highly individual—what seems playful to one person or one group does not always appear playful to another (Owler et al. 2010). We addressed this phenomenon by using a variety of play cues, and although we included a diverse range with four different cues, some individuals, for example, may not consider toy guns at all playful. And weight-conscious individuals might not think sweets

playful. Although there is no one single method that suits all individuals or all groups, our results do support the idea that playfulness may be induced through a variety of playful cues.

Because the majority of research on adult playfulness has focused on the playful personality, the available instruments also focus on playfulness as a trait (Glynn and Webster 1992; Proyer 2012). However, research on organizational playfulness tends to view playfulness as a behavioral approach, as more of a state than a trait (West 2014). Our study is the first, to our knowledge, that attempts to measure playfulness as a state rather than a trait. Although our two-item measure seemed to capture meeting playfulness, it would benefit from improvements of its psychometric properties.

Our results suggest that playful meetings do not harm productivity. On the contrary, adding playful elements to otherwise mundane work meetings may slightly increase productivity. These findings are in line with previous research that has identified organizational play as both an energizer and an enhancer of engagement (Mainemelis and Ronson 2006; West, Hoff, and Carlsson 2013). The positive effect of play cues on meeting productivity may also be explained by the increased humor and laughter that the play cues promote in the meetings. In our study, for example, everyone laughed uproariously when female participants donned self-adhesive mustaches, and such fun and laughter as this is not merely enjoyable—recent research has found that humor relates positively to team performance (Lehmann-Willenbrock and Allen 2014).

In our study, we introduced play cues to the meeting participants, which is something an external consultant might do to inject play, for example, during a creativity workshop. Previous research emphasizes the importance of organizational leaders setting an example by demonstrating their own playfulness to encourage employee playfulness (West, Hoff, and Carlsson 2013). Conceivably, if meeting leaders introduced and embraced the play cues, this could have led to more robust outcomes.

Limitations

This study investigated real-life work groups in real meetings, which limited our design possibilities. The meetings consisted of a variety of meeting types and meeting agendas, and the meetings did not necessarily focus on creativity or innovation. Given that we aimed to investigate the impact of play cues on

the creative meeting climate, it would have been appropriate to select meetings that explicitly sought a creative climate. Another limiting aspect of our design was the short duration of the play-cued intervention; conceivably, a longer duration would have lead to a greater effect. The results from a recent study using a ten-minute "play with clay" task as an intervention failed to find an effect on creative performance. The author suggested that insufficient time for the play intervention could explain the results (Tsai 2013).

We assessed the creativity climate of the meetings with a simple five-item measure developed for this study. Previous research on workplace meetings has used a similar measure that reflects the extent to which a meeting provides a forum for fostering idea generation, idea sharing, and active debate (Agypt, Rubin, and Spivack 2012). Although this measure was similar to ours, it proved unsuitable for our study because it focused on the respondents' sense of psychological safety and their experiences of meetings in general rather than on the experience of the meeting under consideration.

The brevity of our measures also raises concerns. The use of single and two-item measures of meeting productivity and playfulness may have limited construct representation, which made it impossible to calculate estimates of internal reliability. However, other evidence suggests that single-item measures can be both valid and reliable in organizational research (Nagy 2002), and researchers have began to question the long-established truth that multi-item measures are always superior to single-item measures (Fuchs and Diamantopoulos 2009; Fisher, Matthews, and Gibbons 2015). As with all data collection that relies on self-report questionnaires for both dependent and the independent variables, common method variance offers a risk (Podsakoff et al. 2003). Though the concern for common method measurement errors may be exaggerated (Spector 2006), future research should address this issue by gathering data from multiple sources.

Conclusion and Implications

The increasing importance of creativity— and more specifically of collaborative creativity—for organizations provides a powerful impetus for research on organizational creativity (Anderson, Potočnik, and Zhou 2014). As the field of organizational creativity research grows, the benefits of a diversity of methods and approaches become more evident, and, precisely here, organizational play

opens up many interesting research questions. If future research solidifies the thesis that playing at work benefits organizational creativity, then organizations who value and foster playfulness can gain a powerful competitive advantage by encouraging workplace playfulness. Aside from the benefits for creativity, a playful work environment may also prove valuable to organizations wishing to attract young talent, for whom having fun and enjoying their work seems to be more important than it has been for previous generations.

We found that play cues increase a sense of playfulness and promotes a creative and productive climate in work meetings. These findings are relevant for workplace architects who have long known that contextual cues influence behavior. With studies of the role of play for creativity enhancement still in its infancy, we suggest that future research improve on this study by using more prolonged play interventions, by selectively targeting meetings that aim for creativity (such as idea generation or creative problem solving), by using established creativity assessments for more reliable outcome measures, and by collecting data from other sources than self-assessments.

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