Mere-Listening Effect on Creativity and the Mediating Role of Psychological Safety

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Abstract

While research suggests that individuals may increase their own creativity by listening to other's ideas, the effects of being listened to by others have remained understudied to date. We hypothesized that listening behavior of superiors may positively impact employees to explore new ideas flexibly, leading to higher levels of creativity. We further hypothesized this link to be mediated by psychological safety. Therefore, we developed and tested a mediated model of listening behavior, psychological safety and creativity at the individual level. In a series of five complementary studies, we found evidence for the hypothesized effects using self-report, supervisor-report, and objective measures of creativity, while excluding alternative explanations such as reversed causality with experimental designs. A meta-analysis of all our studies provided compelling evidence that listening was related to creativity, N = 744, k = 5, $\overline{r}$ = .39, 95% CI [.13; .60]. Together, our results suggest that supervisor listening may be an underrated aspect of management that fosters creativity.

Key Words: listening, creativity, psychological safety

Both common sense and empirical research suggests that people need to listen to others' ideas to enrich their own viewpoints, which in turn will help them to come up with more creative ideas (Dokko, Kane, & Tortoriello, 2014; Madjar, 2005). However, whereas past research suggests that those who want to be creative need to listen to others, we propose that those who want to be creative can also benefit from being listened to. More specifically, we argue that listening instills psychological safety in individuals, which makes them feel free to think creatively, and express their ideas, and in the end will increase their creativity.

To provide a relevant organizational context to study listening behavior and its effects, we focused on supervisor-employee interactions. While listening is underexplored in the context of supervisor-employee relationships (Van Quaquebeke & Felps, 2016), some studies have considered it indirectly when examining the effects of supervisors' supportive behaviors on creativity (Amabile, Schatzel, Moneta, & Kramer, 2004). Similarly, a meta-analysis indicates that supervisor support and positive supervisor-employee relationships are related to followers' creativity (Hunt, Stelluto, & Hooijberg, 2004). However, some are more critical concerning the empirical findings relating supervisor behaviors to creativity "Results from studies focusing on specific supervisory behaviors are also far from conclusive….More research on leadership and supervision needs to be done" (Anderson, Potočnik, & Zhou, 2014). Extending this line of research, we propose that at least one *specific* behavioral aspect of support—listening behavior—increases employees' creativity. To develop our model, we first review the construct of listening, the link between listening and psychological safety, and the link between psychological safety and creativity. To provide a robust test of our model, we then present a set of five closely linked studies, each testing one or more of the relationships between antecedent (supervisor listening behavior), mediator (psychological safety) and dependent variable (creativity), using

complementary research designs. Finally, to demonstrate the coherence between the studies, we provide a meta-analytic summary of the central relationship of the model between supervisor listening behavior and creativity. In doing so, we believe that our approach of combining different studies and research designs, offers a modest but realistic assessment of the strength of the hypothesized relationship, while at the same time shedding light upon the causal ordering of the constructs in our model.

Listening

Given the importance of creativity for organizational success, research on creativity has burgeoned in the last decade (Anderson et al., 2014). An important focus of this stream of research has been the identification of factors in the social context that support employee innovation and creativity (Lu, Lin, & Leung, 2012; Oldham & Cummings, 1996; Perry-Smith, 2006; Tierney, Farmer, & Graen, 1999). An extensive review (Mainemelis, Kark, & Epitropaki, 2015) distinguished between three dimensions of creative leadership: directing (i.e. where the source of creative vision is the leader), integrating (i.e. integration of the leader's own creative work with others') and facilitating, which was defined as "fostering the creativity of others in the organizational context" (pp. 397). In this perspective, the facilitating leader views the employees as the generators of ideas and his/her role as supporting the creative process. This perspective aligns with a substantial literature suggesting that leader supportive behaviors, such as social skills, persuasion and support, increase creativity (Amabile et al., 2004). Similarly, meta-analytic summaries found evidence suggesting that leader support and positive supervisor relations are related to followers' creativity (Hunt et al., 2004). However, a recent review of the creativity and innovation literature was more critical concerning the empirical findings relating leadership behaviors to creativity pointing to mixed results, concluding that future research

should develop better theory and supporting evidence for specific supervisory behaviors that support creativity (Anderson et al., 2014).

While listening seems to be a basic, almost self-evident, interpersonal behavior, it is surprising to see that the effects of supervisors' listening on subordinates have received relatively little empirical attention (for the benefits of supervisors' listening for the supervisors themselves, see for example, Ames, et al., 2012). The few studies mentioning supervisors' listening effects on subordinates are largely theoretical, with listening being described as a relatively minor part of other overarching constructs. For example, listening has been listed as part of supervisors' soft skills (Alvesson & Sveningsson, 2003; Marques, 2013) and as a central part of respectful behaviors (Van Quaquebeke & Eckloff, 2010; Van Quaquebeke & Felps, 2016). From a leadership perspective, listening seems to also be implied in inclusive leadership, which involves words and deeds by a leader that indicate an invitation and appreciation for others' contributions (Hirak, Peng, Carmeli, & Schaubroeck, 2012; Hollander, 2012) and is sometimes mentioned in the context of servant leadership (Russell & Gregory Stone, 2002), but is not being measured in that context (Liden, Wayne, Zhao, & Henderson, 2008). Yet, the few empirical studies that investigated listening and leadership found strong correlations among these constructs. For example, listening was positively correlated with perceived leadership (Bechler & Johnson, 1995; Johnson & Bechler, 1998) and more specifically with transformational leadership (Berson & Avolio, 2004; Kluger & Zaidel, 2013).

Following Castro, Kluger, and Itzchakov (2016), we define listening as "a behavior that manifests the presence of attention, comprehension, and good intention toward the speaker." This definition has the benefit of being a good reflection of a layperson's conceptualization of listening as reflected in the plea of "Listen to me!" Furthermore, it has regularly been used in

previous research on listening (see Itzchakov, Kluger, & Castro, 2017). Thus, our definition describes listening as a multi-dimensional construct that has attention, understanding, and relational components (Bodie, 2012; Rogers & Roethlisberger, 1991/1952). These components also emerge in empirical studies in which participants are asked to freely describe what listening is (Bodie et al., 2015). Moreover, the relational features of listening includes being non-judgmental, empathic, and respectful (Rogers & Roethlisberger, 1991/1952). Although the construct of listening is complex, it appears that people perceive listening holistically, because different listening instruments designed from different perspectives yield either a single factor or one second-order factor (e.g., Jones, Bodie, & Hughes, 2016; Kluger & Bouskila-Yam, in press).

Our definition of listening suggests that it is a construct that may partially overlap with other related constructs (e.g., empathy, respect). Yet, it is not isomorphic with them. For example, research on layperson perception of the construct of respect suggests that honesty and loyalty, for example, are much more central to the definition of respect than is listening is (cf. Table 2 in Frei & Shaver, 2002). Another related construct is responsiveness, which is defined as "a process by which individuals come to believe that relationship partners both attend to and react supportively to central, core-defining features of the self" (Reis, Clark & Holmes in Mashek & Aron, 2004). Though responsiveness and listening are both forms of support, they are different both in their scope and in their level of abstraction. First, responsiveness includes a *belief* that the "partner will respond supportively to expression of needs" (Reis, Clark, & Holmes, 2004), whereas listening is not about a belief. Second, while responsiveness is a general and abstract term, the literature on listening describes more specific behaviors, such as asking questions (Van Quaquebeke & Felps, 2016; Weger et al., 2010) and paying attention (Ames, Maissen, & Brockner, 2012).

Listening and Psychological Safety

In clinical psychology (Rogers, 1951), listening has been postulated to create an atmosphere of safety for the speaker. We extend this argument to an organizational setting, and suggest that an atmosphere of safety can also be created by supervisors who listen to their team members. Specifically, supervisors who put aside personalized time and psychological space for their employees to speak, develop, and express their ideas gradually wins their trust (Stine, Thompson , & Cusella, 1995). Furthermore, listening empathically reduces threat, thus allowing employees to experience a sense of safety, value and acceptance (Rogers & Farson, 1987). Note that listening does not imply that the listener will completely refrain from criticizing the speaker or will approve of everything that is being said. Yet, listening signals to the speaker that the listener is giving his/her undivided attention for uninterrupted cognitive processing of what is being said in an emotional atmosphere of trust and openness. These interrelated behavioral, cognitive, and affective aspects of listening should create a sense of psychological safety because they instill a confidence in the speaker that at least his/her arguments will receive full consideration and will, thus, be evaluated based on their real worth. In contrast, studies show that people who are concerned about the potential implications of negative reactions of the listeners will refrain from sharing their experiences with others (Pasupathi, McLean, & Weeks, 2009). Thus, we expect that listening will have its beneficial effects not because speakers expect automatic approval, but rather because they are given an honest occasion to provide their perspective in the best way they can without their ideas being judged on the basis of who is talking. Similarly, when confronted with distracted listeners, as opposed to attentive listeners, people refrain from disclosing strongly held beliefs or central self-views (Pasupathi & Rich,

2005). Thus, it appears that listening creates a state described in the organizational behavior literature as psychological safety.

Kahn (1990) defined individuals' feelings of psychological safety as the ability "to show and employ one's self without fear of negative consequences to self-image, status, or career" Other definitions describe it as feelings of emotional safety, trust, and respect when engaging with another person (Tynan, 2005). Psychological safety refers to individuals' perceptions of the consequences of taking interpersonal risks in their work environment (Edmondson, 1999; Edmondson, Kramer, & Cook, 2004; Kahn, 1990). In their review of psychological safety, Edmondson and Lei (2014) distinguish between three different levels of conceptualization: organizational, group and individual, depending on the focal research question. We conceptualize psychological safety in relation to listening behavior at the individual level. There are several studies in which psychological safety is measured at the individual level (May, Gilson, & Harter, 2004) as well as considered as antecedents of individual creativity (Kark & Carmeli, 2009). This individual-level conceptualization is in line with listening research in social and personality psychology, which has shown that listener attention, on the one hand, and the speakers' self-disclosure, on the other hand, reside at the dyad level (Pasupathi & Hoyt, 2009; Weeks & Pasupathi, 2011). This dyad-level conceptualization of listening implies that, differences in supervisor listening behavior towards employees will affect individual differences in perceived psychological safety. Thus, an individual-level conceptualization of psychological safety seems most appropriate here. This does not mean that team-level psychological safety cannot have a place in listening research. In so far as supervisors are chronically inclined to listen in a similar way to all of their employees, we would expect at least some shared perception of listening and the resulting psychological safety among employees. To date, only a few

empirical studies have looked at the role of listening behavior in increasing psychological safety. For example, employees' reports of being listened to by their supervisors are highly correlated, $r > .50$, with their psychological safety (Fenniman, 2010; Tangirala & Ramanujam, 2012). Indirectly, the construct of 'manager consulting' (listening being one component of this construct) was found to be correlated with psychological safety (Tangirala & Ramanujam, 2012). Most recently, six experimental manipulations of listening increased individual level psychological safety on average by 0.45 *SD* (Castro et al., 2016). Furthermore, a construct related to psychological safety—(lack of) social anxiety—was consistently affected by four experimental listening manipulations (Itzchakov et al., 2017), and by three quasi-experimental manipulations in an organizational setting (Itzchakov & Kluger, 2017). Also a likely correlate of listening — management openness—leads to higher psychological safety (Detert & Burris, 2007). Thus, both on conceptual and empirical grounds, we expect that supervisor's listening will influence employee's psychological safety.

H1: *Supervisor's listening is positively associated with subordinate's psychological safety*

Psychological Safety and Creativity

Psychological safety has been identified as one of the most influential explanatory predictors of individual creativity (for a review, see Edmondson & Lei, 2014). Psychological safety increases creativity because it allows employees to be more vulnerable in what and how they say and in how they act (Edmondson et al., 2004; Kahn, 2007; Schein, 1999). Psychological safety is important for creativity because creative ideas can fail or be ridiculed. Failure or face-loss as a result of uttering seemingly far-fetched ideas may make employees vulnerable. Thus, only when employees believe that their supervisor will not exploit their vulnerability, they share

their creative ideas (Edmondson, 1999). Indeed, psychological safety has been found to increase an individual's involvement in creative work (Kark & Carmeli, 2009). Moreover, psychological safety mediates the effects of transformational leadership on creative problem-solving (Carmeli, Sheaffer, Binyamin, Reiter-Palmon, & Shimoni, 2014). In addition, when employees feel supported by their environment, psychological safety emerges, and in turn, psychological safety instills motivation and engagement in innovative behaviors (Vinarski-Peretz & Carmeli, 2011). In sum, we propose a model wherein supervisor's listening behavior affects employee creativity through its effect on psychological safety (see Figure 1). Hence,

H2: *Psychological safety is positively related to creativity.*

H3: *The effect of supervisor's listening on employee's creativity is mediated by employee's psychological safety.*

The Present Study

To test our theoretical model, we present five studies. We started with a scenario experiment testing the causal effect of perceived listening on an objective measure of creative performance (Study 1). Next, we tested the mediation model by conducting a field study (Study 2), replicated it while controlling for other leadership perceptions (Study 3), and again ran a scenario experiment to establish causality of the effect on the mediator (Study 4). Last, we tested our model in a laboratory experiment with participants performing creativity tasks after being listened to by a distracted or non-distracted listener (Study 5).

Study 1

Method

Sample and procedure.

We recruited an online panel (operated by Midgam service) of 366 working employees in Israel, in exchange for payment of approximately 0.50 USD. We provided the participants with a vignette of working in a company that produces bricks, where they had to imagine a meeting with their manager. In the meeting, they were asked to come up with as many uses as possible for a brick for the company marketing efforts. We randomly assigned participants to read a vignette depicting either a *good* or a *poor* listening supervisor. We constructed the vignettes based on our definition of listening. Such vignettes were used in other studies of listening (Castro et al., 2016). In the good listening condition, participants were asked to imagine a meeting with their supervisor who listened attentively, ignored distractions, and was interested in what the participant had to say (see Appendix A). In the poor listening condition, we asked participants to imagine a meeting with their supervisor who did not listen to them. To make the vignette study more realistic, after reading the scenario, we asked participants to elaborate on the imagined situation by recalling a similar experience of a supervisor who demonstrated good listening, or poor listening, and to briefly describe this experience (Van den Bos, 2001). Next, in line with the vignette, we asked participants to suggest as many brick usages as possible in two minutes (Sternberg & O'hara, 1999), for company marketing purposes. Finally, as a manipulation check, we asked participants to answer questions regarding how well they were listened to in the vignette.

Measures.

Manipulation check. To assess the effectiveness of our manipulation, we employed one item: “this supervisor listens to me well” on a 7-point scale.

Creativity.

Fluency. We measured fluency by counting the number of ideas each participant produced. Two raters counted the number of brick usages. Their counts were highly correlated, $r = .98$.

Originality. We constructed originality scores in three steps. First, we created categories for classifying the brick usages, where usages with the same semantical meaning were classified into the same category, for example: "pen holders" and "to put writing materials" were used to create "pen holder" category. We found 67 different categories, such as: "home furniture", "weapons", "food related usages". Second, we then asked two independent judges to sort into these categories all usages with an inter-rater reliability of $r = .96$. Last, following an established method (Roskes, De Dreu, & Nijstad, 2012), we calculated originality scores for each usage by computing usage rarity as the fraction of participants that generated the same semantic idea.

Flexibility. As described in the originality measure, we created categories for classifying the brick usages. The measure we used for flexibility was the number of categories each participant used. In that sense, participant could have scored high on fluency (because s/he generated many ideas for block usages) and low on flexibility, because these ideas were generally similar in their meanings.

Aggregated measure of creativity. We created a mean measure of creativity by aggregating the coders' based measures of creative performance (fluency, flexibility and originality), $\alpha = .71$. Because these measures are on different scales, we standardized these creativity measures prior to aggregation.

Results and discussion.

Participants in the good-listening condition felt they were listened to more than in the poor-listening condition, $d = 1.58$, 95% CI [1.34, 1.81]. Furthermore, on the aggregated creative

measure, participants in the good-listening condition (M = 0.12, SD = 0.93) performed better than the poor-listening condition (M = -0.11, SD = 0.99).

However, we observed that 24% of the sample did not suggest even a single usage for a brick. That may be due to the nature of the vignette, where suggesting marketing slogans for a brick company did not feel natural. Thus, we repeated our test of the hypothesis, this time while excluding participants who did not suggest even a single brick usage. When excluding the data of participants who did not offer brick usages, the effect of listening (the experimental condition) on fluency was no longer significant, d = .21, 95% CI [-0.01, 0.43]. However, the aggregated measure of creativity was found to be significant, d = .23, 95% CI [0.01, 0.45]. Similar effects sizes were found for each of the creativity measures, as presented with correlation as effect sizes in Table 1.

These results could be interpreted in two ways. First, there could be methodological explanation with, for example, participants not having considered the instruction seriously, or with an unrealistic scenario. Second, listening may merely increase *motivation* to come up with at least one idea for a brick, but not necessarily induce creativity. Anecdotal support for a motivational interpretation comes from observing participants' verbal communications, such as "I don't have any ideas for such a manager". Finally, the effect of listening on creativity may be completely mediated by employees' psychological safety which was hypothesized, but not measured in Study 1. Therefore, in the next studies, we tested our full model with psychological safety as a potential mediator of the link between listening and creativity.

Study 2

Method

Sample and procedure.

In Study 2, we collected data from 212 team members, in 40 corporate management units of a health-care provider. Average team size was five employees. Employees anonymously completed online questionnaires. To avoid data loss, $n = 34$, we imputed missing variables with their mean.

Measures.

We administered questionnaires in Hebrew, using a 7-point scales, with response categories ranging from 1 = *strongly disagree* to 7 = *strongly agree*.

Supervisor listening. We measured employee perceptions of supervisor listening with seven items (Ramsey & Sohi, 1997). These items describe specific listening behaviors such as: "Focuses only on me" (attention), "Asks for more details" (comprehension) and "Uses full sentences instead of saying yes or no", $\alpha = .72$. We used a different listening scale than in Study 1 to constructively replicate our findings. However, it should be noted that this scale also matches our conceptual definition of listening. Moreover, in a recent study, both the listening items used in Study 1 and in the current study, along with many other published and unpublished listening items were subjected to a second order factor analysis on a sample of approximately 1,000 respondents. The analysis yielded a single second-order factor (Bouskila-Yam & Kluger, in press). Furthermore, other recent reports suggest that different listening instruments yield a single factor (Schroeder, 2016; Jones et al., 2016)

Psychological Safety. We measured employees' psychological safety using three items from Edmondson (1999) scale. Items were "it is safe to take a risk on this team" and "members of this team are able to bring up problems and tough issues", "working with members of this team, my unique skills and talents are valued and utilized", $\alpha = .59$. Due to time constraints, we could only use a shortened scale with lower reliability as a result. Dropping items resulted in an

even lower alpha (.39 and .50). We acknowledge the low number of items and the low reliability, but used the three items that are most consistent with the individual-level concept of psychological safety.

Creativity. We measured employees' creativity using George and Zhou (2007) employees' 10-item scale. The measure was self-report indication of creativity and the employees indicated their creativity level. Sample items included "Suggest new ways to achieve goals or objectives", "Come up with creative solutions to problems", and "Exhibit creativity on the job when given the opportunity to." The internal reliability was good, $\alpha = .96$.

Results and discussion.

Table 2 shows the means, SDs, and intercorrelations of the variables of Study 2. Due to the study design, employees are nested within their teams. The ICC for employee-self-rated creativity was .08 and for employee-self-rated psychological safety was .11. Because these values are close to the cutoff of .10 indicating consequential nesting (Lee, 2000), we used HLM, where we regressed employee-self-rated creativity, on both perceived supervisor's listening and on psychological safety (Level 1 predictors). As predicted in H1, perceived supervisor's listening was associated with psychological safety, $\beta = .38$, $t(210) = 6.58$, 95% CI [.27, .50]. As predicted in H2, psychological safety was associated with employee-self-rated creativity, $\beta = .18$, $t(210) = 2.58$, 95% CI [.04, .32]. However, we found no direct link between perceived listening and employee-self-rated creativity $\beta = .01$, 95% CI [-.13, .14], suggesting a full mediation model. Because the ICC values were on the cutoff for HLM analysis, we also analyzed the data using OLS (see Figure 1). OLS analyses were similar: the indirect effect (the product terms of the path coefficients) was significant, $\beta = .09$, 95%CI [.02, .15], supporting H3. Moreover, because mean imputation may lead to biased estimates, we re-analyzed the data without imputation. The

indirect effect was approaching significance, β = .10, 95%CI [-.01, .21] which is in line with our mediation hypothesis.

While there was no direct effect of supervisor's listening behavior on creativity, the results supported our hypothesis that psychological safety mediates the link between supervisor listening and self-rated creativity (H3). One potential limitation of Study 2 is that listening may be seen an artifact of another leadership style, such that it is not the listening that affects psychological safety, but rather one of its correlates, like transformational leadership (Carmeli, Sheaffer, Binyamin, Reiter-Palmon, & Shimoni, 2014). Indeed, listening is highly correlated with perceived people leadership (Kluger & Zaidel, 2103). Therefore, our goal in Study 3 was to replicate the findings of Study 2, while controlling for transformational leadership.

Study 3

Method

Sample and procedure.

We recruited 71 employees from various organizations in Israel via "Midgam" panel. It is similar to MTurk where researchers specify desired characteristics of the sample. We required the participants would be employees. Participants received payment of approximately 1$ USD, M_{age} = 38.8 years, SD = 6.34, 48% women.

Measures.

We measured supervisor listening, α = .87, and creativity, α = .93, as in Study 2.

Psychological safety was measured using Castro et al.'s (2016) individual psychological safety scale. Sample items included "In this situation, it is safe for me to make suggestions" and "it is safe for me to speak up", α = .89.

Transformational Leadership. Employees completed 12 items from the Multifactor Leadership Questionnaire (MLQ) using five-point Likert response scale (Bass, & Avolio, 1990), $\alpha = .79$.

Results and discussion

Table 2 shows the means, *SD*s and correlations of Study 3 variables. To test if supervisor listening behaviors (as rated by employees) contributed to self-rated psychological safety, while controlling for transformational leadership (MLQ), we entered both listening and MLQ into a model predicting psychological safety, using SEM (see Figure 2). The model fits the data, $\chi^2_{(1)} = 0.05$, $p = .82$, RMSEA = .00, CFI = 1, AIC = 699.3, and is better than an alternative model where MLQ has a direct effect on creativity and listening not, $\chi^2_{(1)} = 4.90$, $p = .03$, RMSEA = .23, CFI = .97, AIC = 704.2. The relationship between supervisor listening behavior and self-rated creativity was partially mediated by psychological safety and the effect of listening on psychological safety was significant, even in the presence of MLQ. The indirect effect was significant one tailed, $\beta = .16$, 95% CI [-.02, .36], supporting our mediation hypothesis. Study 3 results indicated that listening contributes both directly and indirectly to creativity, beyond the effects of transformational leadership.

Yet, while we found support for our hypotheses concerning the mediating role of psychological safety in Study 2 and in Study 3, these studies were limited by their correlational design. Therefore, our goal in Study 4 was to retest our full model with an experimental design.

Study 4

Method

Sample and procedure.

In Study 4, we recruited 90 full time employees in Germany to volunteer (without any reward), using a convenience sampling method, with 56.7 % of participants being female, as to obtain a heterogeneous sample. We administered online surveys through various online platforms and discussion forums over a period of two weeks. Only questionnaires that were fully completed were used in the analysis. We randomly asked participants to imagine themselves in one out of two vignettes (see Appendix B), depicting a supervisor listening either *well, n*'s = 48, or a *poorly, n* = 42. To maintain consistency with the listening definition and measures we used in previous studies, we constructed the vignettes on the basis of the items (e.g., "I listen for more than just the spoken words. I assure others that I will remember what they say. I show others that I am listening by my body language") of the Active Empathic Listening Scale (Drollinger, Comer, & Warrington, 2006) and followed a commonly used techniques for creating vignettes (e.g. Van Gils, van Quaquebeke, van Knippenberg, van Dijke, De Cremer, 2014). After reading the vignettes, participants indicated their psychological safety and their inclination to show creative behavior. Finally, they answered questions to check the manipulation of listening.

Measures.

Questionnaires were the same as used in Study 3 but were administered in German. Items were measured using a scale ranging from 1 =*strongly disagree* to 7 = *strongly agree*. We measured psychological safety, α = .94, and creativity, α = .97.

Results and Discussion

As expected, participants in the good-listening-supervisor condition reported experiencing better listening (manipulation check), *M* = 4.87; *SD*= 0.67, a stronger preference to exhibit creative behavior on the job, *M* = 5.76; *SD* = 0.81, and higher psychological safety, *M* = 6.08; *SD* = 0.99, than participants in the poor-listening-supervisor condition, *M* = 2.80; *SD* = .70,

d = 2.88, 95% CI [2.28, 3.48], *M* = 3.61; *SD* = 1.43, *d* = 1.83, 95% CI [1.33, 2.33], *M* = 3.59; *SD* = 1.60, *d* = 1.91, 95% CI [1.40, 2.41], respectively.

To test whether psychological safety mediates the effect of listening on creativity, we used SEM. As can be seen in Figure 3, the hypothesis that listening increases creativity through psychological safety was supported, as the indirect effect was *B* = .97, 95% CI [53, 1.51]. Importantly, the contribution of this study is that it provides an indication for the causal link between supervisor listening behaviors, psychological safety and creativity in an experimental design and deals with the threat of reversed causality in our interpretations. It also sheds some light on the generalizability of our results to a different culture. However, as vignette studies have their limitations (e.g., demand effects, lack of real behaviors), we conducted a final lab experiment wherein participants were confronted with actual listening behaviors.

Study 5

Method

Sample and procedure. We recruited 102 undergraduate students, from the Hebrew University in Jerusalem, to participate in a laboratory experiment in exchange for course credit. One participant failed to understand the instructions, and thus we dropped the data of this participant and the data of this participant's dyadic partner.

Upon arrival, participants signed an informed consent form and then participated in an experiment with a 2 x 2 x 2 x (2) (Listening x Role x Topic x Time) design. The (time) within-participant factor indicates measurement of creativity before versus after the manipulations. Specifically, before the manipulations, all participants received the following instructions: "Please imagine that you work in an advertising company that is responsible for writing slogans for different products and companies. Your task is to come up with creative and original slogans

as you can for a new product: virtual reality [(VR)] goggles. You have 5 minutes to complete the task." After five minutes had passed, we randomly assigned participants to dyads and the dyads into Listening (low vs. high quality), Role (speaker first vs. listener first), and Topic (a 3D printer or an autonomous car) conditions. We asked all dyads to sit facing each other. Behind the speakers' chair, we positioned five computer screens visible only to the listener. Following the Itzchakov et al.'s (2017) listening manipulation, in the low-quality-listening condition, $n = 52$, we ran a software program that made the computer screens flicker in black and white with the aim of distracting listeners, whereas in the high-quality-listening condition, $n = 48$, we turned the computers off.

All participants served both in the role of a listener (manager) and in the role of a speaker (employee). Thus, the role factors indicate whether the participant was assigned to be a listener (manager) first, or second. We gave the participant who we assigned to be the first listener the following instruction: "Please imagine that you are a manager and you are asked to listen carefully to your employee as you listen at your best." We asked the first speaker (employee) to talk for 10 minutes about one of two randomly assigned topics. The instructions were "Please imagine that you work in an advertising company that advertises a new product: A three-dimensional printer (or an autonomous car). You are now meeting with your manager and are asked to talk about the benefits of the product and all of the ideas and ways to advertise and sell it." After the conversation, both managers (listeners) and employees (speakers) listed as many, and the most, creative slogans for the product discussed (our key *DV*), and then completed the study questionnaires (manipulation check, psychological safety and manager's ratings of creativity).

After completing the questionnaires, participants were asked to switch roles (and chairs), and repeated the procedure with the only difference that the topic was about a product not discussed in the first round.

Measures.

Manipulation check. We asked listeners to rate the following items: "The room conditions allowed me to listen well, with no interruptions"; "During the conversation, I experienced disturbances which damaged my ability to concentrate" (reversed coded). The rating scale ranged from 0 = *Strongly disagree* to 10 = *Strongly agree*; α = .78.

Listening experience. We measured listening experience with eight items rated on an 11-point Likert-type scale anchored at 0 = *completely disagree* and 10 = *completely agree* (Itzchakov, Kluger & Castro, 2016) for both speaker and listener. Sample items were "The person I interacted with listened to me" and "The person I interacted with made an effort to understand what I was saying," α = .92.

Psychological Safety. We measured three items of psychological safety as in Study 3. We also added three items from individual-level-psychological-safety scale adapted from May, Gilson & Harter (2004) to try to increase scale reliability relative to Study 3. Items were "I'm not afraid to be myself", "I am afraid to express my opinions at work", and "There was a threating environment in the conversation". Factor analysis suggested two factors, with, α = .79 for the combined scale. After calculating reliabilities, we dropped three items that were worded negatively and kept our original three items of psychological safety that we used in the previous studies, α = .95.

Creativity.

Fluency. In line with Study 1, we measured fluency by counting the number of ideas each participant produced. Two judges rated the number of slogans each participant created. The judges agreed, practically in a perfect manner, both on the first (baseline) slogans' production, $r = .99$ and on the second slogans' production, $r = .99$. We, therefore, averaged the judges' coding of the number of slogans to create a fluency measure. Because after the manipulation we assigned two different products for slogan generation, we tested for any differences in slogans production and found no significant difference between slogans production for autonomic car and 3D printer, $d = .11$, 95% CI [-.29, 0.50]. Last, we regressed slogans generated after the listening manipulation on the number of slogans generated before the manipulation (baseline measure of number of slogans produced for VR googles) to control for individual differences in creativity, and used the residual of this regression as a measure of fluency.

Originality. We calculated the originality score as in Study 1. The inter-judges' reliability across all products was $r = .94$. Last, we regressed the post-test originality score on the pre-test originality score, and used the residual as originality score.

Flexibility. Two coders built the categories of the slogans by reviewing the slogans and decided on the relevant semantic categories. We found 32 categories for the VR goggles (pre-test), such as "dream" and "view a different world", 44 for autonomous car, such as: "safety", "smart" and "money saving" and 32 for the 3D printer, such as "efficiency" and "science based".

Coder's subjective rating of creativity. The two independent coders rated each slogan for its creativity and attractiveness on five items (e.g., creativity, attractiveness, innovativeness), using a scale ranging from 1 = *very low* to 5 = *very high* (Goncalo and Staw, 2006). The average

coders' ratings correlated significantly, $r = .80$, and a scale constructed from the average of the items across the raters was reliable, $\alpha = .98$.

Aggregated measure of creativity. We averaged, for each coder, ratings of fluency, flexibility, originality, and coder's subjective evaluation of creativity. We also averaged the ratings for the resulting scale across the two coders, and the internal consistency of these aggregation of four measures as an indicator of creativity was high, $\alpha = .86$. Therefore, for measuring creativity, we used the average of these four facets of creativity aggregated across coders. Because these measures are on different scales we standardized these creativity measures prior to aggregation.

Manager's rating of employee creativity. We choose four items from the creativity scale we used in Study 2, which fitted with the lab setting (Zhou & George, 2001): "S/he suggested new ways to deal with the slogan challenges", "s/he came up with new and practical ideas to improve the slogan effectiveness", "Exhibit creativity in developing the slogans" and "S/he came up with creative ideas in the slogan", $\alpha = .98$.

Results and discussion

Table 3 shows the means, SDs, and intercorrelations of the variables of Study 5. The manipulation was successful as *listeners* in the low-quality listening felt more distracted (higher score on the manipulation check) than people in the high-quality listening condition, $d = 2.04$, 95% CI [1.55, 2.53]. More importantly, the *speakers* reported better listening in the non-distracted condition than in the distracted condition, $d = 0.59$, 95% CI [0.19, 0.99]. We also tested if there were any differences in creativity between the experimental condition and control condition before the manipulation (creativity measures of the VR goggles slogans) and found none ($.50 < ps < .71$).

Next, because our participants were nested within dyads, we calculated Intra-Class Correlation (ICC) of listening (manipulation check), the perceived listening of the speaker, psychological safety and the creativity measures in the dyads, see Table 3. As the ICCs of most dependent variables were below the threshold, .45, that require dyadic data analysis (DDA; Kenny, Kashy, & Cook, 2006; for DDA see supportive information), we tested the hypotheses using ordinary-least-squares techniques.

As predicted in H1, the listening manipulation increased individual psychological safety for the speakers (employees), $d = 0.51$, 95%CI [0.11, 0.91]. Psychological safety was found to be significantly correlated with the fluency-creativity measure, $r = .32$, 95%CI [.14, .50], in support of H2. In the high-quality listening condition, participants produced more slogans, $M = 10.66$, SD = 5.46, than in the low quality listening condition, M = 5.78, SD = 3.11, d = 1.10, 95%CI [0.67, 1.51]. As can be seen in Table 3, high quality listening similarly increased all measures of creativity.

To test the mediation effect, we calculated the indirect effect of the experimental condition on the aggregate measure of creativity. The indirect effect was significant, $\beta = .03$, 95%CI [.00, .06], one tailed, in line with our mediation hypothesis. For ease of interpretation, we standardized the variables as can be seen in Figure 4.

In addition, using the manager's (i.c. listener's) rating of the speaker's (i.c. employee's) creativity, we found, again, that the indirect effect of listening on creativity was significant, $\beta = .06$, $p < .04$, one tailed. Because managers who are more creative are more likely to recognize creativity (Basadur, Runco & Vega, 2000), we also controlled for manager own creative work (how s/he was rated on creativity by the other participant) the indirect effect was still significant, $\beta = .20$, $p < .05$.

Yet, although we found evidence for the role of psychological safety as a mediator of the effect of listening on creativity, the mediation effect was weak and indicated that much of the effect of listening on creativity was direct. This may raise questions about the construct we manipulated in this experiment. For example, it could be that speakers in our distraction condition attributed the poor listening not to listener, but rather than to the distracting environment. This may explain the relatively small effect of listening on psychological safety, preventing it from showing its full potential to mediate listening effects on creativity. Nevertheless, in previous study, the same listening manipulation we used reduced social anxiety (Itzchakov, et al., 2017), a construct related to psychological safety. Thus, when a supervisor does not listen and the employee attributes this to the supervisor the effect on psychological safety could be more profound.

It is also worthwhile noticing the effect of the experimental condition (distraction of listening) on the variances of fluency. In the listening condition, the variance of slogans production is 29.8 (and 17.64 on the residual creativity scale) and in the low-quality listening condition, the variance of slogans production is 9.67 (and 4.8 on the residual creativity scale). These results imply that in the low-quality listening condition (distraction) not only are fewer slogans produced, but there is also a reduction in the production variability of these slogans.

These results support our research model and add to our data in several ways. First, we showed that listening increases creativity in a randomized-controlled experiment, employing real listener, on two independent types of measures of creativity, thus, increasing both internal validity and external validity of our previous studies. Second, in the current study we manipulated the listening construct by distracting the listener, therefore without manipulating

other close constructs, such as respect. Therefore, the current study provided support for a research model while addressing some of the weaknesses and concerns of previous studies.

General Discussion

Although the practitioner-literature often urges supervisors to listen to their subordinates, empirical work in management has only sporadically touched upon this subject (Van Quaquebeke & Felps, 2016). In the present set of studies, we examined listening behavior in the context of supervisor-employee interactions and hypothesized that supervisors who listen instill psychological safety and in doing so consequently increase creativity in the speaker. In four studies in which we measured psychological safety, we consistently found that it was predicted by listening. Moreover, all of the studies involving a measure of creativity brought some support for the hypothesis that listening is positively related to creativity. To measure creativity in our studies we used both self-rating questionnaire and objective measures. As self-report measures of creativity tend to correlate only modestly with actual creative performance and are linked to creative self-efficacy (e.g., Pretz & McCollum, 2014; Reiter-Palmon, Robinson-Morral, Kaufman, & Santo, 2012), our results may indicate that listening is related both to self-efficacy and to actual creative behaviors. We believe that by using different measures of creativity, in concert we provide conservative but robust support for our hypothesis. Moreover, given that the variety in samples, designs, and measures can explain potential variation in the results, we meta-analyzed the results of all studies to assess the degree of support for the effect of listening on creativity. As can be seen in Figure 5, on average, listening was correlated positively with creativity, $\overline{r}$ = .39, 95% CI [.13; .60], p = .01. Yet, the listening effects were heterogeneous, suggesting that the effect of listening on creativity is moderated by some unmeasured variables and therefore future research should attempt to identify moderators of the listening-creativity

association. Thus, below we consider the benefits of listening for creativity with the caveat that this benefit has some unknown boundaries. Finally, mediations tests showed that psychological safety mediated the link between listening and creativity.

We believe that the current study contributes to the creativity literature in two important ways. First, we advance creativity research by identifying and isolating a specific behavior that has the potential to boost employees' creativity: listening. This is especially important in light of the call to increase our understanding of more specific leadership behaviors to counter potential drawbacks of adopting broad and multidimensional leadership frameworks (Van Knippenberg & Sitkin, 2013). In our studies, listening was measured and manipulated with concrete behaviors such as being attentive, distracted, and asking questions and waiting patiently for the employee to talk. These supervisor listening behaviors predicted psychological safety even after controlling for transformational leadership, suggesting that it is not merely a positive halo-effect of positive leadership that is responsible for our results.

A second key contribution to the creativity literature is the identification of the mediating mechanism linking listening with creativity. That is, whereas psychological safety is already known to be implicated in creativity, we extended the understanding of its antecedents. Specifically, we found that supervisor listening instills an individual sense of psychological safety. Employees who feel they are listened to may experience the necessary space to express their thoughts and ideas freely without concerns about how their ideas will be received, and as a result they demonstrate more creativity. This also adds to the psychological safety literature by showing how supervisors can create psychological safety among their employees with a concrete set of behavior. Our results also replicate previous studies demonstrating the effect of psychological safety on creativity and highlighting its role as a mediator (Gong, Cheung, Wang,

& Huang, 2012; Kark & Carmeli, 2009). However, several of our findings tentatively suggests a potentially interesting extension of the relationship between psychological safety and creativity. Specifically, Study 4 suggests that the mere thought of having a listening supervisor may in itself have an effect on creative performance. Yet, there might be other mechanisms at work, which can also partly explain the relation between listening and psychological safety. For example, as was found in Study 1, listening may increase employees' motivation to engage in creative tasks. This is in line with recent theoretical arguments suggesting that listening satisfies the basic needs explicated in Self-Determination Theory (Van Quaquebeke & Felps, 2016), which can lead to higher levels of creativity (Zhang & Bartol, 2010). Similary, a listening supervisor may elicit reciprocity from his or her employees. A supervisor who listens attentivly and signal respect and interest may cause the emplyees to want to reciprocate with more effort and higher motivation. Also, in Study 5, we found that in low-quality listening (distraction), not only did people performed less creatively but the variance of their performance was drastically reduced. This may be in line with previous results, where inattentive listeners were found to undermine speakers attempts for self verification (Pasupathi & Rich, 2005) and tended to ignore the meaning of the speakers' stories (Bavelas et al., 2000). Therefore, one possible explanation for future research to test is that distracted listeners not only reduce the level of creativity but also harm the more creative individuals who become less creative with an overall reduction in variance as a result.

In addition to the effect of psychological safety on willingness to express creative ideas, our findings point to another potential route for psychological safety to affect creativity by freeing up cognitive resources needed for creativity. Edmondson (1999, p. 258) described one of the mechanisms of psychological safety as an actor's "tacit calculus at micro-behavioral decision

points." For potentially risky actions, individuals try to gauge the effects in light of the interpersonal climate: "If I propose this idea or say this out loud, will I be ridiculed, embarrassed or criticized?" However, these continuous appraisals of the interpersonal consequences of each idea may put a heavy burden on the cognitive resources of the actor. Given the central role of working memory in creativity, the cognitive load individuals experience during creative tasks has been found to be a major constraint on the number of creative ideas one can come up with (Roskes, De Dreu, & Nijstad, 2012; Sowden, Pringle, & Gabora, 2015). By constantly fretting about the potentially harmful interpersonal consequences of suggesting creative ideas to their supervisors (e.g. "s/he probably won't like this idea given his/her background"), individuals will have less cognitive capacity available and may be too self-critical to quickly explore and articulate new ideas.

Practical implications

Many listening interventions in practice share common elements (Weger Jr, Castle, & Emmett, 2010). Therefore, trainings in organizations that focuses on the common elements of listening training (Garland, 1981; Rautalinko & Lisper, 2004; Scandura & Graen, 1984; Van Hasselt et al., 2006; Wolvin & Coakley, 1991) can help develop employee creativity. Alternatively, employees could be asked to participate in listening circles, where instead of being trained in listening, they are directly engaged in a practice of listening to each other—a practice that has been shown to reduce employee's social anxiety and increase employee's complex cognitive processing (Itzchakov & Kluger, 2017). Furthermore, our results suggest that simply making leaders aware of the effects that their listening behavior may have, could expand their behavioral strategies for instilling a climate of psychological safety and creativity.

Limitations

Our study has several limitations. It is clear that no single study amongst the current studies allows, on its own, reaching strong conclusions. First, Study 2 and Study 3 are correlational and self-reported, therefore the ability to infer causality is limited. Second, the experimental scenarios used in Study 1 and Study 4 may suffer from demand effects. Another methodological limitation is the low, and fluctuating, reliability of psychological safety. The poor reliability could be the results of using merely three items. Curiously, similar measures of psychological safety also based on only three items yielded acceptable reliabilities in previous research (May et al., 2004, Detert and Burris, 2007). Therefore, it may be desirable to use at least six items of psychological safety, as Castro et al., (2016) obtained listening effects on individual-level psychological safety with scales ranging from six to 12 items. However, in Study 5 we manipulated actual listening behavior in a manner that was not subjected to demand effects. Nevertheless, the effects in Study 5 showed that the distraction affected creativity more than it affected the putative mediator. It could be that a distracted listener affects the creativity of one's partner in a non-conscious way that is not captured in speaker-reported psychological safety. Another limitation of our conclusions regarding the role of psychological safety in mediating the effect of listening on creativity is the inconsistency of measures we used across the studies. While this reflect our attempt to improve the measurement of psychological safety, it also limits the comparison of results pertaining to psychological safety across the studies. Thus, each of our studies has its unique limitations. Altogether, we believe that the strengths of each of the studies may compensate to a certain extent for the weaknesses inherent to the research design of others, providing some confidence in the robustness of our conclusions across studies as shown by our meta-analytic summary.

Future research

The focus on discrete supervisor's behaviors provides interesting questions for future research by breaking it down into its most elementary components such as eye contact, gazing, silence, and emotional expression. There are some findings in micro OB research suggesting that gestures as simple as a handshake (Stewart, Dustin, Barrick, & Darnold, 2008) or an expansive posture (Cuddy, Wilmuth, Yap, & Carney, 2015) may affect job interview outcomes. Similar listening gestures of supervisors may affect psychological safety and hence creativity. Yet, in contrast, it may be that none of the specific listening behaviors determines subordinate' reactions, but rather the deep held attitude of the supervisor towards the act of listening (Tyler, 2011). That is, when managers listen well because they truly believe that their listening will help their subordinates, their micro listening behaviors may signal psychological safety to the subordinates, whereas when the manager listens only to appear polite, their micro listening behaviors may fail to create a sense of psychological safety.

A different route for future research is to explore the relation between listening and power. To provide a relevant and practical context for studying listening behavior in organizations, we specifically focused on supervisor-employee interactions. However, such an interaction, of course, entails a power difference potentially affecting the effects of listening. Good listening may be obstructed by the power that supervisors gain as they ascend in the organizational hierarchy. Having power is related to less empathic concerns for others (Magee & Smith, 2013), more social distance (Lammers, Galinsky, Gordijn, & Otten, 2012), less inclination for perspective taking (Woltin, Corneille, Yzerbyt, & Förster, 2011) and a tendency to listen less to advice (Tost, Gino, & Larrick, 2012). Indeed, one study suggested that listening may undermine the status of the supervisor, such that listening supervisors are perceived as having low dominance, yet they are also perceived as having high prestige (Hurwitz, 2015).

Thus, our work points to future research studying supervisor listening as a mean to increase creativity, but at the same time, taking into account that listening has its costs. Moreover, future research may want to examine how listening among colleagues (peers) may affect psychological safety and creativity on the one hand, but on the other hand also signals power or status differentials.

Conclusion

Our paper shifts the focus from how listeners increase their own creativity to how listeners increase the creativity of others (the speaker). Converging evidence of multiple complementary studies suggests that by merely listening, supervisors might make their employees feel psychologically safe, leading to higher levels of employee creativity. As such, listening to subordinates is a simple, discrete leadership behavior that may be relatively easy to adopt and will allow supervisors to foster creativity among their employees.

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Table 1.

Study 1. Correlations between Manipulated Listening, Manipulation Check and Measures of Creativity

Variable	M	SD	1	2	3	4	5
1. Manipulation (non-distracted =1; distracted = 0)	0.49	0.50					
2. Listening manipulation check	4.56	1.99	.66**				
Creativity							
3. Fluency	4.08	2.66	.11	.14*			
4. Originality	0.06	0.04	.11	.13*	.95**		
5. Flexibility	3.47	2.11	.13*	.12*	.89**	.91**	
6. Aggregated	0.00	0.97	.12*	.13*	.97**	.98**	.96**

Note. * indicates $p < .05$; ** indicates $p < .01$.

Table 2.

Study 2 and Study3: Means, SDs and Correlations of Study Variables.

Variables	*M*	*SD*	2	3	4
Study 2 (*N* = 212)					
1. Perceived supervisor listening	5.37	1.08	.60**	.04	
2. Psychological safety	5.00	1.06		.20**	
3. Creativity	5.97	0.83			
Study 3 (*N* = 71)					
1. Perceived supervisor listening	4.81	1.16	.64**	.56**	.76**
2. Psychological safety	4.53	1.48		.54**	.66**
3. Creativity	4.94	1.10			.49**
4. Transformational Leadership	3.21	0.62			

** $p < .01$

Table 3.

Study 5: Means, Standard Deviations, and Intercorrelations.

Variable	*M*	*SD*	ICC	1	2	3	4	5	6	7	8	9
1. Condition	-0.04	1.00	.58	--								
2. Manipulation check	5.97	3.61	.53	.71**	(.78)							
3. Speaker-reported perceived listening	7.69	2.54	.39	.27**	.53**	(.92)						
4. Speaker's psychological safety	8.32	1.86	.20	.24*	.31**	.18	(.95)					
Creativity												
5. Fluency	0.00	1.00	.18	.63**	.51**	.21*	.34**	--				
6. Originality	0.18	0.13	.66	.44**	.32**	-.03	.17	.72**	--			
7. Flexibility	5.31	3.34	.33	.44**	.28*	-.08	.20	.67**	.89**	--		
8. Coder's subjective rating of creativity	3.11	1.10	.41	.73**	.44**	.08	.25*	.54**	.44**	.47**	--	
9. Aggregated measure	0.00	0.86	.43	.63**	.40**	-.01	.24*	.75**	.91**	.92**	.75**	--
10. Manager's rating of employee creativity	7.06	2.53	.32	.28**	.35**	.11	.28*	.26**	.14	.11	.25*	.19

Note. $N = 95$. [a] The distraction (control) conditions was coded with -1 (1).

* $p < .05$; ** $p < .01$

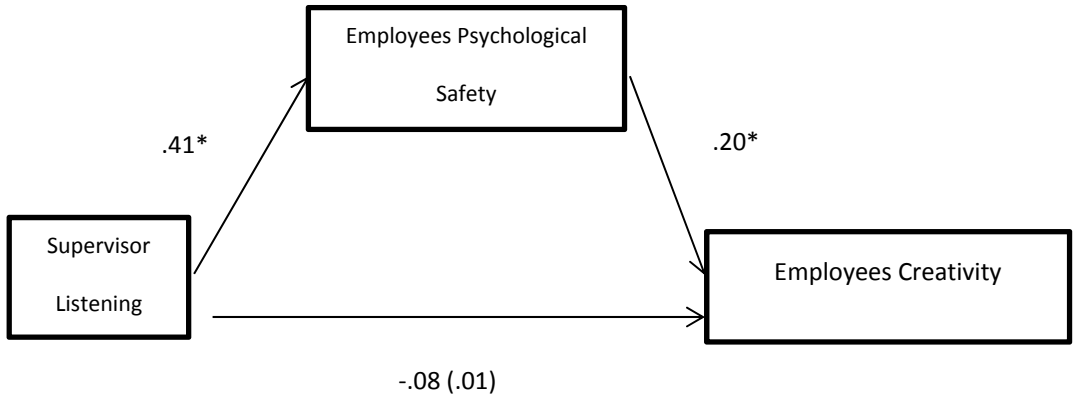

Figure 1.

Standardized path coefficients for the relationship between supervisor's listening on followers' creativity via employees' psychological safety for Study 2. The figure in the parenthesis is a zero-order correlation.

* $p < .01$

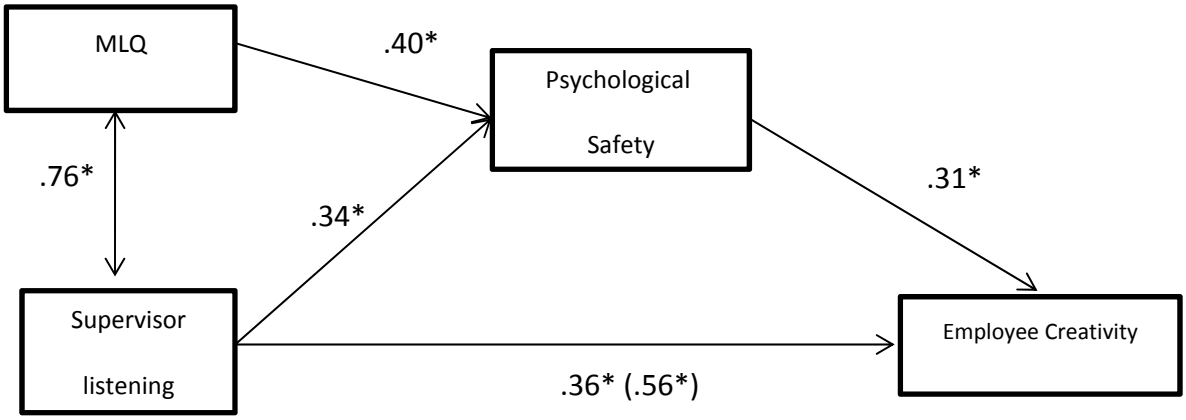

Figure 2.

Standardized path coefficients for the relationship between supervisor's listening on employees' creativity by follower's psychological safety for Study 3, controlling for MLQ. The figure in the parenthesis is a zero-order correlation.

* $p < .01$

Figure 3.

Standardized path coefficients for the relationship between supervisor's listening (experimental condition, where 1 = good listening and 0 = poor listening) with creativity and psychological safety for Study 4. The figure in the parenthesis is a zero-order correlation.

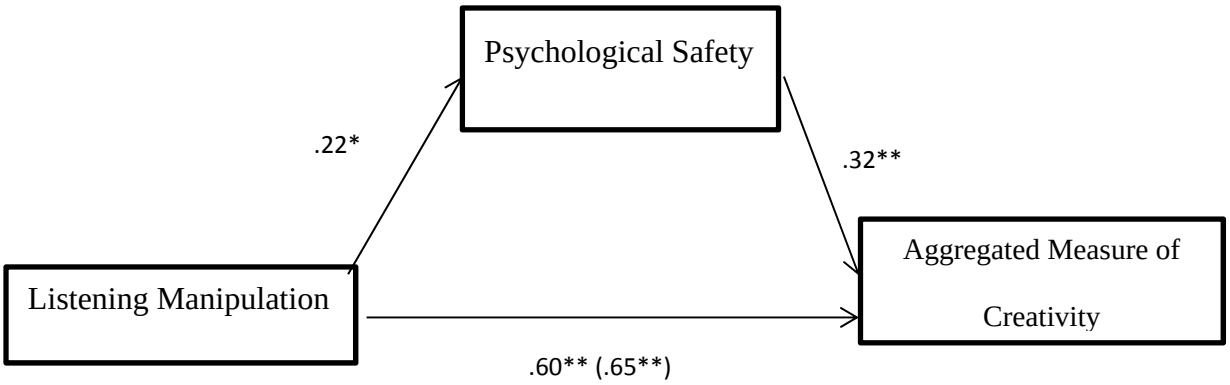

Figure 4.

Standardized path coefficients for the relationship between experimental manipulation of listening (experimental condition, where 1 = good listening and -1 = poor listening) on aggregated measure of creativity via psychological safety for Study 5. The figure in the parenthesis is a zero-order correlation.

* $p < .05$; ** $p < .01$

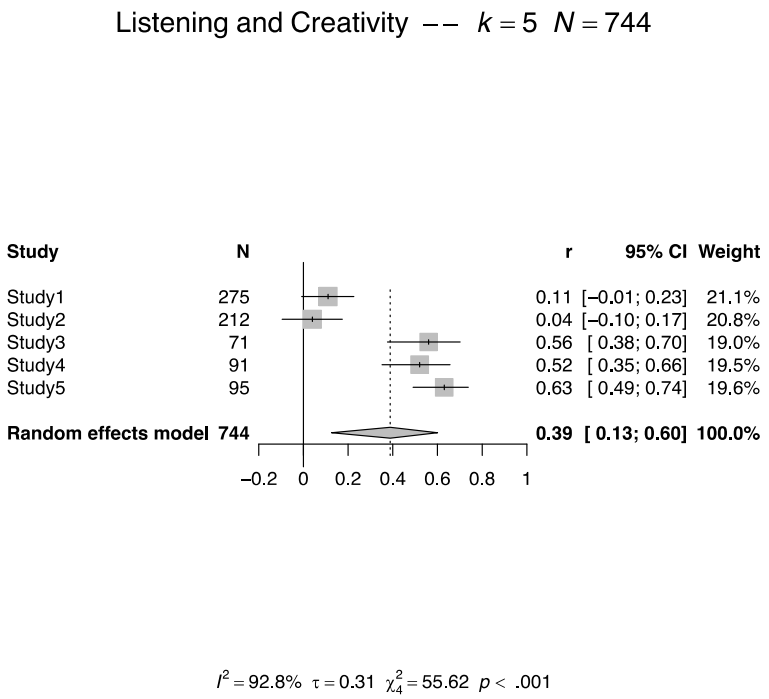

Figure 5.

Meta-analysis of the effects of listening on creativity.

Appendix A

The background story that was presented to the participants:

Imagine the following scenario:

You are an employee, working in a company that produces bricks for a number of different usages. These are troubling and stressful time for the company and managers. Accordingly, you are going to attend a meeting with your direct manager to discuss new ideas to support the marketing department efforts. The goal of the meeting is to come up with as many uses as possible for a brick, for marketing purposes such as slogan and a poster. The ideas for the brick usages should be as many as possible and creative (original and useful).

The *good*-listening vignette:

You entered the meeting and started to discuss ideas with your manager. During the meeting, you felt that your manager listened to you. Even when there were several disturbances and phone calls, he chose not to answer and was attentive to what you had to say. You have felt that your manager made efforts to listen to you and throughout the conversation asked relevant questions to make sure he really understood what you were saying. You felt he really made time to give you his undivided attention.

The *poor*-listening vignette:

You entered the meeting and started to discuss ideas with your manager. During the meeting, you felt that your manager did not listen to you. There were several disturbances and phone calls that he chose to answer and he was not attentive to what you had to say. You have felt that your manager did not make efforts to listen to you and throughout the

conversation did not ask any questions. You felt like he really didn't make time to give you attention.

Asking participants to recall a specific example

We are specifically interested in when and how people listen to each other. We would like to know if you ever experienced a similar conversation where your manager listened to you in that manner. Please think of a specific example and elaborate on his or her listening behaviors.

Creativity task

Now imagine you go back to the meeting. Just before the end of the meeting your manager asked you to think of as many uses as possible for a brick. Please complete the list in the next two minutes

Appendix B

Below you will find a description of a hypothetical situation. Please imagine you are an employee and the story below describes your direct supervisor and the interaction between the two of you. While reading about the situation, try to imagine yourself in this situation as vividly as you can:

Scenario A:

You have to interact with your supervisor a lot in personal meetings. During your interaction, your supervisor seems to listen to you. He is sensitive to what you are saying and understands how you feel. Your supervisor assures you that he will remember what you say by taking notes and keeps track of points you make. Your supervisor uses verbal acknowledgments to assure you that he is listening and assures you that he is receptive to your thoughts. Also, your supervisor asks questions that show his understanding of your position. His body language shows you that your supervisor is listening.

Scenario B:

You have to interact with your supervisor a lot in personal meetings. During your interaction, your supervisor does not seem to listen to you. He is not sensitive to what you are saying and does not understand how you feel. Your supervisor does not assure you that he will remember what you say by taking notes and does not keep track of points you make. Your supervisor does not use verbal acknowledgments to assure you that he is listening and does not assure you that he is receptive to your thoughts. Also, your supervisor does not ask questions that

show his understanding of your position. His body language does not show you that your supervisor is listening.