

**The Frustration Effect:  
Behavioral and Emotional Reactions to Unanswered Voice**

**Liraz Margalit, Ramzi Suleiman, & Yuval Samid**

**University of Haifa**

Please address all correspondence to Prof. Ramzi Suleiman, University of Haifa, Haifa 31509, Israel. Email: [suleiman@psy.haifa.ac.il](mailto:suleiman@psy.haifa.ac.il), Mobiles: 972-(0)50-5474- 215, Fax: 972-(0)4-8240-966.

## **The Frustration Effect: Behavioral and Emotional Reactions to Unanswered Voice**

### **Abstract**

The *frustration effect* refers to situations in which, despite an individual's option to express an opinion, the decision maker does not take that opinion into consideration. Theories of justice predict that, compared with having no voice, an unanswered voice will result in more frustration, dissatisfaction, and negative evaluations of outcome and procedural fairness. We tested these predictions experimentally, using an ultimatum and dictator games in which all participants played the role of recipients, while the allocators were fictitious players, who ostensibly offered them low shares. We found strong support to the frustration-effect hypothesis. Relative to recipients in the no-voice condition, in the unanswered-voice condition recipients in the two games perceived the situation as less fair and expressed more frustration and dissatisfaction from their low outcomes. Moreover, compared with the dictator condition, in the ultimatum game a significantly higher percentage of the recipients rejected the low offers under the unanswered-voice condition than under the no-voice condition. The results also revealed an interesting gender difference in the participants' responses to unanswered voice. Compared to women, men reported higher frustration levels, and rejected low offers with a significantly higher rate when their voice was ignored.

**Keywords:** Frustration effect, voice, distributive justice, procedural justice, ultimatum game, dictator game.

### **Introduction**

Social justice is a key issue in understanding human behavior: people are influenced profoundly by the extent to which they perceive social situations as fair or unfair (Thibaut & Walker, 1975; Lind & Tyler, 1988; Lind, Kanfer & Earley 1990; Jawahar, Kluwer, Heesink, & van de Vliert, 2002). Following the seminal work of Thibaut and Walker

(1975), the focus of social justice research has shifted from questions pertaining to distributive justice, to questions pertaining to procedural justice, that is, to the extent to which the decision-making process is perceived as fair. Among the primary procedural variables, the one that has attracted more attention in the social psychological research is *voice* (Folger, 1977), that is, the opportunity to present an opinion in the decision-making process. Many studies show that voice enhances the perception of outcome and procedural fairness (e.g., Thibaut & Walker, 1975; Homans, 1976; Folger, 1977; Leventhal, 1980; Brehm & Brehm, 1981; Greenberg & Folger, 1983; Lind, Kanfer, & Earley, 1990; Korsgaard & Roberson, 1995; Van den Bos, 2001, 2005; Bhal & Ansari, 2007; Van den Bos et al., 2010; Paddock et al. 2014). The *instrumental view* of voice posits that having a voice in the decision process increases the influence the individual has on the decision's outcome, leading to more favorable outcomes for the individual. By contrast, the *relational view* of procedural justice (e.g., Tyler et al., 1985; Tyler, 1987; Lind et al., 1990; Tyler & Lind, 1992) highlights the non-instrumental, or symbolic, importance of voice, expressed, among other things, in enhanced feelings of satisfaction regarding the procedure, independently of the outcomes. Numerous studies conducted in natural settings as well as in the laboratory indicate that the possibility of having a voice increases individuals' appreciation of the fairness of the process, even when they have no direct control over the decision itself (e.g., Leventhal, 1980, Folger, 1977; Greenberg & Folger, 1983; Lane, 1988; Lind & Tyler, 1988; Tyler, 1990; Greenberg, 1990; Folger & Cropanzo, 1998; Vidmar, 2001). Apparently, the mere opportunity to express one's views and opinions enhances procedural fairness. Moreover, individuals ascribe high value to having voice, because having such right means that their views are worthy. This, in turn, increases their self-worth, and conveys that they garner respect and appreciation within the group or organization (Van Prooijen, Karremans, & Van Beest, 2006).

### **The Frustration Effect**

Despite the aforementioned positive effects of having voice, individuals often respond negatively to procedures that appear to offer process control but do not provide any real effect on the decision outcome. This phenomenon, termed the *frustration effect* (Cohen, 1985; Tyler, 1990), refers to circumstances in which, despite the individual's option to

express an opinion, the decision maker does not take that opinion into consideration (Folger & Konovsky, 1989; Tyler, 1990; Potter, 2006). In such cases, despite the fair procedure, frustrating outcomes may result in less outcome satisfaction than unfair procedures. The frustration effect may be seen as a mirror image of “the fair process effect” (Van den Bos *et al.*, 1997), which prescribes that the recipients perceive favorable outcomes more positively when they have voice than when they do not. Unanswered voice often results in individuals feeling worse than they would have, had they not been asked for their opinions (Folger, 1977; Folger, Rosenfield, Grove, & Cochran, 1979; Folger, Rosenfield, & Robinson, 1983). They might interpret the disregard of their voice as disrespectful and as denial of their basic rights. As result, they might resort to compensatory behavioral strategies aimed at reducing their frustration (Bourdieu, 1965). Despite its importance, the frustration effect has received surprisingly little research attention (Potter, 2006). To explore this effect experimentally, we constructed two settings in which, despite their request for fair shares, subjects were allocated low shares from fictitious allocators. For this purpose, we used the ultimatum and dictator games. In the ultimatum game (Güth, Schmittberger & Schwarze, 1982; Camerer & Thaler, 1995), an *allocator* receives an amount of monetary units and must decide how much to keep for herself and how much to transfer to a *recipient*. The recipient replies either by accepting the offer, in which case both players receive their shares, or by rejecting the offer, in which case the two players receive nothing. In the dictator game (Forsythe, Horowitz, & Sefton 1994; Bardsley, 2008), the allocator’s division is implemented and the game ends. In the ultimatum game the recipients, although with no decision power over how the offer is made, still have considerable structural outcome control, given the fact that they can veto any unsatisfactory offer. In the dictator game, the recipient has no structural control on the outcomes.

In the reported study, we used one-period ultimatum and dictator games, with and without voice. For each game, we tested the recipients’ emotional reactions and evaluations of outcome and procedural fairness to receiving low offers when they had voice that is unanswered, compared to when they had no voice (a “mute” condition). We also looked for gender differences in response to an unanswered voice.

## **The experiment**

### ***Design***

The experimental design was a two-factor between-subjects design. The factors were “Game” (two levels: ultimatum vs. dictator) and “Voice” (two levels: unanswered voice vs. no-voice). About equal numbers of subjects played the role of recipient under each condition. In all conditions, the participants played a one-period game (ultimatum or dictator) in which they received an unfair offer of 10% or 20% of 40 NIS (about \$11).

### ***Participants and procedure***

One hundred and twenty-one subjects participated in the experiment (66% female and 34% male), all students at the University of Haifa. The median participants’ age was 24 Ys. with an age range of 18.5 to 44 Ys. Participants were invited to the social psychology laboratory in evenly sized groups of 14-20 each. Upon arrival, they were randomly assigned to two groups, and each group was guided by an experimenter and seated in a different (adjacent) room, at sufficiently separated chairs. The experimenter in each room explained that one room was (ostensibly) designated for allocators and the other for recipients, and that a random draw had resulted in them being in the role of recipients and the participants in the other room being in the role of allocators. In fact, participants in both rooms played the role of recipients. Each participant was randomly assigned a letter as his or her ID in the experiment, and was told that he/she would (ostensibly) be paired with the allocator who received the same ID letter in the other room. In each room, subjects received an instruction sheet that explained the rules of the game. The experimenter explained that the allocator paired with them in the adjacent room would decide how to allocate 40 New Israeli Shekels (NIS), which is about \$11, between the two of them, would register the allocation on a “decision card,” put the card in an envelope marked with his or her ID, and submit it to the experimenter in the other room. About three minutes after all participants in each room had completed reading the instructions, the experimenter in each room returned with a stack of envelopes, purportedly sent by the allocators sitting in the other room. Each participant then received the envelope corresponding to his/her ID number, which contained the (fictitious) allocator's decision card. The decision, which was handwritten by the experimenter,

indicated a division of 40 NIS, ostensibly written by the allocator. About half of the participants received a 20% offer (stating that the allocator had allocated 32 NIS for himself/herself and 8 NIS for the responder), and the other half received a 10% offer (stating that the allocator had allocated 36 NIS for himself/herself and 4 NIS for the responder). When all participants had finished writing their decisions, the experimenter collected the envelopes containing the decision cards and ostensibly returned each card to the corresponding allocator.

In the dictator-No-voice condition, the subject was requested to open the envelope, read the decision, and signal to the experimenter, who then administered a short questionnaire that the participant was asked to complete, hand to the experimenter, and wait for further instructions. When the experiment ended, participants were called, one at a time, to the experimenter's desk, where they received their gains as well as 10 NIS (about \$2.7) for participating in the study. They were then released from the room.

In the *dictator-voice condition*, the procedure was identical to the one described above, except that the participants were also instructed that *before* the (fictitious) allocators in the other room make their decisions, each recipient could send a short message to his or her paired allocator. The experimenter gave each recipient a "message card" on which he or she could write a short message to the allocator. After all recipients had finished writing their messages, the experimenter collected the messages and ostensibly gave them to the respective allocators in the next room. Recipients who opted not to write a message were asked to hand the empty "message card" to the experimenter. After a few minutes, the experimenter returned to the room and handed each responder an envelope containing a decision card ostensibly sent by his/her allocator.

The procedures of the mute and voice ultimatum conditions were identical to the corresponding procedures described above, except that the participants were instructed that after receiving the allocators' decision cards, they must decide whether to accept the offer or reject it, write the decision on the designated place in the decision card, and hand the card back to the experimenter. The instructions stated clearly that if participant accepted the offer, the 40 NIS would be divided according to the allocator's offer, and if the participant rejected the offer, the allocator and the responder would get nothing.

When the experimental part ended, the participants were asked to answer a short questionnaire pertaining to their levels of satisfaction and perceptions of outcome and procedural fairness. After completion of the questionnaire, participants were called, one at a time, to the experimenter's desk, where they received their gains from the experiment, in addition to 10 NIS (about \$2.75) for participating.

### ***Main Hypotheses***

1. In the ultimatum game, in which recipients have structural power to veto the allocators' offers, a higher percentage of the participants will reject low offers under the unanswered-voice than under the no-voice (mute) condition.
2. Relative to participants in the "mute" condition, participants in the comparable unanswered-voice condition in the two games will feel more frustrated.
3. Participants in the unanswered-voice condition in the two games will perceive the process as less fair than under the no-voice condition.

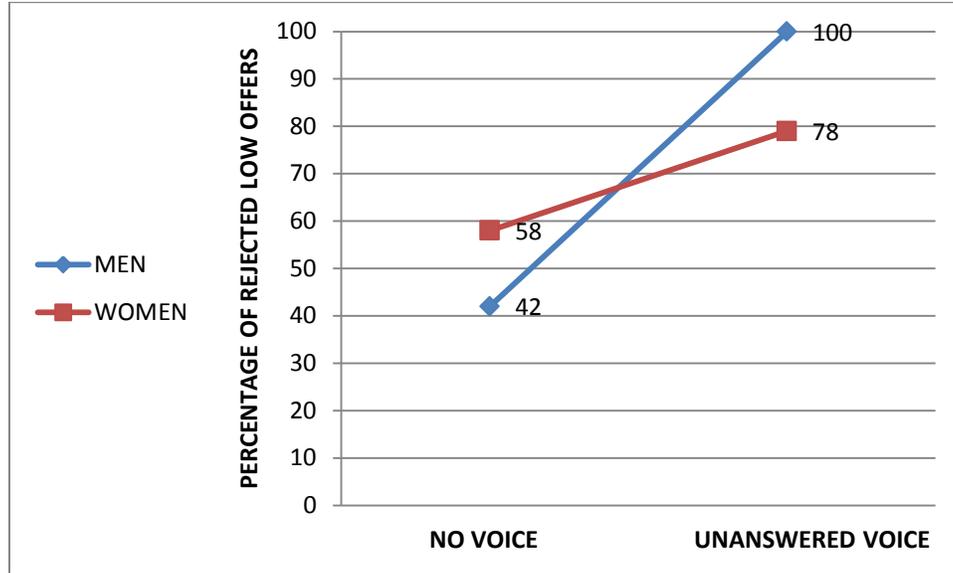
### ***Results***

#### ***(a) Recipient's decisions in the ultimatum conditions***

We hypothesized that the proportion of rejections of low offers will be higher in the ultimatum game with unanswered voice than in the ultimatum game with no-voice (control). A Wilcoxon exact one-tailed analysis revealed a significant difference ( $p = 0.0041$ ), indicating that in the ultimatum game with unanswered voice, the proportion of rejections (85.95%) was significantly higher than in the ultimatum game with no-voice (51.67%).

We also compared the rates of rejection of women and men. Figure 1 depicts the mean rejection rates (in %, approximated to the closest integers) by men and women under the two voice conditions. As the figure shows, among men in the unanswered-voice condition, all proposals were rejected compared to only 42% in the no-voice condition. The difference in rejection rates was significant ( $p = 0.0046$ , Wilcoxon exact two-tailed test). On the other hand, among women, this difference was not significant ( $p = 0.30$ , Wilcoxon exact two-tailed test), and most low offers were rejected in both conditions. In the voice condition, 77.78% of proposals were rejected, versus 57.89% in the standard ultimatum condition. The difference in the power of the voice variable effect among men

versus women reaches only marginal significance ( $\chi^2_{(1)} = 3.54, p = 0.06$ , Bareslow-Day Test for Homogeneity of Odds Ratios). In other words, among women, low proposals seem to have been equally frustrating, whether they had voice or not.

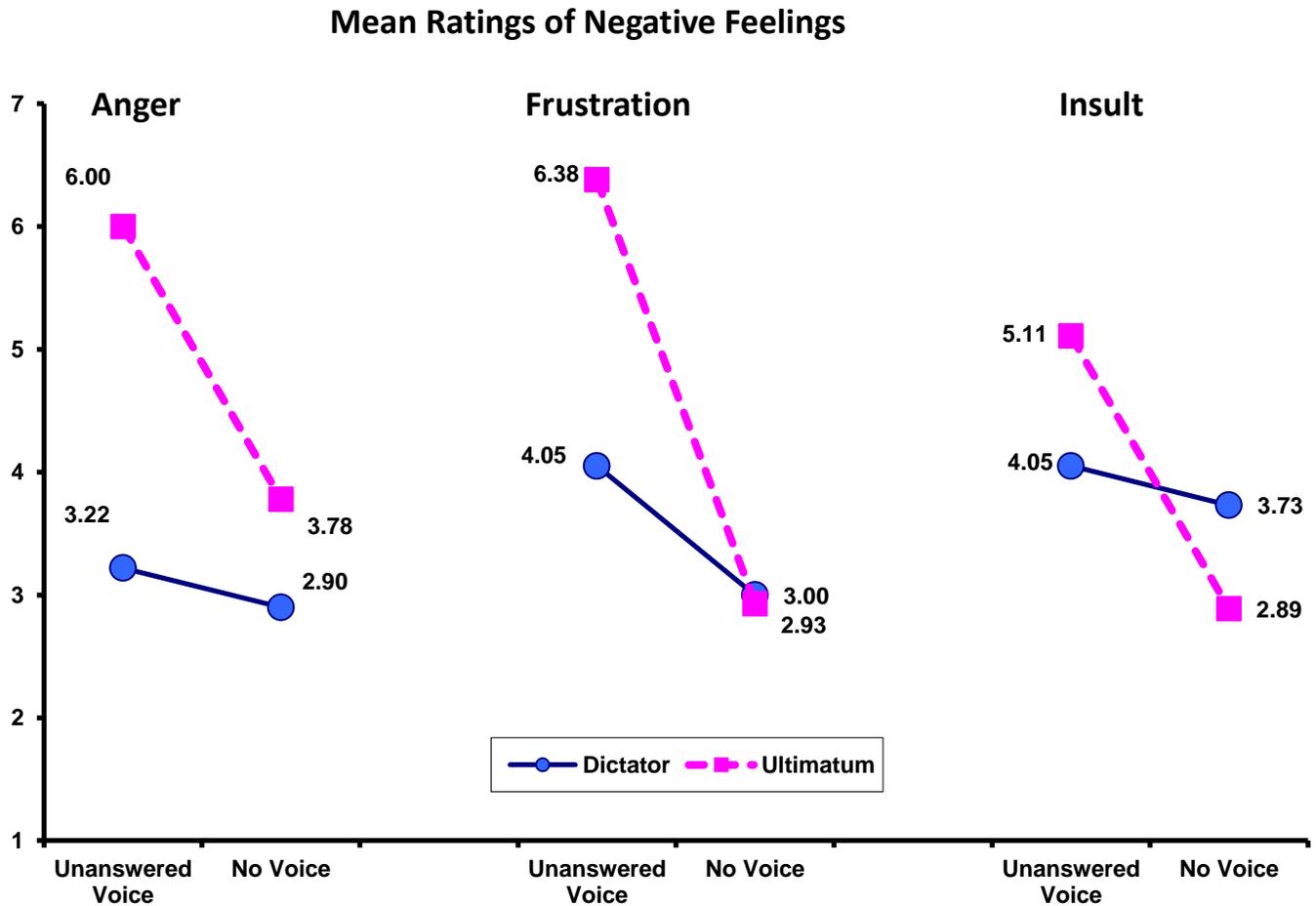


**Figure 1:** Mean rejection rates (in %) by men and women under the two voice conditions

**(b) Self-Reports of Negative Feelings**

The post-experiment questionnaire asked participants to report their feelings after receiving the low offers. Specifically, the questionnaire probed their feelings of anger, frustration, and insult on a scale of 1 (*not at all*) to 7 (*very much*). A multivariate analysis of variance (MANOVA) revealed a significant effect for the type of game ( $F_{(3,106)} = 14.18, p < 0.0001$ ), for the voice condition ( $F_{(3,106)} = 19.98, p < 0.0001$ ), and for the interaction between the two ( $F_{(3,106)} = 6.02, p < 0.001$ ). Separate analyses for each reported emotional reaction revealed significant effects. For anger, the effect of voice was significant ( $F_{(1,108)} = 18.38, p < 0.0001$ ). The effects of the type of the game (ultimatum/dictator) and its interaction with the voice condition were also significant ( $F_{(1,108)} = 38.04, p < 0.0001$ ; and  $F_{(1,108)} = 10.27, p < 0.01$ , for the type of the game and its interaction with the "voice" condition, respectively). A similar analysis on the reported frustration levels yielded significant effects for the voice, type of game, and their interaction ( $F_{(1,108)} = 60.30, p < 0.0001$ ;  $F_{(1,108)} = 15.15, p < 0.001$ ; and  $F_{(1,108)} = 17.06, p < 0.0001$ , for voice, game type, and their interaction, respectively). The comparable

results for the self-reports of "insult" were similar, except that we detected no significant effect for the type of game ( $F_{(1,108)} = 11.85, p < 0.001$ ;  $F_{(1,108)} < 1$ ; and  $F_{(1,108)} = 6.70, p < 0.05$ , for the effects of the voice, the game, and their interaction, respectively). Figure 2 depicts the mean self-reports of anger, frustration, and insult in the ultimatum and dictator games, with no voice and with unanswred voice.



**Figure 2:** Means of self-reports of feelings of anger, frustration, and insult in the ultimatum and dictator games, with no voice, and with unanswred voice.

Across the two game conditions, the mean levels of anger, frustration, and insult under the no-voice condition were 3.34, 2.97, and 3.31, respectively. Under the unanswred-voice condition, the respective means were 4.61, 5.22, and 4.58. The standard deviations under all conditions were in the range 0.90-2.24, with an average of 1.67. As shown in

the figure, when voice was not met with compliance, the self-reported negative feelings were stronger in the ultimatum game than in the dictator game (for anger:  $F_{(1,108)} = 29.16, p < 0.0001$  in the ultimatum game vs.  $F_{(1,108)} < 1$  in the dictator game; for frustration:  $F_{(1,108)} = 73.51, p < 0.0001$  in the ultimatum game vs.  $F_{(1,108)} = 6.37, p < 0.05$  in the dictator game; and for insult:  $F_{(1,108)} = 18.90, p < 0.0001$  in the ultimatum game vs.  $F_{(1,108)} < 1$  in the dictator game). The ultimatum game with voice generated more negative feelings than the dictator game with voice (for anger:  $F_{(1,108)} = 41.65, p < 0.0001$  in the voice condition vs.  $F_{(1,108)} = 4.64, p < 0.05$  in the control condition; for frustration:  $F_{(1,108)} = 30.51, p < 0.0001$  in the voice condition vs.  $F_{(1,108)} < 1$  in the control condition; for insult:  $F_{(1,108)} = 3.98, p < 0.05$  in the voice condition vs.  $F_{(1,108)} = 2.75, p = 0.10$  in the control condition).

### ***(c) Levels of Satisfaction***

The post-experimental questionnaire included two questions which probed the participants' feelings of satisfaction regarding the allocator's division of the monetary "pie," which they reported on a scale of 1-7. The first question was: "How did you feel when you saw the division chosen by the allocator?" (1= very disappointed, 7 = very pleased). The second question was: "To what extent you felt satisfied or unsatisfied when you saw the division chosen by the allocator?" (1= very unsatisfied, 7 = very satisfied). The correlation between the participants' replies to the two questions was only 0.6, thus we treated the two questions as separate items. A multivariate analysis of variance (MANOVA), revealed that only the voice condition had a significant effect on the recipients' levels of satisfaction ( $F_{(2,107)} = 6.46, p < 0.01$ ),

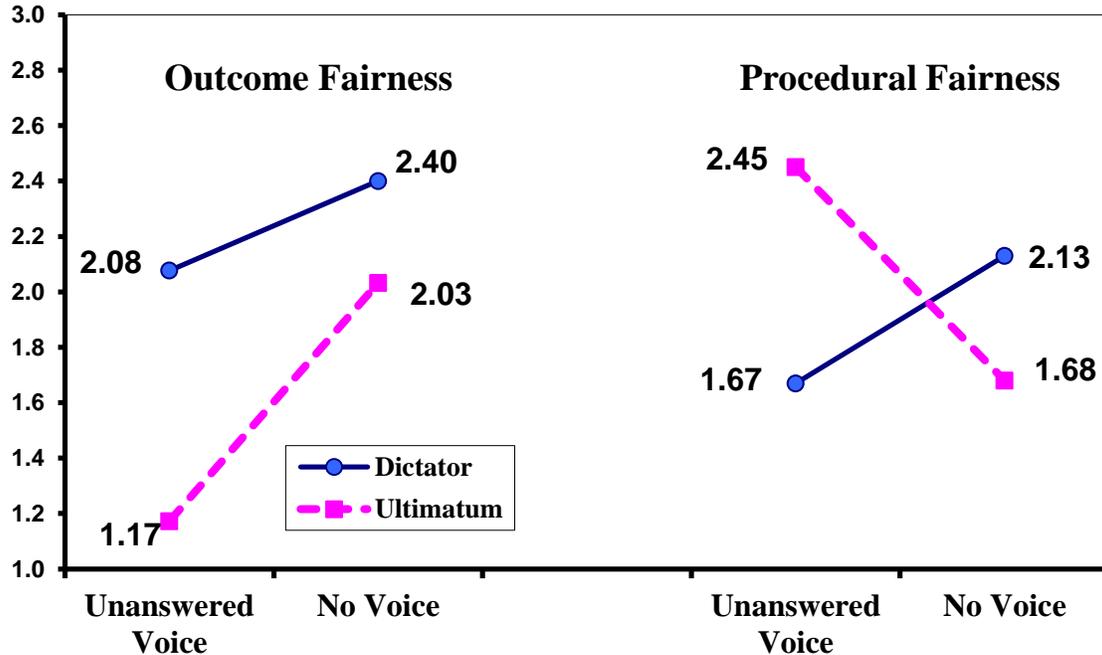
A univariate analysis of variance revealed significant effects for satisfaction ( $F_{(1, 108)} = 7.04, p < 0.01$  for question 1, and  $F_{(1, 108)} = 12.32, p < 0.001$  for question 2, respectively). When the participants' voice was not met with compliance, their level of satisfaction was lower than when voice was not an option.

### ***(d) Perceived Fairness***

Participants' also rated the outcome and process fairness on a scale of 1 (*not fair at all*) to 7 (entirely fair). Figure 3 depicts the mean reported perceptions of outcome and procedural fairness in the ultimatum and dictator games, with no voice and with

unanswered

voice.



**Figure 3:** Means of the perceptions of outcome fairness (left panel) and procedural fairness (right panel) in the ultimatum and dictator games, with no voice, and with unanswered voice

Across the two game conditions, the mean levels of outcome and procedural fairness under the no-voice condition were 2.22 and 1.91, respectively, whereas under the unanswered voice, the respective means were 1.63 and 2.06. The standard deviations under all conditions were in the range 0.47-1.82, with an average of 1.25. A multivariate analysis of variance (MANOVA) revealed significant effects for the voice condition ( $F_{(2,107)} = 3.80, p < 0.05$ ), type of game ( $F_{(2,107)} = 4.41, p < 0.05$ ), and their interaction ( $F_{(2,107)} = 4.76, p < 0.05$ ).

For the perceptions of outcome fairness, the analysis of variance revealed a significant effect for the voice condition ( $F_{(1,108)} = 5.72, p < 0.05$ ) and the type of game ( $F_{(1,108)} = 6.64, p < 0.05$ ), but not for their interaction ( $F_{(1,108)} = 1.17, p = 0.28$ ). Figure 3 shows, that when voice was not met with compliance, participants perceived the allocation outcome as fairer in the dictator game than in the ultimatum game. They also perceived the outcome as fairer in the no-voice than in the unanswered-voice condition. In other words,

when a low proposal is received in a game with no structural power, and when no prior request had been made, the degree of perceived fairness was highest.

For the perceptions of process fairness, we found no significant effect for type of game ( $F_{(1,108)} = 0.41, p = 0.53$ ), nor for the voice condition ( $F_{(1,108)} = .36, p = 0.55$ ). However, a significant interaction effect emerged ( $F_{(1,108)} = 5.89, p < 0.05$ ). Separating the interaction into simple effects, revealed a significant effect for the voice condition in the ultimatum game ( $F_{(1,108)} = 4.75, p < 0.05$ ), whereas in the dictator game, this effect was insignificant ( $F_{(1,108)} = 1.62, p = 0.21$ ). We also found a significant effect for the type of game in the voice condition ( $F_{(1,108)} = 4.45, p < 0.05$ ), whereas in the control condition, this effect was insignificant ( $F_{(1,108)} = 1.70, p < 0.2$ ).

### **Gender differences in negative feelings and outcome satisfaction**

Motivated by the detected gender difference in rejection rates in the ultimatum game, we analyzed the effects of gender on the participants' reports of negative feelings and outcome satisfaction. Three multivariate analyses on the recipients' negative feelings, adjusted for the effects of offer size, showed no significance ( $F_{(3, 98)} < 1$ ) for gender, nor for its interactions with the voice and game conditions. Also, the effect of the three-way interaction—gender x voice x game type—was insignificant. Similarly, we found no significant effects for the two-way interactions between gender and voice and gender and game type, and the three-way interaction between the discussed variables was insignificant ( $F < 1$ ). On the other hand, a multivariate analysis of variance on the reported levels of outcome satisfaction revealed a significant interaction between gender and voice ( $F_{(2, 99)} = 3.98, p < 0.05$ ). All other interaction effects were insignificant ( $F_{(2, 99)} = 1.02, p = 0.36$  for gender main effect, and  $F_{(2, 99)} < 1$  for interaction of gender with the game type and the three-way interaction). Separation of the interaction effect into simple effects shows that the difference between the no-voice and unanswered voice was significant only for men ( $F_{(1, 100)} = 12.41, p = 0.0006$ ), but not for women, for whom the level of satisfaction was similarly low under the two voice conditions.

## **Discussion**

The frustration effect refers to circumstances in which, despite the opportunity to voice one's opinion, the decision maker does not take the expressed opinion into consideration, and rather acts to maximize his own personal benefit (Folger, 1977; Lind & Tyler, 1988; Tyler, 1990; Van den Bos et al., 1997; Potter, 2006). In such cases, theories of distributive and procedural justice contend that, compared with having no voice, an unanswered voice will eventually result in more frustration, dissatisfaction, and negative evaluations of the outcome and procedure's fairness (Folger & Konovsky, 1989; Potter, 2006).

Despite the extensive research on the effects of voice on procedural and distributive justice, the experimental research on the "frustration effect" is relatively scarce (Potter, 2006). Our findings, based on recipients' responses in ultimatum and dictator games, lend strong support to the frustration effect. They also indicate that the effect is stronger when recipients whose voices were ignored have structural power in the process. In the reported study recipients who had structural power, might have had greater expectations of having an influence in the decision-making process than players with no such power, and the higher the expectations were, the higher the disappointment. Moreover, our findings demonstrate that the realization that voice had no influence on the decision, increased the participants' disappointment and diminished their perceived outcome fairness. It is possible that the lack of procedural consistency, caused by unfulfilled expectations, was also a factor that contributed to the significantly higher rejection rates in the ultimatum game with an unanswered voice and to the increased negative emotions in the ultimatum and dictator games. As Van den Bos, Vemunt, and Wilke (1997) have noted, a procedure is perceived to be fair when the expectation it aroused at the beginning of the process is consistent with the actual process. The findings of their study demonstrated that when participants were not told at the beginning of the experiment that they would have the opportunity to express their opinions and then were not given this option, they perceived the process as less fair (situation of inconsistency) than participants who neither had the option of voice nor expected to receive it (situation of consistency). Our study, using the ultimatum and dictator game, lends strong support to the findings and conclusions of the Van den Bos et al. (1997) study.

### *Gender differences*

Previous research on gender differences in justice perception indicate that procedural justice is more important for women than for men (e.g., Sweeney & McFarlin; 1997; Jawahar et al., 2002; Kluwer, Tumewu, & Van den Bos, 2009, Rosener, 2011). Although not hypothesized, our results revealed interesting differences in the behavioral and emotional responses of male and female participants. In the ultimatum game, the increase in the rejection rate caused by an unanswered voice (relative to the no-voice condition) was much higher among men than among women (see Fig. 1). Female participants seem to have perceived low proposals as insulting whether they had the option of voice or not. By contrast, men seem to have ignored the insult and behaved more rationally when they had no option of voice, but they couldn't ignore the insult when they had voice, but their voice was not met with compliance. We contend that the detected differences in reaction to low offers and unanswered voice are rooted in the wider differences in the socialization of men and women in the investigated Israeli sample, where, as in most countries and cultures, men still have more decision power than women. Unfortunately, women face more situations in which they either have no voice, or they expect that their voice will be ignored. Men, on the other hand, are used to having voice and to having their voice answered. As such, their response to having their voice unanswered is more severe than the response of women. In our sample, all men who had their voice unanswered rejected the low offers.

A concluding remark is in order. "Strategic use of voice" and "pseudo participation", are terms that refer to the cynical exploitation of the positive effect attributed to voice. The purpose of such exploitation is to receive support and legitimization, thereby encouraging positive feelings toward supervisors without bearing instrumental costs such as salary raises (Pateman, 1970). Such use is attained through creating the appearance of a fair procedure by encouraging subordinates to take part in the decision-making process, while in fact they have no influence (Lind & Tyler, 1988; Van den Bos et al., 1997, MacCoun, 2005; De Vries, Jehn, & Terwel, 2012). Our results suggest that managers, as well as social and political leaders, should be more aware of the detrimental effects of unanswered voice.

## References

- Bardsley, N. (2008). Dictator game giving: altruism or artefact? *Experimental Economics*, 11, 122 -133, 2008.
- Bhal, K. T., & Ansari, M. A. (2007). Leader-member exchange-subordinate outcomes relationship: role of voice and justice. *Leadership & Organization Development Journal*, 28 (1), 20 – 35.
- Bourdieu, P. (1965). The sentiment of honour in the Kabyle Society. In J. G. Peristiany (Ed.), *The Nature of Human Society: Honor and Shame* (pp. 191- 242). London: Weidenfeld & Nicolson.
- Brehm, J. W., & Brehm, S. (1981). *Psychological Reactance: A Theory of Freedom and Control*. New York: Academic Books.
- Camerer, C. & Thaler, R. H. (1995). Ultimatums, dictators and manners. *Journal of Economic perspectives*, 9 (2), 209-219.
- Cohen, R.L. (1985). Procedural justice and participation. *Human Relations*, 38, 643-663.
- Deaux, K., & Major, B. (1982). Individual differences in justice behavior. In: Greenberg, J. & Cohen, R. L. (Eds.) *Equity and Justice in Social Behavior*, Academic Press, New York.
- Greenberg, J., Folger, R. (1983). Procedural justice, participation, and the fair process effect in groups and organizations. In Paulus, P.B. (Ed.), *Basic Group Processes*. (pp. 235-56). Springer-Verlag, New York, NY.
- Greenberg, J. (1990). Organization justice: Yesterday, today, and tomorrow, *Journal of Management*, 16(2), 399 - 432.
- De Vries, G., Jehn, K. A., & Terwel, B. W. (2012). When employees stop talking and start fighting: The detrimental effects of pseudo voice in organizations. *Journal of Business Ethics*, 105, 221–230
- Farmer, H. S., & Fyans, L. J. (1980). Women's achievement and career motivation: Their risk-taking patterns, home-career conflict, sex role orientation, fear of success, and self-concept. In: Fyans, L. J. (Ed.) *Achievement Motivation: Recent Trends in Theory and Research* (pp. 390-416). Plenum Press, New York.

- Folger, R. (1977). Distributive and procedural justice: Combined impact of 'voice' and improvement of experienced inequity. *Journal of Personality and Social Psychology*, 35, 108-119.
- Folger, R., Rosenfield, D, Grove, J, & Corkran, L. (1979). Effects of "voice" and peer opinion on responses to inequity. *Journal of Personality and Social Psychology*. 37, 2253-2261.
- Folger, R, Rosenfield, D, & Robinson, T. (1983). Relative deprivation and procedural justifications. *Journal of Personality and Social Psychology*, 45, 268-273.
- Folger, R., & Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journal*, 32, 115 - 130.
- Folger, R., & Cropanzano, R. (1998). *Organizational Justice and Human Resource Management*. Thousand Oaks, CA: Sage.
- Forsythe, R., Horowitz, J., Savin, N., & Sefton, M. (1994). Fairness in Simple Bargaining Experiments, *Games and Economic Behavior*, 6, 347-69.
- Güth, W., Schmittberger, R., & Schwartz, B. (1982). An experimental analysis of ultimatum games. *Journal of Economic Behavior and Organization*, 3, 367-388.
- Harrison, G. W., & McCabe, K. A. (1996). Expectations and fairness in a simple bargaining experiment. *International Journal of Game Theory*, 25 (3), 303-327.
- Hunton, J. E., Hall, T. W., & Price, K. H. (1998). The value of voice in participative decision making. *Journal of Applied Psychology*, 83(5), 788-797.
- Homans, G. C. (1976). Commentary. *Advances in Experimental Social Psychology*, 9, 44 - 231.
- Jawahar, I. M., Kluwer, E. S., Heesink, J.A.M., & van de Vliert, E. (2002). The division of labor across the transition to parenthood: A justice perspective. *Journal of Marriage and Family*, 64 (4), 930-943.
- Kahneman, D., Knetsch, J., & Thaler, R. H. (1986). Fairness as a constraint on profit seeking: Entitlements in the market. *American Economic Review*, 76, 728-741.
- Kluwer, E.S., Tumewu, M., & Van den Bos, K. (2009). Men's and women's reactions to fair and unfair treatment in relationship conflict. *Personal Relationships*, 16 (4), 455-474.

- Korsgaard, M. A., & Roberson, L. (1995). Procedural justice in performance evaluation: The role of instrumental and non-instrumental voice in performance appraisal discussions. *Journal of Management*, 21, 657-669.
- Kulik, C., & Clark, S. (1993). Frustration effects in procedural justice research: The case of drug-testing legislation. *Social Justice Research*, 6, 287-299.
- Lane, R. E. (1988). Procedural goods in a democracy: How one is treated versus what one gets. *Social Justice Research*, 2, 177 - 192.
- Lind, E. A., & Tyler, T. R. (1988). *The Social Psychology of Procedural Justice*. New York: Plenum.
- Lind, E. A., Kanfer, R., & Earley, P. C. (1990). Voice, control, and procedural justice: Instrumental and noninstrumental concerns in fairness judgments. *Journal of Personality and Social Psychology*, 59 (5), 952-959.
- Leventhal, G. S. (1980). What should be done with equity theory? New approaches to the study of fairness in social relationships. In K. Gergen, M. Greenberg, & R. Willis (Eds.), *Social Exchange: Advances in Theory and Research* (pp. 27 - 55). New York: Plenum
- MacCoun, R. (2005). Voice, control, and belonging: The double-edged sword of procedural fairness. *Annual Review of Law and Social Science*, 1, 171- 201.
- Major, B., & Adams, J. B. (1983). Role of gender, interpersonal orientations, and self-presentation in distributive justice behavior, *Journal of Personality and Social Psychology*, 44, 598-608.
- Major, B., McFarlin, D. B., & Gagnon, D. (1984). Overworked and underpaid: On the nature of gender differences in personal entitlement, *Journal of Personality and Social Psychology*, 47, 1399-1412.
- Paddock, E. L., Ko, G., Cropanzano, R., Bagger, J., El Akremi, A., Camerman, J., Greguras, G. J., Mladinic, A., Moliner, C., Nam, K., Törnblom, K., & Van den Bos, K. (2014). Voice and culture: A prospect theory approach. *Journal of Behavioral Decision Making*, online early view DOI: 10.1002/bdm.1834.
- Pateman, C. (1970). *Participation and democratic theory*. Cambridge University Press.
- Potter, P. W. (2006). Procedural justice and voice effects, *Journal of Organizational Culture, Communications and Conflict*, 10 (1), 33-61.

- Rosener, J. B. (2011). Ways women lead. *Leadership, Gender, and Organization Issues in Business Ethics*, 27, 19-29.
- Stone, T. H. (2011). Fairness perceptions and satisfaction with components of pay satisfaction. *Journal of Managerial Psychology*, 26 (4), 297 - 312.
- Sweeney, P. D., & McFarlin, D.B. (1997). Process and Outcome: Gender Differences in the Assessment of Justice. *Journal of Organizational Behavior*, 18 (1), 83-98.
- Van den Bos, K. (2001). Referent cognitions theory: the role of closeness of reference points in the psychology of voice. *Journal of personality and social psychology*, 81 (4), 616-626.
- Thibaut, J. W., & Walker, L. (1975). *Procedural Justice: A Psychological Analysis*. Hillsdale, NJ Erlbaum.
- Van den Bos, K. (2005). What is responsible for the fair process effect? In J. Greenberg, & J. A. Colquitt (Eds.), *Handbook of organizational justice: Fundamental questions about fairness in the workplace* (pp. 273–300). Mahwah, NJ: Erlbaum.
- Van den Bos, K., Lind, E. A., Vermunt, R., & Wilke, H. A. M. (1997). How do I judge my outcome when I do not know the outcome of others? The psychology of the fair process effect. *Journal of Personality and Social Psychology*, 72, 1034-1046.
- Van den Bos, K., Brockner, J., Stein, J. H., Steiner, D. D., Van Yperen, N. W., & Dekker, D. M. (2010). The psychology of voice and performance capabilities in masculine and feminine cultures and contexts. *Journal of Personality and Social Psychology*, 99, 638–648.
- Van Prooijen, J.-W., Karremans, J. C., & Van Beest, I. (2006). Procedural justice and the hedonic principle: How approach versus avoidance motivation influences the psychology of voice. *Journal of Personality and Social Psychology*, 91, 686-697.
- Veroff, J. (1977). Process vs. impact of men's and women's achievement motivation, *Psychology of Women Quarterly*, 1, 283-293.
- Veroff, J., McClelland, L., & Ruhland, D. (1975). Varieties of achievement motivation. In: Mednick, M. T. S., Tangri, S. S. and Hoffman, L. W. (Eds.) *Women and Achievement*, Wiley, New York.
- Vidmar, N. (2001). Retribution and revenge. In J. Sanders, V.L. Hamilton (Eds.), *Handbook of Justice Research in Law*. (pp 31-63) New York: Kluwer Acad.