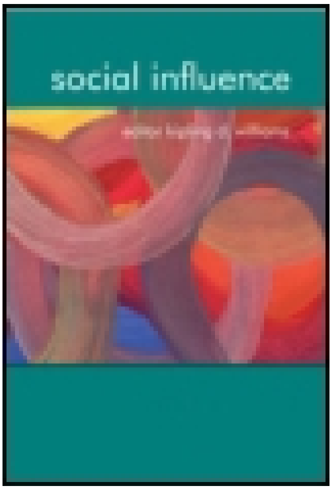
This article was downloaded by: [Mr Jerry M. Burger]
On: 17 July 2015, At: 10:46
Publisher: Routledge
Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: 5 Howick Place, London, SW1P 1WG



Social Influence
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/psif20

The low-ball compliance procedure: a meta-analysis

Jerry M. Burger[a] & Deanna Caputo[b]

[a] Psychology, Santa Clara University, Santa Clara, CA, USA

[b] The MITRE Corporation, McLean, VA, USA

Published online: 17 Jul 2015.

Click for updates

To cite this article: Jerry M. Burger & Deanna Caputo (2015): The low-ball compliance procedure: a meta-analysis, Social Influence, DOI: 10.1080/15534510.2015.1049203

To link to this article: http://dx.doi.org/10.1080/15534510.2015.1049203

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the “Content”) contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms &

Conditions of access and use can be found at http://www.tandfonline.com/page/terms-and-conditions

Social Influence, 2015
http://dx.doi.org/10.1080/15534510.2015.1049203

Routledge
Taylor & Francis Group

The low-ball compliance procedure: a meta-analysis

Jerry M. Burger[a]* and Deanna Caputo[b]

[a]*Psychology, Santa Clara University, Santa Clara, CA, USA;* [b]*The MITRE Corporation, McLean, VA, USA*

(*Received 9 March 2015; accepted 4 May 2015*)

Practitioners of the low-ball compliance procedure allow individuals to agree to a request and then raise the cost of agreement slightly. When successful, the tactic results in more compliance than a condition in which people are presented only with the higher price. A meta-analysis of published low-ball studies found that the procedure is a reliable and effective method for increasing compliance. The procedure appears to be most effective when participants state their initial agreement publicly and when the second request is only slightly more costly than the first. Three psychological processes are identified that may explain the low-ball effect—commitment to the action, commitment to the person, and self-presentation. It is likely that all three contribute to the effectiveness of low-ball manipulations.

Keywords: low-ball; compliance; persuasion; commitment; self-presentation

One tactic often used by salespeople, recruiters and the like to increase compliance is known as “throwing the low-ball” or more simply, the low-ball technique (Cialdini, Cacioppo, Bassett, & Miller, 1978). The basic procedure is relatively simple. It begins when an individual agrees to a request at the price suggested or implied by the requester. The requester then raises the price of compliance slightly. Use of the tactic is said to be common in car sales (Cialdini, 2008). Shortly after a customer and salesperson agree on the price of a car, the salesperson may “discover” that the owner would lose money at that price and that the actual cost is $500 higher. If the tactic is successful, consumers in this situation are more likely to agree to the higher price than those who are told the higher price at the outset.

The low-ball procedure is typically portrayed in the literature as a robust and reliable technique for improving compliance (Cialdini, 2008; Joule, Girandola, & Bernard, 2007; Pratkanis, 2007). However, not all low-ball studies find the effect, and to date there has been no meta-analytic review of the research that allows investigators to gauge the overall effectiveness of the tactic. The primary purpose of this paper is to present such an analysis. Following this, we also will speculate briefly about some of the psychological processes underlying the low-ball effect.

Effectiveness of the low-ball procedure

We began the meta-analysis with a thorough search of relevant studies appearing in articles published in academic journals in English. We located all articles that included the word *low-ball* or the words *low* and *ball* in any field in the PsycInfo retrieval system. This process led us to the 19 studies listed in Table 1. Each relevant study was treated as an

---

*Corresponding author. Email: jburger@scu.edu

© 2015 Taylor & Francis

independent investigation, even when more than one study appeared in the same article. In two cases, we found what amounted to two separate low-ball studies embedded in one experiment. For example, Katzev and Brownstein (1988) asked some participants if they would answer 25 math questions, which was then raised the to 75 questions. A control group was presented only with the more costly request. The same study included a condition in which participants were asked to answer three questions, which was then raised to 10 questions. A control group for this condition was asked only to answer 10 questions. In these cases, we considered each low-ball condition and control condition pair as a separate study.

We also included in the meta-analysis only those conditions that represented pure low-ball manipulations. Investigators have often included in their designs a variation of the basic low-ball manipulation to test a theoretically interesting variable. For example, Burger and Petty (1981, Experiment 1) included a low-ball condition in which the higher price was delivered by a different requester. The researchers predicted and found that this manipulation did not result in an increase in compliance relative to the control condition. Because this low-ball condition was different from the basic procedure in at least one important way, it was not included in the meta-analysis. However, the two conditions in this experiment that represent a pure replication of the low-ball procedure are included.

The nature of the data reported in each of the studies found in Table 1 allowed us to avoid some of the problems that frequently plague meta-analyses (Rosenthal, 1991). For example, especially when dealing with older studies, meta-analytic reviewers often must rely on *p*-values that have been rounded off to $p < .05$ or $p < .01$ rather than more precise data. Worse, in the absence of more complete data, reviewers are forced to assume that a difference reported only as "nonsignificant" means no difference at all between

Table 1. Low-ball and control condition compliance percentages.

	Low-Ball		Control	
Cialdini et al. (1978)—Experiment 1	18/34	52.9%	7/29	24.1%
Cialdini et al. (1978)—Experiment 2	6/10	60.0%	2/10	20.0%
Cialdini et al. (1978)—Experiment 3	29/48	60.4%	15/48	31.3%
Motes and Woodside (1979)[a]	1/20	5.0%	4/20	20.0%
Motes and Woodside (1979)	2/20	10.0%	2/20	10.0%
Burger and Petty (1981)—Experiment 1	11/20	55.0%	4/20	20.0%
Burger and Petty (1981)—Experiment 2	13/20	65.0%	7/20	35.0%
Burger and Petty (1981)—Experiment 3	4/15	26.7%	0/15	0.0%
Brownstein and Katzev (1985)	20/21	95.2%	20/25	80.0%
Joule (1987)[b]	48/64	75.0%	1/24	4.2%
Katzev and Brownstein (1988)[a]	16/30	53.3%	11/30	36.7%
Katzev and Brownstein (1988)	18/30	60.0%	22/30	73.3%
Wang et al. (1989)[b]	26/111	23.4%	10/38	26.3%
Hornik, Zaig, and Shadmon (1991)	94/134	70.1%	64/137	46.7%
Gueguen et al. (2002)	12/40	30.0%	5/40	12.5%
Burger and Cornelius (2003)—Experiment 2	23/58	39.7%	14/89	15.7%
Burger and Cornelius (2003)—Experiment 3	38/49	77.6%	21/50	42.0%
Gueguen and Pascual (2014)—Experiment 1	40/50	80.0%	19/50	38.0%
Gueguen and Pascual (2014)—Experiment 2[b]	72/160	45.0%	44/160	27.5%
Total	491/914	53.7%	272/835	32.6%

[a] Treated as two separate experiments.
[b] Combined more than one low-ball condition into one condition.

conditions. Another problem faced by meta-analytic reviewers is that researchers often fail to report specific cell comparison data. This creates difficulties when reviewers are interested only in comparisons between some of the conditions studied. Fortunately, we faced none of these problems. Each of the studies we found reported raw data for each of the cells of interest. Thus, we could determine the number of people within each condition who did and did not comply with the target request. This allowed us to combine the results of studies without making some of the assumptions other meta-analytic reviewers must rely upon.

We summed the number of participants who complied with the request and the total number of participants for all low-ball conditions and for all control conditions. As shown in the table, the combined low-ball conditions produced a rate of compliance (53.7%) that was considerably higher than the combined control conditions (32.6%). Not surprisingly, a traditional significance test found the difference between compliance rates in the two conditions to be statistically significant, χ^2 $(1, N = 1749) = 78.49$, $p < .0001$.

To get a better idea of the strength of the effect, we also calculated two effect size statistics. First, the phi coefficient represents the size of the effect for dichotomous variables and can be interpreted like a correlation coefficient. When we compared compliance rates between the two conditions, we found $\phi = .21$. Second, we calculated the odds ratio, which describes the relative difference between the two conditions, i.e., the odds that a participant will agree to the higher price when exposed to the low-ball tactic compared to the odds of agreeing to the higher price when not exposed to the tactic. The odds ratio for the low-ball conditions versus control conditions is 2.41.

The results of the meta-analysis demonstrate clearly that the low-ball procedure is an effective method for increasing compliance to a request. If we translate the 2.41 odds ratio into number of sales, dollars donated, or other outcomes often associated with requests, the practical significance of the finding is impressive. We now turn to the more difficult question of *why* the procedure works.

Explanations for the low-ball effect

We can identify three psychological processes that have been invoked to explain the effectiveness of the low-ball procedure. First, Cialdini et al. (1978) proposed that a commitment to perform the requested action is responsible for the low-ball effect. That is, agreeing to perform the request at the initial price causes participants to develop a commitment to carry out the requested action (Kiesler, 1971). This commitment "imparts a resistance to change" and pushes participants toward compliance even when agreeing to the request becomes more costly. Second, Burger and Petty (1981) suggested that a commitment to the person making the request rather than, or in addition to, a commitment to the action might be responsible for the low-ball effect. When we agree to a request, in a sense we are doing a favor for the requester. The requester benefits from the sale, an increase in donations or some assistance with a task. Participants in low-ball studies may feel an obligation to fulfill their promise to help the requester. Third, publicly agreeing to the initial request may trigger self-presentation concerns (Schlenker & Pontari, 2000). Low-ball participants might be concerned about how they will be perceived if they decline the more costly request. Refusing the higher-priced request after agreeing to the less costly request could make participants appear insincere, cheap or lazy, and this concern might motivate them to agree to the second request.

Although many investigators have used a low-ball manipulation in their research, surprisingly few studies have examined the psychological processes underlying the effect.

As a result, it is difficult to draw strong conclusions about the validity of the three explanations or their relative ability to account for the low-ball effect. Cialdini et al. (1978) settled on the commitment to the action explanation after testing and rejecting three other possible explanations (salient behavior "engulfing" cognitions, cognitive dissonance, self-perception theory). The commitment explanation was the only one they came up with that could account for two findings: (a) the low-ball procedure is effective when the second request is more costly than the first request as well as when the second request removes some of the desirable features of the first request; and (b) the tactic works only when participants are given a free choice about whether to agree with the initial request. In the former situation, participants are said to commit to the action regardless of the cost, and in the latter, commitment is said to be formed only when participants believe they have freely chosen to perform the action. However, both of these findings also are compatible with the commitment to the person explanation as well as the self-presentation account. A commitment to the requester also is likely to form regardless of cost and that commitment is unlikely to develop unless individuals feel they have made a personal choice when agreeing to the initial request. Similarly, self-presentation concerns are likely to surface whenever people consider backing out of an agreement and participants are unlikely to be concerned about their public image when declining a request they never agreed to in the first place.

In support of the commitment to the person interpretation, Burger and Petty (1981) found in two studies that the low-ball effect was lower or disappeared when a different person delivered the second request. Because the participants' commitment was to help the first requester instead of or in addition to performing the action, they experienced little or no additional pressure to agree to a request from a different individual. The researchers also found an increase in compliance to the second request when participants were not allowed to perform the initial request, presumably because the participants had yet to fulfill their commitment to the requester.

Support for the self-presentation interpretation can be found in two studies in which requesters interrupted participants before they could give their initial response (Burger & Cornelius, 2003). In both studies, participants not allowed to publicly state their initial response complied significantly less often with the higher-priced request than participants who stated their agreement aloud. Because the requester never heard them agree to the initial request, participants were not concerned that they might appear insincere or cheap for backing out of an agreement. However, this finding also is consistent with the other two explanations. Researchers often find that commitment is stronger when that commitment is stated publicly (Cialdini, 2008). Thus, we would expect that both a commitment to the action and a commitment to the requester would be stronger, and hence lead to more compliance, when agreement to the request is given aloud.

In short, we can identify three psychological processes to account for the low-ball effect, and we can point to research findings that support each explanation. However, at this point we cannot say which of the three explanations is preferred. It is possible that future studies will identify which of the three explanations can best account for the low-ball effect, but it may also be the case that the effectiveness of the low-ball procedure cannot be reduced to just one psychological process. It is likely that a low-ball manipulation, like other compliance procedures, sets a number of psychological processes in motion (cf., Burger, 1999). Participants may feel a commitment to the requested action as well as a commitment to the requester and may also be concerned about making a poor impression on the requester if they refuse the second request. Each of these processes may increase the likelihood that participants will agree to the second request, and the most successful low-ball manipulations may be those that effectively tap into all three processes.

Moderating processes

We can identify two additional psychological processes that might come into play in a low-ball situation and moderate the effect. First, researchers attempting a low-ball manipulation run the risk of generating psychological reactance (Brehm, 1966). Some individuals might see the increase in price as an effort to pressure or trick them into agreeing with the request. According to reactance theory, these participants are likely to respond to this perception by doing the opposite of what the requester wants. Thus, to the extent that a low-ball manipulation creates reactance, the tactic will produce less, not more, compliance. Second, when low-ball researchers present the initial cost of compliance, they might also be manipulating the anchor point participants use when deciding whether to comply with the second request. When making judgments, people often rely on a point of comparison, i.e., an anchor point (Sherif & Sherif, 1967). In low-ball experiments, participants may use the initial price as their anchor point when deciding whether the cost of agreeing to the second request is reasonable. If the cost of the second request is close to this anchor point (within the "latitude of acceptance"), the participant is likely to agree to the slightly more costly request. However, if the cost of the second request is significantly higher than the anchor point and falls outside the latitude of acceptance, participants may be more likely to reject it.

Although the effects of these two processes on the low-ball procedure have not been examined directly, we can speculate that either or both might come into play depending on the difference between the size of the first and second request. A low-ball manipulation might generate reactance when the second request is substantially larger than the initial request. Raising the price of a raffle ticket from $5 to $15 might trigger a what-are-you-trying-to-pull? reaction and a rejection of the more costly request. Similarly, a large difference between the first and second request might place the cost of the second request outside the participants' latitude of acceptance and reduce the likelihood of agreeing with that request.

The effect of different sized gaps between first and second request was examined in a study by Wang, Brownstein, and Katzev (1989). The researchers asked control condition participants to donate $2 to the American Cancer Society. They also created three low-ball conditions. Participants were asked to donate either 50 cents, $1 or $1.50 to the American Cancer Society. If they agreed, participants were then asked to give an additional amount (either $1.50, $1 or 50 cents) for a special cancer program. In all conditions, the total amount of money requested was $2. The researchers found a decrease in compliance as the discrepancy between the first and second price increased. When the final price was four times higher than the initial price (50 cents to $2), only 10.8% gave $2. When the final price was twice as high ($1 to $2), 18.9% donated. Only participants who heard a final price 33.3% higher ($1.50 to $2) donated at a higher rate (40.5%) than the control condition (26.3%).

To further examine this effect, we compared studies in which researchers raised the cost of compliance by a large amount against those in which the difference was relatively small. Using the Wang et al. (1989) findings as a guideline, we identified low-ball studies in which the final cost to the participant was at least 50% higher than the initial cost and studies in which the increase was less than 50%. Unfortunately, only a handful of studies used requests that could be measured on ratio scales, such as asking for a specific amount

Table 2. Effect of cost increase on compliance.

	Low-Ball		Control	
Large increase in cost				
Motes and Woodside (1979)[a]	1/20	5.0%	4/20	20.0%
Motes and Woodside (1979)	2/20	10.0%	2/20	10.0%
Katzev and Brownstein (1988)[a]	16/30	53.3%	11/30	36.7%
Katzev and Brownstein (1988)	18/30	60.0%	22/30	73.3%
Wang et al. (1989)[b]	11/74	14.9%	10/38	26.3%
Total	48/174	27.6%	49/138	35.5%
Small increase in cost				
Brownstein and Katzev (1985)	20/21	95.2%	20/25	80.0%
Wang et al. (1989)	15/37	40.5%	10/38	26.3%
Total	35/58	60.3%	30/63	47.6%

[a] Treated as two separate experiments.
[b] Combined more than one low-ball condition into one condition.

of money or asking participants to answer a specific number of questions. Nonetheless, as shown in Table 2, an interesting pattern emerged in these data. All four of the published low-ball studies that failed to find higher compliance in the low-ball condition used a second request that was significantly higher than the first request. When all five studies meeting this criterion were combined, the compliance rate in the low-ball condition (27.6%) was *lower* than the rate for the control condition (35.5%), although, because of the small sample size, this difference was not statistically significant, χ^2 (1, $N = 312$) = 1.90, $p = .17$, $\phi = .08$, odds ratio = 1.29.

In short, the evidence we have indicates that the low-ball effect declines when the difference between the first and second requests increases. This finding is consistent with the notion that reactance and manipulated anchor points influence the effectiveness of a low-ball manipulation, but to date we have no direct empirical tests to tell us whether either or both of these processes are responsible for the effect.

Conclusions

The combined results of published low-ball studies indicate that the procedure is an effective technique for increasing compliance. Moreover, the procedure appears to be most effective when participants state their agreement to the initial request publicly and when the second request is only slightly more costly than the first. However, more work is needed to identify the psychological processes that underlie and affect a successful low-ball manipulation. One reason for the limited number of investigations examining these psychological processes may be that the vast majority of the studies included in the meta-analysis were conducted in field settings. On one hand, this reliance on field studies is a strength, demonstrating external validity and some of the practical applications of the findings. On the other hand, observing real behavior among individuals who are not aware they are part of a study creates significant challenges for investigators who want to collect data about the participants' thoughts, attitudes, and inner states. Conducting these studies should be the next focus of researchers interested in the low-ball compliance procedure.

Disclosure statement

No potential conflict of interest was reported by the authors.

References

References marked with an asterisk indicate studies included in the meta-analysis.

Brehm, J. W. (1966). *A theory of psychological reactance*. New York, NY: Academic Press.

*Brownstein, R. J., & Katzev, R. D. (1985). The relative effectiveness of three compliance techniques in eliciting donations to a cultural organization. *Journal of Applied Social Psychology*, *15*, 564–574. doi:10.1111/j.1559-1816.1985,tb00920.x

Burger, J. M. (1999). The foot-in-the-door compliance procedure: A multiple-process analysis and review. *Personality and Social Psychology Review*, *3*, 303–325. doi:10.1207/s15327957pspr0304_2

*Burger, J. M., & Cornelius, T. (2003). Raising the price of agreement: Public commitment and the low-ball compliance procedure. *Journal of Applied Social Psychology*, *33*, 923–934. doi:10.1111/j.1559-1816.2003.tb01931.x

*Burger, J. M., & Petty, R. E. (1981). The low-ball compliance technique: Task or person commitment? *Journal of Personality and Social Psychology*, *40*, 492–500. doi:10.1037/0022-3514.40.3.492

Cialdini, R. B. (2008). *Influence: Science and practice* (5th ed.). Boston, MA: Allyn & Bacon.

*Cialdini, R. B., Cacioppo, J. T., Bassett, R., & Miller, J. A. (1978). Low-ball procedure for producing compliance: Commitment then cost. *Journal of Personality and Social Psychology*, *36*, 463–476. doi:10.1037/0022-3514.36.5.463

*Gueguen, N., & Pascual, A. (2014). Low-ball and compliance: Commitment even if the request is a deviant one. *Social Influence*, *9*, 162–171. doi:10.1080/15534510.2013.798243

*Gueguen, N., Pascual, A., & Dagot, L. (2002). Low-ball and compliance to a request: An application in a field setting. *Psychological Reports*, *91*, 81–84. doi:10.2466/pr0.2002.91.1.81

*Hornik, J., Zaig, T., & Shadmon, D. (1991). Reducing refusals in telephone surveys on sensitive topics. *Journal of Advertising Research*, *31*, 49–56.

*Joule, R. V. (1987). Tabacco deprivation: The foot-in-the-door technique versus the low-ball technique. *European Journal of Social Psychology*, *17*, 361–365. doi:10.1002/ejsp.2420170311

Joule, R. -V., Girandola, F., & Bernard, F. (2007). How can people be induced to willingly change their behavior? The path from persuasive communication to binding communication. *Social and Personality Psychology Compass*, *1*, 493–505. doi:10.1111/j.1751-9004.2007.00018.x

*Katzev, R., & Brownstein, R. (1988). The influence of enlightenment on compliance. *Journal of Social Psychology*, *129*, 335–347. doi:10.1080/00224545.1989.9712050

Kiesler, C. A. (1971). *The psychology of commitment*. New York, NY: Academic Press.

*Motes, W. H., & Woodside, A. G. (1979). Influence of low-balling on buyers' compliance. *Journal of Psychology*, *101*, 219–221. doi:10.1080/00223980.1979.9915074

Pratkanis, A. R. (2007). Social influence analysis: An index of tactics. In A. R. Pratkanis (Ed.), *The science of social influence: Advances and future progress* (pp. 17–82). New York, NY: Psychology Press.

Rosenthal, R. (1991). *Meta-analytic procedures for social research* (2nd ed.). Newbury Park, CA: Sage.

Schlenker, B. R., & Pontari, B. A. (2000). The strategic control of information: Impression management and self-presentation in daily life. In A. Tesser, R. B. Felson, & J. M. Suls (Eds.), *Psychological perspectives on self and identity* (pp. 199–232). Washington, DC: American Psychological Association.

Sherif, M., & Sherif, C. W. (1967). Attitude as the individual's own categories: The social judgment-involvement approach to attitude and attitude change. In C. W. Sherif & M. Sherif (Eds.), *Attitude, ego-involvement, and change* (pp. 105–139). Westport, CT: Greenwood Press.

*Wang, T., Brownstein, R., & Katzev, R. (1989). Promoting charitable behaviour with compliance techniques. *Applied Psychology: An International Review*, *38*, 165–183. doi:10.1111/j.1464-0597.1989.tb1207.x