

GETTING CHILDREN TO DO MORE ACADEMIC WORK

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Getting Children to Do More Academic Work:

Foot-in-the-Door versus Door-in-the-Face

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### **Abstract**

In this study we explored whether compliance-without-pressure techniques, known to encourage adults to behave more altruistically, can be used to encourage children to do more academic work. Using three different approaches – Foot-in-the-Door, Door-in-the-Face, and Single-Request – we asked 60 6- to 8-year-old Hong Kong Chinese children to complete a 20-item arithmetic worksheet. The Door-in-the-Face technique was the most effective, eliciting the highest percentage of children who agreed to do the target task, requiring the least adult input to sustain engagement in the task, and producing the greatest amount of accurate work.

## **Getting Children to Do More Academic Work:**

### **Foot-in-the-Door versus Door-in-the-Face**

How can adults get children to do what they want them to do? Socialization of children depends heavily on getting them to pay heed to adults' suggestions and guidance (Feldman & Klein, 2003; Schaffer & Crook, 1980), be it in daily routines such as doing homework (Fishel & Ramirez, 2005), eating behavior (Hays, Power, & Olvera, 2001), development of conscience (Kochanska, 1991), or even behavior therapy (Strand, Wahler, & Herring, 2001).

At the same time, encouraging children to make their own choices and decisions within clear limits seems to foster success at school (Katz, Kaplan, & Gueta, 2010), while using overt pressure often backfires and hurts school performance (Barber, 2002; Grolnick, 2003). This pattern of findings holds for European-American children (e.g., Steinberg, Elmen, & Mounts, 1989) as well as African-American children (Taylor, Hinton, & Wilson, 1995) and Chinese children in Taiwan (Pong, Johnston, & Chen, 2010). In general, adults seem to be most effective when they de-emphasize power and achieve compliance without overt pressure (Kochanska & Aksan, 1995). When children feel that they choose to do the right thing rather than being pressured into doing it, they are more likely to follow through and sustain their efforts without external control (Deci & Ryan, 1992; Skinner, Furrer, Marchand, & Kindermann, 2008).

Compliance-without-pressure techniques have been studied extensively in social psychology research with adults, and we hypothesized that some of them might also work with children. The classic "Foot-in-the-Door" technique involves making a small request first, then upping the ante with a similar but larger request. The idea is that most people agree to the first request because it is small, and then – with the requester's foot now

metaphorically planted in the door – they are primed to agree to the second one as well (Cialdini et al., 1975; Rodafinos, Vucevic, & Sideridis, 2005). Perhaps at that point they see themselves as kind, cooperative, and helpful, and they want to maintain, even enhance, this positive self-image. Empirically, Foot-in-the-Door has proved effective in getting compliance (Burger, 1999).

The “Door-in-the-Face” technique is just the reverse. It involves making a large request first, then lowering the bar to something more reasonable. The idea here is that most people turn down the first request because it is asking too much, but then they may relent and agree to the second one. Perhaps they see that the requester has made a concession in response to their initial refusal and feel moved to reciprocate with a concession of their own, as long as it is not too costly (O’Keefe & Hale, 2001). Door-in-the-Face also seems to work. In fact, a meta-analysis found comparable benefits in compliance rates and effect sizes for these two multi-request techniques, with single-request control as the baseline (Pascual & Gueguen, 2005).

Thus far, research on these two techniques has focused on adults, primarily in the context of altruism, such as charity and donation (see Pascual & Gueguen, 2005 for a review). In this study, we examined how the techniques fared in getting 2<sup>nd</sup>-grade children to do more academic work.

Children’s academic workload increases noticeably in 2<sup>nd</sup> grade, compared to kindergarten and 1<sup>st</sup> grade, as does the expectation that they will do the work without close supervision. Although our study was conducted on Chinese children in Hong Kong, the findings will likely apply to school children of this age in much of the world. Specifically, the present study examined how well the Foot-in-the-Door and Door-in-the-Face techniques can work to get young school children to undertake academic work willingly. We also

assessed the quality of the children's work and how much adult input was needed to get them to sustain their effort and complete the work (Bao & Lam, 2008; Iyengar & Lepper, 1999).

## **Methods**

### **Participants**

Sixty 2<sup>nd</sup>-grade Chinese children (30 boys and 30 girls; aged 6 to 8 years) in an after-school tutorial center in Hong Kong participated with parental consent. The center primarily offers homework supervision and after-school childcare for elementary school children. Such after-school childcare is widely used in Hong Kong, where most parents have long work hours. The research setting approximated the in-class seat-work time in regular elementary schools.

### **Stimulus Materials**

Three sets of arithmetic exercises were prepared: one worksheet with 20 questions for the target request in all three conditions, one worksheet with 5 questions for the Foot-in-the-Door condition, and one with 80 questions on four worksheets for the Door-in-the-Face condition. The worksheets were compiled from commercially available workbooks published locally for 2<sup>nd</sup>-grade children.

### **Procedure**

The experiment was conducted in the tutorial center during periods intended for quiet free play and rest. Children were randomly assigned to one of three conditions: Foot-in-the-Door, Door-in-the-Face, Single-Request Control.

*The Foot-in-the-Door condition.* The children's regular tutor at the tutorial center asked the children, individually, to do a 5-question arithmetic worksheet: "This worksheet is a very easy one. Could you please do this worksheet now?" If a child hesitated, the tutor would add, "You will do better if you have more practice; it will just take just a few minutes." None of the children in this condition refused the small initial request.

Fifteen minutes later, an experimenter (who had once been a substitute tutor for the children) asked the children, again individually, to do a 20-question worksheet (i.e., the target task): “Some tutors told me you can finish a worksheet quickly. Here is a worksheet that is a little longer. Could you please do this worksheet now?” If the child agreed to do the worksheet, the experimenter would tell the child to start right away.

This procedure met the three conditions that seem to make Foot-in-the-Door most effective (Tybout, Sternthal, & Calder, 1983): (1) the initial, smaller request was actually complied with rather than merely agreed to; (2) a delay between the two requests allowed time for any favorable self-image that may have been created by compliance with the initial request to sink in; (3) the two requests were made by two different people, so the person making the second and larger request would not be seen as overly demanding.

*The Door-in-the-Face condition.* The experimenter went to each child with the standard 20-question worksheet, together with four additional similar worksheets. Expecting to elicit a refusal, the experimenter began with the first, larger request: “This worksheet packet has a total of 100 questions; could you please do this worksheet now?” (Five children—3 girls and 2 boys—actually agreed and therefore had to be replaced.) Twenty children randomly assigned to this condition turned down the initial request, setting the stage for the experimenter to make the target request: “How about this? If you think 100 questions would be too much, maybe you can do just 20 of them? Could you please do this worksheet now?” If a child agreed, the experimenter would ask the child to start working on the 20-question target worksheet.

This procedure met the three conditions that seem to make Door-in-the-Face most effective (Tybout et al., 1983): (1) the initial request was substantially larger than the target request; (2) the delay between the two requests was kept minimal, so the requester’s acquiescence to the initial refusal was still fresh in the potential request granter’s memory and

thus likely to prompt a reciprocal concession; (3) the two requests were made by the same person, so the requester's gracious acceptance of the initial refusal seemed like a social concession deserving of reciprocation.

*Control condition.* The experimenter showed the standard 20-question worksheet to each child and simply asked, "Could you please do this worksheet now?" If a child agreed, the experimenter would ask the child to start.

## **Measures**

*Arithmetic ability.* Children's scores on a routine arithmetic assessment done at the tutorial center were obtained with parental consent. Baseline arithmetic ability was used as a covariate in comparing children's responses to the requests across the three conditions.

*Agreement rate.* The percentage of children who agreed to perform the target task (i.e., the 20-question worksheet) in each condition was computed.

*Quality of work.* The number of correct answers in the target task was computed to assess commitment to the work.

*Amount of adult input needed.* To assess how firm children's commitment was, an observer (who was a tutor at the tutorial center) discreetly coded in real time how much adult input was needed to get the children to complete the 20-question worksheet (Kochanska & Aksan, 1995): 1. No adult involvement; 2. Social exchange (an adult talked to the child but made no attempt at control); 3. Guidance/gentle control (e.g., reasoning, polite requests, positive comments); 4. Negative control (e.g., direct commands, prohibitions).

## **Results**

### **Agreement Rate**

As a baseline, 7 out of 20 children (35%) in the Single-Request Control condition agreed to do the 20-question worksheet. By contrast, 12 out of 20 children (60%) in the Foot-in-the-Door condition and 18 out of 20 children (90%) in the Door-in-the-Face

condition did so. A Chi-square revealed significant differences among the three groups,  $X^2(2, N=60) = 12.8, p < .005$ .

The Door-in-the-Face condition yielded more favorable answers than both the Control condition,  $X^2(1, N=40) = 12.9, p < .001$ , and the Foot-in-the-Door condition,  $X^2(1, N=40) = 4.8, p < .05$ . The latter two conditions did not differ significantly,  $X^2(1, N=40) = 2.5, p > .1$ . Door-in-the-Face but not Foot-in-the-Door seemed to be an effective strategy to get children to do more academic work.

### **Quality of Work**

Among the children who agreed to do the 20-question worksheet, an ANCOVA revealed no significant differences among conditions in the quality of the children's work ( $F(2, 33) = .78, n. s.$ ; with arithmetic pretest score as a covariate). The mean numbers of correct answers (out of 20) were: 16.4 (Door-in-the-Face), 17.2 (Foot-in-the-Door), 18.0 (Control). But note that 90%, 60%, and 35%, respectively, of the children in the three conditions actually did the critical worksheet. When both the agreement rate and the quality of work are taken into account, the Door-in-the-Face strategy yielded the largest number of correct answers and remained the most effective in getting children to do academic work accurately.

### **Amount of Adult Input Needed**

To examine how firm children's commitment was, the amount of adult input needed to get each child to complete the 20-question worksheet was recorded discreetly in real time by an observer (who was a tutor at the tutorial center). An ANCOVA, with arithmetic pretest score as a covariate, revealed significant group differences,  $F(2, 33) = 7.7, p < .005$ . The average adult control score was 1.56 (Door-in-the-Face), 2.25 (Foot-in-the-Door), and 2.29 (Single-Request Control), with a higher score indicating that more adult input was needed to get a child who had agreed to do the 20-question worksheet actually completing it.



Follow-up ANCOVAs (with arithmetic pretest score as a covariate) revealed a significant difference between the Door-in-the-Face and the Single-Request Control condition,  $F(1, 22) = 11.3, p < .005, d = 1.1$ , and the Foot-in-the-Door condition,  $F(1, 27) = 9.8, p < .005, d = 1.0$ . By contrast, the latter two conditions did not differ significantly,  $F(1, 16) < .5, n.s.$  These results paralleled those for the rate of agreeing to do the 20-question worksheet, with Door-in-the-Face requiring the least adult input among the three strategies examined.

### Discussion

Both the Door-in-the-Face and the Foot-in-the-Door strategies have been demonstrated in social psychology research on adults and adolescents to induce altruistic actions such as donation or helping others. The present study revealed that the Door-in-the-Face strategy could also work with children in an educational context. While academic work may be minimal in kindergarten and 1<sup>st</sup> grade, children face increasing academic demands from 2<sup>nd</sup> grade onwards. Helping children do more academic work without overt pressure could lessen potential resentment and help children stay engaged in school, thereby contributing to school success (Steinberg et al., 1989). Motivating accuracy is also crucial since homework assignments are most beneficial when students not only complete them but also do so accurately (Rosenberg, 1989). Indeed, teachers often seek advice from colleagues on how best to enhance their students' homework completion and performance in a practical and meaningful manner (Theodore et al., 2009).

Our findings suggest that the Door-in-the-Face strategy could be a useful tool for parents, teachers, tutors, or whoever might need to motivate children to do more academic work than they would otherwise – and to do it accurately. The proportion of 2<sup>nd</sup>-graders who agreed to the critical request of doing the 20-question arithmetic worksheet in the Door-in-the-Face condition was significantly larger than that of the Single-Request Control condition.

Perhaps the power asymmetry between the request seeker (a tutor at the tutorial center) and the potential request granters (the children) was large enough to make the norm of reciprocity salient (Latane, 1981), rendering the Door-in-the-Face strategy especially potent. The experimenter accepted the children's refusal of her initial (rather large) request very graciously. When the children saw that, they may have wanted to return the favor by agreeing to her subsequent smaller, target request.

Although its effectiveness has repeatedly been demonstrated with adults in altruism contexts (see Burger, 1999, for a review), the Foot-in-the-Door technique did not prove to be effective in the context examined in this study. Perhaps complying with the initial small request in this study (i.e., doing 5 arithmetic problems) seemed so trivial that it did not enhance children's self-image very much – so they did not have much to lose by refusing the larger request. Another possible explanation was that the children had already done five arithmetic problems, and perhaps they simply did not want to do any more, whereas in Door-in-the-Face case, the children had not done any arithmetic problems prior to the 20-question worksheet. It remains to be seen whether the Foot-in-the-Door technique would work with children in some other contexts.

This study also went beyond simply considering compliance rate – the typical outcome measure in prior research on multiple requests in social psychology – by also assessing degree of commitment. The Door-in-the-Face condition elicited not only the highest agreement rate but also the firmest commitment. Children in the Door-in-the-Face condition needed the least amount of adult supervision, such as guidance and reminders, to complete the 20-question worksheet. Together, these findings suggest that children are driven by the reciprocal norm. Once they have made a higher-status person, such as a teacher or a parent, concede to the “rebuff” of a prior request, they may be more inclined to

reciprocate by not only agreeing to a smaller request but also fulfilling the request with greater commitment.

Moreover, recall that 90%, 60%, and 35%, of the children actually did the critical worksheet in the “Door-in-the-Face,” “Foot-in-the-Door,” and “Single-Request” control condition, respectively, and the accuracy rate for children who had agreed to do the worksheet was comparable across the three conditions. So, the Door-in-the-Face strategy yielded the largest number of accurate answers, rendering it the most effective in getting children to do academic work seriously and accurately. This strategy can be helpful in education because, as noted earlier, homework assignments are most beneficial when students not only complete the assignments but also do so accurately (Rosenberg, 1989).

These findings can contribute to more effective socialization of children. Across cultures, children are expected to develop discipline to do work (e.g., school work, house chores, community service) that will not always be fun. Overt pressure from parents, teachers, and other adults may yield situational compliance at best and resentment and rebellion at worst. Ethnic Chinese children have been singled out as a potential exception. Many Chinese-American children do well academically with parents exerting considerable overt pressure and control (Chao, 1994; Chua, 2011), and the Confucian ethic of respecting parents and teachers has been cited as a possible explanation. To date, authoritative parenting characterized by open communication and minimal overt pressure has not been rigorously documented to predict Chinese-American children's school success (Pong et al., 2010). Nonetheless, the present study showed that a compliance-without-pressure technique such as “Door-in-the-Face” worked better than a single direct request to get Hong Kong Chinese children to do more academic work seriously. Together with the documented benefits of authoritative parenting for Chinese children's school success in Taiwan (Pong et al., 2010),

the present findings suggest that minimizing overt pressure may well turn out to be a useful socialization tool even for ethnic Chinese children.

If a technique such as Door-in-the-Face can get children to do more academic work without overt pressure, it could be used judiciously as one more socialization tool. For example, to get children to do some academic work during long vacations, a parent could make a relatively large opening bid each day, and then let the child “bargain down” to a smaller, more reasonable amount of work. This tool can also be useful in school settings. Learning to read, write, and do arithmetic requires much practice to consolidate the emergent skills. Teachers and tutors can use the “Door-in-the-Face” technique judiciously to get children to do such practice willingly. For example, after presenting the goal of doing 200 arithmetic problems and giving students an opportunity to exclaim “So much?!” a teacher can clarify that it is a 5-day goal, rendering the workload more manageable and acceptable to the students.

In this study, the adult who made the target request was a substitute tutor rather than the children’s regular tutor at the tutorial center. Research on teacher-student relationships has revealed that children willingly work hard on tasks suggested by the teachers they feel close to, even more so than on tasks chosen by the children themselves (Bao & Lam, 2008). It remains to be seen whether the “Door-in-the-Face” technique will be even more effective if the requests are made by the children’s regular teachers or by teachers the children feel especially close to.

We are mindful that our research protocol involved mild deception. That is, the initial request in Foot-in-the-Door and the Door-in-the-Face condition was not genuine in the sense that the real request had to do with the 20-question worksheet. To protect the children’s rights as research participants, the research protocol had received research ethics clearance. We also opted for a modest sample size to reduce the costs in the research ethics cost-benefit

analysis. While we had not explicitly told children beforehand that this was a research study, we made sure that the requests were not out of the ordinary (i.e., doing one or two arithmetic worksheets), and that the requests were made in a mild manner to avoid creating stress and discomfort greater than what the children would encounter in everyday life.

### **Conclusions**

This study constitutes a first step in exploring whether compliance-without-pressure techniques uncovered in social psychology research can also work with children in educational contexts. Given the importance of children's willingness to engage in social and cultural learning, our findings can contribute to a better understanding of the socialization of children. It remains to be seen how well these findings generalize beyond mundane academic work to work that is more challenging intellectually or to non-academic work. It also remains to be seen how well these findings can generalize to other cultures where the power relationship between children and adults may be less hierarchical than that for Hong Kong Chinese. Given the effectiveness of the Door-in-the-Face technique documented with North American and European adults (e.g., O'Keefe & Hale, 2001; Pascual & Gueguen, 2005; Rodafinos et al., 2005) this technique stands a decent chance to work in educational settings in Western cultures as well as Asian cultures. In fact, in individualistic cultures that deeply value psychological autonomy, a technique that gets children to accept adults' guidance without feeling pressured might prove especially valuable.

### References

- Bao, X., & Lam, S. (2008). Who makes the choice? Rethinking the role of autonomy and relatedness in Chinese children's motivation. *Child Development, 79*, 269-283.
- Barber, B. K. (2002). *Intrusive parenting: How psychological control affects children and adolescents*. Washington, DC: American Psychological Association.
- 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.
- Chao, R. K. (1994). Beyond parental control and authoritarian parenting style: Understanding Chinese parenting through the cultural notion of training. *Child Development, 65*, 1111-1119.
- Chua, A. (2011). *The battle hymn of the tiger mother*. London: Bloomsbury Publishing.
- Cialdini, R. B., Vincent, J. E., Lewis, S. K., Catalan, J., Wheeler, D., & Darby, B. L. (1975). Reciprocal concessions procedure for inducing compliance: The Door-in-the-Face technique. *Journal of Personality and Social Psychology, 31*, 206-215.
- Deci, E. L., & Ryan, R. M. (1992). The initiation and regulation of intrinsically motivated learning and achievement. In A.K. Boggiano & T.S. Pittman (Eds.), *Achievement and Motivation: A social-developmental perspective*. Cambridge studies in social and emotional development (pp. 9-36). New York, NY, US: Cambridge University Press.
- Feldman, R., & Klein, P. S. (2003). Toddlers' self-regulated compliance to mothers, caregivers, and fathers: Implications for theories of socialization. *Developmental Psychology, 39*, 680-692.
- Fishel, M., & Ramirez, L. (2005). Evidence-based parent involvement interventions with school-aged children. *School Psychology Quarterly. Special Issue: Evidence-Based Parent and Family Interventions in School Psychology, 20*, 371-402.

- Grolnick, W. S. (2003). *The psychology of parental control: How well-meant parenting backfires*. Mahwah, NJ: Erlbaum.
- Hays, J., Power, T., & Olvera, N. (2001). Effects of maternal socialization strategies on children's nutrition knowledge and behavior. *Journal of Applied Developmental Psychology, 22*, 421-437.
- Iyengar, S. S., & Lepper, M. R. (1999). Rethinking the value of choice: A cultural perspective on intrinsic motivation. *Journal of Personality and Social Psychology, 76*, 349-366.
- Katz, I., Kaplan, A., & Gueta, G. (2010). Students' needs, teachers' support, and motivation for doing homework: A cross-sectional study. *Journal of Experimental Education, 78*, 246-267.
- Kochanska, G. (1991). Socialization and temperament in the development of guilt and conscience. *Child Development, 62*, 1379-1392.
- Kochanska, G., & Aksan, N. (1995). Mother-child mutually positive affect, the quality of child compliance to requests and prohibitions, and maternal control as correlates of early internalization. *Child Development, 66*, 236-254.
- Latane, B. (1981). The psychology of social impact. *American Psychologist, 36*, 343-356.
- O'Keefe, D. J., & Hale, S. L. (2001). An odds-ratio-based meta-analysis of research on the door-in-the-face influence strategy. *Communication Reports, 14*, 31-38.
- Pascual, A., & Gueguen, N. (2005). Foot-in-the-Door and Door-in-the-Face: A comparative meta-analytic study. *Psychological Reports, 96*, 122-128.
- Pong, S., Johnston, J., & Chen, V. (2010). Authoritarian parenting and Asian adolescent school performance: Insights from the US and Taiwan. *International Journal of Behavioral Development, 34*, 62-72.

- Rodafinos, A., Vucevic, A., & Sideridis, G. (2005). The Effectiveness of Compliance Techniques: Foot in the Door Versus Door in the Face. *The Journal of Social Psychology, 145*, 237-239.
- Rosenberg, M. S. (1989). The effects of daily homework assignments on the acquisition of basic skills by students with learning disabilities. *Journal of Learning Disabilities, 22*, 314-323.
- Schaffer, H. R., & Crook, C. K. (1980). Child compliance and maternal control techniques. *Developmental Psychology, 16*, 54-61.
- Skinner, E., Furrer, C., Marchand, G., & Kindermann, T. (2008). Engagement and disaffection in the classroom: Part of a larger motivational dynamic? *Journal of Educational Psychology, 100*, 765-781.
- Steinberg, L., Elmen, J. D., & Mounts, N. S. (1989). Authoritative parenting, psychosocial maturity, and academic success among adolescents. *Child Development, 60*, 1424-1436.
- Strand, P. S., Wahler, R. G., & Herring, M. (2001). The impact of behavior-specific and behavior-nonspecific reinforcement on child compliance to mother directives. *Behaviour Research and Therapy, 39*, 1085-1097.
- Taylor, L. C., Hinton, I. D., & Wilson, M. N. (1995). Parental influences on academic performance in African-American students. *Journal of Child and Family Studies, 4*, 293-302.
- Theodore, L., DioGuardi, R. J., Hughes, T. L., Aloiso, D., Carlo, M., & Eccles, D. (2009). A class-wide intervention for improving homework performance. *Journal of Educational & Psychological Consultation, 19*, 275-299.



Tybout, A. M., Sternthal, B., & Calder, B. J. (1983). Information availability as a determinant of multiple request effectiveness. *Journal of Marketing Research*, 20, 280-290.