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## Family study of manipulation tactics

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### Abstract

The aim of this study was to explore the aetiology of individual differences in manipulation tactics and the relationship between manipulation tactics and personality traits using a family study design. The sample used in the study consisted of 193 (60 male, 133 female) pupils of high-schools in Zagreb and their parents (152 male, 188 female). All participants completed a new instrument assessing manipulation tactics, as well as the NEO-Five Factor Inventory (NEO-FFI) to assess personality. Data were collected so that both self-reports and observer-reports of manipulation tactics and personality traits were available. Two measures of parent–child similarity in manipulation tactics were calculated: correlations between single parent and offspring, and midparent–offspring regressions. Both measures indicate that there is a familial aggregation of manipulation tactics. The relationship between personality traits and manipulation tactics was tested in correlation and regression analyses. Although both analyses showed coherent links between personality traits and manipulation tactics (e.g. low Agreeableness and high Neuroticism were associated with higher use of manipulation tactics), results also indicate that personality traits play a marginal role in selection and use of manipulation tactics.

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*Keywords:* Manipulation tactics; Family study; Five-factor model; Personality

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## 1. Introduction

We all try to manipulate people around us on a daily basis. However, in doing so we do not all use the same tactics, some will beg or cry, some will threaten, some will give compliments. Even more so, we will probably use different tactics with different people depending on the type and quality of the relationship we have with them.

Buss (1987) proposed that there are three forms of person-situation interactions: selection, evocation and manipulation. Selection was defined as a tendency of individuals to enter some environments and avoid others and evocation as a tendency of individuals to unintentionally elicit or provoke responses from environments. The third form of person-situation interaction is manipulation, defined as ways in which individuals intentionally or purposefully alter, change, influence or exploit others. Although malicious intent can be present, it is not in any way implied by the mechanism of manipulation. Why is manipulation so important? Natural selection favours individuals who successfully manipulate, because those who lack the ability to manipulate others may fail to elicit parental care, acquire resources, establish reciprocal alliances, rise in hierarchies or attract mates (Buss, 1987).

One of the major issues that studies of manipulation investigate is the range of the different tactics people use to manipulate each other. A number of studies examining the manipulation tactics have emerged since Goodchilds, Quadrado and Raven proposed in 1975 that subjects should be directly asked how they get their own way in certain situations (Cowan, Drinkard, & MacGavin, 1984). The studies which followed tended to operationalize manipulation in one of two ways: (a) tactics people use at work with their superiors, co-workers and subordinates (Caldwell & Burger, 1997; Kipnis, Schmidt, & Wilkinson, 1980; Schriesheim & Hinkin, 1990); and (b) tactics people use in intimate relationships e.g. husband and wife, parent and child, two friends (Buss, 1992; Buss, Gomes, Higgins, & Lauterbach, 1987; Cowan & Avants, 1988; Cowan et al., 1984; Dunn & Cowan, 1993; Falbo & Peplau, 1980). Although number and content of the manipulation tactics obtained in those studies differed, they could be positioned according to the model proposed by Falbo and Peplau (1980) along two dimensions labelled directedness and bilaterality. Also, studies confirmed the notion that people would use different tactics depending whom they wanted to manipulate i.e. spouse, parent, friend or boss (Cowan et al., 1984; Poppe, van der Kloot, & Valkenberg, 1999).

Another interesting question deals with how personality characteristics are associated with use of specific manipulation tactics. Three studies have examined the association between manipulation tactics and personality (Buss, 1992; Buss et al., 1987; Caldwell & Burger, 1997). Personality measures used in those studies included the Eysenck Personality Questionnaire and Interpersonal Adjective Scales, as well as measures of Big Five personality dimensions, desire for control and self-monitoring. Also, different data sources were used, and included self- and observer-reported manipulation tactics and self-reported, spouse-observer and interviewer-based reporting of personality dimensions. Overall, results from all three studies show that manipulation tactics covary significantly across data sources with different personality scales used in those studies.

In sum, previous studies of manipulation tactics showed that the use of manipulation tactics depends on the nature of the interpersonal relationship, that personality traits are associated with the use of manipulation tactics, but also that there are individual differences in the use of manipulation tactics. In our study we wanted to explore the aetiology of those individual differences in

manipulation tactics. The hypothesis we wanted to test is that there is a familial aggregation of manipulation tactics, i.e. that family members use similar tactics. Because of the limitation of the family study design, genetic and shared environmental influences cannot be separated. Therefore this study cannot test if individual differences in manipulation tactics can be explained by genetic differences, but it can provide evidence of familial aggregation of manipulation tactics, if it exists. Also we wanted to further explore the relationship between manipulation tactics and personality traits in terms of parent–child relationship, specifically adolescent children. This study goes beyond previous work because it provides measures of manipulation tactics and personality from self- and observer-reports from parents and children. Based on results from previous studies (Buss, 1992; Buss et al., 1987; Caldwell & Burger, 1997) we hypothesized that Neuroticism would be associated with use of indirect tactics, Openness with use of direct tactics, while Extraversion, Agreeableness and Conscientiousness would be associated with use of all tactics, with pattern of high scorers using direct tactics and low scorers using indirect tactics.

## 2. Method

### 2.1. Measures

#### 2.1.1. Manipulation tactics

This instrument was constructed for the purpose of this research. The construction process included four stages. In the first stage items from Buss (1992), Buss et al. (1987) and Schriesheim and Hinkin (1990) instruments were translated from English to Croatian and then back translated to English. In the second stage psychology students were asked to describe in their own words all behaviours that might be used between family members in order to manipulate each other. In the next few stages metric characteristics of the preliminary versions of the instrument were tested on different samples, which included university students, high-school students and parents. Factor analysis of the items was done using principal component analysis with varimax rotation. Based on Kaiser–Guttman criteria and Cattell’s scree test, three factors provided the best fit to the data. The total number of items was reduced to 22 (10 items measuring the first factor, 7 items the second factor and 5 items the third factor) by keeping items which seemed to be the best measure of the corresponding factor based on inter-item and item-total correlations. Factor analysis of these items showed that they generally have the highest factor loadings on the expected factor (Butkovic, 2005).<sup>1</sup>

Final version of the manipulation tactics instrument measures three types of manipulation tactics labelled indirect tactics for coercion (ITC), direct tactics (DT) and indirect tactics for humouring (ITH). These labels are provisional labels given in such a way that comparison with previous work in the area is easier and more straightforward. Each item is scored on a seven-point scale ranging from ‘1’, meaning *not at all likely*, to ‘7’, meaning *extremely likely*. This instrument can be used to obtain both self- and observer-reports of manipulation tactics. In addition to individual ITC, DT and ITH scores, a total sum score can be calculated, which is a measure of global

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<sup>1</sup> More detailed information about the instrument’s development can be obtained from the first author.

general tendency to use manipulation tactics. Cronbach's alpha coefficients for the total score ranged between .81 and .85 for self-reports and between .80 and .83 for observer-reports. Cronbach's alpha coefficients for ITC ranged between .80 and .84 for self-reports and between .77 and .85 for observer-reports. Cronbach's alpha coefficients for the DT ranged between .77 and .82 for self-reports and between .66 and .78 for observer-reports. Cronbach's alpha coefficients for ITH ranged between .61 and .75 for self-reports and between .63 and .71 for observer-reports.

### 2.1.2. *NEO five-factor inventory (NEO-FFI)*

Personality was measured using the NEO Five-Factor Inventory (NEO-FFI; Costa & McCrae, 1989, 1992), a short version of NEO-PI, consisting 60 items, measuring five personality domains: Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness to Experience. The NEO-FFI items are scored on a five-point scale ranging from *strongly disagree* to *strongly agree*. The Croatian version has been previously used and shown to have good psychometric properties (Bratko, Vukosav, Zarevski, & Vranic, 2002). In our study, Cronbach's alpha coefficients based on offspring's self-reports were .84, .72, .57, .68 and .85 and based on offspring's observer-reports .79, .77, .52, .73 and .86 for Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness, respectively. Cronbach's alpha coefficients for paternal self reports were .80, .75, .73, .65 and .80 and for paternal observer-reports .79, .79, .66, .83 and .89 for Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness, respectively. Cronbach's alpha coefficients for maternal self-reports were .79, .76, .64, .72 and .83 and for maternal observer-reports .81, .83, .61, .76 and .89 for Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness, respectively.

## 2.2. *Participants and procedure*

Participants in this study were high school students and their parents. Data were collected for 193 students (60 males; 133 females), and 152 fathers and 188 mothers. A total of 49 males and 101 females responded with complete parental data. For 2 male and 2 female students only paternal data were available. For 10 male and 30 female students only maternal data were available. Age of offspring ranged from 15 to 18 years ( $M = 16.2$ ;  $SD = 0.69$ ), age of fathers from 36 to 62 years ( $M = 47.3$ ;  $SD = 4.74$ ) and age of mothers from 35 to 56 years ( $M = 44.7$ ;  $SD = 4.47$ ).

High school students completed the measures at school in groups of approximately 30 individuals during class. They were asked to complete each of the measures two times, once in self-report format and second time in observer-report format. Students first assessed which manipulation tactics they use with their mothers and fathers (children's self-reported manipulation tactics) and then which manipulation tactics their mothers and fathers use with them (parents' observer-reported manipulation tactics). After that they completed a personality measure, first assessing their own personality (children's self-reported personality), and then the personality of the student seated next to them in class (children's observer-reported personality). After this, students were requested to deliver the measures to their parents and return them one week later to the school psychologist. Parents filled in the measures individually at home during their spare time, also completing each of the measures two times. Parents first assessed manipulation tactics they use with their child (parents' self-reported manipulation tactics), then the tactics their child uses with them (children's observer-reported manipulation tactics), after that they assessed their own personality

(parents' self-reported personality) and at the end the personality of their spouse (parents' observer-reported personality). This procedure enabled us to have self-report and observer-report measure of both manipulation tactics and personality for most participants.

### 3. Results

#### 3.1. Parent–offspring similarity in manipulation tactics

Two indicators of parent–offspring similarity for manipulation tactics were calculated: parent–offspring correlations ( $r$ ) and midparent–offspring regressions ( $R$ ).  $R$  is the regression of the offspring manipulation tactics score on the averaged parental manipulation tactics score. These are shown in Table 1. Since we had self-report and observer-report data from offspring and parents, both  $r$  and  $R$  were calculated for each source of information. As shown in Table 1, the agreement between parent–offspring correlations based on self-reports and observer-reports was not high.

The parent–offspring correlation ( $r$ ) can be used to derive the proportion of individual differences that can be explained by familial aggregation (which includes both shared genetic and environmental effects) of manipulation tactics. Since genetic similarity of parents and their offspring is 50%, the estimate of familial aggregation is obtained by doubling the parent–offspring correlation;

Table 1

Parent–offspring correlations  $r$  and midparent–offspring regressions  $R$  (with confidence intervals) for manipulation tactics

	Self-report				Observer-report			
	TM	ITC	DT	ITH	TM	ITC	DT	ITH
Father–offspring $r$	.20*	.22**	.09	.12	.13	.15	.03	.06
Father–son $r$	.24	.20	.12	.08	.42**	.47**	.25	.07
Father–daughter $r$	.20*	.24*	.12	.15	.00	.01	–.04	.05
Mother–offspring $r$	.24**	.25**	.17*	.14	.15*	.15*	.14	.24**
Mother–son $r$	.30*	.33*	.27*	.24	.14	.36**	.09	.32*
Mother–daughter $r$	.23**	.21*	.16	.05	.15	.08	.16	.22*
$R$ of offspring on midparent	.25** (.07–.30)	.26** (.08–.32)	.13 (–.03–.24)	.17* (.01–.28)	.17* (.01–.45)	.17* (.01–.38)	.03 (–.18–.26)	.19* (.04–.62)
$R$ of sons on midparent	.33* (.04–.44)	.28 (.00–.43)	.32* (.03–.41)	.22 (–.05–.39)	.38** (.14–.87)	.47** (.24–.83)	.20 (–.13–.66)	.25 (–.06–.73)
$R$ of daughters on midparent	.24* (.03–.31)	.25* (.04–.34)	.12 (–.07–.28)	.12 (–.07–.30)	.09 (–.16–.40)	.07 (–.14–.30)	.03 (–.31–.23)	.16 (–.08–.74)

Note. TM = total score on Manipulation tactics instrument; ITC = indirect tactics for coercion; DT = direct tactics; ITH = indirect tactics for humouring; midparent = average mother and father manipulation tactics score.

$N$ s for the correlations differed depending on the relationship; they ranged between 49 and 59 for parent–son, between 101 and 131 for parent–daughter and between 150 and 190 for parent–offspring relationship.

\*  $p < .05$ .

\*\*  $p < .01$ .

this also represents the upper-limit estimate of heritability (Plomin, DeFries, & McClearn, 1990). Based on the self-report data, estimates of familial aggregation for general-use manipulation tactics ranged between 40% and 60% (obtained by doubling parent–offspring correlations from Table 1). Estimates of familial aggregation based on observer-reported mother–offspring correlations are similar, around 30%, whereas estimates of familial aggregation based on observer-reported father–offspring correlations differ greatly depending on the offspring sex. The reasons for this are not clear. In addition, parent–offspring correlations and consequently, estimates of familial aggregation differ for different types of manipulation tactics. Familial influences seem to be the most important for indirect tactics for coercion, since there is a pattern of higher estimates of familial aggregation for that type of tactics than for the other two types of tactics.

Midparent–offspring regressions provide better estimates of heritability than parent–offspring correlations. Variance of midparent scores is half that of a single parent's score and so midparent–offspring regressions provide a direct estimate of narrow-sense heritability (the proportion of phenotypic variance due solely to additive genetic variance) which is unbiased by assortative mating (Plomin et al., 1990), and assumes no cultural transmission or genotype  $\times$  age effects. Also, confidence intervals can be provided for those regressions as indicators of parameter estimate precision (Lynch & Walsh, 1998). Because father–mother correlations in our sample were statistically significant ( $r_{TM} = .26$ ,  $r_{ITC} = .29$ ,  $r_{DT} = .25$ ,  $r_{ITH} = .37$ ;  $p < .01$ ) which indicated some assortative mating for the use of manipulation tactics, the midparent–offspring regressions were the preferred measure of heritability of manipulation tactics.

As with the parent–offspring correlations, different results were obtained depending on the data source. Regression coefficients were in most cases higher and confidence intervals narrower when based on self-reported data. Based on midparent–offspring regression from self-reported data, the heritability estimate for general-use manipulation tactics is 25%. Heritability estimates based on observer-reported data differed greatly depending on offspring's sex. Heritability estimates also differed depending on the type of manipulation tactics. Indirect tactics for coercion had the highest heritability. Since confidence interval for direct tactics overlaps with zero in our sample, the estimate of familial influences for this type of manipulation tactics is nonsignificant.

### 3.2. Manipulation tactics and personality traits

Correlations between manipulation tactics and personality traits were calculated as well as regressions of manipulation tactics on personality traits. Analyses were done separately for self-reports and observer ratings. Only one correlation based on observer-ratings was statistically significant [between indirect tactics for coercion and Agreeableness in fathers' sample ( $r = -.21$ ,  $p < .01$ )]. Therefore, only correlations based on self-report were reported in Table 2.

As can be seen from Table 2, different personality traits were associated with the use of manipulation tactics in all three samples. Among offspring, Agreeableness was negatively correlated with total manipulation tactics score as well as with indirect tactics for coercion. Extraversion and Openness were positively correlated with the use of direct tactics. Among fathers, there were significant correlations between indirect tactics for coercion and Neuroticism (positive), Agreeableness (negative) and Conscientiousness (negative). Among mothers, Neuroticism was positively correlated with total use of manipulation tactics and the use of both types of indirect tactics. Indirect tactics for coercion were also negatively correlated with Extraversion, while the

Table 2

Correlations between self-reported personality traits and self-reported manipulation tactics for offspring, fathers and mothers

	Offspring					Fathers					Mothers				
	N	E	O	A	C	N	E	O	A	C	N	E	O	A	C
TM	.09	.15	.11	<b>-.21</b>	.07	.17	.01	.09	-.16	-.12	<b>.28</b>	-.08	.05	-.02	-.15
ITC	.09	.00	.00	<b>-.36</b>	-.02	<b>.24</b>	-.15	.05	<b>-.31</b>	<b>-.21</b>	<b>.38</b>	<b>-.19</b>	-.04	-.08	-.16
DT	-.01	<b>.27</b>	<b>.25</b>	.04	.14	-.03	.20	.14	.13	.14	-.02	-.15	.17	.15	-.01
ITH	.15	.12	-.02	-.06	.07	.10	.08	-.02	-.05	-.17	<b>.21</b>	-.16	-.08	<b>-.19</b>	<b>-.20</b>

Note. TM = total score on Manipulation tactics instrument; ITC= indirect tactics for coercion; DT = direct tactics; ITH = indirect tactics for humouring; N = Neuroticism; E = Extraversion; O = Openness to Experience; A = Agreeableness; C = Conscientiousness.

Correlations significant at  $p < .01$  are presented in bold.

use of indirect tactics for humouring was also negatively correlated with Agreeableness and Conscientiousness.

To further explore these associations, regression analyses were performed to estimate how much of the variance in manipulation tactics could be explained by personality (results are shown in Table 3). None of the personality traits was a significant predictor of the use of manipulation tactics when based on observer ratings. Therefore, only results based on self-reports are presented. Among offspring, personality traits were significant predictors for total use of manipulation tac-

Table 3

Regression analyses results for offspring, fathers and mothers samples obtained on self-report data

Sample	Manipulation tactics	Predictor	$\beta^a$	$t$	Model summary
Offspring	TM	E	.23	3.01	$R^2 = .12$ ;
		A	-.26	-3.62	$F(5,176) = 4.76$ ; $p < .01$
	ITC	A	-.37	-5.22	$R^2 = .14$ ;
					$F(5,176) = 5.87$ ; $p < .01$
	DT	E	.28	3.69	$R^2 = .15$ ;
ITH	O	.25	3.55	$F(5,176) = 6.25$ ; $p < .01$	
	N	.24	3.06	$R^2 = .07$ ;	
				$F(5,176) = 2.81$ ; $p = .02$	
Fathers	ITC	A	-.25	-2.96	$R^2 = .13$ ;
					$F(5,146) = 4.48$ ; $p < .01$
	ITH	E	.27	2.70	$R^2 = .08$ ;
C		-.24	-2.64	$F(5,146) = 2.39$ ; $p = .04$	
Mothers	TM	N	.30	3.61	$R^2 = .09$ ;
	ITC				$F(5,182) = 3.70$ ; $p < .01$
					$R^2 = .15$
					$F(5,182) = 6.36$ ; $p < .01$

Note. TM = total score on Manipulation tactics instrument; ITC = indirect tactics for coercion; DT = direct tactics; ITH = indirect tactics for humouring; N = Neuroticism; E = Extraversion; O = Openness to Experience; A = Agreeableness; C = Conscientiousness.

<sup>a</sup> Only predictors significant at  $p < .01$  are presented here.



tics including each of three sub-types. High Extraversion and low Agreeableness were significant predictors of the total use of manipulation tactics. Low Agreeableness was a significant predictor of higher use of indirect tactics for coercion. High Extraversion and high Openness predicted higher use of direct tactics, while high Neuroticism predicted higher use of indirect tactics for humouring. Among fathers, personality traits predicted significantly only the use of indirect tactics. Low Agreeableness predicted higher use of indirect tactics for coercion. High Extraversion and low Conscientiousness predicted higher use of indirect tactics for humouring. Among mothers, only high Neuroticism was a significant predictor of higher total manipulation tactics use as well as higher use of indirect tactics for coercion.

#### 4. Discussion

This study represents a novel contribution to the exploration of manipulation tactics and the different ways people behave to influence each other. In this study, we explored the use of manipulation tactics by parents and their children, as well as the association between manipulation tactics and the five-factor model of personality. Using a family design, this is the first study to explore the genetic and environmental aetiology of manipulation tactics. Two measures of parent–offspring similarity, parent–offspring correlations and midparent–offspring regressions, indicated that some of the observed familial aggregation was partly attributable to genetic effects. Low agreement between self- and observer-report data obtained in this study suggests that the perception of manipulation tactics differs greatly depending on the source of information, person doing the manipulation or person being manipulated. However, the correlations between observer and self-reported manipulation tactics are similar to those obtained in previous studies (Buss, 1992; Buss et al., 1987). Our estimates of familial aggregation were based on self-reported data. Estimates of familial aggregation based on the parent–offspring correlations for total manipulation tactics scores ranged between 40% and 60%. The estimated heritability based on midparent–offspring regression ranged between 24% and 33%. Another interesting finding is that different types of manipulation tactics show differences in familial resemblance. Familial aggregation appears to be stronger for indirect tactics for coercion like yelling, pouting, criticizing, and less important for more direct tactics such as asking, begging, or giving reasons.

Results from our study are in line with those previous findings which have reported significant relations between personality traits and the use of manipulation tactics (Buss, 1992; Buss et al., 1987; Caldwell & Burger, 1997). Correlations between personality traits and manipulation tactics and results based on the regression analyses all indicate that manipulation tactics are generally used more by neurotic and less agreeable individuals. Our results also suggest that people with different personality traits would be inclined to use different types of tactics, e.g. less agreeable individuals tend to use indirect tactics for coercion, whereas, extraverts and individuals open to experience tend to use direct tactics. However, the correlations were not very high and the proportion of variance in manipulation tactics explained by personality traits was also modest (between 7% and 15%). This indicates that factors other than personality may be more important in determining the choice of manipulation tactic.

There are a number of limitations of this study. The first concerns the properties of the manipulation scales. Our participants were asked to imagine a situation in which they are trying to

manipulate their parent or their child and then rate which tactics they are likely to use. Therefore, it is possible that the low agreement between self- and observer-reports could be partly due to different situations participants imagined while giving their ratings. Identical items were asked of both parents and offspring to enable direct estimates of parent–offspring similarity in manipulation tactics. Not all behaviours are likely to be used equally by parents and offspring, e.g. it is more likely that a child would beg a parent than the other way around and it is more likely that a parent would offer money to the child than the other way around.

Second, there are some indications that the use of manipulation tactics is related to sex. Cowan et al. (1984) found that more manipulation tactics are directed toward a mother than a father. The same trend was seen in this study. Cowan and Avants (1988) also showed that mothers use different tactics depending on the sex of the child and reinforce, depending on sex, the use of different tactics. Also there were some indications in our study that genetic and environmental contributions to individual differences in manipulation tactics might be different for males and females. Unfortunately, the number of males in our offspring sample was too small to permit a thorough exploration of sex differences in manipulation tactics between parents and offspring.

Finally, family studies such as this one, cannot disentangle genetic and shared environmental effects. We can only say these data suggest that manipulation tactics are heritable. Equally, parent–offspring similarity is likely to be driven by shared environmental influences e.g. observational learning. Also, it is possible that both mechanisms apply, meaning that children inherit a genetic predisposition and then learn from their parents, either directly or indirectly, to use specific manipulation tactics.

Future research on aetiology of manipulation tactics should therefore use more powerful behavioural-genetic methods such as the classical twin design to investigate the genetic and environmental aetiology of individual differences in manipulation tactics. Also further research is needed to further explore the psychometric properties of the measures of manipulation tactics used in this study.

## Appendix

### *Items measuring indirect tactics for coercion*

- I pout until he does it.
- I demand that he does it.
- I ignore him until he agrees to do it.
- I criticize him for not doing it.
- I compare him to someone who would do it.
- I yell at him so he'll do it.
- I threaten him with something if he doesn't do it.
- I make him feel guilty so that he would do it.
- I express my anger verbally.
- I let him know that he will be responsible for my negative feelings if he doesn't do it.

*Items measuring direct tactics*

I beg him to do it.  
 I give him reasons for doing it.  
 I tell him how happy I'll be if he does it.  
 I show him that I would be willing to do it for him.  
 I ask why he doesn't do it.  
 I point out all the good things that will come from doing it.  
 I show him how much fun it is.

*Items measuring indirect tactics for humouring*

I give him something so he'll do it.  
 I lower myself so he'll do it.  
 I offer him money so he'll do it.  
 I look sickly so he'll do it.  
 I promise to buy him something if he does it.

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