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Socialization of Dissonance Processes:

Reports of Parenting Style Experienced during Childhood Moderate Dissonance Reactions

Morgan E. Ellithorpe

David R. Ewoldsen

Russell H. Fazio

The Ohio State University

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Corresponding Author:

Morgan E. Ellithorpe
The Ohio State University
3075 Derby Hall
154 N. Oval Mall
Columbus, OH 43210
Ellithorpe.2@osu.edu

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Abstract

Based on portrayals of dissonance as a learned drive state, it was hypothesized that there may be a role for parenting style and related variables in the development of dissonance reactions. This experiment found that both reports of having parents with authoritarian parenting styles and learning the link between responsibility and consequences moderated the effect of an induced compliance dissonance manipulation on attitudes. Reports of having experienced authoritarian parenting and responsibility emphasis both bolstered the effect of the dissonance manipulation, accentuating the difference between the dissonance and control conditions as authoritarian parenting and responsibility increased. These findings help shed some light on the processes by which dissonance reactions might be learned.

Cognitive Dissonance Theory (Festinger, 1957) is one of the most influential theories in the social sciences, having generated extensive research in the decades that it has existed (Cooper, 2007). The theory states that inconsistency in some combination of cognition and behavior causes an uncomfortable arousal state that Festinger labeled "dissonance". Dissonance is a motivational state, as people will employ various strategies to reconcile the perceived inconsistency and decrease their arousal (Festinger, 1957).

Dissonance has been shown time and again to have effects on attitudes and even behavior given the proper circumstances. Even though the theory carries great explanatory power for a large number of effects in a variety of settings, there is still not much known about how variability in the experience of dissonance might come to develop across individuals. One possibility is that dissonance processes are learned during early socialization and development, and deviations in learning might account for some of the individual variation (Cooper, 2007; Cooper & Fazio, 1984). The present study examines individuals' reports of the parenting styles they experienced as one possible aspect of that learning process.

The New Look Model

During the course of decades of research on dissonance, researchers began to find systematic determinants of the dissonance reaction. Cooper and Fazio (1984) organized these determinants into an extension termed the New Look Model of Cognitive Dissonance. According to the New Look model, dissonance is fostered by the foreseeable production of an aversive consequence, as well as perceived responsibility for bringing about that consequence (Cooper, 2007; Cooper & Fazio, 1984). The roles of aversive consequences, foreseeability, and perceived responsibility in dissonance arousal have been demonstrated across a number of studies (e.g., Cooper, 1971; Cooper & Worchel, 1970; Goethals & Cooper, 1975).

Because feelings of responsibility for aversive consequences are important determinants of

dissonance, the New Look model proposes that dissonance reactions have their basis in early socialization and learning. Dissonance arousal is presumed to be a learned state – one that develops through a process of socialization in which individuals learn how to identify an irrevocably aversive consequence, as well as when to assume responsibility for their actions (Cooper, 1998; Cooper, 2007).

In his discussion of possible dissonance socialization processes, Cooper (1998; 2007) uses the example of a child who breaks a vase and is punished for it, arguing that this type of experience should serve as a basis for dissonance reactions later in life. Responsibility for a negative event comes to be associated with aversive consequences. However, one important-yet-unseen aspect of this scenario is exactly how the parent might have reacted to the broken vase. Surely, parents vary. Had the parent previously told the child that if she touched the vase she would be in trouble? Did the parent actually punish the child, or simply clean up the broken glass and move on? Based on such experiences, the child should learn what it means to break the vase, whether it should be viewed as a transgression, and if so, how severe it was.

The reaction the parent exhibits and the dynamics of the parent-child relationship should have important implications for how children learn the link between responsibility and consequences for their actions. Children likely learn from their parents what consequences are aversive and the role of responsibility in those consequences. Given the importance of parenting in early moral development (Berk, 2009), the way the child is parented could influence understanding of aversive consequences both in terms of consequences for him- or herself as well as those caused for others (e.g., the vase was an heirloom and her mother was sad when she broke it). One way to categorize the range of reactions the parent could have is through parenting style, which is a concept that has as-yet not been examined as a possible socialization factor in the development of dissonance reactions.

The implication of the New Look model's assertion that dissonance is learned has been previously tested in two contexts: cross-cultural comparisons, and the "unlearning" of dissonance

reactions. Both have provided insights regarding the developmental origins of dissonance, and the present study seeks to extend this research by more directly examining the role of parenting style as a potential socialization factor in the development of dissonance reactions.

Cross-cultural comparisons. Differences between independent and interdependent cultures have provided an avenue for studying socialization of dissonance processes. The consensus is that the classic findings from standard dissonance paradigms in which consequences for the self occur (e.g., the free choice paradigm) are most robust in independent cultures because of their inherent focus on the self (Heine & Lehman, 1997). For people raised in interdependent cultures, however, dissonance is strongest when the consequences affect others rather than the self, because of the stronger cultural focus on group membership in defining the self (Cooper, 2007). For example, choosing a CD for oneself leads to the typical spreading of alternatives for people from independent cultures, but not for people from an interdependent culture unless the choice is for a friend, or if thinking of others (Hoshino-Browne, et al., 2005; Kitayama, Snibbe, Markus, & Suzuki, 2004). These findings can be taken as evidence for socialization of dissonance reactions, as interdependent and independent cultures experience dissonance in different circumstances and different degrees. However, it remains unclear exactly how cultural upbringing could affect learning of dissonance processes.

Unlearning dissonance. Another argument is that if dissonance is learned it should be susceptible to "unlearning". Participants who had been taught to misattribute dissonance arousal in a previous experiment, when brought in a second time and dissonance was induced again, showed weaker effects than those who were not taught to misattribute (Cooper, 1989). However, unlearning of something does not necessarily mean that it was learned uniformly to begin with, and the results of this study may simply demonstrate that participants were quick to learn how to misattribute arousal. It is unlikely the manipulation influenced participants' understanding of the consequences of their actions or their responsibility for the consequences. Therefore, further inquiry into the aspects of development

that could affect dissonance processes is necessary.

Parenting Style as a Possible Socialization Factor

Parenting style involves such concepts as rule-making, warmth, strictness, punishments, and parent-child communication (Baumrind & Black, 1967; Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987). It should influence how people are taught to assume responsibility for their actions, the outcomes that would be considered aversive, and when responsibility and consequences are connected. While any single variable can contribute only a small amount to the development picture, a focus on parenting style would appear to be a useful starting point.

Parenting style. This study drew upon Baumrind's original typology of three styles, referred to as authoritarian, permissive, and authoritative (Baumrind & Black, 1967). Within this framework, authoritarian parents are the most strict, with heavy-handed rules, appeals to authority (e.g., "because I said so!"), and harsh punishments when rules are broken. The child has little autonomy or power in this relationship for establishing rules and boundaries, and there is no room for negotiation. These aspects of an authoritarian household should also lead to a sense that actions are irrevocable, which has been shown to matter in dissonance effects (e.g., Frey, 1981). Authoritarian parents are also likely to teach the responsibility-consequences link most strongly, based on their tendency for rule-making and punishment. To the extent dissonance reactions are learned, having an authoritarian parent should foster their development and enhance the effect of a dissonance manipulation. Therefore, we hypothesize that reports of having experienced an authoritarian parenting style should moderate the dissonance effect, such that the dissonance manipulation will prove more impactful among those who report experiencing greater authoritarian parenting.

Conversely, children raised using a permissive parenting style may develop weaker dissonance reactions. Permissive parents do not have many rules for their child's conduct, and the rules they do have are not enforced consistently (Baumrind & Black, 1967). Often the child has the power in this

relationship, as the child is allowed to dictate his or her own guidelines. Because the permissive parent does not teach a strong link between responsibility and consequences, reports of having experienced permissive parenting may moderate the effect of dissonance negatively, such that the effect of a dissonance provocation will become weaker as reports of permissive parenting style increase.

The final parenting style is authoritative, which, like the authoritarian, sets rules for the child, and those rules usually have punishments if they are broken. However, unlike the authoritarian parent, authoritative parents involve their child in rule-making, explaining to their child the reason for the rules. Authoritative parents also often allow the child to negotiate rules and punishments, which could leave the child without a sense for transgressions having consequences and actions being irrevocable because negotiations may absolve the transgression. Therefore, while authoritative parents do have rules, their inconsistency in enforcement makes it unclear how reports of experiencing this style might affect the process of dissonance. Specifically, it is this inconsistency, as well as the relative amount of power that is given to the child in regards to negotiation of rules and punishments, that leads to speculation that this parenting style may have little to no effect on the dissonance reaction. That being said, the mere existence of rules and punishments may be enough to bolster dissonance responses, and the possible role of authoritative parenting should not yet be dismissed.

Finally, it is important to note that authoritarian, permissive and authoritative parenting styles are not necessarily mutually exclusive or the opposite of one another. Avoiding the aspects of one does not necessarily mean a parent should or would be the other (Damon, 1995). For example, a parent may use an authoritarian style when dealing with educational issues but an authoritative style when focusing on issues surrounding social interactions.

Responsibility as a key variable. Much of the discussion of how parenting style is likely to be involved in socialization of dissonance reactions is related to understanding the ways in which individuals learn about responsibility for their actions and the aversive consequences of their behavior.

If understanding of responsibility and consequences amplifies the effect of the dissonance manipulation, it would not only be support for the New Look Model's assertion that assuming responsibility for aversive consequences is a crucial part of dissonance processes, but also that learning about responsibility and when to assume it is important, as well.

The Present Study

The current study uses the induced compliance paradigm (Blanton, Cooper, Skurnik, & Aronson, 1997), as the direct manipulation of consequences served as an ideal platform from which to explore the issues of interest. Participants answered questions assessing their parents' parenting styles, after which they were given instructions for an ostensibly separate study in which they were asked to write a counter-attitudinal essay in favor of raising tuition at their university. A random half of participants were given no choice for their essay topic, which they were told was for research on how people construct arguments. The other half were asked if they would mind writing the essay for a university tuition committee, as the quota for essays arguing against increasing tuition had already been surpassed. The main hypotheses of the experiment revolve around whether the three parenting styles and the extent to which parents emphasized a link between responsibility and consequences would moderate the effect of the dissonance manipulation.

Method

Participants

Participants (N = 127) were undergraduates who participated for extra credit in their courses. In consideration of the differential effects of independent and interdependent cultures and dissonance reactions (Cooper, 2007), the data from participants who self-identified as Asian (N = 14) were removed from the analysis. A small number of participants (N = 4) refused to complete the counterattitudinal essay task and were therefore discarded from the data set. The total number of participants included in analysis is 109. Of this final sample, the median age was 20 and 64 (56.6%) were female.

Design

The dissonance manipulation followed the induced compliance paradigm in which participants randomly assigned to low choice or (perceived) high choice prepare a counter-attitudinal essay.

Participants were asked to write a persuasive essay in favor of increasing tuition. To further differentiate the two conditions, those in the high choice (dissonance) condition were also told that their essay would be read by a university panel that is considering the tuition budget for the next fiscal year (aversive consequences), while those in the low choice (control) condition were told that the essay was only for research purposes (non-aversive consequences). This two-pronged manipulation has been used previously as a means for creating high versus low dissonance conditions (e.g., Aronson, Blanton, & Cooper, 1995).

Procedure

After providing informed consent, participants were led to a private room containing a single desk and computer. The experimenter explained that because the standard extra credit unit is for 30 minutes, they would be participating in two unrelated studies that were each 15 minutes. The experimenter then began the software for the "first experiment", telling participants that once they finished the experimenter would give them directions for the "second experiment". The initial questionnaire included the measures of parenting style and the responsibility-consequences measure. After each participant finished the survey, the experimenter entered the room and gave directions for the experimental manipulation. The wording of the manipulation was a modified version of that used in Blanton, Cooper, Skurnik, and Aronson (1997); it is modified in that the language was changed to be relevant to tuition rather than disability funding.

For the low dissonance condition, participants were told that the researchers were interested in understanding how students think about tuition. They were informed that the researchers wanted to see all possible arguments so the experimenter was assigning that participant to write in favor of increasing

tuition. For the high dissonance condition, participants were told that the university had formed a committee to determine whether tuition should be raised for the next year, and that this committee would like to gather student thoughts. The experimenter went on to explain that this committee wanted to see student arguments for both sides of the issue to facilitate their decision, and that at this point in the data collection they had already met their quota for essays arguing against increasing tuition. The experimenter then asked the participant, "would you be willing to write in favor of increasing tuition?" Most students would hesitate and grudgingly say "yes" (refusals N = 4), at which acquiescence the experimenter would further prompt with, "are you sure?" When participants indicated the affirmative, the experimenter would tell them to use the space provided on the screen, and leave the room. After writing the essay, participants were asked how much they supported or opposed tuition increases, answered demographic questions and were then debriefed.

Measures

All measures were assessed on a scale from zero to 10 unless otherwise specified.

Support for tuition increases. As is customary in induced compliance studies, a single item directly related to the topic of the essay served as the dependent measure (e.g., Cooper, Zanna, & Taves, 1978; Scher & Cooper, 1989). Participants were asked: "How much do you support or oppose tuition increases at [our university]?"

Parenting style. Evaluations of the parenting styles of the participants' parents were based on Baumrind's typology of authoritarian, authoritative, and permissive (Baumrind & Black, 1967). The scales were taken from Dornbusch et al. (1987), who provided evidence of the scales' convergent validity and reliability. For example, they found the scales to correlate with students' grade point averages, which are themselves a well-established corollary of parents' own reports of their parenting styles, and with alternative measures of parenting style from the children's perspectives (Cohen & Rice, 1997; Dornbusch, et al., 1987; Strage & Brandt, 1999). Sample questions from the authoritarian scale

(8 items, α = .74) include "My household followed the rule that parents should not be questioned", and "When I got a poor grade in school my parents reduced my privileges". Examples from the authoritative scale (9 items, α = .67) include "My parents emphasized that everyone should be a part of family decisions" and "When I got bad grades in school my parents offered to help me". Items in the permissive scale (8 items, α = .78) included questions such as "My parents had no rules about watching television" and "My parents didn't care if I got bad grades". The three typologies are not intended to be mutually exclusive and participants could conceivably rate their parents high in more than one (Dornbusch et al., 1987).

Responsibility-Consequence Link. Given that the specific associations presumably learned through parental socialization center on the linkage between responsibility for aversive consequences, we developed an exploratory measure to enhance the validity of conclusions from the parenting style measures. Nine questions were drafted to measure how strongly the participants felt their parents taught them the link between responsibility and consequences. Factor analysis showed two factors, one of which focused on the extent to which parents explained punishments and the other on having been punished when at fault. Some items included in the "explanation" factor were "My parents explained to me the reasons for my punishments" and "I always understood why I was being punished the way that I was". Items that loaded on the "consequences when responsible" factor included, "When something bad happened, the more it was my fault the more I was punished", and "Even if it was obviously my fault, I was rarely punished by my parents (reversed). The eigenvalue for the first factor was 2.86 and it accounted for 31.76% of the variance, whereas the eigenvalue for the second factor was 2.39, and it accounted for 26.57% of the variance.

Results

Consistent with previous research (Dornbusch, et al., 1987), the parenting styles were not highly correlated with each other. Reports of authoritarian parenting did not relate significantly to either permissive (r = .02, p > .10) or authoritative parenting (r = .16, p > .10). Reports of permissive and authoritative parenting were negatively correlated (r = -.35, p < .01). In general, these relations reflect that parenting style is not conceptualized as a single dimension. Instead, participants can readily view their parents as scoring high, for example, on both the authoritarian and permissive scales.

[Table 1]

The distinctions among the parenting styles are further substantiated by their differing pattern of correlation with the two factors of the responsibility measure. The consequences-when-responsible factor was significantly positively correlated with authoritarian (r = .33, p < .01) and authoritative (r = .30, p < .01), but not with permissive parenting style (r = -.04, p > .10). This is consistent with the conceptualization of both authoritarian and authoritative parenting styles as setting boundaries for children with some system of rewards and punishments. The explanation factor, which concerns the extent to which the participant felt they understood the reasons for punishments, was significantly positively correlated with authoritative parenting (r = .36, p < .01), but negatively correlated with authoritarian (r = -.36, p < .01) and permissive (r = -.26, p < .01) parenting styles. This is conceptually consistent with the role of negotiation and communication in the parenting styles; authoritative parents are most likely to talk to their children about why a rule or punishment exists. Neither the authoritarian nor permissive parent tends to do this.

In order to assess the effect of the dissonance manipulation, an independent samples t-test was conducted, which revealed a marginally significant effect on support for tuition increases. Those in the dissonance condition (M = 3.17, SD = 2.45) expressed more support than did those in the control

condition (M = 2.20, SD = 2.96), t(97) = -1.77, p < .08.

Hierarchical OLS regression was used to test the posited moderation effects. Specifically, the condition and three parenting style variables were included in the first step, followed by the interaction terms for condition and each of the three parenting styles. The results indicated that authoritarian parenting style moderated the effect of condition, where reports of more authoritarian parenting were associated with stronger effects of the dissonance manipulation, B = .70, t(91) = 2.43, p < .02. At one standard deviation below the mean on authoritarian parenting style, there was no effect of dissonance manipulation, t(91) = -.73, p > .46. However, at one standard deviation above the mean, the dissonance effect was very evident, t(91) = 2.42, p < .02.

[Figure1]

There was no significant interaction effect on the outcome variable of dissonance induction with permissive parenting style, B = -.12, p > .72, nor with authoritative parenting style, B = -.17, p > .69.

To test whether parental emphasis concerning responsibility and consequences moderated dissonance reactions, the factor scores from our scale items were the variables of interest. The first step of the regression included condition and factor scores for the responsibility subscales, the second included the interaction term of condition and each of the factors. Only one of the factors emerged as a significant moderator of the effect of condition on dissonance reactions; as scores on consequences-when-responsible increased, the effect of the dissonance manipulation strengthened, B = 1.18, t = 2.16, p < .05. At one standard deviation below the mean, the effect of dissonance manipulation was not significant t(91) = -.67, p > .50. However, at one standard deviation above the mean, the effect was evident, t(91) = 2.36, p < .05. The explanation factor was not a significant moderator, B = .21, t = .38, p = .70.

[Figure 2]

It should be noted that the positive relationship between authoritarian parenting and support for

tuition increases that we observed in the high dissonance condition stands in contrast to the negative slope that is apparent under low dissonance (and this pattern is mirrored with the consequences-whenresponsible factor). Given previous research demonstrating a lack of differences between low dissonance conditions and baseline or survey control conditions (Aronson, Blanton, & Cooper, 1995; Elkin & Leippe, 1986; Martinie, Olive, & Milland, 2010), there is little reason to expect that the negative relation observed in our low dissonance condition represents an outcome of writing the essay. Instead, it seems far more plausible that the negative relation simply reflects naturally occurring covariation between the variables. To test this reasoning empirically, we conducted a survey that involved participants from the same subject pool as the original experiment (N = 74). The survey included the same measures of parenting style, consequences-when-responsible, and attitudes toward tuition increases. We also included an ordinal measure of who pays the participants' tuition: the student alone, the student and parent(s) together, or the parent(s) alone. This variable accounted for 4% of the variance when entered as the first step in a regression predicting attitudes toward tuition increases, B =0.50, t = 1.58, p = .12. More importantly, the second step, which included the scale for authoritarian parenting and the factor score for consequences-when-responsible, yielded a significant change in explained variance, $\Delta R^2 = .11$, $\Delta F(2, 63) = 3.89$, p < .03. Turning to the specific variables, both authoritarian parenting style and the consequences-when-responsible factor had negative relationships with support for tuition increases, with authoritarian parenting style being a significant negative predictor, B = -.28, t = -2.55, p < .05, and consequences-when-responsible approaching significance, B = -.46, t = -1.61, p < .11. Thus, the relations between authoritarian parenting style, consequences-whenresponsible, and support for tuition increases that we observed in the low dissonance condition of the experiment appears to reflect naturally existing covariation and was not an effect of the dissonance manipulation.

Discussion

The results from this study provide additional support for the New Look Model's (Cooper & Fazio, 1984) assertion that dissonance reactions are learned. Specifically, the more people retrospectively indicated their parents had authoritarian parenting styles, the more dissonance they experienced when agreeing to write a counter-attitudinal essay that could have aversive consequences. Recall that authoritarian parenting style is characterized by strict rules and harsher punishments which should highlight a responsibility-consequences link, as well as a sense of irrevocability of decisions, both of which are at the foundation of dissonance processes according to the New Look model.

A similar pattern to that of the interaction between dissonance and authoritarian parenting style was also found for the consequences-when-responsible factor. Participants who indicated that their parents emphasized the link between responsibility and consequences responded more strongly to the dissonance manipulation. Together with those for parenting style, these results suggest a role for parental socialization practices in dissonance reactions. The New Look model stipulates that a dissonance effect is more likely to occur when there is an aversive consequence for which the person perceives him- or herself as responsible (Cooper, 2007; Cooper & Fazio, 1984). Authoritarian parents, based on their characteristics, are more likely to teach their children strict rules with non-negotiable punishments. Because of this, they are likely to teach their children that actions are irrevocable, which is an aspect of responsibility that can lead to stronger dissonance reactions (Frey, 1981). Therefore, children of authoritarian parents and parents who held them responsible for their actions appear to grow up to experience stronger dissonance processes under the conditions of the induced compliance paradigm. Future research examining whether these effects can be found in other dissonance induction paradigms would help support the generalizability of the present study.

Limitations and Future Research

Given the clear effects of authoritarian parenting, it was surprising that permissive parenting

style did not negatively moderate the dissonance effect. One possibility is that there was a floor effect in the sample, as the mean for permissive parenting style was fairly low (M = 2.72, SD = 1.78 on a 0 to 10 scale). Lower levels of permissive parenting in this sample is not surprising given that the population from which the sample was recruited is college students. Previous research suggests that adolescents with permissive parents tend to do poorly in school (Cohen & Rice, 1997; Dornbusch, et al., 1987) and are more likely to drop out (Rumberger, Ghatak, Poulos, Ritter, & Dornbusch, 1990). Consequently, a college student population should have few instances of highly permissive parents, as those with poor academic performance in adolescence may be less likely to attend college in the first place. In addition, recall that authoritarian and permissive parenting style are not considered to be ends of a continuum, but instead may co-occur to any given extent (Damon, 1995). This orthogonal relationship is reflected in the lack of significant correlation between them (r = .08, p > .45).

The fact that authoritarian parenting style moderated dissonance effects while authoritative did not is consistent with the breakdown of our responsibility measure into two factors with different effects. The factor that did have a significant effect on dissonance reactions was the one that dealt with the link between responsibility and consequences. The other, non-significant factor had more to do with understanding why rules and punishments exist. Interestingly, each factor correlates moderately with its respective parenting style partner; with a positive correlation between authoritarian parenting style and the consequences-when-responsible factor (r = .35, p < .001) and between authoritative parenting style and the explanation factor (r = .30, p < .001). The parallels between the responsibility factors and the parenting styles offer some degree of convergent validity for our conceptual reasoning, thus reinforcing their respective results.

A final issue involves reliance on retrospective reports of parenting styles experienced.

Although this approach has been used previously (e.g., Kim & Chung, 2003; Strage & Brandt, 1999), it may not be as accurate as assessments from the parents themselves or third party assessments.

However, previous research has found a positive correlation between child assessments of parenting style and observer ratings (Grolnick, Ryan, & Deci, 1991). More importantly, research has found that child perceptions of their parents' parenting styles were more predictive of behavioral outcomes than parents' assessments or observer ratings (Cohen & Rice, 1997; Main, Kaplan, & Cassidy, 1985; Sabattini & Leaper, 2004), suggesting that what is critical is the children's perceptions of the parenting style that they experienced. Nonetheless, longitudinal research using assessments from both children and their parents would prove informative.

Conclusion

The present study provides evidence supporting the assertion of the New Look Model of dissonance (Cooper & Fazio, 1984) that dissonance reactions are learned. The developmental origins of dissonance are likely to be varied and complicated, but the results of this study indicate that retrospective perceptions of the parenting style that individuals experienced as children are important. As such, the findings suggest that the way parents punish their children for transgressions may play a role in the development of dissonance as a learned drive state, and may have far-reaching implications for later experiences in the face of inconsistency and aversive consequences.

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Table 1. Correlations between responsibility factors and parenting styles.

	Authoritarian	Permissive	Authoritative	Consequences -when- responsible Factor	Explanation Factor
Authoritarian					
Permissive	.08				
Authoritative	.16	35**			
Consequences- when- responsible Factor	.33**	04	.30**		
Explanation Factor	36**	26**	.36**	.00	

N = 99.

^{**}p < .01

Figure 1. Interaction between Authoritarian parenting style and dissonance manipulation on support for tuition increases.

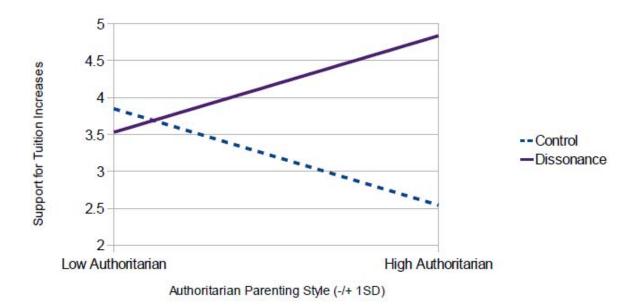


Figure 2. Interaction between consequences-when-responsible and dissonance manipulation on support for tuition increases.

