# USING EXPECTANCY-VALUE THEORY TO PREDICT INTENT TO CONFORM IN ELEMENTARY SCHOOL STUDENTS

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#### Abstract

## USING EXPECTANCY-VALUE THEORY TO PREDICT INTENT TO CONFORM IN ELEMENTARY SCHOOL STUDENTS

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The present study sought to examine the relevance of expectancy-value theory in predicting conformity in elementary school students. The sample consisted of 154 fourth graders and 199 fifth graders from four rural schools in the southeastern United States. Measures of self-expectancy and value for five different domains (academic, sports, dating, misbehavior, and following trends) were used to predict intended conformity to friend group norms. In general, it was hypothesized that students with high value and expectancy for a domain will indicate intent to conform to their friends' behaviors in that domain. Regression analysis was used to measure the strength of the relationship in each domain. Results indicate that the expectancy-value model explained more variance in intent to conform than did general conformity in certain domains, and results varied by gender of participant.

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# Foreword

This thesis is written in accordance with the style of the *Publication Manual of the American Psychological Association (6<sup>th</sup> Edition)* as required by the Department of Psychology at Appalachian State University. Using Expectancy-Value Theory to Predict Intent to Conform in Elementary School Students

Elementary school is a time of rapid development for students emotionally, behaviorally, and socially. In addition to the responsibilities of school, students are learning socially acceptable behavior, taking part in extracurricular activities, and building relationships with their peers. As students progress through the later grades of elementary school, they begin to look increasingly towards the behavior of their peers for information about how to act. To help students succeed in school and these related domains, it is important to understand the variables that influence their engagement and behavior in each of these areas, including the increasing influence of peer conformity.

#### **Expectancy-Value Theory**

To be successful in any domain, an individual must first be motivated to take part in an activity and to do well. For example, in order to succeed in academics, a student must have the motivation to perform well on school assignments. In fact, much of the research on student academic achievement has centered on motivation, as this has been demonstrated to be a key component of academic success (Eccles et al., 1983; Eccles, Wigfield, Schiefele, & Eisenberg, 1998; Pintrich & De Groot, 1990). A major theory that has emerged from this area of research is the expectancy-value theory. Eccles and her research team have found that a student's motivation for an activity can be predicted by two main components: (1) the individual's expectancies about his or her performance on a certain task, and (2) the value that he or she places on the task.

The first component, expectancy about performance, is said to be influenced by a person's "perceptions of competence... and (an) individual's goals and self-schema" (Eccles

& Wigfield, 2002, p. 118). These perceptions are largely based on the individual's interpretations of his or her performance in the past. This feeling of competency is subjective to the individual based on the overall feelings of success or failure. The overall feeling about past competence is thought to result in the expectation for future performance. Thus, in order for a child to have a high expectancy for a domain, he or she must feel competent in that domain and expect to do well in the future, based on past performance.

The second aspect, value, is composed of attainment value, intrinsic value, utility value, and cost. Tasks are said to have attainment value if the experience allows an individual to demonstrate important aspects of one's personality (e.g., bravery, kindness). Intrinsic value, simply put, is the enjoyment or personal interest an individual has for a task. Conversely, utility value is the usefulness of the task, or the more extrinsic reasons to engage in the task (e.g., taking a course one does not particularly like to fulfill a requirement at college). The last aspect of value, cost, is anything negative that the individual experiences as a result of the task (Eccles & Wigfield, 2002). The resulting value for a task or domain is the result of the balance of all of these factors, whether more positive (highly-valued) or negative (less-valued).

Various models based on expectancy-value theory have been used to predict a wide range of student behaviors across grade levels. For instance, Yli-Piipari and Kokkonen (2014) used an expectancy-value model to explain the behavior of elementary and middle school students in physical education class. More specifically, students in grades six through nine were surveyed about their self-expectancy, attainment, intrinsic interest, utility value, and perceived effort expended in physical education class. The researchers found that attainment value was more predictive of female participant motivation, whereas intrinsic value was more predictive of motivation in male participants. Higher self-expectancy and overall value were related to better performance for both genders, as measured by class grades. This study provides evidence for the usefulness of the expectancy-value model in explaining and possibly improving student performance in a class that is particularly important for student health and well-being.

Another successful application of the expectancy-value model to explain student behavior was also demonstrated by Shih, Miles, Tucker, Zhou, and D'Amico (2012). They found that middle-school students' expectancies and values about consuming alcohol have a direct effect on their initiation of drinking. The researchers found that as the adolescents' self-efficacy for resisting alcohol increased, their chances of underage drinking decreased. They also found that students who believed that drinking alcohol would result in negative consequences were less likely to drink. The documented success of using the expectancyvalue model to predict such potentially dangerous behaviors has promising implications for guiding the prevention of underage drinking. More research is needed to investigate whether increasing self-efficacy for resisting alcohol or emphasizing the negative consequences of alcohol consumption would be effective to delay the initiation of alcohol consumption in adolescents.

The expectancy-value model has also been used to predict student behavior related to academics. For instance, Durik, Vida, and Eccles (2006) used this model to predict choices made by students in high school that related to literacy, such as time spent reading for fun, enrollment in language arts courses, and whether their reported future career related to reading. The researchers measured students' values for reading-related tasks and their beliefs in their abilities related to literacy. They found that students who reported high value

and high self-efficacy for reading spent more time reading for leisure and enrolled in more language arts courses and were more likely to report a prospective career that related to reading. This study provides evidence that student self-expectancy and value are useful factors in understanding student academic behavior.

In a similar study, Andersen and Ward (2014) used an expectancy-value model to predict high school student behaviors related to science, technology, engineering, and mathematics (STEM). The researchers surveyed high-achieving students about their selfexpectancy and value for STEM as well as their plans to persist in STEM-related career trajectories. Results indicated that attainment value, intrinsic value, and utility value significantly predicted reported STEM persistence, though self-expectancy did not have as much predictive power, likely due to the high overall ability of the group. These results further indicate that components of the expectancy-value model are valuable in predicting student academic behaviors, particularly in a field that is in need of qualified workers.

Relatedly, Meece, Wigfield, and Eccles (1990) used an expectancy-value model to predict anxiety related to mathematics with seventh, eighth, and ninth graders. Perceptions of ability, expectations about performance, and value for mathematics were found to predict the level of anxiety a student reported feeling about math. That is, students who perceived themselves as good at math, expected to do well in math, and valued doing well in math were found to have the least anxiety related to math. The researchers also found that student performance expectancies predicted their math grades in the next year of school.

Leaper, Farkas, and Brown (2012) examined the effects of ability beliefs, values, and past experiences on adolescent girls' motivation in math and science. Their results indicate that girls who reported having an egalitarian view of gender, exposure to feminism, and high expectancy-value for the domain were more motivated in math and science class than those who did not report the same. They also found that students with more motivation in math and science showed better grades. These results are especially important as educators are looking to encourage female students to pursue careers in science, technology, math, and engineering, which have traditionally been male-dominated fields.

Thus far, the *intrapersonal* components of the expectancy-value theory have been emphasized. However, there are many *interpersonal*, or social, influences on both expectancy and value. As noted, a person's expectation about his or her performance is a reflection of that individual's self-efficacy for a task, which is developed through interpretations of past performances in that area. The way an individual interprets his or her past experiences is influenced by that person's socialization and culture (Eccles & Wigfield, 2002). Not only do social forces influence interpretations of past performance, they may also impact our planning of future behavior. As discussed by Cialdini and Goldstein (2004), "people are frequently motivated to conform to others'... behaviors in order to enhance, protect or repair their self-esteems" (p. 611). In other words, members of a group conform to match their behaviors with the group majority, which in turn improves their own selfconcepts (Cialdini & Goldstein, 2004; Cialdini, Sagarin, Brock, & Green, 2005). When taking all of this into consideration, it seems that self-expectancy is influenced by both personal and social forces.

The second component of expectancy-value theory is also susceptible to social influence. That is, our values are greatly impacted by our social environment. Elementary school classrooms generally consist of 20-30 students who spend a majority of their day together throughout the 36 weeks of the school year. During these close interactions,

students tend to form relationships with others who are similar to them and who share similar values. This formation of homogenous groups within the classroom is aligned with the well-documented phenomenon of homophily. Homophily, literally "love of the same," is the tendency of individuals to interact and bond with people who are similar to them (Cairns, Cairns, Neckerman, Gest, & Gariepy, 1988; Espelage, Holt, & Henkel, 2003; Kindermann 1993; Kindermann, 2007).

Not only is the homogenous make-up of a group high to begin with, it increases over time as the students "socialize" each other and as certain behaviors are rewarded or punished (Bandura, 1986). Kindermann (1993) demonstrated the phenomenon of peer groups remaining homogenous over time as it relates to academic motivation. In a study with fourth and fifth graders, Kindermann found that students tended to be friends with peers of similar self-reported academic motivation at the beginning of the year, and by the end of the year they still belonged to groups of similar motivational status, even if the composition of group members changed. In a similar study with sixth graders, Kindermann (2007) found that students in peer groups with higher academic motivation had similar or even increased levels of motivation by the end of the year, whereas peer groups with initially lower levels academic motivation showed decreases in engagement by the end of the school year. These studies provide support for the argument that children are likely to have values similar to their friends.

#### Conformity

Due to the documented impact of social forces on both expectancy and value, it stands to reason that one's conformity to the behaviors of the social group to which one belongs could be predicted by the expectancy-value model. Conformity is a social phenomenon characterized by "changing one's behavior to match the responses of others" (Cialdini & Goldstein, 2004, p. 606). Individuals may conform for a variety of reasons and may even conform when the behavior they are conforming to is negative. In fact, based on a review of the existing literature, much of the research on conformity has focused on negative behaviors, presumably due to the fact that researchers are trying to figure out ways to reduce conformity to negative behaviors.

For instance, a study done by Espelage, Holt, and Henkel (2003) examined the effects of peer groups on aggression in middle school students. Participants were asked to fill out a survey about how often they engage in bullying and fighting and how often their peers do the same. In order to establish peer groups, the students were asked for the names of up to eight people with whom they spend the most time. Results indicate that students who were nominated as bullies and who reported engaging in bullying and fighting tended to be friends with each other. This study provides support for the possibility that students conform to the behaviors of their peers, even if they are aggressive behaviors.

Another study focusing on the negative aspects of conformity was conducted by Cohen and Prinstein (2006). In this study, 11<sup>th</sup> grade students were led to believe they were talking to fellow students in an online chat room, but they were actually talking to computergenerated confederates. The confederates and the participants were asked questions about their reactions to different scenarios, and the confederates selected answers that involved aggressive or risky behaviors. The participants reported more conformity and more aggressive or risky attitudes when they thought that the confederates were high-status peers. This study provides further evidence that students may conform to the negative behaviors of other students.

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Conformity to the negative behavior of peers has also been examined in preschoolers and kindergarteners. Hanish, Martin, Fabes, Leonard, and Herzog (2005) examined the effects of interactions with peers who engaged in externalizing behaviors at an urban child care facility. All of the students were observed and rated on positive and negative emotions as well as their engagement in externalizing behaviors (e.g., defiance, fighting, and destructive behaviors). The researchers found that students with more exposure to peers engaging in externalizing behaviors demonstrated more externalizing behaviors themselves. An additional noteworthy finding is that the young female participants seemed to be more influenced by the negative behavior of others than the male participants. Thus, this study provides additional evidence of conformity to negative behaviors, as well as an interesting difference in the behavior of students of different genders.

The aforementioned studies provide evidence that the expectancy-value model is useful in predicting student behavior. Due to the probable social influences on both expectancy and value, it is likely that this model will also be beneficial for predicting conformity. If evidence is found in this study that expectancy and value can be used to predict conformity to positive behaviors, it could be used to inform attempts to encourage students to conform in positive ways (i.e., to engage in more behaviors that would improve academic performance). In addition, if this study finds that expectancy-value theory is useful in predicting negative conformity, these results could possibly guide attempts to decrease conformity to negative behaviors.

#### The Present Study

The present study used the expectancy-value theory to predict conformity. More specifically, I used a model based on this theory to examine how self-expectancies and value

for a domain influenced the likelihood that an individual would report conforming in a future situation related to that domain, while controlling for general tendency to conform. By controlling for general inclination to conform, I was able to examine whether the expectancy-value model provides more information about reported intent to conform than does one's natural propensity to conform. In addition to examining conformity in the academic domain, I expanded on the existing research and measured conformity related to the domains of sports, misbehavior, having a boyfriend/girlfriend, and following trends. These five domains were selected based on the results of focus groups studies conducted with elementary school students. The students were asked questions within these focus groups to determine the most pertinent areas of their life.

In general, I predicted that, for each of the domains noted above, students would be most likely to conform to the behaviors of their friend group when they valued that domain and expected themselves to perform well in that domain. I also predicated that the expectancy-value theory would be useful in explaining student behavior even when they did not report conformity to the behavior of their friend group.

Working from this premise, I created specific hypotheses about the likelihood of conformity of participants in each domain:

- 1. In the area of academics, I predicted students with high expectancy and value for academics would conform to the academic behaviors of their peer group.
- 2. I further hypothesized that students with high value and self-expectancy for sports would engage in the same sports activities that their friends do.

- In the domain of misbehavior, I predicted that students with a high value and self-expectancy for misbehavior would be more likely to conform to the misbehavior of their friend group.
- 4. A similar trend was expected for students' likelihood of reporting that they will start trying to pursue a romantic relationship if their friend group does. That is, students with a high expectancy and value for this domain would be likely to conform to the behavior of their peer group.
- 5. Lastly, it was hypothesized that students who have a high self-expectancy and value for following trends (e.g., wearing the same clothes) would conform to the behaviors of their peers in this domain.

In addition to examining domain-specific patterns, I will also be examining differences between male and female participant responses. This study is one of the first to apply the expectancy-value model to examine conformity, thus gender will be examined in an exploratory manner to determine whether the model operates differently between male and female participants. Students in elementary school tend to form friend groups with peers of the same gender, so it is likely that same-gendered participants may have similar response patterns (Martin et al., 2013).

#### Method

### Procedure

Invitations to participate in this study were sent to the parents of students in the selected grades at each of the four schools. Parental consent and child assent were obtained for all participants who agreed to take part in this research. The average participation per grade level ranged from 75-86% with an overall average of 81%. The data for the present

study were part of a larger study on peer relations. Participants completed several different measures in two 1-hour sessions. One researcher read all of the items aloud while another member of the research team helped participants individually as needed.

#### Measures

Achievement Motivation. Participants were asked to answer questions designed to measure the expectancy-value components of achievement motivation based on the Eccles, et al. (1983) model. Their questionnaire focused on academics, so for the purposes of this study, I expanded the measure to include questions about the other domains of interest. Questions were answered on a 5-point scale. An example of a question meant to assess the student's academic self-expectancy is as follows:

If you were to list all of the students in your class from worst to best in schoolwork, where would you put yourself? ("One of the worst," to "one of the best")

A sample question that assessed the student's value for academics is as follows:

How interesting is schoolwork to you? ("Not at all" to "A lot")

In total, there were 25 questions related to the participant's self-expectancy and value for the five domains (academics, sports, misbehavior, having a girlfriend/boyfriend, and following trends). Domain-specific average expectancy and value ratings were calculated by averaging the responses across items that measure expectancy and value for each domain. See Appendix A for the full list of questions.

**Self-report of intentions to conform to peer group behavior.** Participants were asked questions to measure their tendency to conform in general, as well as their intent to conform in domain-specific scenarios. To measure their general tendency to conform, students were asked to answer questions such as "*I often rely on, or act upon, what others in* 

*my group think or say*" and "*I don't give in to others in my group easily*." Responses were provided on a 5-point scale range from "strongly disagree" to "strongly agree." Answers to these questions were averaged to create a general conformity variable. See Appendix B for the full list of questions.

To measure the participants' likelihood of conforming to the behavior of their peer group in each domain, participants were asked to read vignettes about hypothetical situations. There were five vignettes, and each focused on one of the five domains of interest. After reading each, participants then answered a question about their intent to conform on a 5-point scale from "*not at all likely*" to conform, to "*very likely*" to conform. An example vignette and question, focused on sports, follows:

- Imagine that someone in your group started to play a new sport, for example, soccer/basketball or tennis/swimming. Most of the kids have been talking about how much fun the new sport sounds. Some of the kids in your group have also started playing it.
- A. How likely would you be to start playing it, too? ("Not at all likely," to "very likely")
- B. Imagine that you have been playing a different sport that you really like. How likely would you be to start playing the new sport instead? ("*Not at all likely*," to "*very likely*")

Participant intent to conform in each domain was calculated by averaging their answers to both questions in each domain. See Appendix C for the full list of scenarios and questions.

#### Results

#### **Descriptive Data**

A total of 353 children (186 females and 167 males) participated in this study. All students were recruited from four rural elementary schools in the southeastern United States. Based on information obtained from school records, the sample was made up of 77% White students, 13% Black students, and 9% other ethnicities. The sample included 154 fourth graders and 199 fifth graders.

The relationship among all variables was examined with zero-order correlations, and the results are provided in Table 1. ANOVA was used to compare differences in gender in explaining reported intent to conform in each domain. In the areas of academics and following trends, girls were significantly more likely to report intent to conform than boys, F(1, 347)=36.70, p<.000 and F(1, 346)=22.73, p<.000, respectively. Boys were significantly more likely to report intent to conform to misbehavior, F(1, 347)=12.72, p<.000. No significant gender differences were found in intent to conform to sports-related behavior, F(1, 347)=.90, p=.34, or in pursuing a boyfriend or girlfriend, F(1, 346)=.03, p=.86.

#### **Regression Analyses**

Hierarchical linear regression was used to explain variability in intended conformity, with five regression models tested in total. In Step 1 of each model, domain-specific conformity was entered as the dependent variable, and the independent variable was the general tendency to conform. At Step 2, domain-specific average expectancy and value ratings were added as independent variables. In this way, it was possible to determine whether the proposed expectancy-value model provided more information about domain-specific conformity than the general tendency to indicate intent to conform. Results in each

domain are displayed in Table 2, and further explained in the following paragraphs.

Academic Domain. Results show that at step one, general conformity did not significantly predict academic conformity for either gender. At Step 2, the expectancy-value model significantly predicted intent to conform for both boys and girls. For both genders, the reported value of academics was more strongly related to intent to conform than expectancy. On average, female participants rated a significantly higher value for academics than males, F(1, 344)=19.94, p<.001. There was no significant difference in the self-expectancy between the genders, F(1, 343)=5.38, p=.02.

**Sports Domain**. In the area of sports, neither general conformity nor the expectancyvalue model predicted intent to conform for boys, but general conformity did significantly predict the intent of girls to conform in sports. Self-expectancy and value for sports were not significantly related to intent to conform for either gender. Male participants were more likely to rate themselves higher on both expectancy and value than female, F(1, 343)=10.80, p=.001 and F(1, 339)=10.95, p=.001, respectively.

**Following Trends Domain.** The expectancy-value model predicted intent of boys to conform in the area of following trends better than general conformity. However, both general conformity and the expectancy-value model explained a significant amount of variance in intent to conform for girls in this domain. On average, female participants reported a higher value for following trends, F(1, 343)=8.50, p=.004, but there was no significant difference between genders on self-expectancy F(1, 343)=3.18, p=.07. For both male and female participants, value for following trends was more strongly related to intent to conform.

**Misbehavior Domain.** The expectancy-value model predicted intent of boys to conform in the area of misbehavior better than general conformity; however, both the expectancy-value model and general conformity explained a significant amount of variance in the intent to conform for girls in the domain of misbehavior. On average, male participants reported a higher self-expectancy and value for misbehavior than females, F(1, 275)=15.87, p<.001, and F(1, 343)=16.50, p<.001, respectively. For both genders, the reported value of misbehavior was more strongly related to intent to conform than self-expectancy.

**Dating Domain.** In the domain of obtaining a boyfriend or girlfriend, the expectancy-value model predicted intent to conform better than general conformity for both genders. There was no significant difference between genders in self-expectancy or value in this domain, F(1, 339)=0.05, p=.83, and F(1, 333)=0.52, p=.47 respectively. For both genders, the value of obtaining a significant other was more strongly related to intent to conform than self-expectancy.

#### Discussion

Results indicated that, in general, the expectancy-value model explained more variance in participant intent to conform than the general tendency to conform. However, the effectiveness of this model varied by gender and the domain in question. Though more research is needed in this area, preliminary findings show support for using self-expectancy and value of students to predict intent to conform in various situations. More specifically, the reported *value* of each domain (excluding sports) was more strongly associated with intent to conform than was the reported *expectancy* (or efficacy) of that domain. To better understand these results, the following paragraphs summarize the findings in each domain, followed by a discussion of the limitations of the present study and suggestions for future research.

#### Academic Domain.

The expectancy-value model explained more variance than general conformity in reported intent to conform to academic behavior in both males and females, which fully supported the hypothesis in this domain. These findings indicate that the self-expectancy and value are important components in understanding conformity and provide more information than simply the general tendency of participants to conform. As discussed in the introduction of this study, students with high self-expectancy and value for academics are more likely to engage in behaviors that promote successful academic achievement (Durik, Vida, & Eccles, 2006; Leaper, Farkas, & Brown, 2012; Meece, Wigfield, & Eccles, 1990). Following this logic, it may be the case that participants reported an intent to conform simply because they normally tend to engage in academic behaviors; however, the intent to conform variable also reflects the fact that students were asked about their intent to study even if this is something they do not normally do. Thus, students are more likely to report intent to conform to the academic behaviors of their peers, even if this means they have to change their behavior, when they value academics and expect to do well. In summary, the results of the present study indicate that more information is needed than general tendency to conform to fully understand student conformity in the domain of academics. This study also provides further evidence of the usefulness of the self-expectancy and value variables in the area of academics.

## **Sports Domain.**

In the area of sports, general tendency to conform was the best predictor of intent to conform in the responses of female participants, but neither model significantly explained intent to conform in the responses of males. Thus, no support was found for the original hypothesis that participants with high self-expectancy and value would be more likely to conform. Based on the nature of the question, it is likely that the participants in the present study answered based on what they would do with their friends during recess or free time. In general, research has shown that elementary students often segregate into gendered groups during playtime (i.e., sex homophily) and that the gender of their playmates is a better predictor of whom young children play with during free play than the type of activity (Martin et al., 2013). Research also indicates that, in general, boys are more likely to engage in sports and more active games, whereas girls prefer less physical activities (Nielsen, Pfister, Bo Anderson, 2011; Smith, Nichols, Biggerstaff, & DiMarco, 2009). As previously mentioned, such gender differences have also been demonstrated to differently motivate boys and girls in late elementary and middle school physical education classes (Yli-Piipari & Kokkonen, 2014). This gendered physical activity preference is consistent with the findings of the effectiveness of the regression models in the present study. The male participants reported a high likelihood of playing sports across the board, regardless of expectancy, value, or tendency to conform. The female participants likely responded that they generally intend to conform to the behavior of their same-gender friend group during recess or free time, regardless of the activity, their self-expectancy, or value for sports.

## **Following Trends Domain.**

In the area of following trends, the expectancy-value model explained more variance than general tendency to conform in the responses of male participants, partially supporting the hypothesis in this domain. Although research in this area is limited, one related study has shown that for some male children, clothing and shoes are valued aspects of developing and asserting one's masculinity (Swain, 2002). As shown in Table 2, a stronger relationship was found between the *value* of following trends and conformity than self-expectancy for male participants. It may be that the males who indicated more value for following trends may see this an area to demonstrate their masculinity. For female participants, both general tendency to conform and the expectancy-value model explained a significant amount of variance in the intent to follow trends. A study by Banerjee and Dittmar (2008) found that elementary children who report feeling more peer group pressure also report more materialistic values. That is, the participants felt that buying the "right" clothes, shoes, and other materialistic items is important to avoid rejection from peer groups. Thus, female participants who feel an inclination to conform in general may also follow trends to avoid rejection from their peer group.

#### **Misbehavior Domain.**

In the area of misbehavior, partial support was found for the original hypothesis. The expectancy-value model explained more variance than the general tendency to conform in the responses of male participants, but not female. For both male and female participants, the rated value of misbehavior was more strongly related to conformity than expectancy. Males were more likely to report higher value and expectancy for misbehavior. This result is not surprising given the large body of research that shows that boys are more likely than

girls to misbehave, be aggressive, or engage in bullying behaviors (Espelage, Holt, & Henkel, 2003; Verlinden et al. 2014). In addition, studies have shown that students form groups based on similar values, and this homophily phenomenon was found to extend to misbehavior or aggressive behavior in middle school students (Espelage, Holt, & Henkel, 2003). Thus, males with high expectancy and value for misbehavior are likely to be friends with other students with the same characteristics, and to report an intent to conform to the behavior of that friend group in this domain, regardless of their individual tendency to conform in general.

For the female participants, general tendency to conform was significant, but the expectancy-value model explained even more of the variance in reported intent to conform to misbehavior, and value was more strongly related than self-expectancy. As noted, middle school peers with similar values for misbehavior are likely to form friendships (Espelage, Holt, & Henkel, 2003). Additionally, one study with kindergarteners provides evidence that exposure to the misbehavior or aggressive behavior of their peers may have a stronger influence on the increase of the same behaviors for females than males (Hanish, Martin, Fabes, Leonard, & Herzog, 2005). Based on the results of the present study with elementary school students, it seems that females who have a tendency to conform in general have an increased chance of reporting an intent to misbehave seems to increase even more if they value misbehaving, which may be likely if they are part of a friend group that is misbehaving.

## **Dating Domain.**

The expectancy-value model explained more variance in reported intent to conform to seeking a significant other than general conformity in both males and females. Thus, the hypothesis for this domain was fully supported. Based on a thorough review of the literature in this area, very few studies have examined the dating behaviors of students at the elementary school level, and it seems none have investigated dating conformity with this age group. Results from one longitudinal study indicates that participants who reported higher quality friendships at age 13 were more likely to begin dating, and this early onset of romantic relationships was in turn related to an earlier onset of sexual activity as well as the initiation of alcohol use (Zimmer-Gembeck, Siesbenbruner, & Collins, 2004). This study highlights the crucial need for more research into the early dating behaviors of elementary students, to aid in prevention efforts as well as the encouragement of responsible dating and sexual activity. The results of the present study indicate that the expectancy-value model may serve as a framework for predicting early dating behaviors with elementary school students, as a version of this model has already been demonstrated to predict the sexual behavior and dating of females ages 16-25 (Zimmer-Gembeck, Ducat, Boislard-Pepin, 2011).

#### Limitations

There were a few limitations within this study that should be considered when interpreting the results. A major consideration is the fact that the sample was only representative of four rural schools in the southeastern United States. More research in this area with a more diverse sample would be needed to understand the implications for the multi-cultural population of the United States. An additional limitation is the simplified measure of the multi-faceted dimensions of both expectancy and value. Answers to questions related to expectancy were averaged for a mean expectancy score, and the same was done to calculate value. As discussed earlier, both expectancy and value are multi-faceted in nature. Expectancy for a domain is thought to be based upon perceptions of competence based on past performance as well as overall selfesteem and self-concept. Value for a domain can be further broken down into attainment value, intrinsic value, utility value, and cost. It may be the case that each of the aspects that play into expectancy and value have varying impacts on an individual's behavior in different domains. Future studies should address the various components of both, as well as how they relate to the domains in question. In this way, we may be able to isolate which components of the expectancy-value theory are best able to explain conformity in various situations.

A further limitation is the way in which conformity was measured. Conformity was not directly observed; instead, students were asked to indicate the likelihood that they would conform in a hypothetical situation. This method may not have been an effective way to measure conformity (considering the age of the participants), as it involves metacognition, a skill that these young participants may not have developed yet. Further research is needed to examine whether these results would be replicated in a real-world situation.

#### **Future Research**

The following study provides a framework for understanding and predicting intent to conform in various domains of elementary school student behavior. Results indicate that the expectancy-value model is useful in explaining variance in conformity but to varying degrees across domains and genders. The expectancy-value model is generally more effective for understanding domain-specific conformity than is general conformity alone. Thus, students are more likely to conform to the behavior of their peers in domains that they value and expect to do well. The current findings suggest that unless future research on conformity in these domains includes the contributions of self-expectancy and value, valuable information about student behavior may go unexamined. Additional research should use a more representative sample to allow further generalization the results to various ages, races, and ethnicities. For instance, it is likely that students in middle school and beyond will have an increased awareness of their standing among their peers which in turn may increase the amount of variance explained by the expectancy variable. Further research is also needed to determine if the results found translate to conformity in real world situations, rather than intent to conform reported on surveys.

#### Implications

Late elementary school is a time when students increasingly rely on the behavior of their peers to decide how to behave. As discussed previously, conformity to negative behaviors has been a large focus of research in this area likely due to a desire to decrease such occurrences. As the results of the present study indicate, the degree to which a student tends to conform in general does not always explain a significant amount of variance in student behavior. An individual's self-expectancy and value for a domain seems to provide much more information about his or her intent to conform than that individual's general tendency to conform, particularly in the fields of academics, misbehavior, following trends, and seeking a significant other. This information may lead to a promising means of intervention, as students' self-expectancy and value may be easier to influence than inherent tendency to conform. For example, further research may find that decreasing a student's value for misbehaving may lead to a decrease in the likelihood that he or she misbehaves, even if that student's friend group is misbehaving. Parents and educators alike would benefit from research that finds a new way to teach their students to make better choices, in spite of the alluring temptation to conform to the behavior of the peer group.

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# Appendix A DOMAIN MOTIVATION

For the next items, think about the whole class and where you would put yourself:					
1. If you were to list all of the students in your class from worst to best in schoolwork, where would you put yourself?	One of the worst	In the bottom half, but not the worst	In the middle	In the top half, but not the best	One of the best
2. If you were to list all of the students in your class from least to most stylish or trendy (with music, clothes, athletic shoes), where would you put yourself?	One of the worst	In the bottom half, but not the worst	In the middle	In the top half, but not the best	One of the best
3. If you were to list all of the students in your class from worst to best at sports, where would you put yourself?	One of the worst	In the bottom half, but not the worst	In the middle	In the top half, but not the best	One of the best
4. If you were to list all of the students in your class from worst to best behaved, where would you put yourself?	One of the worst	In the bottom half, but not the worst	In the middle	In the top half, but not the best	One of the best
For the next questions, think about how good you are at various activities:					
5. How good at schoolwork are you?	Not good at all □	Not very good	Just OK	Pretty good □	Very good □
6. How good are you at getting a girlfriend/boyfriend?	Not good at all	Not very good	Just OK	Pretty good	Very good

Now, think about how good you think you would be at the following:					
7. If you went to a new school, how good would you be at figuring out the latest trends (the in-style clothes, new music,	Not good at all	Not very good	Just OK	Pretty good	Very good
cool athletic shoes)?					
8. If you started to act up when teachers weren't around, how good would you be at	Not good at	Not very	Just OK	Pretty good	Very good
getting away with it?		gooa		Π	
9. How good would you be at learning something new in school?	Not good at	Not very	Just OK	Pretty good	Very good
	all	good		0	0
10 How good would you be at learning	Not	Not			
and playing a new sport?	good at all	very good	Just OK	Pretty good	Very good
11. How well do you expect to do in school this year?	Not well at all	Not very well	Just OK	Pretty well	Very well
12. If you were to try to get a girlfriend/boyfriend, how likely would it be that someone would want to go out with you?	Not likely at all	Not very likely	Just OK	Pretty likely	Very likely
-					
How much do you like to do the following?	0				
13. How much do you like your schoolwork?	Not at all	Not very much	A little	Some	A lot
14. How much do you like wearing in- style clothes or listening to cool music?	Not at all	Not very much	A little	Some	A lot
15 How much do you like or would you		Not			
like having a girlfriend/boyfriend?	Not at all	very much	A little	Some	A lot

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16. How much do you like playing	sports?	N	ot at	No	t		
			all	ver	y Aliti	tle Some	A lot
17. How much do you like causing	trouble	N	ot at	No	t A lit	tle Some	A lot
when teachers are not around?			all	ver	y		
				тис	ch		
			·	17		1 0	A. T
18. How interesting is schoolwork	to you?	N	ot at all	No ver	t Aliti	tle Some	A lot
			ші	muc	y ch		
19. In general, how useful is	Not at c	all	Not ve	ery h	A little	Some	A lot
what you learn in school?				ı			
20. In general, how useful is	Not at a	all	Not ve	ry	A little	Some	A lot
playing sports?			much	'n			
How important are the following?							
21. For me, being good at my	Not at a	all	Not ve	ry	A little	Pretty	Very
schoolwork is	importa _	nt	import	ant	important _	important _	important _
		11					
22. For me, wearing in-style	Not at a	ill nt	Not ve	ery ant	A little	important	<i>Very</i> <i>important</i>
is				un			
23. For me, being good at sports	Not at a	all	Not ve	ery	A little	Pretty	Very
is	importa	nt	import	ant	important	important	important
		11					
24. For me, being good at getting	Not at c	all	Not ve	ry	A little	Pretty	. Very
a giriiriend/doyiriend is	importa	nt	import	ant	important	important	important
25. For me, being good at	Not at a	all	Not ve	ry	A little	Pretty	Very
causing trouble is	ımporta	nt	importe	ant	important _	important _	important _

# Appendix B GENERAL CONFORMITY SCALE

# Think about your FRIENDSHIP GROUP for these questions:

1. I often rely on, or act upon, what	Strongly discaree	Disagree	Undecided	Agree	Strongly
others in my group think or say.	uisugiee				ugree
2. I would be the last one to change my	Strongly	Disagree	Undecided	Agree	Strongly
opinion when my group makes a decision.	disagree				agree
3. When my group makes a decision, I'd	Strongly	Disagree	Undecided	Agree	Strongly
rather give in and go along than try to	disagree				agree
have my way.					
4. Often, others in my group decide what	Strongly	Disagree	Undecided	Agree	Strongly
we are going to do together.	disagree				agree
5. Others with strong opinions can easily	Strongly	Disagree	Undecided	Agree	Strongly
influence and change my ideas.	disagree				agree
6. If others in my group try to change my	Strongly	Disagree	Undecided	Agree	Strongly
opinion, I tend to follow and go along	disagree				agree
with them.					
<b>-</b>	<i>c</i> , , ,	0.			<u> </u>
7. I don't give in to others in my group	Strongly	Disagree	Undecided	Agree	Strongly
easily.	uisugiee	_		_	ugiee
8. I prefer to make my own way rather	Strongly	Disagree	Undecided	Agree	Strongly
than follow others in my group.	aisagree				agree

## Appendix C INTENT TO CONFORM TO CLIQUE NORMS

## Think about your FRIENDSHIP GROUP for the next questions.

1. Imagine that your class will soon be taking a big test. Most of the kids in your group have been talking about studying for the test. Some kids in your group have already started studying hard for it.

A. How likely would you be to start studying hard for it, too?	Not at all likely	A little	Somewhat likely	A lot	Very likely
B. Imagine that you usually spend a lot of time after school playing or going to activities. How likely	Not at all likely	A little	Somewhat likely	A lot	Very likely
would you be to study hard for the test instead?					

2. Imagine that some kids started to play a new sport, for example, soccer/basketball or tennis/swimming. Most of the kids in your group have been talking about how much fun the new sport sounds. Some of the kids in your group also have started playing it.

	1		1 2 0			
A. How likely would you be to start	Not at	A little	Somewhat	A lot	Very	
playing it, too?	all		likely		likely	
	likely		·			
B. Imagine that you have been	Not at	A little	Somewhat	A lot	Very	
playing a different sport that you	all		likely		likely	
really like. How likely would you	likely		·		·	
be to start playing the new sport						
instead?						

3. Imagine that some kids started wearing something really trendy or listening to some cool new music. Most of the kids in your group have been talking about how cool it is. Some kids in your group also have started wearing it or listening to it.

-	0 1 0	0					
	A. How likely would you be to start	Not at	A little	Somewhat	A lot	Very	
	wearing it or listening to it, too?	all		likely		likely	
		likely		-			
	B. Imagine that you wear other	Not at	A little	Somewhat	A lot	Very	
	kinds of clothes or listen to other	all		likely		likely	
	kinds of music. How likely would	likely					

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you be to switch to the new style or			
the new music instead?			

4. Imagine that some kids started causing trouble when teachers are not around. Most of the kids in your group think it's really funny. Someone in your group also has started to cause trouble.

A. How likely would you be to join it, too?	Not at all likely	A little	Somewhat likely	A lot	Very likely
B. You know that if you get caught you're going to be in trouble. How	Not at all	A little	Somewhat likely	A lot	Very likely
cause trouble anyway?	likely				

5. Imagine that some kids have started getting boyfriends/girlfriends. Most of the kids in your group have been talking about getting one. Some of the kids in your group also have started trying to get one.

A. How likely would you be to try to get a boyfriend/girlfriend, too?	Not at all likely	A little	Somewhat likely	A lot	Very likely
B. If you're worried that you might not get one, how likely would you be to try anyway?	Not at all likely	A little	Somewhat likely	A lot	Very likely

Vari	iable	1	2	33	4	5	9	7	8	6	10	11	12	13	14	15	16
1.	General Conformity	1															
2.	Academic Conformity	.086	ł														
'n.	Academic Expectancy	-000	.281*	ł													
4.	Academic Value	028	.406*	.420*	ł												
5.	Sports Conformity	$.190^{*}$	.170*	.055	.086	I											
9.	Sports Expectancy	.007	.062	.274*	.056	$.131^{*}$	I										
7.	Sports Value	033	.036	.225*	.087	$.126^{*}$	.645*	ł									
œ.	Following Trend Conformity	.201*	.121*	.055	060	.363*	.033	*960.	ł								
9.	Following Trends Expectancy	.050	$.141^{*}$	.292*	.016	.080	.298*	.195*	.372*	I							
10.	Following Trends Value	.072	.059	$.102^{*}$	087	$.169^{*}$	$.166^{*}$	.145*	.548*	.561*	ł						
11.	Misbehavior Conformity	.065	419*	248*	391*	.061	.020	.010	$.171^{*}$	.082	.200*	1					
12.	Misbehavior Expectancy	032	389*	241*	384*	.008	.173*	.029	.024	$.108^{*}$	.170*	.537*	1				
13.	Misbehavior Value	.062	382*	- 090	356*	.020	$.167^{*}$	$.100^{*}$	$.111^{*}$	$.157^{*}$	.253*	.575*	.770*	1			
14.	Dating Conformity	$.114^{*}$	097	.012	141*	$.140^{*}$	$.101^{*}$	.129*	.437*	.292*	.462*	.279*	.265*	.308*	I		
15.	Dating Expectancy	023	071	.086	082	.087	.297*	.248*	.270*	.423*	.392*	.201*	.263*	.304*	.457*	1	
16.	Dating Value	.066	083	.053	105*	.102*	.228*	.191*	:309*	.368*	.455*	.238*	.263*	.297*	.643*	.561*	I
· · · *	)C																

Table 1. Zero-Order Correlations for General Conformity and Domain-Specific Conformity, Expectancy, and Value

\**p<*.05

	Acad	emic	Sp	orts	Followin	g Trends	Misbe	havior	Dat	ing
	$\Delta \mathbf{R}^2$	б	$\Delta \mathbf{R}^2$	В	$\Delta \mathbf{R}^2$	ත්	$\Delta \mathbf{R}^2$	ත්	$\Delta \mathbf{R}^2$	β
Step 1 (males) General Conformity	.017	.130	.030	.174	.015	.121	.002	044	.003	.059
Step 2 Expectancy-Value	.224**		.022		.437**		.409**		.417**	
Expectancy		.204*		.105		.068		.154		.255*
Value		.350**		.057		.620**		.512**		.456**
Step 1 (Females)		0					1949 - C. 1	***		
General Conformity	.003	058	.042*	.205	.057*	.238*	$.105^{**}$	.323**	.019	.138
Step 2										
Expectancy-Value	.091**		.017		.245**		.226**		.375**	
Expectancy		.157		690.		.165		.032		080.
Value		.215*		.077		.392**		.463**		.570**

Table 2. Hierarchical linear regressions in each domain

p<.01 \*\*p<.001

Vita

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