The Influence of Moral Competence on Abstinence Education For Pre and Early Adolescent Females

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Abstract

The Too Young For Two program of the Girls Incorporated of Rapid City provides pre- and early adolescent girls with an abstinence education program addressing risk behaviors, making healthy decisions and delaying the early onset of sexual activity. Embedded within program is a character education program intended to improve the moral development of young girls. This study examines the impact of a character education program on the authentic moral decisions girls (e.g., initiating sexual activity, using tobacco, marijuana and other chemical substances) made by pre- and early adolescent. Using a randomized pre/post comparison group design, questionnaires probed both frequency of risk-taking behaviors, other inappropriate behaviors (e.g., cheating, stealing, and lying), girls' attitudes regarding their moral obligations toward others and the acceptability of immoral behaviors if they did not harm others. Moral behaviors were highly correlated to each other. Moral cognition was a significant predictor of moral behavior in pre-intervention girls but many of the predictors ceased to consistently predict moral behavior in post-intervention girls. Analysis of moral cognition revealed that the post-intervention girls who had the most immature moral cognition had changed suggesting that the character education program had impacted their moral behavior in some areas and their moral cognition in others.

Introduction

Over the last few decades, the literature surrounding moral development has expanded to include examinations of the validity of Kohlberg's moral stages, invariance of the stages, transitions between stages, childhood development, and factors motivating or corrupting moral behavior (Kohlberg, 1981, 1984; Piaget, 1932). Throughout this literature, much of the experimental work has utilized hypothetical moral situations. While hypothetical dilemmas avoid the ironic ethical problem of recruiting participants, there is clear reason to believe that when studying morality, one must account for the competence-performance distinction.

One approach to studying genuine moral behavior has focused on the growing trend of cheating in classrooms. Several studies have documented the increasing frequency of cheating in classrooms starting from middle school through the collegiate years (Jensen, Arnett, Feldman, & Cauffmann, 2002; McCabe, Trevino, & Butterfield, 2001). In response to the cheating trend, some researchers have identified variables corrupting moral decision-making. Anderman, Griesinger, & Westerfield (1998) found that students who cheated perceived the classroom to be extrinsically focused with extrinsic incentives (e.g., grades and getting on the honor roll). Students with extrinsic goals (e.g., getting good grades and receiving praise from parents) were also more likely to cheat than those with intrinsic goals. Murdock, Miller, & Kohlhardt (2004) found that students used situation ethics rather than absolute ethics to justify or "neutralize" their decision to cheat. Classrooms with extrinsic performance motivators created environments where students were more likely to cheat than those with intrinsic motivators (i.e., content mastery). Students made distinctions between the justifiability of cheating and the morality of cheating. When asked to give ratings of the justifiability of cheating, their ratings were most strongly

related to ratings of the perceived likelihood of cheating and not the moral acceptability. Students demonstrated that their sense of right and wrong is determined by the extent to which cheating can be justified in a particular context.

The research on cheating has further illustrated the separation of moral cognition from moral behavior. It has also identified some of the factors corrupting moral decision-making as well as rationalizations for those decisions. A few researchers have taken this a step further examining the moral development and decision-making process for adolescents engaged in situations where moral decision-making has much graver consequences (e.g., drug usage and sexual activity). Nucci, Guerra, and Lee (1991) investigated adolescents' drug usage and their views of morality of the issue. From a societal perspective, drug use creates harm for the individual and the larger society, making the behavior wrong. Nucci et al. (1991) examined whether adolescents would view drug usage as harmful, whether the perceived benefits outweighed the harm caused by drug use, and whether the harm caused made the behavior wrong. Adolescent participants were categorized into either a high- or low-drug usage group based upon their responses to the self-report of *Drug Use Scale* (Nucci, 1982). Using a questionnaire, adolescents were asked to judge the morality of behaviors including drug usage as: (1) morally wrong - regardless of rules or laws because of its harm to others; (2) conventional - morally okay if there were no laws against it; (3) personal - a matter of personal choice and not subject to moral judgment; (4) prudentially acceptable – acceptable but foolish; (5) prudentially unacceptable – wrong because of harm to oneself.

Few adolescents viewed substance use as a matter of morality but rather as an issue of personal prudence. Judgments of acceptability of drug usage were closely related to judgments of

harm caused by use of the substance. Adolescents with high drug use patterns treated drug use as a purely personal issue without any prudential ramifications, thereby rationalizing the behavior. Adolescents with low-drug use were more likely than adolescents with high-drug use to classify the behavior as wrong because of the harm to oneself. Adolescents neutralized the moral import of issues such as drug usage by extricating the social impact and placing the issue in a domain reserved as purely intrapersonal matters with either no harm or only prudential harm. Domain placement of these issues impacts the action taken (Nucci, Guerra, & Lee, 1991).

Kohlberg (1984) argued that low stage moral cognitive judgments generate immoral behaviors. However, Bartek, Krebs, and Taylor (1993) argued that most of the research examining the direct relationship has focused upon criminal behaviors. Yet, even criminals can generate higher stage moral cognitive judgments in certain contexts (Kohlberg, Scharf, & Hickey, 1972).

Bartek, Krebs, and Taylor (1993) explored the relationships among moral cognitive stage, coping strategies, defensiveness, and moral behavior in female prostitutes and other female juvenile delinquents. Using questionnaires and interviews with both prostitutes and non-prostitutes on the morality of prostitution, Bartek et al. (1993) found delinquents scored lower in moral cognitive stage than non-delinquents. Delinquents with low coping skills also made judgments lower in moral cognitive stage than those with high coping skills or non-delinquents. Judgments on abstract prescriptive behaviors (e.g., abiding by the law for principle) were far less predictive of criminal behavior than judgments about acts in which individuals have engaged. Judgments of prescriptive behaviors were higher in moral cognitive stage than judgments about acts in which these adolescent young women had engaged. Adolescents may generate higher

stage moral judgments but without matching stage moral cognition, they lack support to generalize their moral cognition across behaviors, including ones they have already engaged in.

The research on cheating, drug use, and juvenile prostitution underscores the need for additional research on adolescent moral development and its impact on important moral behaviors. One program addressing multiple developmental issues before they become significant problems is Girls Incorporated of Rapid City. Girls Incorporated provides a multi-faceted program designed to enrich and empower the lives of girls. Girls Incorporated clearly serves a single gender audience. Research supports the need for separate gender programming due to the differential effects upon each gender (Aarons, et al., 2000; Tolman, Striepe, & Harmon, 2003).

One high priority program of Girls Incorporated of Rapid City is a pregnancy prevention program, Too Young For Two. Recognizing the wide array of factors contributing to adolescent girls becoming sexually active, Girls Incorporated has developed a multi-faceted program to address many of the factors such as substance usage, peer group influences, and parental relationships. It is a positive youth development program that seeks to promote social, emotional, cognitive, moral, and behavioral competencies. Within the educational curriculum, Girls Incorporated uses age-phased programming with an embedded moral development core. The program serves preadolescent (ages 9 to 11) and early adolescent (ages 12 to 14) girls who may be more receptive to messages regarding abstinence (Aten, Siegel, Enaharo, and Auinger, 2002). Over the course of the year, girls attending the Girls Incorporated of Rapid City program were surveyed in the fall and in the late spring, yielding pre and post-program data. With this unique population in a moral development program coupled with comparison data from age-matched

students from the Rapid City Schools, the following research questions emerged:

1. How do girls entering the Too Young For Two (TYFT) program compare to peers in the same school district?
2. Is there a relationship between self-reported inappropriate behaviors such as cheating, lying and stealing and risky behaviors (e.g., substance use and sexual activity)?
3. Is there a relationship between self-reported inappropriate behaviors and moral judgments? Does moral cognition predict risky behaviors?
4. Does a character education program alter either moral behaviors or moral judgments regarding early sexual initiation or abstinence?

Methods

Participants

The population served by this project was girls, ages 9-14. Both intervention and comparison students came from the Rapid City School District area. Intervention students were referred to the Too Young For Two program at Girls Incorporated of Rapid City by school counselors, social service agencies, or placed by a caregiver. These girls were identified as being *most at-risk* for an adolescent pregnancy. The comparison group were grade-matched cluster samples with the exclusion criteria of not being enrolled in the Too Young For Two program.

Data across three years of the Too Young For Two program have been aggregated for analyses yielding an overall population sample size of 431. Of those girls, data was collected for 241 girls prior to participating in the program and 190 after participating in the program with no duplication. The decrease between data collection points may be due to girls leaving the program or girls absent during the second data collection phase. Girls leaving the program were not tested

further creating a possible program dosage variability.

The average age of girls before beginning the program was 10.75; the average age of girls at the conclusion of the program was 11.06 (Table 1). Among the girls, 50% were white, 31% were American Indian, 4% were Hispanic, 4% were African-American, and 8% identified themselves as other minorities. Over one-third (38%) of the girls came from two parent homes.

Participants in the comparison group were girls enrolled in area schools not participating in Girls Inc. Three years of data collected in the school districts was aggregated for analyses producing an overall sample of 2,473 girls. Data for the comparison group was only collected once per year creating an opportunity to compare the samples prior to the onset of moral development programs. Two-thirds of the girls (66%) in the comparison sample came from two parent homes compared to roughly one-third in the Two Young For Two population. Within the comparison sample, the average age of the girls was 10.95 years old. Among comparison group girls, 72% were white, 15% were American Indian, nearly 2% were Hispanic, 1.6% were African American, 1% were Asian, and 7% identified themselves as other minorities (See Table 1).

Each year in the TYFT program, a random sample of girls were selected at two collection points each year: early in the school year (October) to obtain pre-intervention data and near the end of the school year (May) to obtain post-intervention data. Missing data from the girls sampled was factored into the analyses. Table 1 shows the sample sizes for each year.

Instruments

For each girl interviewed in the moral development program, data was collected on age, self-identified ethnicity, household size, and family structure (e.g., two parents, mother only). Four surveys were administered during the data collection periods. Instrumentation used was

based on previous research (Usera, Jenkins, & Anagnopoulos, 2005). Each instrument was designed for age appropriateness and readability levels and were submitted to an Institutional Review Board (Institute for Educational Leadership & Evaluation, IRB 2706). The instruments of interest within this paper include the Youth Development Survey (YDS) and the Character Education Survey (CES). These two surveys had a Cronbach alpha of 0.93 and 0.77, respectively. The Kuder-Richardson formula (KR-21) was used to test the reliability of the survey instruments.

The Youth Development Survey is a 31-item instrument that measures respondents' current behavior in regard to understanding of female sexuality, sexual behavior (intercourse, abstinence, etc.), alcohol use, substance use, and relationships with peers, parents, and adults. For this paper, only questions on substance use and sexual behaviors were used. The Character Education Survey is a 26-item instrument that measures moral behavior, asking if respondents have engaged in behaviors such as cheating, copying, breaking promises, lying, destroying property, stealing, or being dishonest with others. The Character Education Survey evaluates moral cognition through a series of questions on moral responsibilities and moral beliefs.

Due to the number of students involved and the volume of data, girls in the Rapid City comparison group were only given two surveys per year, alternating the surveys given each year. Thus, only the data available on the Character Education Survey and its accompanying demographic data have been analyzed.

Procedure

This study is based on pretest and posttest survey data using both intervention and a comparison cohort. For both the intervention and the comparison group, pretest data were collected early in the fall semester (October). Posttest data for the intervention group were

collected late in the spring semester (May). Girls were given the questionnaires in a group setting after assuring them of the anonymity of the data collected. Data were analyzed using SPSS 14.0 and Minitab for Windows.

Results

Data from each group was aggregated over the three cohorts for analysis. This quasi-experimental design was used to determine if there were differences between the Too Young For Two group and the comparison group and for changes in effects from pre- to post-intervention.

The first set of analyses consisted of numerous one-way analyses of variance (ANOVAs) comparing the mean scores from the Character Education survey responses between the pretest intervention group and the comparison group. While the girls in the intervention group had engaged in significantly less copying ($F(1,2690) = 11.07$, $p < 0.001$) or lying about being late ($F(1,2694) = 6.72$, $p < 0.01$), they were less likely to agree that they had a moral responsibility to help others ($F(1,2664) = 10.94$, $p < 0.001$) or to right a wrong ($F(1,2677) = 7.85$, $p < 0.001$) than girls in the control group.

Analyses of the pre to post survey data revealed no significant effects between the two groups. It is critical to note that the absence of effects between the pre survey and post survey intervention groups is noteworthy. A significant effect between those groups could denote either a significant increase or decrease in an undesirable or desirable behavior. Therefore, the absence of significant effects between the groups reveals that the behaviors did not change. Moreover, given that the intervention girls were identified as most at-risk for an adolescent pregnancy along with the existing statistical differences between them and the comparison group, the absence of any change, particularly for risky behaviors, is remarkable.

A principal-components factor analysis using an equimax rotation identified five factors from the 19 variables. The first factor, termed moral responsibility, included moral responsibility to help others, responsibility to right a moral wrong, honesty, doing the right thing, accepting other's opinions, and respecting differences. The second factor, termed moral behavior, included questions probing the frequency of cheating, allowing others to copy one's work, breaking promises, lying about being late, destroying property, stealing, and being dishonest with another person. The third factor, termed self-promotion, included responses about the acceptability of cheating to succeed, appropriateness of responding to an insult with violence, cheating to avoid unwanted consequences, lying on an application to get a better job, and whether using people is acceptable as long as they aren't hurt by it. The fourth factor included responses about use of tobacco, alcohol, and marijuana. This factor was labeled substance usage. The final factor included only one variable: whether respondents believe others lie or cheat to succeed, named moral beliefs.

Using four of the five factors (moral responsibility, moral behavior, self-promotion, and moral beliefs), a series of regression analyses were performed using the four risky behaviors as dependent variables (sexual activity and substance usage). Analyses were performed for both pre- and post-intervention girls. Stepwise regression was used then to establish a predictor model for specifying risk behaviors based on the specific factors identified.

The factor termed moral behavior included frequency of cheating, allowing others to copy one's work, breaking promises, lying about being late, destroying property, stealing, and being dishonest with another person within the past 30 days. For pre-intervention girls, both frequency of lying about being late and destroying property were consistently significant predictors for tobacco use, ($F(2,229) = 30.69$, $p < 0.001$), with an R^2 of 0.21; alcohol use ($F(2,229) = 25.87$, $p < 0.001$), with an R^2 of 0.19; and marijuana use ($F(4,229) = 9.81$, $p < 0.001$), with an R^2 of 0.15. None of the variables were significant predictors of sexual activity for pre-intervention girls.

For post-intervention girls, the frequency of cheating, lying about being late, and destroying property were all significant predictors of sexual activity ($F(4,182) = 7.21$, $p < 0.001$), with an R^2 of 0.14 as well as alcohol use ($F(4,181) = 39.19$, $p < 0.001$), with an R^2 of 0.42. For tobacco use, lying about being late and cheating were significant predictors ($F(3,182) = 22.97$, $p < 0.001$), with an R^2 of 0.28. Marijuana use was significantly predicted by lying about being late and destroying property ($F(2,180) = 43.57$, $p < 0.001$), with an R^2 of 0.33 (See Tables 2-5).

The factor labeled moral responsibility tapped moral cognitions such as moral responsibility to help others, a responsibility to right a moral wrong, honesty, doing the right thing, accepting other's opinions, and respecting differences. Respondents indicated their level of agreement using a 5-point scale with strongly agree and strongly disagree at the ends.

Three variables from the moral responsibility factor emerged as predictors of substance usage for pre-intervention girls. For pre-intervention girls, doing the right thing and accepting other's opinions were significant predictors of both tobacco use ($F(4,222) = 10.25$, $p < 0.001$), with an R^2 of 0.16 and marijuana use ($F(3,222) = 12.94$, $p < 0.001$), with an R^2 of 0.15. For alcohol use in pre-intervention girls, doing the right thing, accepting the opinions of others, and

righting a moral wrong were all significant predictors ($F(3,222) = 11.90$, $p < 0.001$), with an R^2 of 0.14. Analyses of the moral responsibility cluster failed to yield any significant predictors for post-intervention girls on either substance use or sexual activity (See Tables 2-5). An examination of the data revealed that usage patterns improved slightly while responses to the questions tapping moral responsibility remained largely the same but failed to reach significance.

A third factor, labeled self-promotion, included responses about the acceptability of cheating to succeed, appropriateness of responding to an insult with violence, cheating to avoid unwanted consequences, lying on an application to get a better job, and whether using people is acceptable as long as they aren't hurt by it. Respondents indicated their level of agreement to the statements using a 5-poing scale. Questions within the self-promotion cluster fit with literature distinguishing moral behaviors based upon who is harmed.

Four variables within the cluster appeared as significant predictors of sexual activity or substance use in both pre- and post-intervention girls. For pre-intervention girls, sexual activity was significantly predicted by the acceptability of cheating unwanted consequences and cheating to succeed ($F(3,223) = 7.16$, $p < 0.001$), with an R^2 of 0.09. The appropriateness of responding to an insult with violence was a significant predictor of both tobacco ($F(2,224) = 6.41$, $p < .005$), with an R^2 of 0.06 and alcohol use ($F(2,224) = 7.25$, $p < 0.001$), with an R^2 of 0.06. Marijuana use was significantly predicted by the acceptability of lying on an application to get a better job ($F(2,224) = 7.17$, $p < 0.001$), with an R^2 of 0.06.

For post-intervention girls, none of the variables were significant predictors of sexual activity. Tobacco use was significantly predicted by the acceptability of responding to an insult with violence and cheating unwanted consequences ($F(3,181) = 5.18$, $p < 0.005$), with an R^2 of

0.08. The variable assessing the acceptability of cheating to succeed was a significant predictor of both alcohol ($F(1,180) = 12.42$, $p < 0.001$), with an R^2 of 0.07 and marijuana use ($F(1,179) = 8.52$, $p < .005$), with an R^2 of 0.05 (See Tables 2-5).

The final factor consisted of only one variable. Analyses of pre- and post-intervention girls on this single variable revealed it to be a predictor of sexual activity for pre-intervention girls ($F(1,228) = 5.49$, $p < 0.05$), with an R^2 of .0.02. It was also a significant predictor of tobacco use in post-intervention girls ($F(1,184) = 5.46$, $p < 0.05$), with an R^2 of 0.03 (Tables 2-5).

Discussion

The first research question compares girls entering the moral development program to age-matched peers. This comparison revealed that the intervention girls differed on a number of variables, many of which placed them at greater risk for adolescent pregnancies (e.g., household composition). Also, the intervention girls differed significantly on two moral cognition questions (i.e., righting a wrong). These differences highlight the variables placing the intervention girls at-risk for teen pregnancies.

The second research question addressed the linkage between risk-taking behaviors (i.e., sexual activity and substance usage) and other inappropriate behaviors (e.g., cheating and stealing). Analysis revealed the moral behavior factor was a significant predictor of risky behaviors. Three variables within the cluster appeared to be highly predictive of substance use for both pre- and post-intervention girls and for sexual activity in post-intervention girls. The number of predictors increased from pre- to post-intervention girls with the primary increase in the predictors of sexual activity. For pre-intervention girls, none of the variables were significant

as predictors for sexual activity but for post-intervention girls, some variables were significant predictors. The appearance of significant predictors for sexual activity in post-intervention girls paints a picture consistent with previous research. Adolescents who are using substances such as alcohol, tobacco, and marijuana have a higher likelihood of becoming sexually active (Harvey & Spigner, 1995; Robinson, Telljohann, & Price, 1999). Within each of the risky behavior variables, a steady increase is seen such that increased frequency for one behavior is linked to increased frequency of the other. The same adolescent girls who use substances and become sexually active also self-reported a variety of behaviors that may be caused by their substance use (e.g., destroying property) as well as behaviors likely committed to cover their behaviors (e.g., lying about being late). The connection between cheating and both substance use and sexual activity suggests that small transgressions in moral behavior may either pave the way for larger transgressions or be an indicator of an immature or underdeveloped sense of morality.

The third research question tackled the issue of whether moral judgments would be associated with moral behavior. Previous research on the relationship between the two variables has yielded mixed results but established a distinction between moral cognition and moral behavior. Data collected from pre- and early adolescent girls supports the distinction between moral cognition and moral behavior. While some moral behaviors were correlated with responses to moral cognition questions, moral cognition questions failed to consistently predict moral behavior supporting the separation of the two areas of morality.

The moral responsibility factor yielded interesting results for substance use. Prior to the character education programming, questions tapping moral cognition showed some consistency between beliefs and behaviors. Girls using substances such as tobacco, alcohol, or marijuana

disagreed that one should do the right thing or that they should try to right a moral wrong. Girls abstaining from substances were much more likely to agree with such statements. However, these variables ceased to predict substance use after the character education programming. Closer analysis of the data revealed that while there were no significant changes in moral cognition, there were changes in substance usage (albeit none were statistically significant). This change suggests that the Too Young for Two (TYFT) program is effective in its emphasis on abstinence from tobacco, alcohol, and marijuana and may be influencing girls to make moral decisions that reflect a higher level or maturity than their moral cognition supports.

Data from the self-promotion factor produced results that were more indicative of success in the character education component of the TYFT program. For pre-intervention girls, two variables significantly predicted sexual activity: acceptability of cheating unwanted consequences and cheating to succeed. Girls endorsing the acceptability of these behaviors were more likely to be sexually active than girls who felt those were unacceptable behaviors. For post-intervention girls, there were no significant variables predicting sexual activity. Considering that sexual activity did not decrease, this finding suggests moral cognition, instead, has been altered. The variable responding to insult with violence was a significant predictor for substance usage in both pre- and post-intervention girls. This may be a product of situational variables as a function of substance usage. In addition, the acceptability of cheating to succeed and cheating unwanted consequences continued to be predictors of substance use in post-intervention girls. The variable of acceptability of cheating unwanted consequences appears consistent with Murdock, Miller, & Kohlhardt (2004) in that adolescents are not making moral judgments based upon an absolute sense of right and wrong but rather are using situational ethics.

The fourth research question dealt with a specific intervention program and its impact on moral development and its potential subsequent effects on decisions on genuine moral behaviors. The Girls Incorporated program attempts through its various programs to address issues of moral development in conjunction with its other substance and sexual abstinence programs. Thus, Girls Incorporated tackles both moral cognition and moral decisions as they apply to behaviors.

Data from pre-intervention girls was largely consistent with expectations. The significant predictors of risky behaviors performed in expected ways. For example, girls who found it acceptable to cheat unwanted consequences were sexually active. The differences occurred in post-intervention girls. Many of the variables that predicted moral behaviors in pre-intervention girls cease to have predictive value for post-intervention girls. Looking at the three domains of moral cognition, slightly different patterns of change emerge. Under moral responsibility, responses to moral cognition questions did not change over the intervention period. However, risky behavior patterns did slightly (although not statistically significantly). For self-promotion or prudential judgments, risky behaviors did not change but moral cognitions did. This change signals an important alteration in moral cognition. Nucci, Guerra, and Lee (1991) found that adolescents often viewed their substance usage behaviors as a matter of prudential judgment, affecting only themselves. The questions in the self-promotion factor specifically refer to the absence of harm to others. Yet, post-intervention girls are changing their responses, recognizing that what appears to be a prudential judgment may still be wrong.

Although the data revealed inconsistent findings on the predictive ability of moral cognition on moral behavior variables, the inconsistencies appeared in the post-intervention girls.

The changes suggest movement in moral cognition as a product of the intervention program. The Too Young For Two program influences girls to make better decisions regarding risky behaviors. While the girls may still lack the moral cognition to fully support those decisions, some growth was seen in changed views of prudential judgments. With changes in moral behavior and growth in moral cognition, the pre- and early adolescent girls served by Youth and Family Services' Girls Incorporated Too Young For Two program may be on a track toward improved moral development coupled with appropriate moral behavior.

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Table 1: Group Sizes and Mean Age

Groups	Data collection	n	Mean	Groups	Data collection	n	Mean age
Pre-intervention	Fall '01	69	10.60	Post-intervention	Spring '02	56	11.00
Pre-intervention	Fall '02	65	11.06	Post-intervention	Spring '03	65	11.03
Pre-intervention	Fall '03	107	10.66	Post-intervention	Spring '04	69	11.13
Total & Mean		**241**	**10.75**			**190**	**11.06**
Rapid City	Fall '02	976	11.00				
Rapid City	Fall '03	719	10.84				
Rapid City	Fall '04	778	10.99				
Total & Mean		**2,473**	**10.95**				

Table 2: Hierarchical Regression Analyses For Variables Predicting **Sexual Activity**

	Step	B	Beta	SE B	R^2 adj	F value
SELF PROMOTION [***PRE-INTERVENTION***]						
	1	-0.177	-0.389	0.440	0.077	
Cheat to succeed	2	0.114	0.258	0.440	0.077	7.16**
People cheat	1	-0.064	-0.154	0.449	0.019	5.49*
MORAL BEHAVIOR *[POST-INTERVENTION]*						
Lied about being late	1	0.140	0.293	0.402	0.120	
Destroy property	2	-0.210	-0.216	0.402	0.120	
Cheating	3	0.131	0.246	0.402	0.120	7.21**

* $p < 0.05$; ** $p < 0.01$

Table 3: Hierarchical Regression Analyses For Predicting **Tobacco Use**

	Step	B	Beta	SE B	R^2 adj	F value
MORAL BEHAVIOR ***[PRE-INTERVENTION]***						
Lied about being late	1	0.385	0.343	0.749	0.206	
Destroy property	2	0.336	0.206	0.749	0.206	30.69**
MORAL RESPONSIBILITY *[PRE-INTERVENTION]*						
Do the right thing	1	0.389	0.486	0.740	0.143	
Accept other's opinions	2	-0.137	-0.195	0.740	0.143	10.25**
SELF-PROMOTION *[PRE-INTERVENTION]*						
Respond with violence	1	-0.112	-0.146	0.836	0.046	6.41*
MORAL BEHAVIOR *[POST-INTERVENTION]*						
Lied about being late	1	0.352	0.488	0.553	0.278	
Cheating	2	0.127	0.159	0.553	0.278	22.97**
SELF-PROMOTION ***[POST-INTERVENTION***]						
Respond with violence	1	-0.174	-0.286	0.625	0.065	
Cheat consequences	2	0.139	0.221	0.625	0.065	5.18*
PEOPLE CHEAT *[POST-INTERVENTION]*						
People cheat	1	-0.094	-0.170	0.634	0.024	5.46*

* $p < 0.05$; ** $p < 0.01$

Table 4: Hierarchical Regression Analyses For Predicting **Alcohol Use**

	Step	B	Beta	SE B	R^2 adj	F value
MORAL BEHAVIOR *[PRE-INTERVENTION]*						
Lied about being late	1	0.275	0.309	0.604	0.178	
Destroy property	2	0.266	0.206	0.604	0.178	25.87**
MORAL RESPONSIBILITY *[PRE-INTERVENTION]*						
Do the right thing	1	0.238	0.367	0.606	0.140	
Accept other's opinions	2	-0.136	-0.238	0.606	0.140	
Right a wrong	3	0.073	0.142	0.606	0.140	11.90**
SELF-PROMOTION *[PRE-INTERVENTION]*						
Respond with violence	1	-0.113	-0.187	0.655	0.061	7.25**
MORAL BEHAVIOR *[POST-INTERVENTION]*						
Lied about being late	1	0.160	0.305	0.354	0.408	
Destroy property	2	0.156	0.273	0.354	0.408	
Cheating	3	0.181	0.173	0.354	0.408	39.19**
SELF-PROMOTION *[POST-INTERVENTION]*						
Cheat consequences	1	-0.110	-0.255	0.447	0.060	12.42**

*** p < 0.05; ** p < 0.01**

Table 5: Hierarchical Regression Analyses For Predicting Marijuana Use

	Step	B	Beta	SE B	R^2 adj	F value
MORAL BEHAVIOR [*PRE-INTERVENTION*]						
Lied about being late	1	0.239	0.255	0.652	0.133	
Destroy property	2	0.290	0.213	0.652	0.133	9.81**
MORAL RESPONSIBILITY [*PRE-INTERVENTION*]						
Do the right thing	1	0.278	0.405	0.635	0.139	
Accept other's opinions	2	-0.133	-0.220	0.635	0.139	12.94**
SELF-PROMOTION [*PRE-INTERVENTION*]						
Lie on job applications	1	-0.130	-0.178	0.689	0.052	7.17**
MORAL BEHAVIOR [*POST-INTERVENTION*]						
Destroy property	1	0.380	0.391	0.352	0.321	
Lied about being late	2	0.143	0.293	0.352	0.321	43.57**
SELF-PROMOTION [*POST-INTERVENTION*]						
Cheat to succeed	1	-0.086	-0.214	0.420	0.040	8.52**

* $p < 0.05$; ** $p < 0.01$

Table 6: Factor Loadings and Commonalities for Character Variables

Measure & Variable	Rotated factor loadings	Communalities
FACTOR 1 – Moral Behavior		
Stealing	0.751	0.632
Dishonest with others	0.721	0.525
Broke promises	0.718	0.578
Allow others to copy	0.682	0.542
Cheating	0.673	0.521
Destroy property	0.649	0.559
Lied about being late	0.597	0.519
FACTOR 2 – Moral Responsibility		
Do the right thing	0.813	0.741
Honesty as best policy	0.790	0.685
Respect differences	0.779	0.644
Accept other's opinions	0.730	0.564
Responsibility to help	0.654	0.504
Right a wrong	0.620	0.437
FACTOR 3 – Self-Promotion		
Cheat consequences	0.818	0.692
Use people	0.746	0.573
Cheat to succeed	0.726	0.554
Respond with violence	0.697	0.518
Lie on job applications	0.695	0.527
FACTOR 4 – Moral Beliefs		
People cheat	0.368	0.340