Family structure as a primary agent of socialization and the relationship between behavior attitude and peers

Karen M. Foote

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Family Structure as a Primary Agent of Socialization and the Relationship Between Behavior, Attitude, and Peers

By

Karen M. Foote

B.A. The University of Montana, 1998

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Master of Arts

The University of Montana

2000

Approved by:

Chairperson

Dean, Graduate School

Date

5-13-2000
ABSTRACT

Family is a primary agent in the socialization process of children. The purpose of this study was to examine the relationship between family structure and the respondents' attitude, behavior, and an imputed measure of peer attitudes. Using standard contingency tables family structure was found to have a slight positive relationship (as measured by gamma) with all three variables. Next self-attitude was regressed on the three independent variables followed by the regression of self-behavior, resulting in multiple r-coefficients of .452 and .38. Multiple-partials were computed resulting in significant drops for both regression models. The multiple correlation for Model 2 when controlled on respondents' attitude was reduced to .003 indicating that the individuals' attitude toward smoking marijuana is derived from family structure, peer attitude, and once the respondents' attitude is in place then the behavior either smoking or not smoking marijuana follows as a consequence.
Acknowledgements

I would like to thank the following people for mentoring and guiding my educational pursuits:

First I would like to thank Dr. William H. McBroom, for chairing my thesis committee. Your guidance, patience, and friendship has enriched my educational experience and I’m truly grateful for your help. Thank you for setting your standards and expectations just out of reach and helping me to succeed. I’ll keep on stretching.

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The normative order is a fundamental concept in sociological thought. Norms provide an integrated structure that guides social expectations about correct or proper behavior, feelings, and perceptions. Human society could not exist without the normative order (Davis 1948:53). Of sociological interest are the conditions under which societal members acquire and internalize norms.

Many social norms specify a range of acceptable behaviors. Despite apparent elasticity, violation of norms may result in sanctions with the explicit purpose of rewarding or correcting behavior. Sanctions may be applied informally in everyday interaction or formally-through the courts or quasi-judicial proceedings.

BACKGROUND

Most infants are born into some type of family configuration where the process of socialization begins (Damon 1983:27, Handel 1988:45). Erickson's eight stages of development begin in infancy during the caretaking process where an infant learns about trust and mistrust (Erickson 1963:247-84, McCandless 1969:791-819).

The socialization process involves an agent (a source of instruction), a learning process, a target (the individual being socialized), and an expected outcome (Michener and DeLamater 1999:50). Socialization into the normative order begins with the family, where the child learns to function within the framework of a given society (Elkin and Handel 1972:4).
As the child matures, other agents of socialization, such as school peers and other extra-familial groups, are influential in the acquisition of norms and other social qualities (Cooley [1909], 1961:315-18, Michener and DeLamater 1999:50). Adolescence is the time from puberty to adulthood where a child grows and matures. This is the period when an adolescent can no longer be as carefree or frivolous as a child, but when he or she has not yet assumed the responsibilities of adulthood. It is also a time when young people begin to distance themselves from their parents and become susceptible to the influence of non-familial others.

The socialization process is directed toward producing individuals who participate effectively in society. Without this socialization process society could not exist (Wiggins, Wiggins, and Vander Zanden 1994:34). Agents of socialization share a general system of norms and values, the acquisition of which facilitates the individuals' ability to function in society. These include prescriptive norms that tell us what we should do and proscriptive norms that identify what we should not do. The internalization of norms occurs when individuals adopt societal norms as an integral part of their own attitudes or beliefs. Once these values and norms have become an integral part of the individual's attitudes or beliefs, it is expected that these internalized social norms will influence the individual's behavior.

Just as there are presumed links between norms and behavior there are also connections between attitudes and behavior. The relationship between
attitudes and behavior has been extensively studied (Chaiken and Stangor, 1987; Cialdine et al., 1981; Cooper and Croyle, 1984; Eagly and Himmelfarb 1978; Fishbein and Ajzen, 1975; Hovland, Janis, and Kelley, 1953; Kiesler and Munson, 1975; McBroom and Reed, 1992; McGuire, 1960; Schuman and Johnson, 1976; and Sears and Abeles, 1969). The research generally indicates that the relationship between attitudes and behaviors is far more complex than a mono-causal model. Social psychologists are no longer asking if attitudes can predict behavior, but rather under what conditions are they linked?

Similarly, in the case of norms, we may ask under what conditions do normative attitudes develop and conforming behavior take place? What prevents an adolescent or adult from conforming to the prevailing norms of a given society? The internalization of norms, anticipation of nonreward or formal punishment, the desire for approval, or a lack of opportunity to commit deviant acts are all identified by Blake and Davis (1964:477-80) as inhibitors of deviant behavior. Failure to conform to the prevailing norms results in informal or formal sanctions that have been defined by the members of society or societal subcultures. Responses to the deviant behavior may vary from a reprimand (informal sanction) to an act of deviance as defined by society-at-large, resulting in confinement or loss of life (formal sanction).

As Gottfredson and Hirschi's (1990) extensive review of the literature beginning in the 1960s indicates, youths who do not endorse the normative order are at risk of criminal activity and drug use. The internalization of norms
should be evident in higher levels of self-control, which in turn results in fewer acts of self-reported delinquency by juveniles and their peer groups.

While it is known that the primary agent of socialization is the family (Cooley [1909], 1961) and that different kinds of family structures affect the socialization process, less is known about how or the degree to which different family types affect the child's adoption of the normative order. Family structure is often described as traditional or non-traditional. Traditional, or normative families in our society, include a father and mother who are married and live in the same residence with their biological children (nuclear family). All other family types may be classified as non-normative. Childhood socialization often occurs informally as the result of normal everyday interaction between parents and their children. The socialization process may occur through specific instructions or education concerning proper and improper behavior or through children internalizing norms for accepted behavior through observation and first-hand experience. Children from different types of families are likely to be socialized differently and this may be evidenced by both their behaviors and attitudes with respect to social norms.

PROBLEMS FOR INVESTIGATION

There is a great deal of published literature relating to the family and the socialization process. Since the first agent of socialization an infant encounters is the family, the values and norms that provide the framework allowing the
family to function in society are internalized by the child. The process of social reproduction suggests that normative families will produce children with normative behaviors and attitudes. Thus, children residing in normative families should exhibit higher degrees of normative behavior and higher degrees of normative attitudes compared to youths from other family types.

For the present research the rates at which children from normative families engage in non-normative behavior are compared to the rates exhibited by children from other types of families. Marijuana use is a non-normative behavior of considerable interest both to social scientists and to the general public. Respondents' behavioral conformity is indicated by their personal use of marijuana prior to completing the questionnaire. Youths from normative family types are expected to indicate low involvement with marijuana use.

Not only are youths from normative families expected to indicate little or no involvement with marijuana use, they are also expected to indicate normative attitudes toward marijuana use. That is, youths who come from normative families are expected to provide the normative response indicating that marijuana use is wrong.

Although family attitudes and behaviors are central to childhood socialization, the influence of peer groups as the child matures may vary, depending on family type. Youths who come from normative families are expected to have a higher percentage of peers who engage in normative behaviors (abstaining from marijuana use) than youths from non-normative families.
While adolescents' perceptions of their peer groups are important, so are their perceptions of what they think their peer groups' opinion is of their own behavior. It is expected that respondents who come from normative families would indicate that there is little chance of being perceived as "cool" for using marijuana.

Investigating the link between the socialization of norms calls for the examination of the relationship between family structure and three variables of interest, respondents' attitudes, respondents' behavior, and the attitudes respondents attributed to their peers about smoking marijuana. Because peers may be selected on the basis of preexisting attitudes, it is important to look at the relationship between peer attitude and self-attitude. Finally, the link between these presumed causal variables (family structure, self-attitude, and peer attitude) and their relationship with behavior will be examined.

It is important to investigate more complex relationships using multivariate analysis in order to identify whether peer attitude or self-attitude is more strongly related to behavior.

DATA AND METHOD

Sample

The data used in this report were taken from the Montana Prevention Needs Assessment survey (DPHHS 1998) in which all Montana students in the 8th, 10th, and 12th grades were asked to complete a self-administered
questionnaire in school in the fall of 1998. The instrument, designed to take approximately 45 minutes to complete, contained more than 100 questions dealing with the students' friends and families, the students themselves, and their orientations and behaviors. Few of the State's school districts declined to participate. Of the more than 15,800 returned questionnaires, approximately 2.5 percent were excluded for providing invalid or suspicious data (e.g., impossibly high rates of drug use, reporting being "not honest at all" in completing the questionnaire, etc.). Of the 15,455 cases remaining, 204 respondents did not complete any of the variables used to identify family composition. Because the respondents' family structure is of primary interest for this research, these 204 cases have been eliminated from further analysis. Since the population of Montana is predominately white the effect of ethnicity will be controlled by standardization; that is, only whites will be used. There were 2,281 self-identified minority students and 222 cases with missing values for ethnicity which were eliminated, resulting in a final sample size of 12,748 white students. Females comprised 50.9 percent and males 49.1 percent of the remaining cases.

Note: Thanks are due Pete Surdock, Jr., Montana Department of Health and Human Services, Addictive and Mental Disorders Division, Chemical Dependency Bureau, and Bruce Parsons and Steve Harrison, of Evaluation Services, Inc., Helena, Montana, for the use of data (initially supported through contract #277-97-6001 from the Center for Substance Abuse Prevention).
Indicators

The indicators used here are all treated as dichotomies in order to simplify and clarify the presentation of findings. Binary coding is used (0 = non-normative and 1 = normative) in order to produce a meaningful sign of measures of association. That is, a positive association means that one normative dimension goes with another.

*Family Structure.* Respondents were asked, "Think of where you live most of the time. Which of the following people live there with you" (Choose all that apply.)" The specific choices offered were: "mother," "stepmother," "foster mother," "grandmother," "aunt," "father," "stepfather," "foster father," "grandfather," "uncle," "other adults," "brother(s)," "stepbrother(s)," "sister(s)," "stepsister(s),," and "other children." Normative family structures included 7,664 respondents (60.1%) who reported living only with their father and mother and any siblings (coded 1). The remaining 5,084 cases included all other familial arrangements (39.9%) and were coded zero (non-normative).

*Self-Attitude.* The students were asked, "How wrong do you think it is for someone your age to smoke marijuana?" The four choices included: "very wrong," "wrong," "a little bit wrong," and "not wrong at all." Over 86 percent (86.5%) of respondents indicated the normative response that smoking marijuana was "very wrong," "wrong," or "a little bit wrong," (coded 1). There were 1,691 (13.5%) respondents who reported that smoking marijuana was "not wrong at all" (non-normative) and were coded zero.
Peer-Attitude. In order to assess peer attitudes respondents were asked, "What are the chances you would be seen as cool if you smoked marijuana?" This question is not a direct measure of peer attitude, but rather an imagined self-appraisal from others. Thus, this question represents the respondents' estimates of what their peers' attitudes about smoking marijuana are. The specific choices offered were: "no or very little chance," "little chance," "some chance," "pretty good chance," and "very good chance" of being seen as cool. There were 8,851 (70.9%) respondents who indicated the normative response of "no or very little chance" or "little chance" and were coded one. The other 3,629 (29.1%) responses were considered non-normative and coded zero.

Self-Behavior. Respondents were asked, "on how many occasions (if any) have you used marijuana during the past 30 days?" The specific choices offered were: "0," "1-2," "3-5," "6-9," "10-19," "20-39," and "40+." Over 81 percent (81.2%) of the respondents (10,062) indicated they had not used marijuana during the previous 30 days and were coded one (normative). The remaining 2,336 (18.8%) respondents reported they had used marijuana and were coded zero (non-normative).

Logic of Analysis

In the analysis that follows the relationships between the variables are examined using standard contingency tables. For example, by crosstabulating family structure and respondents' attitude (given the coding 0 = non-normative
and 1 = normative on both dimensions) a positive relationship is expected. The relationships will be measured by gamma coefficients.

FINDINGS

Correlates of Family Structure

*Family Structure and Self-Attitude.* Table 1 reports the relationship between family structure and self-attitude. The reader can see that when asked whether marijuana smoking was wrong or not wrong, only 10 percent (10.0%) of those teenagers from normative families thought that marijuana smoking was not wrong where nearly twice the percentage (18.7%) of those from non-normative families felt that marijuana smoking was not wrong (gamma = .347).

<table>
<thead>
<tr>
<th>Self-Attitude About Smoking Marijuana</th>
<th>Family Structure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-Norm.</td>
<td>Norm.</td>
</tr>
<tr>
<td>Not Wrong</td>
<td>18.7%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Wrong</td>
<td>81.3%</td>
<td>90.0%</td>
</tr>
<tr>
<td>Total (no. of cases)</td>
<td>(5,005)</td>
<td>(7,564)</td>
</tr>
</tbody>
</table>

Note: Excludes 179 cases with missing values gamma = .347, p < .0005

*Family Structure and Marijuana Use:* The reader can see from Table 2 below that only 15.0 percent of the respondents from normative families have
used marijuana during the previous 30 days while 25.0 percent (24.7%) of those from non-normative families have used marijuana (gamma = .299).

Table 2. Family Structure and Respondents' Marijuana Use During the Previous Thirty-Days (Percents)

<table>
<thead>
<tr>
<th>Respondents' Marijuana Use in the Previous 30-Days</th>
<th>Family Structure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used Marijuana</td>
<td>Non-Norm.</td>
<td>Norm.</td>
</tr>
<tr>
<td></td>
<td>24.7%</td>
<td>15.0%</td>
</tr>
<tr>
<td>No Marijuana Use</td>
<td>75.3</td>
<td>85.0</td>
</tr>
<tr>
<td>Total (no. of cases)</td>
<td>(4,914)</td>
<td>(7,484)</td>
</tr>
</tbody>
</table>

Note: Excludes 350 cases with missing values

Gamma = .299, p < .0005

Family Structure and Peer Attitude: Table 3 reports the relationship between family structure and peer attitude. It will be recalled that in the questionnaire the respondents were asked how their peers would regard their use of marijuana. The possible responses were in degrees of how "cool" respondents believed their peers would consider them if they used marijuana. Over 27 percent (27.2%) of respondents from normative families thought their peers would think their use of marijuana was "cool," while a slightly higher percentage, nearly 32 percent (31.9%), of those from non-normative families felt that their friends would regard marijuana smoking as "cool." The gamma measure of .113 is not as strong as those reported in Tables 1 and 2, yet it is still significant (p < .0005) as it indicates that youths from normative families are more likely to have friends who regard marijuana smoking as not "cool."
Table 3. Family Structure and Peer Attitude ("Coolness" of Smoking Marijuana) (Percents)

<table>
<thead>
<tr>
<th>Imputed Peer Attitude About Smoking Marijuana</th>
<th>Family Structure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-Norm.</td>
<td>Norm.</td>
</tr>
<tr>
<td>Cool</td>
<td>31.9%</td>
<td>27.2%</td>
</tr>
<tr>
<td>Not Cool</td>
<td>68.1%</td>
<td>72.8%</td>
</tr>
<tr>
<td>Total (no. of cases)</td>
<td>(4,964)</td>
<td>(7,516)</td>
</tr>
</tbody>
</table>

Note: Excludes 268 cases with missing values
gamma = .113, p < .0005

Correlates of Peer Attitude

Peer Attitude and Self-Attitude: Table 4 reports a strong relationship between the attitudes that respondents believe their peers hold regarding how "cool" smoking marijuana is and whether the students believe that smoking marijuana is "wrong." Only 7.5 percent of respondents have peers who believe that smoking marijuana is "not cool" and believe that smoking marijuana is 'not wrong.' In comparison, over 27 percent (27.5%) of respondents who believe their peers think that smoking marijuana is "cool" also report that they believe smoking marijuana is "not wrong." The statistical relationship is remarkably strong (gamma = .650). The data available are insufficient to allow a determination of whether the respondent had a particular attitude about marijuana before choosing their friends and chose friends who were consistent with their attitude or fell in with friends who influenced the attitude that the respondent had.
Table 4. Peer Attitude ("Coolness" of Smoking Marijuana) and Self-Attitude (Respondents' Belief that Smoking Marijuana is Wrong) (Percents)

<table>
<thead>
<tr>
<th>Self-Attitude (&quot;Wrongness&quot; of Smoking Marijuana)</th>
<th>Imputed Peer Attitude About Smoking Marijuana</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cool</td>
<td>Not Cool</td>
</tr>
<tr>
<td>Not Wrong</td>
<td>27.5%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Wrong</td>
<td>72.5</td>
<td>92.5</td>
</tr>
<tr>
<td>Total (no. of cases)</td>
<td>(3,610)</td>
<td>(8,777)</td>
</tr>
</tbody>
</table>

Note: Excludes 361 cases with missing values

gamma = .650, p < .0005

Only 11.2 percent of respondents who had peers whom they believed thought that smoking marijuana was "not cool" reported using marijuana themselves during the previous 30 days. More than three times as many (37.2%) respondents who believed their friends would think they were "cool" if they smoked marijuana reported using marijuana during the previous 30 days. There is a strong positive relationship between peer attitude and respondents' marijuana use (gamma = .649).

Table 5. Peer Attitude ("Coolness" of Smoking Marijuana) and Respondents' Marijuana Use During the Previous Thirty-Days (Percents)

<table>
<thead>
<tr>
<th>Respondents' Marijuana Use In The Previous 30-Days</th>
<th>Imputed Peer Attitude About Smoking Marijuana</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cool</td>
<td>Not Cool</td>
</tr>
<tr>
<td>Used Marijuana</td>
<td>37.2%</td>
<td>11.2%</td>
</tr>
<tr>
<td>No Marijuana Use</td>
<td>62.8</td>
<td>88.8</td>
</tr>
<tr>
<td>Total (no. of cases)</td>
<td>(3,509)</td>
<td>(8,651)</td>
</tr>
</tbody>
</table>

Note: Excludes 588 cases with missing values

gamma = .649, p < .0005

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Correlate of Self-Attitude

Table 6 (below) reports a strong positive relationship (gamma = .927) between self-attitude ("wrongness" of smoking marijuana) and respondents' marijuana use during the previous 30 days. The reader can quickly see that only 10.3 percent of respondents who believe marijuana use is wrong reported using marijuana during the previous 30 days while 75 percent (75.0%) who believe marijuana use is not wrong reported using marijuana during the previous 30 days.

Table 6. Self-Attitude ("Wrongness" of Smoking Marijuana) and Respondents' Marijuana Use During the Previous Thirty-Days (Percents)

<table>
<thead>
<tr>
<th>Respondents' Marijuana Use In The Previous 30-Days</th>
<th>Self-Attitude (&quot;Wrongness&quot; Of Smoking Marijuana)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used Marijuana</td>
<td>Not Wrong</td>
<td>75.0%</td>
</tr>
<tr>
<td></td>
<td>Wrong</td>
<td>10.3%</td>
</tr>
<tr>
<td>No Marijuana Use</td>
<td>Not Wrong</td>
<td>25.0</td>
</tr>
<tr>
<td></td>
<td>Wrong</td>
<td>89.7</td>
</tr>
<tr>
<td>Total (no. of cases)</td>
<td></td>
<td>18.8%</td>
</tr>
</tbody>
</table>

Note: Excludes 497 cases with missing values

In reporting on the significance of family structure (Tables 1 - 3) it was found that family structure was related to the respondents' self-attitude, marijuana use, and the belief that the respondents' peers will think they are
"cool" if they use marijuana. For all three variables respondents from normative families reported higher percentages of normative behaviors and attitudes than students from non-normative families. It was interesting to find that those respondents who believe that their peers would think they were "cool" if they smoked marijuana were more than three times as likely to believe that smoking marijuana was not wrong (27.5% and 7.5% respectively) and more than three times as likely to have reported using marijuana (37.2% and 11.2% respectively) than respondents who believe that their peers do not think smoking marijuana is "cool." Those respondents who reported an attitude favorable to smoking marijuana were seven times more likely to have used marijuana during the previous 30 days than respondents who believe that smoking marijuana is wrong (75.0% and 10.3% respectively).

Thus far the analysis has only considered two variables at a time. In the remaining section multivariate analyses employing ordinary least squares regression are presented. In contrast to the preceding section where dichotomies were used for ease in presentation the full variation of each variable is employed (family structure remains a dichotomy) in order to maximize the explained variance.

Of theoretical interest is the joint effect of family structure, peer-attitude, and self-behavior on self-attitude. As stated above, it is not possible for these data to determine with certainty whether self-attitude represents an
accommodation to behavior and to the attitudes of others or whether it is independent of behavior and attitudes. The second analysis examines the joint effects of family structure, peer attitude, and self-attitude on self-behavior.

The first regression model (Table 7) predicts self-attitude ("wrongness" of smoking marijuana) from the joint effects of family structure, peer attitude, and self-behavior. Although family structure is the weakest variable in Model 1, it is stronger than in the second regression model (-.066 vs. -.033). As reported in Table 7 self-behavior is the strongest predictor of self-attitude.

Table 7. Regression Results Predicting Self-Attitude (The "Wrongness" of Smoking Marijuana)

<table>
<thead>
<tr>
<th>Covariates</th>
<th>β</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Structure</td>
<td>-.066</td>
<td>p &lt; .0005</td>
</tr>
<tr>
<td>Peer Attitude</td>
<td>.280</td>
<td>p &lt; .0005</td>
</tr>
<tr>
<td>Self-Behavior</td>
<td>.516</td>
<td>p &lt; .0005</td>
</tr>
<tr>
<td>N (Adj. R²)</td>
<td>12,081</td>
<td>(.452)</td>
</tr>
</tbody>
</table>

Table 8 reports the regression results predicting respondents' use of marijuana (the model of primary interest) during the previous 30 days and the joint effects of family structure, peer attitude, and self-attitude. The reader can quickly see that the strongest relationship is between respondents' marijuana use by their self-attitude ("wrongness" of smoking marijuana). Although family structure has the weakest relationship, all three variables are highly significant.
Table 8. Regression Results Predicting Self-Behavior (Thirty-Day Marijuana Use)

<table>
<thead>
<tr>
<th>Covariates</th>
<th>β</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Structure</td>
<td>-.033</td>
<td>p &lt; .0005</td>
</tr>
<tr>
<td>Peer Attitude</td>
<td>.054</td>
<td>p &lt; .0005</td>
</tr>
<tr>
<td>Self-Attitude</td>
<td>.585</td>
<td>p &lt; .0005</td>
</tr>
</tbody>
</table>

Although family structure is the smallest predictor for both models it is still important for both behavior and attitudes. The most pronounced effect in both regressions is the link behavior and attitude and between attitudes and behaviors. The greatest portion of explained variance is found in Table 7 (.452) as well as the largest individual coefficients.

It was asserted above that it was not possible to disentangle self-behavior and self-attitude. However, it is possible to use multivariate analysis to do some causal analysis (Blalock [1960] 1979:468-82). Table 8 shows that family structure, peer attitude, and self-attitude jointly influence behavior, but it may be that family structure, peer attitude produce self-attitude which in turn is the strongest direct influence on self-behavior. The alternative, as recorded in Table 7 parallels this logic arguing the family structure and peer attitude directly affect the behavior of smoking marijuana with self-attitude being the subsequent and direct accommodation to behavior. A straightforward technique that may be used to disentangle the relationship between self-behavior and self-attitude is to
compute a multiple-partial coefficient which is an extension of multiple and partial correlations where the influence of two presumed causal variables on a dependent variable is controlled on a third causal variable. Using conventional notation the multiple regression using three independent (causal) variables to predict a single dependent variable is $R_{1(23),4}^2$. Of interest are the variables and the difference in the amount of variation explained by variables two and three resulting in the variation explained by the control variable in explaining the relative differences, if any, between the two (Blalock [1960] 1979:488).

This analysis (data not shown) was computed for both regression models. The possibility that self-attitude is a direct accommodation of behavior had a multiple R-square of .452 (Table 7) and a multiple-partial of .119, it is reduced but the reduction is more complete in the second model (Table 8) that has behavior as the direct result of self-attitude and the joint effects of family structure and peer attitude because the multiple r-square of .380 (Table 8) is reduced to .003. The limited choices between these two indicates that Model 2 tends to have the greatest support.

The regression analysis presented thus far provides two competing models (Figure 1 below). First, we’re presented with a model where family structure and peer attitudes combine to produce the respondents’ behavior (smoking marijuana) and then the respondents’ attitude about whether smoking marijuana is right or wrong is a justification or an accommodation to their behavior. The second model is one in which family structure and peer attitude
combine to produce the attitude the respondent had about smoking marijuana (right or wrong) with the behavior of smoking marijuana being the consequence of the respondents' attitude.

Model 1. Attitude as an Accommodation of Behavior

Model 2. Behavior as a Consequence of Self-Attitude

The obvious differences between the two models are the dependent variables and the control variables (in box). In Model 1 the multiple correlation between family structure and peer attitude in explaining the attitude of the respondent when the behavior of smoking marijuana as a control variable is investigated. If Model 1 is the correct model the partial should reduce the
correlation to zero. The actual results were a multiple r-square of .452 and a multiple-partial of .119.

In testing Model 2 a similar logic was use where the multiple correlation between family structure and peer attitude in explaining the respondents' behavior of smoking marijuana is controlled for respondents' attitude about smoking marijuana. The multiple correlation should reduce to zero if Model 2 comes closest to representing what happens in the world. The multiple correlation equaled .38 and when controlled on the respondents' attitude the correlation was reduced to .003, essentially zero.

As a consequence of this comparison, Model 2 appears to come closer to reflecting reality than does Model 1. In this instance it can be proposed that the individuals' attitude toward smoking marijuana is derived from family structure and the attitude of their peers and once the respondents' attitude is in place then the behavior, either smoking or not smoking marijuana follows as a consequence.

**DISCUSSION**

This thesis investigates the socialization process of Montana Youth. The family structures of eighth, tenth, and twelfth graders were classified as being normative (nuclear) or non-normative. It was found that normative family structure was related to normative attitudes, having peers with normative
attitudes, and engaging in normative behavior. Additionally respondents’ attitudes were strongly related to those imputed to peers. Multivariate analysis indicates that family structure, imputed peer attitudes, and self-behavior all related to whether or not one thinks smoking marijuana is wrong, with self-behavior producing the strongest relationship. Also when family structure, imputed peer attitudes, and self-attitudes are used to predict self-behavior the three covariants are each significantly related.

These two multivariant analyses suggest different models of socialization and deviance. One model assumes that self-attitude results not only from family structure and imputed peer attitude, but also from behavior. That is, this model views attitudes as an important outcome of behavior. The second model is consistent with classic attitude behavior research in which the behavior (the use of marijuana) is an outcome of family structure and attitudinal variables. The evidence presented here is more supportive of this later view. That is, the final multivariate analysis performed does not support the model where attitude is seen as the outcome.

**IMPLICATIONS**

Based on the preceding findings family structure was found to still be an important variable. Since the survey instrument was administered using a cross-sectional design rather than a longitudinal design, future implications are limited.
This research indicates that changing a youths' behavior occurs as the result of changing their attitudes. However, because this survey was administered to youths between the ages of 13 to 19 years of age, the influence of peers is most likely much stronger than in any other time period.
Bibliography


DPHHS (Department of Public Health & Human Services, Addiction and Mental Disorders Division and Chemical Dependence Bureau). 1998. Montana Prevention Needs Assessment Survey, Grades 8, 10, and 12 (Center for Substance Abuse Prevention Contract #277-97-6001). MT.


