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ABSTRACT Interviews with 321 university students were used to determine relationships between admitted marijuana use and theft and perceptions of the severity and certainty of punishment. Use of marijuana and theft activity were expected to be least frequent among those who: (1) perceive the harshest penalties for marijuana possession and petty larceny; (2) perceive the greatest likelihood of receiving the maximum penalty upon conviction for those offenses; (3) expect that law violaters are, generally, caught by the police; (4) have the greatest familiarity with others who have been arrested for theft or marijuana possession; and (5) perceive the greatest chance of being arrested themselves, should they steal or use marijuana. The data suggest that (1) perceptions of severe punishment are largely unrelated to admitted theft or marijuana use; (2) "general" deterrence appears not to be working for either offense -- that is, punishment of "other" when perceived by "ego" appears unrelated to "ego's" admitted criminality; (3) the expectation that arrest or maximum penalties upon conviction would be likely (certain) for oneself appears somewhat related to lower levels of marijuana use and larceny. However, these latter relationships are stronger for marijuana use than they are for theft. (Author)
PERCEIVED PENAL SANCTION AND SELF-REPORTED CRIMINALITY:
A NEGLECTED APPROACH TO DETERRENCE RESEARCH

by

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The entire system of American criminal justice -- from the debate of legislators to the maximum custody prison -- is based, in part, on the assumption that punishment of criminal offenders will deter future criminality. Despite its antiquity,\(^1\) this assumption has received little more than speculative attention from legal philosophers, jurists, politicians, and the general public.\(^2\) Only recently have social scientists put this assumption to empirical test, and to date, the evidence appears somewhat contradictory and inconclusive.

The earlier studies by Schuessler (1952) and Savitz (1958) questioned the deterrent effectiveness of capital punishment. Their research showed little difference in homicide rates when: (1) comparable abolitionist and retentionist states were examined (Schuessler, 1952) and (2) when rates were compared before and after well-publicized executions (Savitz, 1958). Sellin (1967) later showed that rates of homicide were relatively unaffected by the temporary abolition and eventual reinstatement of capital punishment in eleven states. He concluded (Sellin, 1967: 124) that:

...there is no evidence that the abolition of the death penalty generally causes an increase in criminal homicides or that its re-introduction is followed by a decline. The explanation of changes in homicide rates must be sought elsewhere.

The study of crime rates for clues to questions about deterrence was extended by Gibbs (1968) to alternative measures of the severity and certainty of punishment,\(^3\) and by Tittle (1969) to alternative criminal offenses.\(^4\) The former (Gibbs, 1968: 523-527) found inverse relationships between rates of homicide and the severity (\(\phi = -.25\)) and certainty (\(\phi = -.48\)) of punishment. This contradiction of earlier deterrence findings was reinforced by Tittle's (1969: 409) study of seven criminal offenses, which revealed:

Strong and consistent negative associations...between certainty of punishment and crime rates, while a negative association is observed between severity of punishment and crime rates only for homicide.
However, Tittle's findings were called into question by Chiricos and Waldo (1970) who extended a similar mode of analysis to additional points in time and to measures of change in the levels of certainty, severity and criminality. Their data showed little consistent support for the assumption that rates of crime are inversely related to the certainty and severity of punishment, and several methodological issues were raised which cast doubt upon the appropriateness of findings derived from this approach to deterrence research.

The studies cited represent the major thrust of sociological research in the area of criminal deterrence and each has operationalized the dependent variable -- criminality -- by some use of available, aggregate rates of crime. For several reasons, not the least of which is the inconsistency of conclusions among the studies, such an approach to questions of deterrence may never prove definitive. A major problem is the sensitivity of official crime rates to changes in the reporting of crime to the police and the recording of crime by the police. These difficulties are compounded by the fact that variation in the official level of crime may reflect variation in the age distribution of the population or in the concentration of that population in urban areas.

In addition, official statistics limit the researcher to seven "crime index" offenses, inasmuch as "crimes known to the police" are unavailable for additional specific crimes. If one wished to examine deterrence for other types of criminality -- such as victimless crime or white collar crime -- official statistics would be of little use. Indeed, the need for deterrence research to distinguish among types of crimes is underscored by Andenaes' (1966: 957) distinction between crimes that are *mala per se* and those that are *mala quia prohibita*:

In the case of *mala per se*, the law supports the moral codes of society. If the threats of legal punishment were removed, moral feelings and the fear of public judgement would remain as powerful crime prevention forces, at least for a limited period. In the case of *mala quia prohibita*, the law stands alone; conformity is essentially a matter of effective legal sanctions.
A further limitation of the aggregate data approach is the researcher's inability to discern those social-psychological processes by which the presumed effects of punishment are realized. For example, when correlating crime rates with the severity of statutory provisions for punishment, one knows nothing of how the penalties are perceived by potential offenders -- if, indeed, they are perceived at all. Clearly, the deterrent effectiveness of punishment presumes that potential offenders know or think they know what the penalties are. Further, it must be assumed that offenders and non-offenders act on the basis of their knowledge. However, these assumptions received critical attention in a recent California survey (Assembly Committee on Criminal Procedure, 1968: 13-14):

While the Legislature has supposedly responded to public appeal and increased the penalties for crimes of violence to victims, this was not known by the public...people were in general unaware that the Legislature had taken any action at all when in fact the Legislature had increased the minimum penalties...When the public did answer these items, they tended to underestimate the amount of the penalty....

Even assuming awareness of penal sanctions it remains impossible, using aggregate data (with states or other political categories as the unit of analysis), for the researcher to determine whether individual offenders are actually deterred by the threat of formal punishment or by the social embarrassment of detection. The functional relationship between formal and informal sanctions is well summarized by Andenaes (1966: 961):

If the criminal can be sure that there will be no police action, he can generally rest assured that there will be no social reprobation. The legal machinery, therefore, is in itself the most effective means of mobilizing that kind of social control which emanates from community condemnation.

Finally, the approach to deterrence research through aggregate data precludes an examination of situational differences that could affect an individual's response to threats of punishment. For example, one cannot ask whether some people are deterred from some crimes in certain situations by a particular set of deterrents, or whether different persons, in different situations may be
differentially affected by threats of penal sanction. Further, the possibility that the same individual would respond to different deterrents for different crimes in different situations, must be ignored when dealing with these data.10

In short, while official aggregate data have been useful in the study of deterrence, alternative modes of analysis must be tried if some of the remaining deterrence questions are to be answered. The research reported here provides one alternative approach to several deterrence questions that have not, as yet, been answered by traditional (i.e., based upon official aggregate statistics) deterrence research. In all, six related questions are being considered.

1. Is the admitted frequency of a specific criminal offense lowest for those who perceive the most severe penalties for that offense?

From deterrence theory, one would expect those perceiving the harshest penalties for a specific offense to be the least likely to engage in that offense. However, the empirical evidence that does exist (Schuessler, 1952; Sellin, 1967; Gibbs, 1968; Tittle, 1969; Chiricos and Waldo, 1970) neither deals with the issue of perceptions, nor does it confirm deterrence theory. In short, prior research has shown that official rates of crime are generally insensitive to variations in penal severity. It remains to be seen whether self-reported crime is responsive to perceptions of severe punishment.

2. Is the admitted frequency of a specific criminal offense lowest among those who perceive the greatest likelihood of someone like themselves receiving the maximum penalty if convicted for that offense?

Harsh statutory penalties would seem to have little deterrent effectiveness if potential offenders perceive little chance that the courts will invoke them. Such a situation may, in fact, currently exist with regard to marijuana offenses. Grupp and Lucas (1969) have documented a widely held suspicion that court dispositions of marijuana cases have become less severe over time. Their study in California during the period from 1960 to 1967 indicates that while arrests for marijuana offenses have increased by 525% in those eight years, the percentage of
convictions that resulted in a \textit{prison sentence} dropped from 27\% in 1960 to 11\% in 1967. At the same time, the use of probation increased to where 46\% of those convicted in 1967 were placed on probation, as opposed to 24\% in 1960 (Grupp and Lucas, 1969: 5-8).

3. Is the admitted frequency of a specific criminal offense lowest for those who perceive the greatest likelihood that law-violators will be caught by the police?

While the deterrence hypothesis would anticipate such an inverse relationship, existing empirical evidence is somewhat contradictory. With regard to a belief that "people who break the law are almost always caught and punished," Jensen (1969: 194-196) found the greatest support from self-reported non-delinquents, and the slightest support from youths reporting two or more delinquencies. On the other hand, Claster (1967: 83-84) showed that "training school" delinquents had a pronounced tendency to overestimate arrest rates for the general public, whereas "non-delinquents" had an almost equivalent tendency to underestimate those rates. Clearly, if one considers the perceptions of law-enforcement efficiency to precede delinquent activity, then Jensen's data support classical deterrence expectations, while Claster's does not.

4. Is the admitted frequency of a specific criminal offense lowest for those who have had the greatest contact with others who have been arrested or convicted for that offense?

It is assumed that persons who have had the greatest contact with others who have been punished for a specific crime, will have the most proximate knowledge of the consequences of the criminal justice system. On that account, they should be more readily deterred from that crime than others having less contact with the "clients" of criminal justice. At an earlier time, public penitence was demanded from offenders and public executions were significant community events. Today, the process of formal community response and the affixing of criminal labels is still intended to be a public ritual with at least two objectives: (1) the exemplary transfer of the offender from the status of "law-abiding
citizen," to the "temporary" role of criminal; and (2) the definition of acceptable behavioral boundaries for the remainder of the community.14

5. Is the admitted frequency of a specific criminal offense lowest for those who perceive the greatest likelihood of arrest for someone like themselves committing that offense?

While the prior questions deal with arrests of "others," this question considers perceptions of law enforcement for a specific offense and for "someone like" the respondent. For example, in accord with deterrence theory, the lowest frequency of admitted marijuana use was expected for those who perceive the greatest likelihood of someone like themselves being arrested if they used marijuana. This expectation receives some support from another aspect of Cluster's (1967: 83-84) work with training school delinquents. Even though his "official" delinquents over-estimated the chances of arrest for the general public, they perceived significantly lower probabilities of being arrested themselves for a hypothetical offense, than did a sample of "non-delinquents." Curiously, these "delinquents" who had been officially responded to by society were still willing to believe in their relative immunity from legal sanction. From a deterrence perspective, one could argue that this type of perception helps facilitate delinquency, rather than deter it.

6. Are the foregoing deterrence relationships any stronger for crimes that are mala prohibita [e.g., marijuana use] than they are for crimes that are mala in se [e.g., larceny]?

This question recognizes the need for deterrence research to consider fundamental differences in types of crimes that may or may not be deterred by legal threats. Most empirical studies of deterrence have limited themselves either to homicide or to F.B.I. "crime index" offenses,15 all of which are mala in se. The legal sanctions against these crimes have massive support in the mores and on that account, may be relatively unnecessary for deterrence.

On the other hand, many criminal activities such as gambling, marijuana use, under-age drinking, etc., are widely practiced and condoned among large segments
of our society -- despite the legal proscriptions. In the case of these crimes, which are mala prohibita, the mores may be sufficiently ambivalent to cause the law to "stand alone" as a deterrent (Andenaes, 1966: 957). These distinctions have prompted Zimring (1971: 44-45) to hypothesize that:

...where a threatened behavior is considered to be a serious breach of society's moral code [i.e., larceny] the major explanation for the higher rate of compliant behavior is the strongly socialized citizen's sense of right and wrong, rather than his special sensitivity to the negative aspects of threatened consequences. Where a threatened behavior is considered a less drastic breach of the moral code [i.e., marijuana use], a special sensitivity to the negative aspects of threatened consequences may play a noteworthy part in explaining the difference between these two groups.

In short, this hypothesis suggests that "the effectiveness of deterrence varies in inverse proportion to the moral seriousness of the crime" (Morris, 1951: 13). For the purposes of this study, we are assuming that stealing is a crime of greater moral seriousness than possession of marijuana. This assumption is supported by the fact that 98.2% of the study population disagreed with the statement that "stealing shouldn't be a crime," whereas only 25% disagreed with a similar assertion for marijuana possession. Thus, if Andenaes, Zimring and Morris are correct, deterrence relationships should be stronger for marijuana offenses than they are for theft crimes.16

RESEARCH METHOD

An approach to the foregoing questions is sought through data collected in 321 interviews of undergraduates at The Florida State University. The completed interviews represent 82.3% of an original sample of 390 students. From the latter group, which represents a 3% random sample of the undergraduate population (stratified by school year), 44 were out of town on internships, or had dropped from school sometime after the registrar's lists were completed. An additional 25 interviews could not be completed after initial contact was made. Of these, only seven involved refusals on the part of potential respondents. Given the size of
the sample and the low rate of incompleted interviews, it is felt that a representative sample of the undergraduate population was obtained.

The interviews were carried out between January and May, 1970, by five undergraduate research assistants who had participated in the construction, pre-testing and revision of the interview schedule. Respondents were assigned to the five interviewers in a random manner.

A short, self-reported crime inventory was included in the interview schedule. Comprising the inventory were questions relating to several dimensions of criminal activity: (1) how often has it been done; (2) at what age was it first done; (3) with how many other people was it first done; (4) how often has it been done in the past year; (5) with how many other people is it normally done?

Several of these questions were used to distinguish self-reported users of marijuana from those who claim to have "never used," while similar distinctions were made between those who admit to stealing and those who have "never stolen."18

Perception of the severity of penalties for theft and marijuana offenses was indicated by responses to the following questions: What would you say is the maximum prison penalty in Florida for someone who:

(a) takes or steals something worth less than $100
(b) illegally possesses marijuana -- first offense?

For purposes of contingency analysis, respondents were grouped into three categories for each of the crimes: (1) those overestimating the penalty; (2) those with accurate perceptions of the penalty; and (3) those underestimating the penalty.

Perceptions of the certainty of punishment were obtained from responses to several questions. Respondents were asked to estimate the percentage of people committing crimes who are caught by the police. This general question was followed by estimates pertaining to specific offenses and to persons "like the respondent." In this latter instance, students were asked how likely the police were to catch "someone like yourself" if you used marijuana or stole something
worth less than $100. The responses were given in a Likert-type format ranging from "very likely" to "very unlikely." A third set of questions — also in Likert format — asked the respondent how likely it was for "someone like yourself" to receive the maximum prison sentence if you were convicted for one of the several offenses under consideration.

Finally, contact with previously punished offenders was determined by asking the respondent how many individuals he knew personally, who had been arrested and/or convicted for theft and marijuana offenses.

PRESENTATION OF FINDINGS

The relationships between self-reported criminal behavior and perceptions of the penal structure are analyzed in contingency tables with Gamma computed to indicate the strength of association. The data in Table 4 are not appropriate for the 2 x 3 format used in other tables, and a Q-value rather than Gamma is reported.

--- Table 1 Approximately Here ---

Deterrence theory suggests that use of marijuana and admitted larceny should be most frequent among those who under-estimate the penalties, and least frequent among those who over-estimate the penalties for each offense. An inspection of Tables 1-A and 1-B reveals that the present data do not confirm this expectation. While marijuana use is least frequent among those who over-estimate the penalties, it is most frequent among those whose perceptions of the law are the most accurate. Further, admitted use of marijuana is less common for those under-estimating the penalties than for those whose estimates are accurate. At the same time, deterrence logic is contradicted by the fact that admitted theft (Table 1-B) is as prevalent among respondents who over-estimate penalties for petty larceny as it is among those who under-estimate. In addition, the most frequent theft activity is found among those who accurately perceive the penalty for petty larceny. The low gamma values reinforce the conclusion that admitted criminality appears
unrelated to perceptions of the severity of punishment. This interpretation applies to theft, which is mala in se, as well as to marijuana use, which is mala prohibita.

It is interesting to note that a larger proportion of the respondents underestimated penalties for marijuana possession (43.7%) than for petty larceny (19.3%). This greater tendency to under-estimate marijuana penalties should, according to deterrence theory, eventuate in a greater frequency of marijuana as opposed to theft offenses. However, the opposite is true. Whereas a total of 33.3% of the respondents admit to some experience with marijuana, 58.6% have stolen something in their life. Thus, something other than a perception of severe penalties appears to be operating in the presumed deterrence of these students from marijuana and theft crimes.

The actual level of punishment available for any crime may be irrelevant as a deterrent if citizens understand or believe that courts are unwilling to impose harsh penalties. The strength of this belief was elicited for both offenses, with the expectation that criminal behavior would be more frequent among those who believe that the courts would spare them the maximum allowable penalty. This expectation is borne out for marijuana offenders, but not for theft offenders.

--- Table 2 Approximately Here ---

Tables 2-A and 2-B give the frequency of marijuana use and admitted theft for groups of respondents with varying perceptions of the court's leniency. Among those respondents who are most optimistic about avoiding the maximum penalty upon conviction, marijuana use is more than twice as common (43.4%) as it is among those who consider the maximum penalty "likely" (19%). A moderately strong gamma value (-.41) suggests that this optimism may be closely associated with the admitted use of marijuana. While admitted theft is more common among those who think the maximum penalty is "unlikely" than it is among those who consider it "likely," it is most common among those who see the maximum penalty as a 50/50
probability. However, the percentage differences among the several groups are sufficiently small to generate a very small gamma value (-.02) and a conclusion that the perceived likelihood of severe court disposition is apparently unrelated to admitted theft activity. The discrepancy between deterrence relationships involving marijuana and theft behavior is consistent with the expectation raised by Zimring (1971), who hypothesized stronger deterrence relationships for crimes that are *mala prohibita* (marijuana use) than for crimes that are *mala in se* (larceny).

As suggested by Jensen’s (1969) findings cited earlier, a deterrent to crime may be provided by the perception that law-violators in general are caught by the police. This approach, dealing with certainty of punishment at the *general* level, assumes that punishment of "others" will deter "ego's" criminal behavior. Tables 3-A and 3-B show the frequency of admitted criminality for respondents with varying perceptions of the probability that law-violators will be caught by the police.

-- Table 3 Approximately Here --

As expected from deterrence theory, the lowest frequency of marijuana use (25.0%) and larceny (51.0%) is found among those who perceive the greatest likelihood (50%+) that law-violators will be apprehended by the police. Conversely, those perceiving little chance (0-20%) for such apprehension are much more likely to have used marijuana (43.5%) or to have stolen something (61.1%). Given the middle-class character of the student sample it is not surprising that potential arrest should, by itself, loom so important as a deterrent to crime. For "respectable" criminals, an arrest -- with its attendant publicity -- may be as socially and personally consequential as any subsequent court action. This point was considered by Cameron (1964) who noted that formal legal action was frequently not taken in the cases of apprehended middle-class shoplifters. Both police and storekeepers apparently felt that the situation of arrest, even without publicity, was a sufficient deterrent to future pilfering. In the case of our student sample,
arrest for a drug offense carries a particularly harsh consequence. A recent and well publicized Florida statute requires the summary suspension of any student arrested for drug offenses. Since reinstatement must await court disposition; and since trial delays are excessive, and a loss of student status could result (for males) in a change of military draft status; an arrest for marijuana possession could have drastic consequences for the accused student. Thus, arrest may carry as strong a sanction as a subsequent conviction -- which frequently results in probation for first offenders.

For the punishment of "other" to have an impact upon one's own behavior, that punishment must, of course, be known. Thus, proponents of general deterrence would argue that knowledge of society's punishment of others will deter one from similar criminal endeavor. Presumably, then, the less contact one has had with punished "others" the more likely is he to commit the punished act. Tables 4-A and 4-B summarize data pertaining to respondent contacts with others who had been arrested or convicted for marijuana possession and petit larceny.

Contrary to general deterrence expectations, use of marijuana is more than twice as great among respondents who had knowledge of someone arrested for possession (47.2%) than among those without such knowledge (21.8%). A computed Q-value (.53) that is statistically significant but in the "wrong" direction for the deterrence hypothesis, further indicates that general deterrence appears not to be working among marijuana offenders. Of course, we cannot tell from these data whether one's knowledge of another's arrest for marijuana possession preceded or followed his use of marijuana. However, one-half of the self-reported users of marijuana admit to having used it at least six times in the previous year. Thus, it is probable that for many of the marijuana users at least some criminal activity was preceded by knowledge of an arrested "other."
In this regard, it is interesting to note that 104 of the 105 admitted mari-
juana users indicate that their crime was initially committed in the company of at
least one other person and 48 of those using for the first time were with three or
more persons. Indeed, the social character of this offense \(^{22}\) makes it more likely
that one will have contact with similar offenders — some of whom may have been
arrested and/or convicted. At the same time, a subculture of drug use probably
countermands the deterrent effect of knowing punished offenders, by providing
"definitions favorable to violation" of marijuana laws, as well as the opportunity
and techniques for doing so.\(^ {23}\)

Knowledge of arrested offenders, while generally not as extensive for theft
as for marijuana use, appears positively related to admitted theft activity. As
seen in Table 4-B, those respondents who know of at least one other person arrested
for petty larceny, are more likely to have committed some larceny themselves (66.7%)
than those who have no such knowledge (52.8%). Again, something other than general
deterrence appears to be working, inasmuch as the computed Q-value is statistically
significant in the "wrong" direction. The fact that the positive relationship be-
tween knowledge of apprehended others and criminality is stronger for marijuana
use than for theft, may be partially explained by the fact that larceny is not as
"social" an offense as marijuana use. Approximately 42% of those admitting to
some theft activity (77/184) indicate that their first petty larceny was committed
alone. Thus, it may be somewhat more difficult for petty thieves to meet others
who have been arrested for that offense.

The deterrent effectiveness of arrest is brought into sharper focus when
perceptions of its likelihood for specific offenses, and for oneself, are con-
sidered. Tables 5-A and 5-B show the relative frequency of admitted criminality
for respondents with varying perceptions of the likelihood that they would be
arrested for the specific offenses of stealing or marijuana use. The data, though
varying somewhat by crime, provide what appears to be consistent support for
deterrence theory.
As expected, the use of marijuana and belief in the likelihood of arrest for marijuana possession, were inversely related (\(\text{Gamma} = -.84, p < .001\)). In fact, none of the respondents believing that their use of marijuana would likely lead to an arrest, have ever used marijuana! By contrast, 38.9% of those believing that such an arrest is unlikely, admit to some use of marijuana. The large Gamma value may be slightly misleading, however, since it is greatly enhanced by the one zero cell in the table. While intra-offense comparisons suggest that perceptions of arrest potential may be serving as a deterrent -- the fact is that hardly anyone, user or non-user, sees that potential as very great. Indeed, 75% of the non-users and almost all of the users think there is less than a 50/50 chance of being arrested for marijuana possession. Thus, it is not entirely clear just how strong a deterrent is offered by the threat of arrest for marijuana possession.

Also as expected, those who think their chances of arrest for petty larceny are lowest, are the most likely to have committed a theft (62.4%). Those who believe they are likely to be arrested should they ever steal something, admit to such theft much less frequently (40.6%). Although statistically significant \((p < .01)\) the Gamma value for petty larceny \((- .31)\) is appreciably smaller than the corresponding value for marijuana use. This difference in strength of relationship when marijuana and theft data are compared, offers further support for Andenaes' (1966) and Zimring's (1971) contention that for crimes that are \textit{mala prohibita} (marijuana use), the law may stand alone as a deterrent. Because laws have the support of the mores in the case of theft (\textit{mala in se}) the relationship between deterrence and perceptions of the law may be more difficult to establish. For theft, deterrence may, indeed, be more the consequence of internalized morality than internalized legality.
SUMMARY AND DISCUSSION

In an effort to answer questions that have not been resolved by prior research, this paper has used a different approach to the empirical study of deterrence theory. Whereas most of the earlier studies were concerned with rates of crime for large geographic units, the present study used the admitted criminality of a specific sample of individuals as the dependent variable. It was expected that deterrence -- if it existed -- would likely vary with the perceptions of punishment held by potential and actual self-reported criminals, as well as with the types of crime presumably being deterred.

Interviews with 321 university students were used to determine relationships between admitted marijuana use and theft, and perceptions of the severity and certainty of punishment. From deterrence theory it was expected that admitted criminality would be least frequent among those who: (1) perceive the most severe penalties for larceny and marijuana use; (2) perceive the greatest chances of receiving the maximum penalties for those offenses upon conviction; (3) perceive the greatest probability that law-violators will be arrested; (4) have the greatest familiarity with others who have been arrested for larceny or marijuana possession; and (5) perceive the greatest probability of their own arrest in the event that they stole something or used marijuana.

The data for marijuana use and theft indicate that no relationship exists between perceptions of severe punishment and admitted criminality. This finding runs counter to deterrence theory, but is in accord with several earlier studies of deterrence (Schuessler, 1952; Sellin, 1967; Gibbs, 1968; Tittle, 1969; Chiricos and Waldo, 1970). While these and the earlier findings cannot be held conclusive, they strongly question the assertion that crime may be deterred by increasing penalties.

If the viability of severe punishment as a deterrent to crime has been seriously questioned by empirical findings, the same cannot be said for certain
punishment. The latter dimension of deterrence has emerged from recent empirical tests with a considerable amount of credibility (Chambliss, 1966; Gibbs, 1968; Tittle, 1969; Jensen, 1969). In the present study, perceived certainty of punishment appears to be related to admitted criminality. However, the strength of this relationship varies by crime and by the index of certainty employed. For each of the certainty indices, marijuana use seems more related than admitted theft activity to perceptions of the certainty of punishment.

Although the present data provide only moderate support for this aspect of deterrence theory, the strongest support is found in the perception that one's own criminality is likely to result in an arrest (Tables 5-A and 5-B). The next greatest support appears to come from the perception that one's own criminality is likely to eventuate in the maximum allowable penalty for a specific crime (Table 2-A). Both of these situations have a common focus on the individual and his chances of arrest and punishment for a specific crime. Thus, perceptions of the certainty of punishment appear most viable as a deterrent when they involve the potential criminal's estimate of his own chances for arrest and harsh penalties for a particular crime -- independent of the chances for any "generalized other."

This latter point receives support from two sources. First, the weakest deterrent among the several certainty dimensions is the perception that law-breakers in general are likely to be arrested or convicted. Only for marijuana use (Table 3-A) is the relationship between admitted criminality and this perception of punishment in general, statistically significant (p < .01). Second, personal knowledge of the punishment of "others" for marijuana use of theft is apparently ineffective in deterring these offenses. On the contrary, use of marijuana and admitted theft are most likely for those who know someone else who has been arrested for these offenses. Thus, little support is found for a basic premise of deterrence theory; i.e., the punishment of alter, if known to ego, will serve as a general deterrent, keeping ego from involvement in that criminal activity.
As noted above, marijuana use appears more likely than theft to be deterred by perceptions of the certainty of punishment. Such a finding is consistent with Andenaes' (1966) distinction between crimes that are mala prohibita and crimes that are mala in se, and with Zimring's (1971) hypothesis cited earlier. That is, one might expect the law to "stand alone" in the deterrence of marijuana use (mala prohibita) inasmuch as the law has little support in the mores of the university student subculture. In this regard, it is recalled that only 25% of the respondents disagreed with the assertion that "possession of marijuana should be legalized for adults," while 78.5 of all respondents agree that the "penalties for possession of marijuana are too harsh." Thus, it seems reasonable to conclude that the norms prevalent in student groups are not likely to deter marijuana use. Whatever deterrence is to occur must be the product of some other force, such as the law.

For the crime of theft, the law has a great deal of support in the mores. Because of this, it may be difficult to separate the deterrent effect of the law from other aspects of deterrence. Again, 68% of the respondents disagreed with an assertion that "the penalties for stealing are too harsh" (even though most perceived the penalty to be greater than it actually is), and 98.2% disagreed with the statement that "stealing shouldn't be a crime." It is not, then, surprising to note that perceived certainty of punishment has little discernible deterrent impact upon the crime of theft. For most who are deterred, pressures from alternative sources -- such as moral values that have long been internalized -- are likely sufficient to inhibit the proscribed theft activity.

The important point to note is that the law, and more specifically, perceptions of the certainty of punishment, cannot be assumed to deter all criminal activities in the same way. The deterrence equation may be more or less complex, depending upon the type of crime and the degree of congruence between formal and informal reactions to that crime. Thus, an understanding of deterrence further presumes an
understanding of the kinds of persons involved, and the way in which their values reflect upon the illegal activity. Should these values be inconsistent with the formal dictates of law, then the latter will "stand alone" as a deterrent. How strongly the law stands as a deterrent may further depend upon how serious the conflict between the mores and the law.

Just how strong the marijuana law stands as a deterrent within the particular group studied is questionable -- despite the fact that deterrence relationships appeared to be strongest for marijuana offenses. As noted above, more than three-fourths of the students sampled feel that marijuana laws are too harsh. In addition, all respondents were asked the following question:

If the penalties for the use of marijuana were reduced, would you consider using it, or using it more often?

Of the 215 students who claimed to have never used marijuana, only 26% affirmed that they would consider using the drug if the laws were made less harsh. For the remainder, it may not be unreasonable to assume that their perception of the law was not the principle reason for their non-use of marijuana. The impact of extralegal factors may be even stronger for theft offenses than for marijuana use.

Ninety-one per cent of those who claim to have never stolen, assert that they would not consider stealing if the laws governing theft were reduced. This further confirms the possibility that the law itself is not deterring these activities to a significant degree.

It is difficult to foresee what would happen to the situation of deterrence if, in fact, laws were changed or eliminated. To some extent, the informal norms and mores of the people are prompted and supported by the formal laws -- even though it may appear that the mores themselves are what deter or stimulate criminality. Should, for example, the laws against theft be eliminated, would the moral repulsion against stealing persist? At the same time, would the mores of the general public come to accept marijuana if the laws forbidding it were erased? Answers
to these and related questions are beyond the scope of this paper. However, the results of this study may justify the conclusion that the effects of law in deterring crime are probably not as great, and certainly less uniform than many have heretofore assumed.
Table 1-A
ADMITTED "MARIJUANA USE BY PERCEIVED SEVERITY OF FLORIDA PENALTY FOR FIRST MARIJUANA POSSESSION"

<table>
<thead>
<tr>
<th>Perceived Penalty</th>
<th>% Having Used Marijuana</th>
<th>% Never Using Marijuana</th>
<th>Total (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over-Estimated</td>
<td>27.0</td>
<td>73.0</td>
<td>100.0 (74)</td>
</tr>
<tr>
<td>Accurately-Estimated</td>
<td>37.3</td>
<td>62.7</td>
<td>100.0 (102)</td>
</tr>
<tr>
<td>Under-Estimated</td>
<td>33.6</td>
<td>66.4</td>
<td>100.0 (137)</td>
</tr>
</tbody>
</table>

Gamma = -.07

Table 1-B
ADMITTED STEALING BY PERCEIVED SEVERITY OF FLORIDA PENALTY FOR PETTY LARCENY

<table>
<thead>
<tr>
<th>Perceived Penalty</th>
<th>% Having Stolen</th>
<th>% Never Stealing</th>
<th>Total (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over-Estimated</td>
<td>54.9</td>
<td>45.1</td>
<td>100.0 (142)</td>
</tr>
<tr>
<td>Accurately-Estimated</td>
<td>61.7</td>
<td>38.3</td>
<td>100.0 (115)</td>
</tr>
<tr>
<td>Under-Estimated</td>
<td>54.8</td>
<td>45.2</td>
<td>100.0 (62)</td>
</tr>
</tbody>
</table>

Gamma = -.04

*Data for these items are obtained from responses to the question, "Could you estimate the maximum prison penalty in Florida for illegal possession of marijuana -- first offense?" "What would you say the maximum prison penalty in Florida is for someone who takes or steals something worth less than $100?"
Table 2-A

ADMITTED MARIJUANA USE BY PERCEIVED LIKELIHOOD OF RECEIVING MAXIMUM PENALTY UPON CONVICTION FOR MARIJUANA POSSESSION*

<table>
<thead>
<tr>
<th>Perceived Likelihood of Maximum Penalty</th>
<th>% Having Used Marijuana</th>
<th>% Never Using Marijuana</th>
<th>Total (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likely</td>
<td>19.0</td>
<td>81.0</td>
<td>100.0 (79)</td>
</tr>
<tr>
<td>50/50</td>
<td>26.5</td>
<td>73.5</td>
<td>100.0 (83)</td>
</tr>
<tr>
<td>Unlikely</td>
<td>43.4</td>
<td>56.6</td>
<td>100.0 (159)</td>
</tr>
</tbody>
</table>

\[\text{Gamma} = -.41\]
\[p < .001\]

Table 2-B

ADMITTED THEFT BY PERCEIVED LIKELIHOOD OF RECEIVING MAXIMUM PENALTY UPON CONVICTION FOR PETTY LARCENY*

<table>
<thead>
<tr>
<th>Perceived Likelihood of Maximum Penalty</th>
<th>% Having Stolen</th>
<th>% Never Stealing</th>
<th>Total (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likely</td>
<td>44.4</td>
<td>55.6</td>
<td>100.0 (18)</td>
</tr>
<tr>
<td>50/50</td>
<td>63.1</td>
<td>36.9</td>
<td>100.0 (65)</td>
</tr>
<tr>
<td>Unlikely</td>
<td>56.7</td>
<td>43.3</td>
<td>100.0 (238)</td>
</tr>
</tbody>
</table>

\[\text{Gamma} = -.02\]

*Data for these items are obtained from responses to the questions, "If you were convicted of possession of marijuana, how likely would you be to get the maximum Florida penalty?" "If you were convicted of stealing something worth less than $100, how likely would you be to get the maximum Florida penalty?"
Table 3-A

ADMITTED MARIJUANA USE BY PERCEIVED PROBABILITY OF ARREST FOR LAW VIOLATORS*

<table>
<thead>
<tr>
<th>% of Law Violators Arrested by Police</th>
<th>% Having Used Marijuana</th>
<th>% Never Using Marijuana</th>
<th>Total (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50% +</td>
<td>25.0</td>
<td>75.0</td>
<td>100.0 (104)</td>
</tr>
<tr>
<td>21-49%</td>
<td>30.6</td>
<td>69.4</td>
<td>100.0 (108)</td>
</tr>
<tr>
<td>0-20%</td>
<td>43.5</td>
<td>56.5</td>
<td>100.0 (108)</td>
</tr>
</tbody>
</table>

Gamma = -.28  
p < .01

Table 3-B

ADMITTED THEFT BY BELIEF IN THE PROBABILITY OF ARREST FOR LAW VIOLATORS*

<table>
<thead>
<tr>
<th>% of Law Violators Arrested by Police</th>
<th>% Having Stolen</th>
<th>% Never Stealing</th>
<th>Total (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50% +</td>
<td>51.0</td>
<td>49.0</td>
<td>100.0 (104)</td>
</tr>
<tr>
<td>21-49%</td>
<td>60.2</td>
<td>39.8</td>
<td>100.0 (108)</td>
</tr>
<tr>
<td>0-20%</td>
<td>61.1</td>
<td>38.9</td>
<td>100.0 (108)</td>
</tr>
</tbody>
</table>

Gamma = -.14

*Data for these items are obtained from responses to the question, "What percentage of the people who commit crimes do you think ever get caught by the police?"
**Table 4-A**

**ADMITTED MARIJUANA USE BY KNOWLEDGE OF OTHERS ARRESTED FOR MARIJUANA POSSESSION***

<table>
<thead>
<tr>
<th>Number Known</th>
<th>% Having Used Marijuana</th>
<th>% Never Using Marijuana</th>
<th>Total (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 or More</td>
<td>47.2</td>
<td>52.8</td>
<td>100.0 (142)</td>
</tr>
<tr>
<td>None</td>
<td>21.8</td>
<td>78.2</td>
<td>100.0 (179)</td>
</tr>
</tbody>
</table>

\[ Q = .53 \]
\[ p < .001 \]

**Table 4-B**

**ADMITTED THEFT BY KNOWLEDGE OF OTHERS ARRESTED FOR PETTY LARCENY***

<table>
<thead>
<tr>
<th>Number Known</th>
<th>% Having Stolen</th>
<th>% Never Stealing</th>
<th>Total (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 or More</td>
<td>66.7</td>
<td>33.3</td>
<td>100.0 (105)</td>
</tr>
<tr>
<td>None</td>
<td>52.8</td>
<td>47.2</td>
<td>100.0 (214)</td>
</tr>
</tbody>
</table>

\[ Q = .28 \]
\[ p < .01 \]

*Data for these items are obtained from responses to the questions, "Altogether, how many people that you know personally, have been arrested for illegal possession of marijuana?" "How many people that you know personally have ever been arrested for stealing something of little value (worth less than $100)?"*
Table 5-A

ADMITTED MARIJUANA USE BY PERCEIVED LIKELIHOOD OF ARREST FOR MARIJUANA POSSESSION

<table>
<thead>
<tr>
<th>Perceived Likelihood of Arrest</th>
<th>% Having Used Marijuana</th>
<th>% Never Using Marijuana</th>
<th>Total</th>
<th>(N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likely</td>
<td>0.0</td>
<td>100.0</td>
<td>100.0</td>
<td>(28)</td>
</tr>
<tr>
<td>50/50</td>
<td>10.7</td>
<td>89.3</td>
<td>100.0</td>
<td>(28)</td>
</tr>
<tr>
<td>Unlikely</td>
<td>38.9</td>
<td>61.1</td>
<td>100.0</td>
<td>(265)</td>
</tr>
</tbody>
</table>

Gamma = -.84
p < .001

Table 5-B

ADMITTED THEFT BY PERCEIVED LIKELIHOOD OF ARREST FOR PETTY LARCENY

<table>
<thead>
<tr>
<th>Perceived Likelihood of Arrest</th>
<th>% Having Stolen</th>
<th>% Never Stealing</th>
<th>Total</th>
<th>(N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likely</td>
<td>40.6</td>
<td>59.4</td>
<td>100.0</td>
<td>(32)</td>
</tr>
<tr>
<td>50/50</td>
<td>48.5</td>
<td>51.5</td>
<td>100.0</td>
<td>(68)</td>
</tr>
<tr>
<td>Unlikely</td>
<td>62.4</td>
<td>37.6</td>
<td>100.0</td>
<td>(221)</td>
</tr>
</tbody>
</table>

Gamma = -.31
p < .01

*Data for these items are obtained from responses to the questions, "If someone like yourself used marijuana occasionally in Tallahassee, how likely are the police to catch him (her)?" "If someone like yourself stole something worth less than $100 in Tallahassee, how likely are the police to catch him (her)?"
FOOTNOTES

1. Among the earliest to crystallize this issue was Jeremy Bentham, whose Principles of Penal Law was published in 1843.

2. Even among social scientists, most of the input on this issue has been theoretical or moralistic in nature (Mead, 1918; Wood, 1938; Ball, 1955; Polier, 1956; Barnes and Teeters, 1959; Toby, 1964; Jeffery, 1965; Bittner and Platt, 1966; Zimring and Hawkins, 1968) and as noted by Chambliss (1966: 70), "...the question of deterrence has frequently turned into a debate over the morality of capital punishment."

3. Severity of punishment was operationally defined by Gibbs as "the median number of months served on a homicide sentence by all persons in prison on December 31, 1960. This measurement was taken for each state in the United States, as was his index of the certainty of imprisonment:
   
   # of State Prison Admissions for Homicide in 1960
   Mean # of Homicides Known to Police for 1959-1960

4. Tittle examined the following offenses: homicide; assault; sex offenses; robbery; larceny; burglary; and auto theft. His principle measure of severity was provided by the "mean length of time served for felony prisoners released from state prisons in 1960." Certainty of punishment for the several felonies was given by the following ratio:
   
   # of State Prison Admissions for "X" Offense in 1960 & 1963
   # of "X" Crimes Known to the Police in 1959 & 1962

5. Certainty of punishment was calculated for three time periods, 1950, 1960, and 1963. The general format for certainty measures is given by the 1950 index:
   
   1950 Admissions to Prison for "X" Offense
   Mean of "X" Crimes Known to Police in 1949 & 1950
   Severity of punishment for 1960 and 1964 were given by the "median length of sentence served by state prisoners released in 1960 and 1964," respectively.

6. In brief, this criticism suggests that Tittle's "strong and consistent" inverse relationships between certainty of punishment and crime rates, may be the product of correlated bias existing in his measures of certainty and criminality. That is, the numerator of Tittle's criminality index is almost identical to the denominator of his certainty index. Thus, any computed relationship between such variables would have to be inverse. Implementing successive samples of random digits in the terms of the certainty and criminality measures, it was found that Tittle's actual relationships were no greater than could be found using random data.

7. See, for example, Crime and Its Impact: An Assessment (President's Commission, 1967: 24-28), which summarizes the effects of these and other sociological factors upon the official rates of crime. For a discussion of problems in the under-reporting of crimes to the police, see the victimization survey conducted by the National Opinion Research Center (President's Commission, 1967: 17-19). The impact of irregularities in the reporting of crime by the police is discussed in the same volume (President's Commission, 1967: 22-24).

8. One may consult any recent issue of Uniform Crime Reports, published annually by the Federal Bureau of Investigation, Washington, D.C., to confirm this limitation.
9. See the discussion by Zimring (1971: 56-61) concerning "Public Knowledge as a Threshold Requirement" in the study of deterrence.

10. Zimring's (1971: 33-96) entire discussion of the many factors related to the success or failure of deterrence threats, is supportive of this point.

11. Jensen's (1969) "non-delinquents" are those who admit to no delinquent activities.

12. It must be remembered, when comparing Claster's (1967) "delinquent" with Jensen's (1967), that the former "delinquents" are those who had been admitted to training school -- whereas Jensen used self-reporting techniques.

13. In actuality, however, one could argue that the experiences of the two samples of "delinquents" may have resulted in their perceptions of law enforcement. That is, training school "delinquents" might easily be expected to over-estimate arrest probabilities -- simply because they have experienced the formal sanctions of the police. On the other hand, self-reported "delinquents," because they have not received such formal sanction, could be just as likely to under-estimate police efficiency. Should this be the case, then the logical time-order of deterrence relationships does not obtain.


15. Exceptions to this concentration on crimes that are maia in se are, of course, provided by Chambliss' (1966) work with parking violations and Schwartz and Orleans' (1967) work with income tax evasion -- both of which may be considered maia prohibita.

16. An alternative perspective on "types of crime" and deterrence is offered by Chambliss (1969: 368-370) who hypothesized that instrumental actions (i.e., theft) are subject to greater control through formal sanctions than expressive actions (i.e., marijuana use), inasmuch as the latter are engaged in as a part of a broader style of life to which the individual may be committed. Applying this perspective, we might expect deterrence relationships to be stronger for larceny offenses than for marijuana offenses.

17. The limitations of a student sample are readily acknowledged, however; the researchers were not expecting to settle the issue of deterrence for all time. Quite the contrary; for they would argue that different kinds of people, in different kinds of situations are deterred from different kinds of crimes for entirely different reasons. This sample deals with a segment of our population that may be over-represented on one of the crimes we are studying -- marijuana use, and, perhaps, under-represented on the second crime -- theft. We simply want to know whether the perceptions of this particular sample are related to the performance or non-performance of two specific criminal activities.

18. Several possible methods of delimiting "levels" of admitted theft were attempted. A simple distinction between those admitting to grand larceny and those admitting to petit larceny was not feasible because only seven students admitted to the more serious offense. Simple frequency of petit larceny was
rejected, inasmuch as most of the frequent larcenies were committed at an early age -- and it was felt that larcenies committed in the past year would probably be more significant.

19. The median income of the respondents' fathers was $10,000, and 55% of the fathers had at least some college training.

20. Legislation passed in 1969 called for automatic suspension of any student arrested for a drug offense. Subsequent legislation passed in 1970, and effective on October 1 of that year, gives university officials the authority to suspend such a student if they so desire.

21. The question of how many "others" one knew who had been arrested or convicted of selling marijuana was deliberately not asked, so as to avoid the appearance of seeking information that was too sensitive. Too few students knew "others" who had been arrested or convicted of grand larceny to warrant the inclusion of this crime.

22. Among the earliest to describe the social character of marijuana use, and the processes of socialization into marijuana subcultures, was Howard Becker in Outsiders, (1963) pp. 41-58.


24. The possibility that the threat of law will be less of a deterrent for crimes that are strongly abhorred in the mores of the people, has been suggested, as well, by Zimring (1971: 44-45) and by Morris (1951: 13).

25. When considering the variation in deterrence effectiveness for different "kinds of persons" it is interesting to note that "casual users" of marijuana are frequently the most likely to minimize the threat of legal reprisal (data analyzed, but not presented in this paper). It is entirely possible that this response represents an over-reaction to the sudden awareness that one can commit the crime without immediate response from the criminal justice system. That is, confidence of immunity may not lead to the use of marijuana, as much as it follows the experience of non-apprehension. "Regular users," who may participate more fully in a subculture of drug use, are much more likely to know others who have been arrested for possession of marijuana. It may well be this knowledge which gives the "regular user" a less optimistic outlook on the chances of apprehension, than that espoused by the "casual user."

26. This point is supported in the findings of Schwartz and Orleans (1967) who note that: "the results of the study....suggest that the threat of sanction can deter people from violating the law, perhaps in important part by inducing a moralistic attitude towards compliance."
27. The Florida Legislature has recently (May, 1971) reduced to a misdemeanor the penalty for possessing a small amount (less than 5 grams, or about 1/4 "joints") of marijuana. The official rationale for this change is that the prosecutors were unwilling to prosecute and the courts were unwilling to convict under the existing law which provided for a maximum of five years in prison. Clearly, the shift in penal sanction reflects a prior shift in community mores regarding the use of marijuana. As long as marijuana use was largely confined to black-slam communities, there was apparently little pressure upon the police to enforce marijuana laws. However, as the popularity of marijuana spread to respectable, white, middle-class colleges and high schools, the initial expectation was that stronger enforcement of the laws would make the problem go away. Yet with time, the increased enforcement of the law only served to crowd police stations with sons and daughters of judges, business leaders, and law-makers. Indeed, it was not until the mores of white, middle-class and prosperous youth showed themselves to be persistent and growing in their acceptance of marijuana that the legislators were motivated to act. It will be interesting to observe whether this change in law, brought about by a change in the mores of youth, will precipitate a wider acceptance of marijuana within the adult or youth communities of Florida.
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