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THE EFFECT OF ROLES AND DEEDS ON RESPONSIBILITY JUDGMENTS:

THE NORMATIVE STRUCTURE OF WRONGDOING

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ABSTRACT

THE EFFECT OF ROLES AND DEEDS IN RESPONSIBILITY JUDGMENTS:

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Human judgment of wrongdoing is a potential meeting ground for sociological models of norms and psychological models of cognition. The present paper discusses the theory of human responsibility judgments that has dominated psychology since Jean Piaget and expands on that theory from a sociological perspective. We offer an alternative model, arguing that judgments of responsibility are functions of both the deeds an actor performs and the social expectations of others for the actor. Socially differentiated expectations, social roles, should therefore play a crucial role in the judgment of wrongdoing. Roles should serve as normative contexts that determine how other information is weighed and used. We identify two dimensions of roles that may be determinants of responsibility judgments: the hierarchy and the solidarity of the actor-victim relationship. We report results from a survey in which experimentally varied vignettes included consideration of role relationships as well as traditional psychological factors (such as the actor's mental state). The study replicated results known since Piaget, pointing to the importance of an actor's mental state when adults judge responsibility in comparison to the relatively trivial role of the act's consequences. But the findings also showed that roles alter the interpretation and judgment of wrongdoing, including the use of information about mental state. In particular, the normative model for judgment of persons in authority over victims differed substantially from the model for judgment of persons who were equals with their victims. The results indicate, as predicted, that no model of how humans judge responsibility is complete without consideration of social roles and their normative demands.

## THE EFFECT OF ROLES AND DEEDS ON RESPONSIBILITY JUDGMENTS:

### THE NORMATIVE STRUCTURE OF WRONGDOING

Responsibility for wrongdoing, a key category of human norms, is a central issue in both group social organization and individual social life. Permeating all legal systems, the concept of responsibility has long concerned philosophers. Sociologists have similarly long been convinced that human judgment of wrongdoing may be a key issue in social control. But we still do not know how such judgments are made. This paper, after reviewing relevant theories of such judgments, will formulate a sociological framework to examine norms about responsibility, and will then test this framework empirically.

Despite its importance, responsibility itself has only recently become an issue for study in three fields: legal anthropology, sociology of law, and attribution theory in social psychology. Legal anthropologists have concentrated upon the social organization of groups to explain the process of responsibility attribution (e.g., Gluckman, 1967; Llewellyn and Hoebel, 1949; Nader, 1969). Legal sociologists have focused on status differences between actors and on the effect of bureaucratic organization on dispute settlement (e.g., Emerson, 1969; Nonet, 1969; Ross, 1970). Social psychologists have studied responsibility judgments as cognitive processes, concentrating on individual differences among observers or on general models of how perceivers process information about deeds observed (e.g., Heider, 1958; Shaw and Sulzer, 1964; Shaver, 1970). In sum, legal anthropologists and sociologists have focused on organizational determinants of responsibility while social psychologists have concentrated on perceptions of individual deeds. Our approach merges these alternative foci into a single scheme which makes explicit what is often implicit in discussions of norms: the notion that norms as rules or standards

are carried in people's hands. We focus on what determines judgments by individual respondents who assess ideal-typical instances of wrongdoing. Our goal is to bring sociological concepts into models of cognition about wrongdoing.

Our basic premise is that role expectations serve as normative contexts within which people judge the actions of themselves and others. Psychological studies investigating responsibility judgments have, by focusing on the actions of isolated individuals, discounted the potential importance of social expectations as determinants of responsibility for wrongdoing. Since these studies rest on what have been claimed to be universal laws for such judgments, it is important to examine the central theoretical tradition in psychology before turning to how sociological insights can yield a still more general model.

Fritz Heider (1958), perhaps the foremost theoretician in this area, built upon the work of Jean Piaget (1965[1932]) to produce a developmental model of five levels in responsibility judgments.<sup>1</sup> At the Association level, a person merely associated with an event may be held responsible for it. At the Commission level a person may be held responsible for any effect caused, whether or not it is intentional or foreseeable by the actor. At the Foreseeability level a person is held responsible for any effect that could have been foreseen, even if it was not intended. At the Intentionality level, only fully intended acts are grounds for responsibility. And at the Justifiability level responsibility for even intentional acts may be reduced by the presence of environmental justifications or excuses.

Heider's proposed levels are a useful place to begin a discussion of responsibility judgments. Yet one should note that the levels, although they are laid out as if on a continuum, do not all address the same considerations. The second, third, and fourth levels basically speak to the

actor's mental state in relation to a given act. The first and fifth address other considerations. The first, Association, is concerned with the role relations between a person being judged and some other person who actually commits the act. The fifth, Justifiability, is concerned with various situational circumstances which may alter a judgment based solely upon an actor's mental state. Thus while the five levels may comprise a continuum in some developmental sense (i.e., children may in a general way move through these stages as their moral judgment matures), they are not levels in the conceptual sense that a higher level means there is more of something. To compare Intentionality and Justifiability, for instance, is to compare mental state to a host of situational excuses. A more sociological approach would argue that to understand responsibility judgments we must consider at least two distinct factors: what an actor did, and the social expectations of others for what the actor should have done.<sup>2</sup> What an actor "did" may be approximated by traditional psychological variables such as the actor's intention and the act's consequences. But in order to know how an observer will judge that deed, one also needs to know what was expected of the actor.

Social expectations may be considered at several levels. At the most abstract level are general expectations; norms which tend to apply to all individuals (e.g., rules against homicide) or are so general that they may appear to apply to all actors (such as the rules for safe driving that all drivers are supposed to know). At the other extreme are particularistic features of situations that can alter our view of what one should have done, and indeed of what one did in fact do. These "contextual" features can include aspects of the actor's biography (such as how he or she has acted in the past) or inputs that third parties bring to a situation (such as persuasion attempts, orders, or coercion). At a middle level are expectations that are differentiated by social position. These are social roles.

A more sociologically informed model of human responsibility judgments must therefore attempt to specify which roles may produce differential expectations, and how these in turn lead to different attributions of responsibility. Roles, however, can be analyzed into a bewildering variety of categories and according to a wide variety of perspectives (e.g., Biddle and Thomas, 1966; Sarbin and Allen, 1968). Are there any differences among roles that are generally appropriate for a model of responsibility judgments? We believe that there are at least two such differences: those based on the dimensions of hierarchy and solidarity. We shall briefly examine evidence of related linguistic distinctions, as indicators of the everyday importance of these differences among roles; legal rules, as indicators of how responsibility and sanctioning judgments may be formally differentiated along these dimensions; and sociological theories themselves, as indicators that informed observers of social structure find these to be useful distinctions among role relationships.

Linguistic distinctions based on role positions provide at least prima facie evidence of the importance of certain social categories to humans. In this regard Brown (1965) has argued that there are, cross-culturally, two fundamental dimensions to norms of address (words and titles people use in speaking to one another). The dimension of hierarchy between individuals is reflected in rules involving the superiority of one speaker to another.<sup>3</sup> And the dimension of solidarity is reflected in rules involving the personal closeness of speakers. As Brown notes, there have been fascinating historical changes in such rules, particularly in the form of shifts toward equal and close forms (e.g., "comrade") as a result of industrialization and revolution. It remains the case, however that modern languages reveal a full range of use of the two dimensions of address--from the Japanese multiple levels of hierarchy,<sup>4</sup> through the complexities of

politely juggling the French tu and vous or the German du and Sie, to the niceties of "first naming" versus more formal titles in English. The fact that people use these linguistic dimensions daily suggests they may base certain social expectations on the distinctions they draw.

The law incorporates hierarchy in formal decisions about responsibility. Legally subordinate and superior positions are frequently treated differently from equal ones. Both military and civil law hold superiors responsible for actions conducted at low levels of intentionality. Vicarious liability (Heider's association level) and strict liability (Heider's commission level) rules are typically employed against corporations, employers, generals, parents and presidents--not against average citizens who wrong their equals.<sup>5</sup> Likewise, subordinates are sometimes provided with defenses when acting on the basis of superior orders (c.f. Dinstein, 1971).

Law also affords solidarity some recognition. Sometimes this is in the form of nonrecognition: offenses may be ignored or treated leniently if committed by one person closely tied to another.<sup>6</sup> For example, rapes or assaults may not be recognized between husband and wife. On the civil side, there has been a parallel legal hesitation to recognize torts between members of a family. The primary justification for this reluctance has been that litigation would destroy the harmony of the household.<sup>7</sup> For both criminal and civil issues, people who are closely tied may themselves recognize the corrosive nature of the formal legal process and avoid legal involvement where possible (e.g., Macaulay, 1963). And procedures in places such as family court often try, with varying degrees of success, to restructure the legal process to accommodate the nature of the relationship between those who are closely tied.

Finally, sociologists would agree that hierarchy is important. Whether one speaks in terms of power or authority, hierarchy is seen as a fundamental

dimension in social relationships (e.g., Blau, 1964, Dahrendorf, 1959; Weber, 1947; Wesolowski, 1962). Hierarchy versus equality is an obvious property of roles, as the differences between parent-child or worker-employer dyads and pairs of siblings, friends or co-workers would suggest. But hierarchy alone does not account for all the differences between these dyads. When we compare parent-child to worker-employer, or brother-sister to two co-workers (or even more extremely to buyer-seller), a second dimension emerges. This dimension is related to Brown's notion of solidarity.

Because so many sociologists have used this solidarity dimension there is no one label to describe it. For example, the movement from pre-modern to modern society has been variously characterized as a movement from Gemeinschaft to Gesellschaft (Tönnies, 1957); from traditional to rational-bureaucratic authority (Weber, 1947); and from law based on status to law resting on contract (Maine, 1963). Anthropologists similarly distinguish between peasant life in multiplex relations and the change engendered by a cash economy (e.g., Nader, 1969; Wolf, 1969). In Parsonian (1951) terms one can speak of a movement from ascribed to achieved statuses; from particularistic to universalistic relations; and from diffuse to specific obligations.

While such concepts may be used to differentiate types of societies, they are also potentially relevant to describing role relationships within modern societies--such as in distinguishing parent-child from worker-employer relations. A final salient example of a relevant distinction between modern role relations is Blau's (1964) discussion of intrinsic versus extrinsic exchanges. Intrinsic exchanges are particularly likely in the kinds of relations that anthropologists might call multiplex or Parsonians might call particularistic and diffuse. Thus many different social scientific terms appear to tap the linguistic distinction between solidary and non-solidary relations. From the viewpoint of modern social structure, each relates to differences in the type of tie between individuals.

For convenience in relating our terms to legal thought, we shall summarize this second dimension of social life by using Maine's (1963) contrast between status and contract relationships. Maine's original distinction focused on legal organization and particularly on property. We use the status-contract distinction more broadly, referring to the full range of interaction involving bonded group members (status) versus individuals freely agreeing to an exchange (contract). In status-based relationships social ties are more extensive, permanent, unalterable, and individually unique. The parties share a collective identity (e.g., family) based on the bond of their relationship. In contract relationships the ties are more limited, temporary, voluntary, and interchangeable.

The distinction between status and contract relations can, of course, be cross-cut by the distinction between hierarchy and equality. In the context of ongoing relationships, the hierarchy involved is generally one of authority rather than sheer power. In most extreme form, then, four ideal-typical role relations can be explored as potential determinants of the judgment of wrongdoing.<sup>8</sup>

In sum, human judgment of wrongdoing is an area where we might expect general social norms to exist. We have argued that these norms should incorporate elements related to an actor's deed and elements related to social expectations for what the actor should have done. Since a primary concern for sociologists should be role-differentiated expectations, we identified two primary dimensions of social role relations that deserve attention as potential influences on assessments of wrongdoing: hierarchy and solidarity. These dimensions pervade language, law, and sociological theory itself. In the present paper we explore the effect of these role relations on responsibility judgments, both as direct determinants of responsibility and as normative contexts that may alter the meaning or impact

of the deed-related variables generally studied by psychologists: the actor's mental state and the act's consequence. Both "main effects" of role and "interaction effects" between roles and deeds may prove important. In addition, we examine the impact of two contextual variables that may affect expectations: the presence of a past pattern of bad or good behavior by an actor and the presence or absence of influence from another person on the actor. These contextual features of action stand in an intermediate position between features of the act itself and features of the role relationship between the parties involved. As with mental state and consequences, the issues for these contextual variables are their direct impact on judged responsibility and their potential for differential impact in different role contexts.

In the present study we obtained judgments of hypothetical stories concerning wrongdoing to assess the impact of roles and deeds on responsibility. Since Piaget (1965[1932]), such strategies have been used in psychology to ascertain the structure of cognition about wrongdoing. We also embedded experimental variations in these stories, which were then administered to a random sample survey of adults. This tactic, similar to that recently used by Rossi and colleagues (e.g., Alves and Rossi, 1978; Jasso and Rossi, 1977), combines the experiment's advantage of clearer causal inference with the survey's advantage of wider generalizability.

#### The Study

The data come from a probability sample survey of the Detroit S.M.S.A. in the spring and summer of 1977 (N=678). Data for the present study represented approximately half of the one-hour interview schedule for the 1977 Detroit Area Study,<sup>9</sup> plus supplemental information from a mailback questionnaire returned by approximately half of the respondents (N=349).

Each subject heard six vignettes concerning some wrongdoing. Each vignette was itself an experiment. Versions of each story were randomly assigned to subjects, and in addition the order of presentation of stories was varied according to a Latin Square design to control for possible order effects. After hearing one version of a given story, each respondent was asked a series of questions. These included the responsibility of the actor for what happened, asked on an 11-point scale from 0=not at all responsible to 10=fully responsible; the appropriate sanction; manipulation checks on the experimentally manipulated variables; and an open-ended question asking the respondent's perception of the most important determinant of responsibility.

Design. The two role relationship dimensions, hierarchy and solidarity, were incorporated in four vignettes designed to represent each of the four ideal-typical combinations. All respondents also heard two stories in which there was no prior relationship between the parties, one an automobile accident and the other an armed robbery. These were introduced to examine the effect of deed-related variables in the absence of role ties.<sup>10</sup> Finally, the subjects were given a mailback questionnaire containing an additional ten stories. These included both additional examples of role relationships and other more specialized topics. The present paper concentrates on the four core stories in the main interview. It also briefly presents data from the automobile accident and armed robbery cases; and it ends with data from one mailback story in which role relationships were varied in a single setting.

The design of the four core stories is summarized in Table 1. The capitalized labels indicate the role pairs chosen for each type of relationship. To exemplify wrongdoing between status equals, we presented a story of a fight in which one of a pair of 10-year-old twins attacks and

harms the other; for that between actor and victim in a status authority relationship, an incident in which a mother harms her child while responding to a crying incident; for that between contractual equals, the selling of a defective car to a customer; and for that between those having a contractual authority tie, an injury to a worker caused by an assembly line supervisor's disregard of safety precautions. Within each story four variables - mental state, consequences, past pattern, and other's influence - were varied dichotomously.

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 Insert Table 1 about here  
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Deed variables, contextual variables, and hypotheses. Below we discuss initial predictions for the relationship of deed-related and contextual variables to responsibility judgments. In the interest of brevity we present the experimental variations and hypotheses in relatively abstract terms. Full descriptions of all stories are available upon request.

Hypotheses 1-2. Since mental state is generally seen as a central element in adult responsibility judgments, we expected respondents to assign more responsibility to negligent acts than to accidental ones, and more responsibility to intentional acts than to negligent ones. These three categories of acts correspond to the three Heiderian levels that involve mental state: Commission, Foreseeability, and Intentionality. The dichotomous variations in our stories represented adjacent pairs among these levels. In contrast, the seriousness of an act's consequence should bear little relationship to adult responsibility judgments if we are to believe the developmental literature (e.g., Piaget, 1965 [1932]). Yet an extensive social psychological literature has explored the possible impact of



consequence severity on adult judgments of accidents, with inconclusive results (e.g., see reviews by Fishbein and Ajzen, 1973; Vidmar and Crinklaw, 1974). We concluded that it was worthwhile to examine the potential effect of consequence severity in a random sample of adults, using both accidental and non-accidental occurrences. Any conclusion would be more definitive than could be the case with college subject pools and stimuli restricted to accidents. If an effect was found, we expected that higher consequence severity would increase attributed responsibility.<sup>11</sup>

Hypotheses 3-4. The first contextual variable, past pattern of behavior, potentially alters perceptions of the act committed. It taps Kelley's (1967, 1973) theoretical notions of consistency versus distinctiveness information, such that past behavior can be either consistent with a current bad act (suggesting causes internal to the actor) or inconsistent with a current bad act (suggesting something distinctive about the stimulus to which the actor responds). We anticipated, therefore, that bad past behavior would produce greater attributed responsibility than good past behavior. In addition, we expected that past behavior and current intent would interact with one another. For example, a bad past pattern might counteract information about low intentionality in a current incident.

Hypothesis 5. The second contextual variable, influence from another person, provides an external cause for an actor's behavior when it is present. However, the impact of this influence should vary depending upon the relationship of the actor to the other. For this manipulation, we introduced another person influencing the actor in half of the versions; the other half of the time influence was not mentioned. Note that this means there were potentially three parties to a deed--an actor, a victim, and another party influencing the actor. For simplicity we made all relationships in a given

story be of the same type. Thus if an actor-victim relationship was contractual and equal, so was the actor-other relationship. This strategy also made it possible to view actors in authoritative stories as simultaneously superiors (vis-a-vis the victim) and subordinates (vis-a-vis the other).<sup>12</sup> We predicted that initiative from a superior would reduce an actor's responsibility more than persuasion from an equal, and that any main effect of other's influence on responsibility would primarily reflect the influence of superiors.

Manipulation checks. These items were crucial for determining whether the experimental manipulations were in fact perceived by respondents as intended. For checking the distinctions among mental state, two such items were needed for all stories, as the difference between accidental and negligent acts is not the same as that between negligent and purposive acts. One 11-point item asked the extent to which the actor "didn't mean to" or did "on purpose" the act in question. A second dichotomous item asked whether the actor "could have avoided" the act or not. The first item is an intention check, the second a negligence check.

Since the mental state manipulation was always dichotomous, the appropriate manipulation check depended upon which levels of mental state were presented. When the issue was accident versus negligence, we expected the "could have avoided" item to be the appropriate manipulation check and the "on purpose" item to show a relatively constant "didn't mean to" response. Conversely, when the issue was negligence versus intent, we expected the "on purpose" item to be the appropriate comparison and the "could have avoided" question to show a relatively constant "could" response. Thus the pattern of responses to these different items was expected to shed light on different bases of responsibility at different levels of involvement of mental state.

The manipulation checks for consequence severity and past pattern of behavior were more straightforward. The manipulation of consequences used two levels of seriousness which pretests showed to be significantly different in each story; the manipulation was checked with an 11-point item going from 0="not at all serious" to 10="extremely serious." Again using pretests to ensure appropriate variability, past behavior relevant to the misdeed was described as either good or bad. That manipulation was checked with a dichotomous item asking whether the actor's deed was or was not predictable based on the information given.<sup>13</sup>

The final manipulated variable, influence from another, had no appropriate manipulation check given that influence was missing in half of the versions of each story and present in the other half. We did, however, ask follow-up questions about the relative responsibility of the actor and other in those versions where influence was introduced.

Role effects: Informal predictions. Our basic argument is that roles, as normative contexts, should alter the impact of deed-related and contextual variables on responsibility judgments. However, given the stories selected and the interaction effects anticipated, certain main effects of roles appeared plausible in this data set. First, other things being equal, one would expect a person in authority over a victim to be more responsible for wrongdoing than a person of equal status. We argue theoretically that superiors are held to stricter moral and legal standards because authority carries with it greater obligations (see Hamilton, 1978).<sup>13a</sup> In contrast to ordinary actors, authorities may be held responsible for events when intentionality is completely absent, as in vicarious and strict liability rules. They may also be held responsible according to more strict interpretations of a given set of rules. For example, standards of negligence may be more strict for authorities than they otherwise would be. In general, superiors are being judged according to a combination of mental

state and diffuse role obligations and thus should be more responsible than equals for an action of any given degree of purposiveness.

In terms of the usual social psychological way of viewing responsibility judgments, the Heiderian levels, this produces a methodological difficulty: The "same" mental state levels theoretically should not produce the same outcome in authoritative and equal relationships. Thus how one manipulates mental state becomes an issue in comparing authorities and equals. Our original objective for the four core stories was to manipulate mental state between negligence and intentionality. However, pretests indicated no appreciable variance in responsibility in authoritative stories unless we varied mental state around lower levels. (As our model suggests, actors in superior positions were invariably being assigned top levels of responsibility for intentional acts, while equal actors were not.) Thus we settled on variations between carelessness and intentionality for the equal stories and between accidents with some carelessness versus clear indications of recklessness for the authority stories.<sup>14</sup> Therefore, in order to control for differences in levels of mental state between stories, analyses involving formal and informal predictions about authority versus equality will use techniques designed to control for differences in perceived purposiveness of the acts depicted.

Moreover, as was noted in Hypothesis 5, authoritative actors were also described as being themselves under the influence of a superior in half of the stories. This intermediate position can confuse the impact of an actor's authority on responsibility. Thus we would expect any pure effect of authority versus equality to appear in vignettes where influence from another was absent.

It was also plausible to expect a status-contract effect because of the stories chosen. These stories were selected to represent as closely as possible the usual situations of wrongdoing in the relevant settings.

In status relationships, we felt, it is often the case that the victim is in some way involved or implicated. This involvement can even follow simply from the presumption of extended interaction and generalized exchanges that characterize those relationships. The incidents we depicted followed this pattern.<sup>15</sup> Thus less responsibility should be attributed to the actor in these status stories, since the victim's participation would reduce the actor's responsibility. Had we depicted completely unmotivated wrongdoing in such stories, however, we would have expected responsibility to be judged more severely in the status stories.

Thus the general model suggested a possible effect for authority versus equality, which in the present design would be partly masked by the presence of influence from another. We also anticipated a possible effect for status versus contract because of the implicit victim involvement in the status incidents.

The interactions of roles and deeds. We expected that the role dimensions would create normative contexts for the use of three kinds of information: mental state, past pattern of behavior, and influence from another.<sup>16</sup> Statistically, this normative effect would appear as interactions between the experimental variables and the role typology.

Hypothesis 6. We hypothesized that the impact of mental state on responsibility would be affected by both the solidarity and the hierarchy of the relationship. Concerning solidarity, status relationships are characterized by the parties' having greater knowledge of each other's past and greater concern with the relationship's future. This should lead participants in such situations to take a more subjective orientation to others' deeds, perceiving and using mental state information more. We believed that this tendency would be strong enough that even our respondents, reacting at best vicariously to the act, would weigh mental state more heavily in status

than in contract stories because of their social knowledge of the content of such ties. The general hypothesis is that outside observers as well as participants judge deeds between those closely tied more subjectively than deeds between those more loosely tied.

Hypothesis 7-8. The impact of authority on the use of mental state information is theoretically more complex, both in general and in the specific examples used here. As was noted above, authorities are potentially held responsible at quite low levels of involvement of mental state because of their role obligations. Equals are not held responsible, or are held less responsible, because their wrongdoing is judged more heavily on the basis of their purposiveness or negligence. This implies an interaction between mental state and hierarchy: Mental state information should have a greater impact on responsibility for equals than for authorities. However, this prediction is confounded by the fact that information about mental state can potentially be used to assess the nature of a superior's unfulfilled role obligations as well as to assess mental involvement per se.<sup>17</sup> Thus for superiors we hypothesize that mental state information may alter responsibility either indirectly, by affecting judged purposiveness or avoidability, or directly, by affecting judgments of unmet obligations. For equals, in contrast, the only effect of mental state information should be through its impact on mental state judgments; and, as hypothesized above, this direct effect should be larger than that for authorities.

Hypothesis 9. This model of an authority's responsibility as flowing from mental state information plus diffuse role obligations implies a final hypothesis regarding hierarchy. Differences between the responsibilities of an authority and an equal actor should be greatest at lower Heiderian levels of involvement of mental state, where authorities are being held responsible to a substantially greater degree than are equals. The gap between authority and equal

should be greatest where association with an act or commission of that act are involved. Given the presumed importance of mental state in adult responsibility judgments, responsibilities of authority and equal should be more similar for negligent acts. And as action becomes more clearly intentional, judgments should converge toward full responsibility for both authority and equal.

Hypothesis 10. As the discussion of solidarity and mental state suggests, status relations involve greater emphasis on and awareness of past patterns of behavior. We thus expected that variations in past pattern, like variations in mental state, would have greater impact in status than in contract stories.

Hypothesis 11. One obvious expectation about the effect of role relations on other's influence has already been noted in Hypothesis 5: influence from equals should reduce an actor's responsibility less than does influence from superiors. Cross-cutting this, however, is an expectation of somewhat greater subtlety. Because status relations involve an ongoing tie of mutual obligation, one's superior in a status relationship should have less coercive control. Thus the impact of another's influence should be strongest in authority contract settings, weaker in authority status settings, and weakest in settings of equality between actor and another. Influence from another person should not have a unitary effect on an actor's responsibility for wrongdoing. The other person's role relation to the actor provides a key piece of interpretive information.

In summary, the model of responsibility norms as involving both roles and deeds suggested an empirical design to test for effects of deeds, effects of role dimensions themselves, and effects of interactions between roles

and deeds. The interactions in particular represent the notion that roles serve as normative contexts, altering the impact of variables previously studied in isolation.

#### Data Analysis and Results

Analysis Procedures. The initial procedure for the core stories involves a somewhat unusual analysis of variance. The design consists of four between-subjects factors (intent, consequence, past pattern, and other's influence) and two within-subjects factors (relationship hierarchy and solidarity), all varied dichotomously. Each respondent thus heard four sixty-fourths of a fully repeated design. Because higher-order interactions of the between-subjects factors are confounded with the within-subjects factors in such a design, we did not use a conventional mixed model anova. Instead, we first created an extended data file that treated each response as independent. Second, we created four artificial between-subjects data sets by randomly selecting one answer from each respondent within the constraint that all four stories were assigned to one of the data sets. This produced four quasi-independent replications of the study as a fully between-subjects design. Then we analyzed each data set as a  $2^6$  design and examined the coefficients for consistency across the four replications plus the extended file analysis. This procedure improves on that currently in use by Rossi and colleagues for experiments in surveys (e.g., Alves and Rossi, 1978; Nock and Rossi, 1978) because we were able to produce a discrete number of full replications of the design where they were not.

Since the experiment was conducted in the field and respondents given simple random assignment to conditions, cell  $n$ 's were slightly unequal. All analyses of variance reported actually used contrast coded dummy variable regression to produce a true least squares solution.

Manipulation checks. The relationships between the experimental variations and the manipulation check items serve to demonstrate that any absence of

effect in the data is not a result of a failed manipulation. In addition, we did not expect the manipulations to affect just "their variable" and no other. The concepts involved-- purposiveness, seriousness, avoidability, and predictability-- are not orthogonal concepts, though our manipulations of their corresponding experimental manipulations were. Explorations into how these items interrelate can suggest how the concepts are in fact linked by the respondents themselves. This Table 2 presents the relationships between each manipulation and all manipulation check items by story.

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 Insert Table 2 about here  
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Table 2 can be summarized simply in one sense: all manipulations worked. The effects of a given manipulation were always significant on the relevant manipulation check, and in almost all cases those effects were substantially stronger than the effect of any other manipulation on that item. But as expected, the interrelationships prove interesting. The most important involve the two checks for mental state and the relation of intention and past pattern. The intent manipulation significantly affected purposiveness in all stories, but affected avoidability only in the hierarchical stories. This pattern reflects respondents' strong tendency to say that the result was avoidable in the equal relationship stories, confirming our priori assessment that those stories were constructed around higher average levels of the mental state variable. Mental state and past pattern, in turn, are linked. A bad past pattern of behavior always produced a higher rated purposiveness; higher manipulated intentionality also produced judgments that the deed was more predictable. (The latter effect was significant only in the hierarchical stories, but the lack of significance in the other stories may reflect the higher overall intentionality portrayed rather than any effect of role relationship per se.) Such results conform closely to common sense.

Previously "bad apples" are likely to be perceived as meaning to be rotten when they act badly again; and more intentional action is likely to be interpreted as more predictable. Respondents appeared to impose the sort of consistency on behavior that Kelley's (1967, 1973) attributional approach would predict. Overall, the results for the manipulation checks were both methodologically satisfying and suggestive of the ways in which the concepts may interrelate. These interrelations might provide hints for further research in the general area of causal attribution processes.<sup>18</sup>

Overall analysis of variance of responsibility attribution. Results for the overall analysis and the four quasi-independent replications are presented in Table 3. For the extended file analysis, the F tests, significance levels, and unstandardized coefficients are reported for all results significant at the conventional  $p=.05$  level in the saturated model.<sup>19</sup> For the replications, the corresponding coefficients are presented. All coefficients are contrast coded to reflect the difference between the mean and the "high" cells. They should be doubled to obtain the difference between high and low cells on the 11-point scale for the dependent variable.

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 Insert Table 3 about here  
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Since the question of the true effect of roles on responsibility requires some special accounting for the issue of differences in purposiveness, we turn first to a summary of the main effects of the deed-related and contextual variables. All results are straightforward. Mental state had a powerful main effect on responsibility assigned, as suggested by Hypothesis 1 as well as all psychological and legal theories. Greater intentionality produced greater responsibility. Seriousness of consequences had a small effect on responsibility judgments, but the effect is unstable across replications. The direction of this unstable effect, as expected in Hypothesis 2, is that more

severe consequences produced higher responsibility. Past pattern of bad versus good behavior had a sizeable effect on responsibility, with bad past behavior leading to greater responsibility as predicted in Hypothesis 3. Finally, influence from another had a small but stable main effect on responsibility, such that the actor was less responsible when under influence from another. As noted in Hypothesis 5, we expected this main effect to be small if it existed at all, given predicted differences between equal and authoritative influence.

Table 3 also shows what appear to be dramatic effects of both role dimensions. These main effects indicate more responsibility assignment in contract than in status situations and more in equal than in authoritative situations. Taken together, these apparent effects are more than double the effect of manipulated mental state. However, as indicated above, examining effects of role dimensions requires taking account of both the presence versus absence of another's influence and the differential intentionality in the stories presented. Figure 1 presents path models predicting to responsibility with other's influence present versus other's influence absent. The path models include the exogenous variables mental state, hierarchy, and solidarity; and the endogenous variables "on purpose" and "avoidability" as controls for perceived mental involvement of the actor.<sup>19a</sup> This control strategy is a conservative one, as it removes from the direct effects of roles any aspect of "roles themselves" that lead to differences in inferred mental state as well as removing confounding due to different mental state manipulations. The models exclude the interaction between role dimensions because it was unstable across the quasi-independent replications. Models were run in the extended file as well as in the replication files. For simplicity, the range of path coefficients from the replications is summarized in parentheses below the coefficients for the overall analysis.

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 Insert Figure 1 about here  
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Figure 1a shows that solidarity continued to have a sizeable and stable direct effect on responsibility when other's influence was absent. As in the initial analysis, more responsibility was assigned in contract situations than in status situations, confirming our informal expectations. Hierarchy had a smaller and less stable direct effect, but in the generally expected direction: Authorities were more responsible than equal actors with purposiveness controlled and influence from another on the actor eliminated.

As expected, Figure 1b illustrates that influence from another serves to muddy the waters of both role effects. The status-contract direct effect, though still significant, was reduced. As we shall see below, this results from the predicted impact of other's influence, which reduces responsibility more in contract stories than in status stories. And the authority-equal effect was reversed: the introduction of other's influence depressed the responsibility of authorities slightly below that of equals. Thus the authority who is also a subordinate loses the responsibility edge that our model suggested and our data confirmed in Figure 1a.<sup>20</sup>

The overall impact of the role variations thus proves to be sizeable and consistent with general expectations. Size comparisons with direct or indirect effect of mental state on responsibility are unwarranted, however, for a number of conflicting reasons. First, mental state was not itself varied across all the possible Heiderian levels, but only dichotomously in any given story. Second, the strategy of controlling for perceived mental state is, as noted above, a conservative one that may remove an unknown component of "true" mental state difference produced by roles themselves. Finally, as suggested in Hypothesis 8, the direct path from mental state to responsibility is an inappropriate indicator of mental state per se.

Interaction effects. We had predicted interactions between mental state and past pattern, solidarity, and hierarchy; between past pattern and solidarity; and between other's influence and both role dimensions. As the overall analysis in Table 3 indicates, only some of these expectations were confirmed. We shall discuss the results in order of the theoretical importance of the issues, treating the mental state-role interactions first, followed by the other's influence-role interactions, and concluding with the past pattern interactions.

In Hypothesis 6 we argued that mental state should prove more important in status relationships than in contract ones. Although there was no significant interaction between mental state and solidarity, there was a small three-way interaction of mental state, solidarity, and consequences. This interaction, which was of modest magnitude and relatively unstable across replications, is presented in Table 4. Tests for the mental state-solidarity interaction show that when consequences were severe, variation in mental state had a significantly greater effect on responsibility in status stories. This relationship, which is consistent with the original hypothesis, did not hold when consequences are mild. The data thus imply that when things turn out badly and people search for an explanation, they are more likely to turn to mental state information in status relationships. The relationship, however, is much weaker than we had predicted.

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 Insert Table 4 about here  
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The predicted relationships of mental state and hierarchy were more complex. Table 5 presents the means for both responsibility and purposiveness judgments by levels of mental state and hierarchy. Looking first at responsibility alone, Table 5 explains the significant mental state-hierarchy interaction from Table 3. Changes from low to high levels of manipulated mental state made more difference in authoritative than equal relations. The corresponding purposiveness

ratings indicate that this responsibility difference occurred in the face of an opposite pattern for judged purposiveness. Differences in purposiveness from low to high levels of mental state were significantly smaller for the authoritative stories. (From a separate analysis of variance on purposiveness,  $F(1, 2605)$  for the interaction=4.39,  $p=.04$ .) These results indicate that respondents were quite attentive to small differences in mental state when they occurred for authorities, more attentive than for larger changes when the actor and victim were equals, in apparent contradiction to Hypothesis 7.

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 Insert Table 5 about here  
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Hypothesis 8 suggested, however, that mental state information can have two uses. It can directly affect judgments of an actor's mental involvement, but it can also be relevant to assessing an actor's obligations. Figure 2 therefore presents the path models for the direct and indirect effects of mental state separately for authorities and equals. (Results are collapsed across the other's influence variable because it did not significantly alter the patterns shown.) The figure indicates clearly that for equal actors, mental state information was information about purposiveness or avoidability; and mental state had a powerful effect on responsibility through its effect on these variables. The indirect effects of mental state were similar for authorities, contrary to Hypothesis 7. But there was also a significant direct path from mental state to responsibility for authorities, a path that we interpret in terms of authorities' obligations of attention and foresight. Thus Hypothesis 8 is confirmed, in that use of mental state information in judging authorities is something "more" than previous psychological models suggest. We argue that the "more" reflects the diffuse obligations of the authority's role.

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 Insert Figure 2 about here  
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Hypothesis 9 argued that the differences between authorities and other actors are at their maximum at low levels of involvement of mental state, and that the responsibilities of authorities and equals tend to converge when action is fully intentional. Given the differences in our manipulations of mental state for authorities and equals, an adequate test of this hypothesis must use respondents' own perceptions of how purposive the actions were. Thus Table 6 shows the effects of hierarchy and mental state on responsibility stratified by levels of perceived purposiveness. Judged purposiveness was divided for convenience into categories labeled here as accidental, careless, and intentional acts. Results are presented separately for conditions where other's influence was absent and present to clarify interpretations.

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 Insert Table 6 about here  
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Results for the conditions with other's influence absent clearly show the predicted pattern. When an action was judged as accidental, authorities were significantly more responsible than equals. In addition, the now-familiar interaction appeared such that change in level of mental state had a significant effect for authorities, but not for equals, with perceived purposiveness controlled. When the action was judged as careless, authorities were again significantly more responsible than equals. The interaction, though still visually evident, was no longer significant. Finally, when action was judged as intentional, no differences were significant -- judgments of authorities and equals had converged.

Even with the confounding presence of influence from another party, the right side of Table 6 shows the same interaction of hierarchy and mental

state for acts judged as either accidental or careless. Remaining significant effects of mental state itself in these subtables are functions of the interactions. Although the main effects of hierarchy itself are neutralized or reversed by the presence of another's influence (as Figure 1 had already demonstrated), two points are striking. First, the interactions remain. Second, the models for authorities and equals again converge in the subtable for action perceived as intentional. Thus Hypothesis 9 is clearly confirmed. The normative models of responsibility for authorities and equals converge to linear "main effects" only when purposive action is involved.

As the discussion of results so far has already anticipated, the interaction of other's influence with hierarchy was substantial and consistent with Hypothesis 5. The means for the significant interaction, first shown in Table 3, are presented in Table 7. Influence from another had a greater impact on responsibility in authoritative settings (where the other was an authority) than in equal settings (where the other was an equal). In addition, Hypothesis 11 suggested that the impact of authority should be particularly strong in contract settings. Although the contract-status difference was not large enough to produce a significant three-way interaction, results were indeed consistent with the hypothesis. The impact of another's influence was only marginally significant in the status story ( $.10 < p < .05$ ), while it was highly significant in the contract story ( $p < .001$ ). Thus influence from another proved to have finely differentiated effect on an actor's responsibility, as predicted, depending on the type of role relationship involved.

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 Insert Table 7 about here  
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The final predicted interactions involved past pattern of behavior. Hypothesis 10, which had argued for an interaction between past pattern and solidarity of the role relationship, was simply disconfirmed. Hypothesis 4,



which argued that past pattern and mental state should interact, received some indirect support. Although there was no significant interaction in the overall analyses of responsibility, it is noteworthy that the results for manipulation checks presented in Table 2 did show effects of past pattern on perceived purposiveness. This suggested a link between those concepts in the eyes of respondents. Inspired by the analyses in Figure 2 (where authorities and equals differed in the direct effect of mental state on responsibility), we therefore conducted parallel path models for the direct and indirect effects of past pattern on responsibility with purposiveness and avoidability controlled. We again collapsed across other's influence because it did not alter the pattern of results. The outcome, summarized in Figure 3, is instructive. For equal actors, there was no effect of a past pattern of behavior on responsibility other than through its effect on perceived mental state. For authorities, in contrast, there was a significant direct effect of past pattern on responsibility. These results again indicate that the normative models of responsibility for authorities and equals are different. For authorities, a past pattern of behavior is something other than a clue to the mental state of the actor; for equals, it is not.

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 Insert Figure 3 about here  
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Summary of basic results. The findings so far have generally supported the proposed model of how adults judge responsibility for wrongdoing.<sup>21</sup> It is a matter of more than those variables, intent and consequences, so long studied by psychologists. Responsibility is instead a matter of role expectations as well as physical actions. The role relations introduced into our vignettes produced both sizeable main effects on responsibility judgments and theoretically important and sizeable interactions with traditional deed-related variables. Neither an actor's mental state, nor the actor's past pattern

of behavior, nor the possible presence of influence from a third party, can be considered as determinants of responsibility in isolation from the kind of role relationship involved. In general, the most striking findings concerned the normative structure of wrongdoing for authorities versus equals. The judgment of responsibility for authorities was different in ways consistent with predictions based on those authorities' role obligations.

#### Subsidiary Results and Threats to Inference

Despite the general confirmation of the model of responsibility judgments, two subsidiary analyses and one major threat to validity remain to be addressed. A first subsidiary analysis concerns the other stories presented to respondents, the more traditional auto accidents and crime story. The standard variables of mental state and consequences were also manipulated there, and the psychologist interested in salvaging consequence severity as an issue in responsibility might wonder whether situations where no prior roles are involved are the appropriate "home" for the study of consequences. A second subsidiary analysis, in light of the importance of authority-equal differences observed, concerns the responsibility of the third party who influenced the actor. If authorities and equals in fact differ in the ways we have suggested, then results for the other's responsibility are a fascinating part of the puzzle, given that the third parties were themselves either authorities or equals. Finally, the major threat to valid inference concerns the limitation of the main interview to single stories of each role type. This limitation is most important where predictions involved differences between individual stories, as they did for other's influence; it is less important where predictions involved pairs of stories versus other pairs, as was otherwise always the case. Below we shall present results from a story included in the mailback questionnaire that varied role relations between actor and other in a single setting, providing a stringent test for the validity of our conclusions about other's influence.

Other stories presented. As was noted earlier, the crime story included variations in the actor's mental state, the act's consequences, and the actor's past pattern of behavior. Two auto accidents were presented: in one, the three variables of mental state, consequences, and past pattern were varied; in the other, the actor's social status replaced past pattern. For present purposes, the results from these vignettes can be presented in brief verbal summary. Mental state had a significant effect on responsibility in both auto accidents. Past pattern, where it was included, also affected responsibility, but more weakly than mental state. The actor's social status had no effects except for interactions with mental state and consequences that turned out to be complex and dependent on the respondent's sex. Consequence severity per se affected responsibility in neither story. In the crime story, somewhat surprisingly, only past pattern (presence or absence of a prior record) affected responsibility at all. The lack of results for mental state may perhaps be attributed to a ceiling effect; given that most respondents rated the criminal as fully responsible for the deed. The overall pattern of results across these stories, then, virtually mirrors the results for the stories involving role relations. In the absence of role relations, as in their presence, mental state is the most important element of deeds, followed by the actor's past pattern of behavior. Consequence severity is of negligible importance irrespective of the setting.

Responsibility of the influencing other. Two follow-up questions asked about the responsibility of the other when other's influence was present. We first asked respondents whether the other person had any responsibility for what happened; and if so, whether it was less than the actor's, equal, more than the actor's, or all of the responsibility involved. We then constructed a composite variable ranging from one (none) to five (all), for the responsibility of the other person relative to the actor. Analyses of variance were then conducted on this variable using

the remaining 2<sup>5</sup> saturated model (omitting other's influence and its interactions, of course, because the item was only asked when influence was present). The results for the only significant and stable effects are presented in Table 8.

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 Insert Table 8 about here  
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There were two clearly observable main effects of role relations on the other's responsibility. Others who were in contract relations were more responsible than others in status relations, and others who were authorities were substantially more responsible than others who were equals. These results are mirrors of the previously noted effects of other's influence on the actor involved. The four means also lined up in perfect theoretical order, with responsibility for a status equal lowest, followed by responsibility for a contract equal, followed by a status authority, and with top responsibility for a contract authority. The gaps between these means were unequal, however, producing a significant interaction effect as well.

The absence of any effect of the actor's own mental state is particularly striking given its role in the main analyses. It would seem plausible that an actor who meant to perform a misdeed would retain more responsibility even if that misdeed was initiated by another. Respondents' reactions are congruent, however, with a major theory of the role of causation in the law that derives from philosophical ordinary language analysis (Hart and Honoré, 1959). According to that approach, humans tend to push causal chains back to a voluntary human actor who initiates a deed. These results simply confirm that in pushing back the causal chain, orders from a superior are more clearly initiatory than persuasion from an equal; and influence from someone socially distant is more clearly initiatory than influence from another who is close to the actor. The questions respondents were answering

here were about the starting point of the causal chain, and therefore the actor's own mental involvement was indeed irrelevant.

Such results are suggestive of a deeper conceptual point about responsibility judgments. It is quite plausible for an actor to be "fully responsible" at the same time that another party influencing the actor is more responsible for what happened. The first question deals with the liability of a person for sanctions; the second, with the relative liability of another for potentially greater sanctions. Here the pattern of results for the actor's responsibility, coupled with those for the influencing other's responsibility, suggests that respondents were implicitly using a "200%" rule rather than a "100%" rule in conceptualizing responsibility itself. Given the ubiquitous presence of human causal chains in modern bureaucratic states, the question of how humans judge absolute versus relative responsibility for wrongdoing is clearly one worthy of further investigation.

Meeting the threat to inference: Role relations in a single story. Although time pressures prevented our using more than six vignettes in the main instrument, we were sensitive to the possible claim that some results reflected idiosyncratic elements in the stories chosen rather than "true" effects of relationships. The most vulnerable result concerned the different effects of authoritative third parties in status and contract relations, both because the prediction involved comparing isolated stories and because the status authority in the main instrument was a husband (who some observers might plausibly feel was not an authority over a wife; see footnote 12). Therefore we included one story in the mailback instrument in which role relations between actor and other were varied in a single setting. Since the mailback was returned by only about half of the survey respondents, we cannot make the same claims to generalizability that are available for the core stories.<sup>22</sup> However, given that the mailback sample is still considerably more representative of an adult population than is characteristic of related psychological research,

we felt that the additional vignette could provide key support -- or disconfirmation -- for the theoretical arguments.

The vignette involved a man who infected some infants in a hospital where he worked by staying on the job while ill. The experimental manipulations included the actor's mental state plus three variables related to another's influence. These variables were the other's hierarchy (coworker or supervisor), solidarity (was a friend/friendship not mentioned), and exertion of control (suggested/got angry and told the actor to stay on the job). Note that solidarity is quite a weak manipulation in this story, such that if its results replicated those from the main design we would be quite confident that no idiosyncratic interpretations had produced the initial results.

Table 9 presents the significant results from a 2<sup>4</sup> analysis of variance for responsibility assigned to the actor. Three of the four main effects were significant. Although mental state had no appreciable effect, an examination of the manipulation checks revealed no significant differences between conditions, indicating that mental state was not successfully manipulated in the story. Thus the failure of mental state to affect responsibility does not contradict earlier findings about the importance of that variable. All other main effects were as expected. The actor was less responsible when the other person was a supervisor, when the other person was not a friend, and when the other person got angry rather than suggested that he stay. We expected influence from an authoritative other to reduce responsibility more because the role relations turn even a suggestion into a directive. Similarly, we expected that in a friendship (i.e., status) relation the worker would have more countervailing influence on the other, and hence retain more responsibility, than in the absence of friendship. Finally, the exertion of angry control by another more clearly provides an external cause for the behavior, a voluntary human further back in the causal chain.

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 Insert Table 9 about here.  
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As Table 9 indicates, there were also significant interaction effects between hierarchy and control and between hierarchy and solidarity. The means for these interactions appear in Table 10a and 10b. From the first interaction we see that the control exerted by the other made little difference in an equal relationship, but more difference in an authoritative one. This is consistent with the general pattern that influence from an equal is simply discounted in attributing responsibility, however that influence is clothed. It adds to our picture of authority the point that strongly worded directives have more impact, presumably because they more clearly remove causal agency from the actor. The second interaction shows that the presence of solidarity made essentially no difference in equal relations, but has a large effect in authoritative relations. An authority who was also a friend had substantially less impact on an actor's responsibility. This interaction replicates within a single vignette the pattern found in the main instrument for authorities across status and contract stories, and lends confidence that the result from the main instrument is indeed a result of the role relations themselves rather than idiosyncratic elements.

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Given the failure of the mental state manipulation in this vignette we were unable to examine the mental state-role interactions found in the main analyses. We did find, however, that the hierarchy variable (supervisor versus coworker) had a significant effect on the "on purpose" manipulation check ( $r=.43, p<.0001$ ). The actor was seen as acting less purposively when influenced by a boss than by a coworker. As the "on purpose" variable in turn correlated with responsibility judgments in this story, influence from authority partly affected responsibility

through altering the perceived mental state of the actor. Yet the impact of authority was not solely due to its effect on purposiveness. A path model including all three role-related variables as exogenous variables, purposiveness as endogenous, and responsibility as the dependent variable, showed that the effects of all three exogenous variables were essentially unchanged and still significant as direct paths. This result suggests that influence from an authority has two effects: it alters responsibility by modifying perceptions of the actor's mental state, but it also affects responsibility by reducing the actor's role obligation to avoid misdeeds. Thus the authority-actor link here shows intriguing parallels with results for the authority-victim link in the main analysis. In both cases the responsibility that devolves on the actor is a function of both perceived mental state and role obligations themselves.

#### Conclusions and Suggestions for Further Research

Psychologists since Jean Piaget have had what is claimed to be a universal model for the human judgment of wrongdoing. Yet that model ignores the social setting of action in favor of focus on the deed itself-- in particular, on the actor's intent and the act's consequences. From a sociological viewpoint, it is clear that responsibility for wrongdoing should be a function of the social expectations held for the actor as well as the deed performed. These social expectations include generalized norms for behavior, particularistic considerations arising in any given situation, and socially differentiated expectations: social roles. We have argued that language, law, and sociological theory each incorporate two fundamental dimensions of social roles that may govern responsibility judgments. These dimensions are the hierarchy of the relationship -

whether it is between equals or an authority and subordinate - and the solidarity of the relationship - whether it is between those bonded by a solidary status or linked by an implicit or explicit contract. The present paper constituted a first empirical examination of whether roles as well as deeds are crucial to understanding human responsibility judgments.

The data set, a random sample of the Detroit S.M.S.A., included responses to experimentally varied vignettes about wrongdoing in everyday life, as well as the more formal legal situations of auto accidents and crime. We included variations in the deed performed, the traditional psychological variables of actor's mental state and act's consequences; variations in contextual aspects of the deed, the actor's past pattern of behavior and the presence of influence from another party; and variations in the two role dimensions of hierarchy and solidarity. Most of our expectations about the effects of deed-related variations, of role dimensions, and the interactions of the two were confirmed.

The way deeds affect judgments of wrongdoing appears clear-cut in the present data. Mental state of the actor was a critically important determinant of responsibility. The actor's past pattern of behavior was a substantial, but less important, determinant. As prior developmental data suggested, severity of an action's consequences had a trivial effect on responsibility judgments in our role-related stories, and no effect on judging either auto accidents or crime vignettes. Finally, influence from another person on the actor had a small overall effect on the actor's responsibility. As we predicted, however, the meaning and impact of influence from another depended on the role relationships between the parties involved.

We argue that roles are theoretically normative contexts for interpreting actions. But they may have direct impact on judgments of responsibility, as well as altering the meaning or use of deed-related information. We found main effects

of both role dimensions, such that authorities were held more responsible than equals and persons in contractual relations to their victims more responsible than those in status relations. The effect of solidarity on responsibility was particularly potent, but we believe that it is due to our attempt to present "typical" instances of wrongdoing in the role relationships involved. The victims in our status relationship vignettes were to some extent implicated in the onset of the actor's deed, as is probably typical of wrongdoing between those closely tied. Child abusers, wife abusers, bullies, and the like often have excuses that involve the victim's deeds. Completely unmotivated or unprovoked wrongdoing in solidary relationships, in contrast, would probably evoke more severe responsibility judgments and sanctions than those meted out to actors in contractual relations. Thus the "main effects" of role ties on judgments of wrongdoing are still at issue. Further examination of norms about wrongdoing in status relations is especially important.

We expected both role dimensions to interact with deed-related variables in determining responsibility. We were disappointed in the results for the solidarity dimension. Only weak evidence emerged that the kind of tie between participants affected use of deed-related information, although that evidence involved the theoretically crucial variable of the actor's mental state. Hierarchy, however, altered the impact of all the important deed-related variables. The data support our arguments that authorities and equals are not judged by the same normative model of responsibility for wrongdoing. Being an authority creates a set of heightened expectations about one's behavior and thus establishes obligations over and above the general social obligations not to act carelessly nor to intentionally cause harm.

This set of heightened expectations for authorities had several effects in the present data. First, authorities were more responsible than equals for actions of a given degree of purposiveness. Second, mental state information had a

greater impact on judgments of authorities than on judgments of equals. This effect, however, must be understood in light of the complex normative role of mental state information in evaluating authorities. Mental state's impact on the responsibility of equal actors can be understood simply as imparting information about the actor's purpose and the deed's avoidability. Its effect is entirely deed-related. But for authorities, mental state information affects responsibility both by altering perceptions of purposiveness or avoidability and by directly affecting the actor's responsibility. We interpret this direct effect as evidence that authorities have diffuse role obligations that include obligations to be attentive to the situation and to safeguard the welfare of subordinates. Fulfillment of such obligations is measured in part by the authority's mental state when the deed occurred. Third, these obligations involve less than intentional action. Where actions were judged as purposive the normative models for authorities and equals converged to one based on purposiveness alone.

An actor's past pattern of behavior, like his or her mental state, represented a clue to a deed's purposiveness or avoidability when respondents judged equal actors. For authorities, past pattern had an effect on responsibility over and above its impact through the purposiveness and avoidability variables. We again infer that this reflects the authority's role obligations, and a bad past pattern of behavior sensitizes observers that obligations have not been met.

Finally, influence from another person had no impact on the responsibility of equal actors. It had a large impact for authorities in contractual relations and a smaller one for authorities in status relations, as we had predicted. Given the importance of chains of command in bureaucratic, political, and military hierarchies, further exploration of how the responsibility of authorities is diminished by the intervention of "higher ups" is a key area for further study.

Suggestions for further research. Several important steps remain undone in the present work. For reasons of brevity, we have concentrated on judgments of responsibility for wrongdoing. But the sanctions that respondents wished to employ are another aspect of how humans assess wrongdoing; a paper on that topic is in preparation. We have also spoken of "humans" and of "norms" as if the humans are undifferentiated and the norms universal. Yet as any sociologist or anthropologist would reply, perhaps the normative structure of wrongdoing is different for some demographic groups or for some other cultures. Within this society, it is important to explore possible differences between male and female judgments of wrongdoing, for recent psychological research suggests that the "male model" reflected in some current theories may not apply to females (e.g., Gilligan, 1978; Hoffman, 1975; Sampson, 1978). It appears equally important to search for social class or race differences, given evidence that divergent socialization practices across classes and races lead to different models of morality (e.g., Kerckhoff, 1973; Kohn, 1969). In the present paper we wished to ask whether there was any benefit to be obtained from a roles-and-deeds model of judging wrongdoing; in a future paper, we will ask whether all parts of that model hold across important social categories.

A final barrier is culture itself. We have explored judgments of wrongdoing in a country that is ideologically individualistic with regard to wrongdoing. To find effects of role relations on responsibility in such a culture is to find them in a place where the deck is probably stacked in favor of deed-related or contextual variables. We argue generally that knowledge of roles and knowledge of deeds are both crucial to judging wrongdoing in all cultures, though cultures may differentially emphasize either actors' deeds or their role obligations. Thus we have collaborated with a group of Japanese scholars to replicate

the basic Detroit study in Yokohama and Kanazawa, Japan.<sup>23</sup> Reports on those data sets will also be forthcoming; we expect them to show greater emphasis on role relations as normative principles in more obligation-oriented Japan.

Beyond these ongoing efforts, a variety of research opportunities are available to social scientists interested in a more comprehensive model of how humans judge wrongdoing. Methodologically, we and others should move beyond the limited stimuli presented in this study, to find out whether other role relationships that ought to yield the same results actually do so. Investigating roles that are intermediate on either the hierarchy or solidarity dimension is a further step. Conceptually, exploring the tensions in solidary relations where the victim is not implicated and exploring in depth how humans judge wrongdoing in chains of authority are important tasks to which we have already alluded. What we hope to have shown is that no model of how humans judge wrongdoing can be complete without considering role expectations and their effects. But we have begun, not ended, the investigation of those effects.

Broader implications. If, as it now appears, role expectations play a fundamental part in the judgment of wrongdoing, they may also have practical implications for sanctioning practices. Most obviously, many aspects of the legal process, from jury trials to legislative and administrative rule making, may be influenced by fuller consideration of role expectations. Our culture's interpretive ideology of wrongdoing usually rests on what we have called deed-related or contextual factors. Thus the legal model has basically assumed a "normal situation" which is contractual and equal. Yet results indicate that this "normal situation" is not uniformly transferrable to other relationships. The presence of hierarchy and the presence of status ties fundamentally alter responsibility judgments.

All of us are generally aware of this problem, as when we feel that the law does a poor job of settling domestic disputes, or when we feel that bureaucratic rules fail to pin responsibility on anyone. But it is important to move beyond this general sense of unease to work toward a deeper understanding of how rules and legal institutions function (or should function) when confronting different role relationships.

Finally, at a more theoretical level, studying the impact of roles on judgments of wrongdoing should provide a better understanding of roles themselves. A role is, ultimately, a set of expectations based upon certain obligations. To study the process of holding individuals to account when obligations are breached is to study roles, role boundaries, and the ways in which they mesh to form the horizontal and vertical web of society itself.

FOOTNOTES

1. In The Moral Judgment of the Child, Piaget argued that children shift from emphasis on the objective consequences of action as a determinant of its wrongfulness to emphasis on the actor's subjective intent. Within psychology, moral development has become an area rich in research and controversy since Piaget (see, e.g., Kohlberg, 1969; Lickona, 1976). For present purposes, however, the importance of Piaget's contribution is that it centered theorizing about responsibility around the hoped-for universals of judgments of actors' intention and actions' consequences. Research following from Heider's (1958) elaboration upon Piaget has emphasized either the development of responsibility judgments in children (e.g., Shaw and Sulzer, 1964; Harris, 1977; Fincham and Jaspars, forthcoming) or adult judgments of responsibility for accidents, with primary concern for the effect of severity of consequences (e.g., Walster, 1966; Shaver, 1970; Akkelin, Oakley, and Mynatt, 1979).
2. Other recent critiques have begun to address the issues of whether there is a single continuum involved and whether there is even a single underlying concept of responsibility (e.g., Fishbein and Ajzen, 1973; Vidmar and Crinklaw, 1974; Harvey and Rule, 1978). Yet these critiques, save that of Harvey and Rule, have still focused on responsibility as arising from the deeds committed by an actor. Harvey and Rule have begun to argue that responsibility is a matter of "oughts" as well as actions in a manner similar to Hamilton (1978); but they have not addressed the issue of whether "oughts" are socially differentiated by role positions or other factors.
3. In discussing the dimension that we are calling hierarchy, Brown actually uses the term status. What he means by status, however, is clearly authority-equality-subordination; and we prefer to reserve the term status for a different distinction discussed below.
4. This is not to suggest that Japanese are insensitive to the issue of solidarity, but merely to emphasize that their language is rich in terms for hierarchy. As an example of their use of solidarity information, the Japanese use four verbs that translate into the English verb "to give." These four verbs reflect both the hierarchy of the relationship between giver and receiver and their personal closeness or distance. Gift giving is an extremely important aspect of Japanese social relations.
5. For example, strict liability standards have been adopted against employers in the area of workman's injuries and against manufacturers and retailers in the area of liability for products that contain defects. In general, the civil duty people have to each other is in part determined by the power and/or authority they have over each other (see Green, 1930). As Marshall Shapo notes in a recent work, "analysis based on power provides a most satisfactory framework for tort questions of duty, .." (1977:xiii). For him power means different ways in which people exercise control of others' destiny in particular transactions or circumstances.
6. A recent sociological controversy has concerned potential differences between criminal offenses among associates versus strangers (e.g., Black, 1976, 1979; Gottfredson and Hindelang, 1979, a,b). Both sides of the controversy agree, however, that legal processing of offenses within the bounds of family or friendship may not occur because participants themselves do not see it as a matter for the law.
7. To cite a quaint version of this legal concern, the judge in the old case of *Ritter v. Ritter* (31 Pa. 396 (1958)) argued: "The flames which litigation would kindle on the domestic hearth would consume in an instant the conjugal bond, and bring on a new era indeed -- an era of universal discord, of unchastity, of bastardy, of dissoluteness, of violence, cruelty, and murders." More recent cases involving intra-family torts have adopted a much more open



posture, often on the theory that serious torts themselves effectively dissolve the conjugal bond, and thus there is nothing left for the legal process to destroy.

8. We should emphasize that we conceive of both hierarchy and solidarity as dimensions rather than dichotomies; we are simply examining ideal-typical extremes in the present study in order to determine the usefulness of the dimensions. A number of social relations would obviously be intermediate between the ones we have looked at on one or both dimensions. The teacher-student tie, for example, is probably intermediate in solidarity throughout the life cycle and changes in its rigidity of hierarchy with the student's age.

The overall typology that results is most closely similar to the distinctions made by Peter Blau (1964) in Exchange and Power in Social Life. Blau distinguished between situations of intrinsic versus extrinsic exchange and between reciprocal versus unilateral transactions. In speaking of hierarchy and ties instead of power and exchange, we hope to subsume Blau's distinctions and add a slightly different emphasis. Obviously, a hierarchy of authority versus a situation of equality is similar to what Blau called power versus exchange. Further, what we call a contract relationship is likely to be characterized by extrinsic exchange, in which parties see each other as means toward ends. A status relationship is likely to be characterized by intrinsic exchange, in which the parties value the exchange itself. Dyadic exchange may be aptly characterized by Blau's labels. Responsibility, however, is a different story. The allocation of responsibility fundamentally rests on the existence of third parties: other people whose explicit or implicit expectations help to define the obligations of the actors. For example, to be an authority you need a subordinate-- but you also need some other person or persons who

define you as the authority, if only to enforce sanctions when called for. Thus Blau's distinctions embody much of the social psychological content of the relations we are considering. The distinctions we suggest here are an attempt to better capture the social enforcement of responsibility.

9. We also split the interview time of the D.A.S. with another project concerned with attitude-behavior consistency. Their part, approximately 20 minutes' worth of material on television watching preferences, preceded our own. Although a few of their items dealt with "police and crime" shows, and one item asked whether there was too much violence on T.V., we seriously doubt that these questions would have any sensitizing effect, given that they were embedded in a total of 49 items related to T.V. Further, any such effect would presumably be strongest for the initial story heard, and our Latin Square design ensured that each story would be heard first an approximately equal number of times.
10. In neither the crime nor the accident did we vary other's influence, as that would represent only the theoretically less interesting case of coercion. In the crime story, therefore, we varied mental state, consequences, and past pattern of behavior. Two auto accidents were actually used, alternated in the computer generation of questionnaires so that n's for the two were approximately equal. One accident examined the standard variables of mental state, consequences, and past pattern. In the other accident, we replaced past pattern with variation in the social status of the actor. This was done in part because the basic design was to be replicated by a group of Japanese colleagues on a Yokohama area sample, and both research groups were interested in exploring the effects of actors' general social status on responsibility judgments.
11. Although consequence severity might not have a powerful impact on responsibility for wrongdoing, as previous research suggests, legal theory and practice indicate that it may have a more potent impact on punishment

choices. The present design allows us to examine effects of all variables on punishment as well as responsibility, although space considerations preclude discussion of punishment in the present paper.

12. In the equal status story, where a twin harmed his brother, the other participant was a friend; in the equal contract story, where a salesman sold a customer a defective car, the other was a fellow salesman; in the authority status story, where a mother harmed her child, the other was the father; and in the authority contract story, where a foreman's disregard for safety led to a worker's injury, the other was the foreman's boss. Note that it might be argued that a husband-wife relation is actually a symmetrical one in this culture. However, it is questionable the extent to which this is true across all class and subcultural boundaries. In addition, the study was also being conducted in Japan, and eventual comparisons between views of sex roles in the two countries were of interest to the two collaborating research teams. We shall present further data below from an additional story to bolster arguments involving status authority versus contract authority in light of possible critiques that differences are due to a weak manipulation of authority in the status setting.

13. It would appear that a more natural manipulation check for a good versus bad past pattern of behavior would be a question that asked how likely the actor was to do a similar act in the future. However, the answer to such a question is confounded by the possible effects of sanctions on future action. In the crime story, for example, the actor might not repeat a bad action because imprisonment would prevent his doing so. Even in the less extreme role relation stories, sanctions might serve either to teach the offender or to prevent the offender from acting similarly again. Thus the most appropriate manipulation check appeared to be an item that asked for a Bayesian-like prior probability of the action-- i.e., whether it was predictable or not predictable given what was known about the actor.

13a. As has been noted in a prior paper (Hamilton, 1978), we wish to stress that stringency in standards of liability is not necessarily accompanied by actual stringency in sanctioning. Although authorities may be normatively bound to higher, obligation-based standards, there is an escape-hatch involved in such standards. Just as it may be difficult to say when they have been met, it is correspondingly difficult to say when they have been seriously violated. Authoritative jobs may be accompanied by a great expansion in autonomously controlled time, in the sense of time before one is called on the carpet for nonperformance. Further, such jobs are accompanied by diffuse, occupant-controlled boundaries between work time and "time off." Finally, the standards themselves may be inherently slippery ones of a morality of aspiration (Fuller, 1964), such that we are more comfortable in praising clear achievement than in blaming failure. What authoritative roles thus guarantee is increased freedom of action rather than improved behavior by actors.

14. Note that we have thus pulled apart two concepts that are combined in Heider's notion of the foreseeability level of responsibility attribution. This pulling apart is characteristic of legal handling of negligence, however, in that simple negligence is distinguished from recklessness in a variety of settings. Recklessness shades over into intentionality in legal rules, as well, such that the difference between presenting reckless acts for authorities and intentional acts for equals is probably not as great as it might seem. Legal rules such as felony murder statutes, for example, rest on the recklessness of engaging in a felony that might lead to loss of life for the victim. Hart (1968) discusses this issue in terms of the concept of oblique intention-- obviously a philosophical cousin of simple intentionality.

15. The victim's involvement in each of these stories might be of interest in evaluating results. In the equal status story, the brothers were playing baseball with a friend. Either Billy, the protagonist, or the friend (when other's influence was introduced) decided that it was Billy's turn at bat. Billy grabbed the bat and the brothers began fighting. The brother was then hit with the bat; the hit was described as accidental in the low intention conditions. Billy had either often or rarely gotten into fights before. In the authority status story, a four-year-old child was crying and wouldn't sleep. The child's mother either went in to quiet him or was told by the father to do so (when other's influence was introduced). The child either struggled in her arms and slipped, hitting a chair (low intention) or was shoved into the chair (high intention). In either case, the child was hurt on the chair. The mother was described as either frequently or rarely getting angry at her child. Thus in both stories the victim played some role in initiating the actor's deed, although only to a degree that we felt was realistic in introducing stories about intra-familial harmdoing.
16. We had no firm predictions about interactions of consequences severity with the role dimensions, as prior results for consequence severity suggested that it might play only a weak role in determining responsibility. If differential effects were to emerge, we felt that they would most plausibly involve more emphasis on consequences in the non-role relationship settings of the auto accident and crime stories.
17. Part of an authority's role obligation, for example, might be to exercise a high degree of foresight in overseeing events or the actions of others. Evidence that the actor did not exercise foresight is thus informative regarding both the authority's mental state per se and the authority's failure to live up to role demands.

18. Two somewhat weaker trends are evident for consequence severity and other's influence. Most strikingly, higher levels of mental state always produced perceptions of greater consequence severity, suggesting that more intentional actions leads to a global evaluation of the event as worse. There was also a weaker trend for consequences of greater severity to be judged as more avoidable (though only in those stories where avoidability was rated as quite high). Other's influence, which had no manipulation check of its own, had diffuse but consistent effects on the checks for the other items. If influence from another was present, the action tended to be evaluated as less purposive, and less predictable.
19. The conventional analysis strategy for anova designs is to use the fully saturated model. We also repeated the analyses using only those effects that were significant in the initial analysis and found essentially identical coefficients. (Given that cell  $n$ 's were unequal, it was possible that results for the saturated and unsaturated models would differ, indicating that some results were confounded by uneven distribution of cases among certain cells.)
- 19a. Note that the "Avoid" variable is dichotomous, and therefore technically should not be used as an endogenous variable. However, use of "Purpose" alone would lead to inappropriate conclusions regarding the use of mental state information given the differences between stories for equals and authorities. Therefore we chose to include both manipulation checks as a better reflection of the true relationships in these data. In addition, in these figures we have omitted the two-headed arrow between the Purpose and Avoid variables to simplify reading the models, as that arrow is theoretically uninteresting. The correlation between the two is only .25, so that multicollinearity does not threaten any conclusions drawn.
20. The direct path from mental state with purposiveness and avoidability controlled

REFERENCES

- might seem to be an odd entity. We shall show below, however, that it results from expected differences between stories with equal and authoritative actors.
21. Table 3 also indicated four other significant effects: an interaction of hierarchy and solidarity; a three-way interaction of consequences, other's influence and hierarchy; and one four-way and one five-way interaction. All of these effects were small and unstable across replications as well as being unpredicted. They can, therefore, safely be ignored. They serve to illustrate that use of multiple observations from respondents without a control strategy such as the replication one used here can produce results that would not prove to be stable across studies.
22. As one would expect, the mailback respondents were significantly more likely to be white, female, and highly educated than was the overall sample. They are thus more similar both to survey quota samples and to the college subject pools of other studies than are the respondents taken as a whole. Yet mailback respondents did not differ significantly from nonrespondents in their reactions to the stories in the main design, and so their answers to the mailback story are not likely to differ systematically from those that would be produced by the whole sample. Inference to the whole sample, of course, is nevertheless unwarranted.
23. The project has involved collaboration with an interdisciplinary team of Japanese scholars since the fall of 1976. Initial plans for the D.A.S. were made after consultation with Professor Yoko Hosoi and items were developed with feedback from her and Professors Zensuke Ishimura and Kazuhiko Tokoro. During the course of planning the Yokohama study, the Japanese group expanded to include Professors Nozomu Matsubara, Nobuko Tomita, and Tsuyochi Kato, and Dr. Haruo Nishimura. The Japanese research group's plans for the Kanazawa study, in turn, were made after consultation with us.

- Alves, W. and P. Rossi  
1978 "Who should get what? Fairness judgments of the distribution of earnings." *American Journal of Sociology* 84: 541-564.
- Arkkelin, D., Oakley, T., and C. Mynatt  
1979 "Effects of controllable versus uncontrollable factors on responsibility attributions: A single-subject approach." *Journal of Personality and Social Psychology* 37: 110-115.
- Biddle, B.J. and E.J. Thomas (Eds.)  
1966 *Role Theory: Concepts and Research*. New York: Wiley.
- Black, D.  
1976 *The Behavior of Law*. New York: Academic Press.  
1979 "Common sense in the sociology of law." *American Sociological Review* 44: 18-27.
- Blau, P.  
1964 *Exchange and Power in Social Life*. New York: John Wiley and Sons.
- Brown, R.  
1965 *Social Psychology*. New York: Free Press.
- Dahrendorf, R.  
1959 *Class and Class Conflict in Industrial Society*. Stanford: Stanford University Press.
- Dinstein, Y.  
1971 *The Defense of Obedience to Orders in International Law*. Leyden, Netherlands: A.W. Sijthoff.
- Emerson, R.M.  
1969 *Judging Delinquents: Context and Process in Juvenile Court*. Chicago, Illinois: Aldine.
- Fincham, F. and J. Jaspars  
forthcoming "Attribution of responsibility to the self and others in children and adults." *Journal of Personality and Social Psychology*, in press.
- Fishbein, M. and A. Ijzen  
1973 "Attribution of responsibility: A theoretical note." *Journal of Experimental Social Psychology* 9: 148-155.
- Gilligan, C.  
1977 "In a different voice: Women's conception of the self and of morality." *Harvard Education Review* 47: 481-517.
- Gluckman, M.  
1967 *The Judicial Process Among the Barotse of Northern Rhodesia*. Manchester: Manchester University Press.

- Gottfredson, M.R. and M.J. Hindelang  
1979a "A study of The Behavior of Law." American Sociological Review 44: 3-18.
- 1979b "Theory and research in the sociology of law." American Sociological Review 44: 27-37.
- Green, L.  
1930 Judge and Jury. Kansas City: Vernon Law Book Co.
- Hamilton, V.L.  
1978 "Who is responsible? Toward a social psychology of responsibility attribution." Social Psychology 41: 316-328.
- Harris, B.  
1977 "Developmental differences in the attribution of responsibility." Developmental Psychology 13: 257-265.
- Hart, H.L.A.  
1968 Punishment and Responsibility: Essays in the Philosophy of Law. New York: Oxford University Press.
- Hart, H.L.A. and Honoré  
1959 Causation in the Law. Oxford: Clarendon Press.
- Harvey, M.D. and B.G. Rule  
1978 "Moral evaluations and judgments of responsibility." Personality and Social Psychology Bulletin 4: 583-588.
- Helder, F.  
1958 The Psychology of Interpersonal Relations. New York: Wiley.
- Hoffman, M.  
1975 "Sex differences in moral internalization and values." Journal of Personality and Social Psychology 32: 720-729.
- Jasso, G. and P.H. Rossi  
1977 "Distributive justice and earned income." American Sociological Review 42: 639-651.
- Kelley, H.H.  
1967 "Attribution theory in social psychology." In L. Berkowitz (Ed.), Nebraska Symposium on Motivation 15: 192-238.
- 1973 "The process of causal attribution." American Psychologist 28: 107-128.
- Kerckhoff, A.  
1973 Socialization and Social Class. Englewood Cliffs, N.J.: Prentice-Hall.
- Kohlberg, L.  
1969 "Stage and sequence: The cognitive-developmental approach to socialization." In Handbook of Socialization Theory and Research, D.A. Goslin, (Ed.). Chicago: Rand-McNally.
- Kohn, M.  
1969 Class and Conformity: A Study of Values. Homewood, Illinois: Dorsey Press.
- Lickona, T. (Ed.)  
1976 Moral Development and Behavior. New York: Holt, Rinehart.
- Llewelen, K. and A. Hoebel  
1949 The Cheyenne Way. Norman: University of Oklahoma Press.
- Macaulay, S.  
1963 "Non-contractual relations in business: A preliminary study." American Sociological Review 28: 55-67.
- Maine, H.  
1963 Ancient Law. Boston: Beacon Press.
- Nader, L. (Ed.)  
1969 Law in Culture and Society. Chicago: Aldine.
- Nock, S. and P. Rossi  
1978 "Ascription versus achievement in the attribution of family social status." American Journal of Sociology 84: 565-590.
- Nonet, P.  
1969 Administrative Justice. New York: Russell Sage Foundation.
- Parsons, T.  
1951 The Social System. New York: Free Press.
- Piaget, J.  
1965 The Moral Judgment of the Child. New York: Free Press.
- Ross, H.L.  
1970 Settled Out of Court: The Social Process of Insurance Claims Adjustments. Chicago: Aldine.
- Sampson, E.E.  
1978 "Scientific paradigms and social values: Wanted - - a scientific revolution." Journal of Personality and Social Psychology 36: 1332-1343.
- Sarbin, T.R. and V.L. Allen  
1968 "Role theory." In Handbook of Social Psychology, Vol. 1. (G. Lindzey and E. Aronson, Eds.). Reading, Mass.: Addison-Wesley.
- Shapó, M.  
1977 The Duty to Act: Tort Law, Power and Public Policy. Austin: University of Texas Press.
- Shaver, K.G.  
1970 "Effects of severity and relevance on the responsibility assigned for an accident." Journal of Personality and Social Psychology 14: 110-113.

- Tonnies, F.  
1957 Community and Society. New York: Harper Torchbook.
- Vidmar, N. and L. Crinklaw  
1974 "Assignment of responsibility for an accident: A methodological and conceptual critique." Canadian Journal of Behavioral Science 6: 112-130.
- Walster, E.  
1966 "Assignment of responsibility for an accident." Journal of Personality and Social Psychology 3: 73-79.
- Weber, M.  
1947 The Theory of Social and Economic Organization. (T. Parsons, Ed.) New York: Free Press.
- Weslowski, W.  
1962 "Some notes on the functional theory of stratification." Polish Sociological Bulletin 3-4: 28-38. (Reprinted in R. Bendix and S.M. Lipset (Eds.) Class, Status, and Power (2nd ed.). New York: Free Press.
- Wolf, E.  
1969 Peasant Wars of the Twentieth Century. New York: Harper and Row.

Table 1

Summary of the study design.

Solidarity between Actor-Victim

	Status Relationship	Contract Relationship
Equality  <u>Hierarchy</u> <u>between</u> <u>Actor-Victim</u>	<p>TWINS</p> <p>Variations in:</p> <p>Mental State Consequences Past Pattern Other's Influence</p>	<p>SELLER-BUYER</p> <p>Variations in:</p> <p>Mental State Consequences Past Pattern Other's Influence</p>
	<p>MOTHER-CHILD</p> <p>Variations in:</p> <p>Mental State Consequences Past Pattern Other's Influence</p>	<p>BOSS-WORKER</p> <p>Variations in:</p> <p>Mental State Consequences Past Pattern Other's Influence</p>
Authority		

TABLE 2

Effects of experimental manipulations on manipulation checks by story.<sup>a</sup>a) Equal/status

	Mental State	Past Pattern	Consequences	Other's Influence
Purposiveness				
$\bar{t}$	- 8.00 <sup>e</sup>	- 2.81 <sup>c</sup>	.05	- .15
r	.30	.11	- .00	.01
Avoidability				
$\chi^2$	3.32	.32	4.44 <sup>b</sup>	1.51
$\gamma$	.23	.07	.27	- .16
Predictability				
$\chi^2$	1.96	83.00 <sup>e</sup>	.84	6.04 <sup>b</sup>
$\gamma$	.11	.66	- .08	- .20
Seriousness				
$\bar{t}$	-3.69 <sup>d</sup>	- 2.03 <sup>b</sup>	-6.41 <sup>e</sup>	.65
r	.14	.08	.24	- .03

b) Equal/contract

	Mental State	Past Pattern	Consequences	Other's Influence
Purposiveness				
$\bar{t}$	-10.03 <sup>e</sup>	- 4.02 <sup>d</sup>	-1.51	3.16 <sup>c</sup>
r	.37	.16	.06	- .12
Avoidability				
$\chi^2$	.09	.10	6.16 <sup>b</sup>	.09
$\gamma$	.06	.06	.49	- .06
Predictability				
$\chi^2$	1.79	114.77 <sup>e</sup>	.50	17.18 <sup>e</sup>
$\gamma$	.11	.72	- .02	.32
Seriousness				
$\bar{t}$	- 2.37 <sup>b</sup>	- 1.67	-8.44 <sup>e</sup>	-1.75
r	.09	.07	.32	.07

TABLE 2 (continued)

c) Authority/status

	Mental State	Past Pattern	Consequences	Other's Influence
Purposiveness				
$\bar{t}$	- 4.80 <sup>e</sup>	- 3.43 <sup>d</sup>	-1.30	- .93
r	.18	.13	.05	.04
Avoidability				
$\chi^2$	49.44 <sup>e</sup>	4.44 <sup>b</sup>	1.59	.06
$\gamma$	.60	.19	.11	.02
Predictability				
$\chi^2$	10.48 <sup>c</sup>	85.10 <sup>e</sup>	2.20	.69
$\gamma$	.29	.75	.14	.08
Seriousness				
$\bar{t}$	- 2.88	- 3.53 <sup>d</sup>	-7.46 <sup>e</sup>	-1.96
r	.11	.14	.28	.08

d) Authority/contract

	Mental State	Past Pattern	Consequences	Other's Influence
Purposiveness				
$\bar{t}$	- 9.39 <sup>e</sup>	- 3.08 <sup>c</sup>	.23	1.82
r	.34	.12	- .01	- .07
Avoidability				
$\chi^2$	18.40 <sup>e</sup>	5.22 <sup>b</sup>	.20	1.42
$\gamma$	.58	.32	- .06	- .17
Predictability				
$\chi^2$	14.88 <sup>d</sup>	69.31 <sup>e</sup>	.18	3.60
$\gamma$	.30	.60	.03	- .15
Seriousness				
$\bar{t}$	- 1.26	- .81	-8.97 <sup>e</sup>	- .67
r	.05	.03	.33	.03

TABLE 2 (continued)

a) Dichotomous manipulations are: Mental State, low-high; Past Pattern, good-bad; Consequences, mild-severe; and Other's Influence, absent-present. Manipulation checks for purposiveness and seriousness are 11-point scales going from "didn't mean to" to "on purpose" and from "not at all serious" to "very serious". Manipulation checks for avoidability and predictability are dichotomous items scored from "couldn't have avoided" to "could have avoided" and from "not predictable" to "predictable". For continuous items we present  $\bar{L}$ -tests and  $r$ 's; for dichotomous items, chi squares and gammas.

b)  $p \leq .05$   
 c)  $p \leq .01$   
 d)  $p \leq .001$   
 e)  $p \leq .0001$

Table 3

Analysis of variance for responsibility: Summary of significant effects from saturated ( $2^6$ ) model for extended file plus coefficients from quasi-independent replications.<sup>a</sup>

Effect	d.f.	Extended File		Replications: Unstandardized Coefficients			
		F	Unstandardized coefficient	1	2	3	4
Mental State (M)	1	127.5 <sup>e</sup>	.63	.70	.39	.77	.61
Consequences (C)	1	5.7 <sup>b</sup>	.13	.01	.03	.30	.22
Past Pattern (P)	1	28.0 <sup>e</sup>	.30	.27	.51	.21	.28
Other's Influence (O)	1	7.6 <sup>c</sup>	-.15	-.13	-.12	-.12	-.22
Hierarchy (H)	1	72.2 <sup>e</sup>	-.48	-.45	-.51	-.46	-.52
Solidarity (S)	1	162.8 <sup>e</sup>	.72	.77	.77	.84	.44
M x H	1	13.6 <sup>d</sup>	-.21	-.22	-.21	-.13	-.25
O x H	1	13.9 <sup>d</sup>	.21	.02	.12	.40	.32
H x S	1	7.7 <sup>c</sup>	-.16	-.09	-.25	-.05	-.14
M x C x S	1	6.0 <sup>b</sup>	-.14	-.16	.04	-.18	-.15
C x O x S	1	4.0 <sup>b</sup>	-.11	-.05	-.09	-.21	-.04
C x P x H x S	1	5.6 <sup>b</sup>	.13	.01	.16	.16	.09
C x P x O x H x S	1	4.1 <sup>b</sup>	.11	.21	.25	-.13	.11

Error 2551

Grand Mean = 8.29 (Responsibility variable recoded to 1-to-11 from 0-to-10 original scale for computational convenience.)

a) The independent variables were entered as the following contrast-coded effects: Mental State, low-high; Consequences, mild-severe; Past Pattern, good-bad; Other's Influence, absent-present; Hierarchy, equal-authority; and Solidarity, status-contrast. The unstandardized coefficients for these main effects and all interactions compare means against "high" cells. Thus they should be doubled in size to obtain the overall effect for each variable.

b)  $p \leq .05$

c)  $p \leq .01$

d)  $p \leq .001$

e)  $p \leq .0001$



Table 4

Interaction of mental state, solidarity, and consequences: Effects on attributed responsibility in extended file analysis.<sup>a</sup>

		Consequences:			
		Mild		Severe	
		Mental State			
		Low	High	Low	High
Status		6.85 (328)	7.90 (323)	6.81 (334)	8.70 (320)
Solidarity					
Contract		8.29 (334)	9.57 (327)	8.64 (325)	9.60 (324)

Mental State-Solidarity interaction, mild consequences:

$F(1,1308) = .44, n.s.$

Mental State-Solidarity interaction, severe consequences:

$F(1,1298) = 8.80, p = .003.$

a) Cells contain mean score for responsibility, ranging from 1 (not at all responsible) to 11 (fully responsible); it was rescaled from original 0-to-10 scale for computational convenience. Cell n's are presented in parentheses below means.

Table 5

Interaction of mental state and hierarchy: Effects on attributed responsibility (Resp.) and purposiveness (Purp.) in extended file analysis.<sup>a</sup>

		Mental State			
		Low		High	
		<u>Resp</u>	<u>Purp</u>	<u>Resp</u>	<u>Purp</u>
Equal		8.36 (660)	5.98 (654)	9.20 (646)	8.42 (644)
Hierarchy					
Unequal		6.94 (661)	2.59 (666)	8.69 (648)	4.46 (645)

a) Cells contain means for responsibility, ranging from 1 (not at all responsible) to 11 (fully responsible); and for purposiveness, ranging from 1 (didn't mean to) to 11 (did on purpose). Both variables were rescaled from original 0-to-10 scales for computational convenience. N's for both variables are presented in parentheses below means.

Table 6

Effects of mental state and hierarchy on responsibility stratified by respondent's judgment of purposiveness and by influence from another party.<sup>a</sup>

A) Accidental Acts (Purposiveness from 0-2 on 11-point scale)

		Influence from other Absent		Influence from other Present	
		Hierarchy		Hierarchy	
		Equal	Authority	Equal	Authority
Mental State	Low	7.01 (102)	6.79 (236)	6.86 (104)	6.13 (250)
	High	6.31 (35)	8.17 (163)	6.86 (49)	7.51 (163)

Hierarchy (H):  $F(1,532) = 4.83, p < .05$

Mental State (M):  $F(1,532) = .84, n.s.$

H x M:  $F(1,532) = 7.73, p < .01$

Hierarchy (H):  $F(1,562) = .01, n.s.$

Mental State (M):  $F(1,562) = 4.39, p < .05$

H x M:  $F(1,562) = 4.37, p < .05$

B) Careless Acts (Purposiveness from 3-7 on 11-point scale)

		Influence from other Absent		Influence from other Present	
		Hierarchy		Hierarchy	
		Equal	Authority	Equal	Authority
Mental State	Low	8.09 (115)	8.60 (72)	8.55 (118)	6.93 (58)
	High	8.09 (65)	9.27 (92)	9.12 (82)	8.78 (82)

H:  $F(1,340) = 9.46, p < .01$

M:  $F(1,340) = 1.53, n.s.$

H x M:  $F(1,340) = 1.48, n.s.$

H:  $F(1,336) = 13.35, p < .001$

M:  $F(1,336) = 20.34, p < .0001$

H x M:  $F(1,336) = 5.67, p < .05$

Table 6 (con't)

C) Intended Acts (Purposiveness from 8-10 on 11-point scale)

		Influence from other Absent		Influence from other Present	
		Hierarchy		Hierarchy	
		Equal	Authority	Equal	Authority
Mental State	Low	10.01 (113)	9.88 (25)	9.53 (101)	9.78 (18)
	High	9.89 (211)	10.33 (70)	10.10 (195)	9.93 (72)

H:  $F(1,415) = .29, n.s.$

M:  $F(1,415) = .32, n.s.$

H x M:  $F(1,415) = .97, n.s.$

H:  $F(1,382) = .01, n.s.$

M:  $F(1,382) = 1.29, n.s.$

H x M:  $F(1,382) = .43, n.s.$

a) Cells contain mean score for responsibility, ranging from 1 (not at all responsible) to 11 (fully responsible); it was rescaled from original 0-to-10 scale for computational convenience. Cell n's are presented in parentheses below means.

Table 7

Interaction of other's influence and hierarchy in extended file analysis.<sup>a</sup>

		Other's Influence	
		Absent	Present
Hierarchy	Equal	8.71 (651)	8.83 (655)
	Authority	8.17 (663)	7.43 (646)

a) Cell means are for the dependent variable responsibility, recoded to 1-to-11 scale. N's are presented in parentheses below means.

Table 8

Means for variables significantly affecting relative responsibility of actor and other in extended file analysis.<sup>a</sup>

		Hierarchy	
		Equal	Authority
Solidarity	Status	1.80 (321)	2.96 (328)
	Contract	2.60 (327)	3.04 (319)

Results of anova

Hierarchy (H):  $F(1,1263) = 137.2, p < .0001$

Solidarity (S):  $F(1,1263) = 42.3, p < .0001$

H x S :  $F(1,1263) = 27.6, p < .0001$

a) Relative responsibility was a composite variable scored from 1 (other not at all responsible) to 5 (other completely responsible). Cells contain means for this variable with n's in parentheses below.

Table 9

Summary of significant results from 2<sup>4</sup> analysis of variance for responsibility in a mailback story where actor-other role relations were varied.<sup>a</sup>

Effect	d.f.	F	Unstandardized Coefficient
Solidarity (S)	1	7.9 <sup>c</sup>	-.47
Hierarchy (H)	1	87.4 <sup>e</sup>	-1.55
Control (C)	1	8.0 <sup>c</sup>	-.47
S x H	1	6.1 <sup>b</sup>	.41
H x C	1	4.4 <sup>b</sup>	.34
Error	333		

Grand Mean = 7.05

a) Main effects included in the model were Mental State, low-high; Solidarity, other party was status-contract; Hierarchy, other was equal-authority; and Control, other suggested-told. Responsibility was recoded to 1-to-11 scale from original 0-to-10 variable. Effects were contrast coded to reflect the difference between means and "high" cells, and thus should be doubled to reflect the overall effect of each variable.

b)  $p \leq .05$

c)  $p \leq .01$

d)  $p \leq .001$

e)  $p \leq .0001$

Table 10

Interaction effects for mailback story where role relations of actor and other were varied.<sup>a</sup>

A. Hierarchy-Control Interaction

		Hierarchy	
		Equal	Authority
Control	Suggested	8.67 (88)	6.33 (84)
	Told	8.43 (92)	4.59 (85)

B. Hierarchy-Solidarity Interaction

		Hierarchy	
		Equal	Authority
Solidarity	Status	8.59 (100)	6.40 (90)
	Contract	8.50 (80)	4.38 (79)

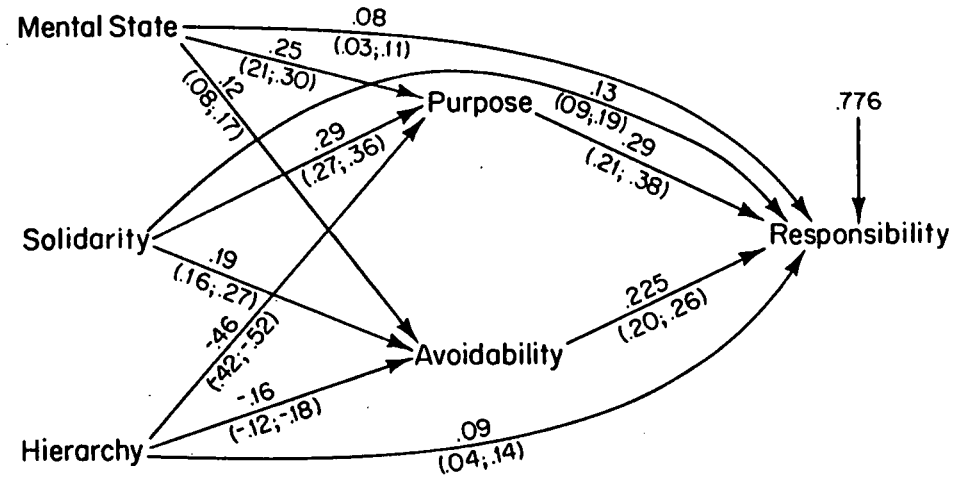
a) Cells contain mean responsibility score on 1-to-11 scale and  $n$ 's in parentheses below means.

Figure Captions

- Figure 1. Direct and indirect effects of mental state, solidarity, and hierarchy on responsibility attribution with other's influence absent versus present.
- Figure 2. Direct and indirect effects of actor's manipulated mental state on responsibility of equals versus authorities.
- Figure 3. Direct and indirect effects of actor's past pattern of behavior on responsibility of equals versus authorities.

Figure 1<sup>a</sup>

A. Other Absent



B. Other Present

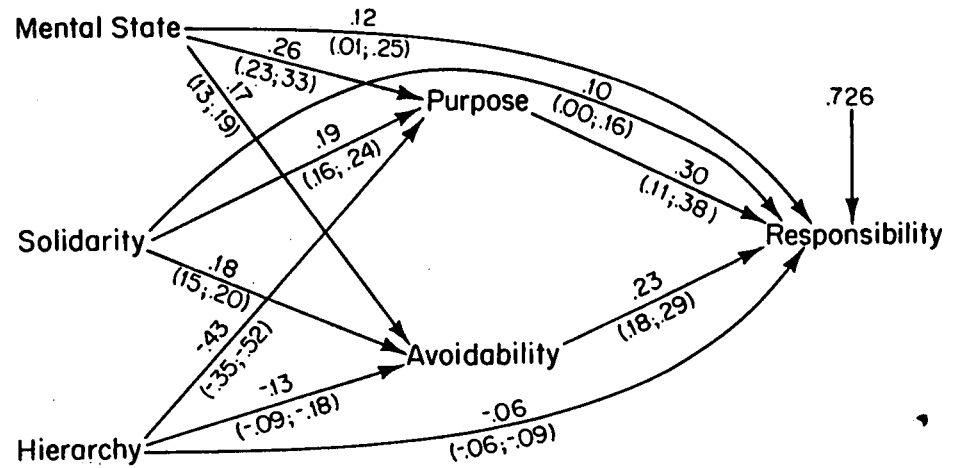
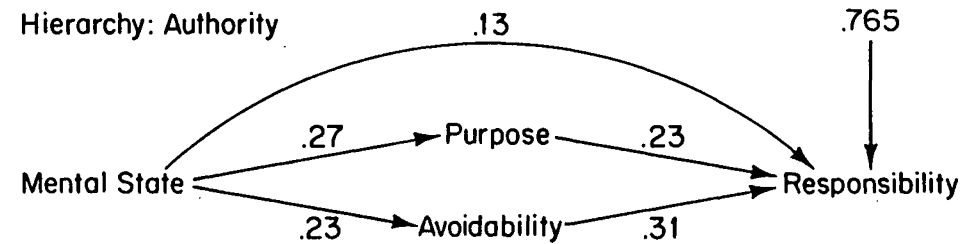
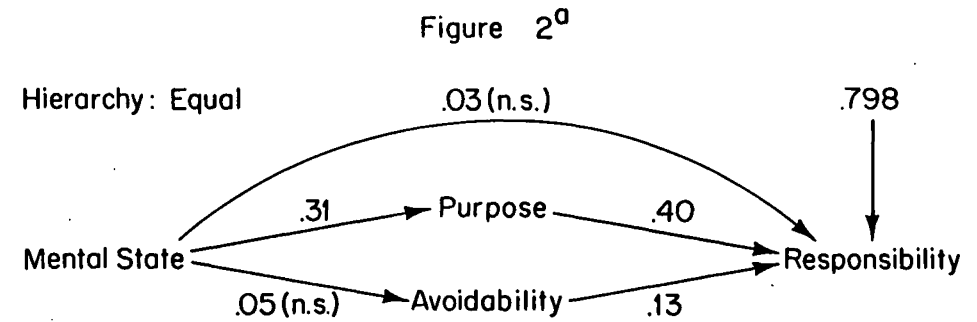


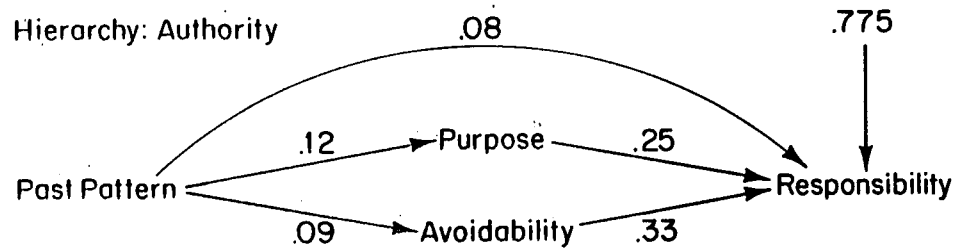
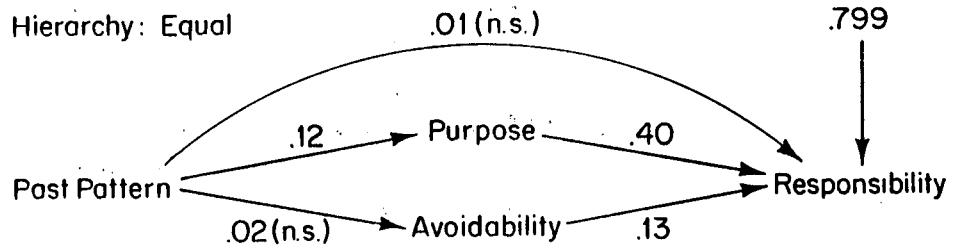
Figure 1. continued

a) Variables were coded as follows: Mental State, Low-High; Solidarity, Status-Contract; Hierarchy, Equal-Authority; Purpose, "didn't mean to-did on purpose"; Avoidability, "could not have avoided-could have avoided"; Responsibility, "not at all responsible-fully responsible." Standardized coefficients for extended file analysis are presented above each arrow; all were significant at the  $p < .05$  level or better. The low and high coefficients from the four quasi-independent replications are presented below each line in parentheses.



a) Variables were coded as follows: Mental State, Low-High; Purpose, "didn't mean to-did on purpose"; Avoidability, "could not have avoided-could have avoided"; Responsibility, "not at all responsible-fully responsible." Standardized coefficients from the extended file analysis are presented with indications where they are not significant.

Figure 3<sup>0</sup>



a) Variables were coded as follows: Past Pattern, Good-Bad; Purpose, "didn't mean to-did on purpose"; Avoidability, "could not have avoided-could have avoided"; Responsibility, "not at all responsible-fully responsible." Standardized coefficients from the extended file analysis are presented, with indications where they are not significant.

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