The Determinants of Street-Level Bureaucratic Behavior: Gate-keeping in the Social Security Disability Program

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Abstract

The behavioral theory of choice posits that bureaucratic decisions can be understood not only as a function of rational decision-making, but also as a function of variables that influence decision-making due to the limitations on human’s cognitive abilities to process large amounts of information under conditions of ambiguity. In this paper, I test the hypotheses that hierarchy, bureaucratic culture (mission and attachment to rules) and emotion toward claimants explains variation in street level bureaucratic decision-making using survey data from the Social Security Disability program. The findings suggest that bureaucratic decision making is explained by bureaucratic culture and emotion, but at the margins.
For many citizens, their experiences with government arise from their interactions with street-level bureaucrats (Goodsell 1981). These interactions create the public policies that citizens actually experience. Many street-level bureaucrats determine who gets benefits, how much they get and when they get them. In other words, street-level bureaucrats determine who gets access to public policies and programs. Therefore, understanding street-level bureaucratic decision-making is essential for understanding public policy. Despite the substantial literature that exists on this topic, we do not have definite answers or consistent understandings about who or what influences bureaucratic choices (Brehm and Gates 1997). In this paper, I generate a model using the behavioral model of choice to predict bureaucratic decision-making and test the model using survey data from examiners in three offices that determine eligibility in the Social Security Disability program.

The literature on bureaucratic decision-making takes two different approaches – one closely related to economics and the other emerging from public administration and organization theory. Two recent works that have merged these two literatures together, serve as a useful starting point in creating a model to explain bureaucratic choice.

In Working, Shirking, and Sabotage: Bureaucratic Response to a Democratic Public, John Brehm and Scott Gates (1997) explore the question of what bureaucrats maximize when making decisions and who or what influences their choices. They argue that bureaucratic decisions fall into three types – working, shirking or sabotage. When bureaucrats work they exert effort toward accomplishing policy goals that match their supervisors goals, when they shirk, they direct effort toward non-policy goals such as leisure and when they sabotage they exert effort toward accomplishing policy goals that
differ from the goals of their supervisors. By revising traditional principal agent models that seek to explain how and whether political principals (supervisors) control their agents (bureaucrats), Brehm and Gates (1997) demonstrate that supervisors are very limited in their ability to control subordinate’s behavior. Through empirical testing, they find instead that street-level bureaucrats decisions are explained most of all by bureaucrats’ own preferences and by the preferences of fellow bureaucrats. Luckily, these preferences are aligned with fulfilling their policy missions. Marissa Golden (2000) finds support for this claim in her study of federal executives. Although she found a few instances of sabotage, most federal executives felt a professional obligation to follow appointed and elected officials and believed they had a responsibility to fulfill their missions in line with superior preferences. Although supervisors have a limited impact on whether bureaucrats work, shirk or sabotage because the link between hierarchical controls and bureaucratic behavior is weak, bureaucratic responsiveness exists because bureaucrats act in ways consistent with the preferences of elected officials/ and or their missions.

Brehm and Gates (1997) work suggests that we should understand bureaucratic decision-making by understanding the policy preferences of bureaucrats, rather than the administrative controls that supervisors use to affect decisional outcomes. Understanding policy preferences of street-level bureaucrats is essential for understanding bureaucratic behavior. If we can discern bureaucrats’ policy preferences, we can predict their behavior.

However, knowing that bureaucrats’ behavior is determined by their policy preferences does not help us to explain decision-making under conditions of ambiguity,
which are inherent in many public policy situations. Ambiguity refers to the state where multiple ways of thinking exist about the same circumstances or phenomena (Feldmen 1989, 5). Public policy is strife with ambiguity; policy actors often have conflicting notions of what they seek to accomplish through policy implementation and what preferences they hold about policy outcomes (Zahariadis 1999) Public policy is a paradox because policy goals have multiple meanings and often conflict (Stone 1997). Conceiving of bureaucratic decisions as work, shirking or sabotage is useful when what the public, supervisors and bureaucrats want is not clouded by ambiguity. However, if policy actors are ambiguous in their feelings about policy, the distinction between work and sabotage becomes blurry. Under ambiguous policy conditions, street level bureaucrats may all work, and yet still have variation in the decisions that they make because each street-level bureaucrat may have a different understanding of what he or she is supposed to do.

Ambiguity is particularly present in decisions that place individuals into categories for public policy purposes (Stone 1997). For many government programs, street-level bureaucrats must place citizens in categories to determine whether or not they should receive government benefits or punishments. It is not always clear whether individuals fit into these categories (Prottas 1979). Is someone who takes drugs periodically a ‘drug addict’ requiring intensive treatment? Does a claimants’ back pain make him ‘disabled.’ Is a parent who leaves her child at home while she works without a babysitter an ‘unfit mother.’? Two street-level bureaucrats could reach different conclusions in this case and both be ‘working.’ Under conditions of ambiguity, what we consider working and shirking depends on how we define the problem and to what
information we pay attention. In these ambiguous types of policy questions where there
are no clear right answers, we cannot predict how street-level bureaucrats will decide
these issues from knowing that they will base their decisions on their functional
preferences. Neither political principals nor agents may be clear as to what the ‘right’ or
‘rational’ decision is in these cases.

The question remains, what determines bureaucratic decisions when the
distinction between working and sabotage is blurry due to policy ambiguity? In other
words, what theoretical frameworks help us understand variations in ‘work.’ Building on
the work of Herbert Simon, Bryan Jones (2001), in *Politics and the Architecture of
Choice* provides a theory of bounded rationality that can be used to predict and explain
behavior in street-level bureaucracies under conditions of ambiguity. As Jones argues,
this theory has existed since the late 1950s, but has yet to be fully incorporated into
political science (Jones 2003).

**The Behavioral Model of Choice**

The behavioral model of choice argues that humans are limited in their cognitive
abilities to process information from a large and ambiguous environment. Although
humans intend to choose alternatives that are most likely to achieve their goals, their
cognitive and emotional constitutions both promote and interfere with goal directed
behavior (Jones 2003). These cognitive limitations preclude policy actors from making
decisions following a strictly rational approach of choosing decisions that have the
greatest chance of achieving policy objectives among all the possible options of decisions
(Simon 1947). This approach is very helpful in understanding street-level bureaucratic
decisions under conditions of ambiguity.
Jones (2001) argues that we should not abandon the view that policy actors are rational, just revise our conception to view policy actors as trying to follow a rational strategy, but failing to do so some of the time because of cognitive limitations. Jones argues that a rational choice approach, which predicts behavior based on what a rational actor would do, explains some of our decision making but that the limits of our cognitive structure ‘show through’ so that many decisions will not be the most rational decisions. Jones defines rational decisions and those that achieve a decision-maker’s objectives given incentives that exist in the environment.

One difficulty facing a decision maker is the inability of humans to process large amounts of information at the same time. Decision makers must choose which information to pay attention to in the environment. Changes in attention to different kinds of information help to explain policy change (Jones 2001).

First, through evolution, human-beings have developed certain decision making strategies or heuristics to deal with a diverse environment (Jones 2001). These strategies or heuristics lead to rational decision making some of the time but not always and the existence of these heuristics allows us to generate hypotheses that predict street-level bureaucrats’ decisions. We cannot understand individual decision-making without taking into account the organizational context where street-level bureaucrats make decisions. Organizations have evolved to compensate for some of humans cognitive limitations (Jones 2001). For example, organizations allow humans to process information serially through specialization and to process a higher volume of information that an individual is capable of doing alone. Through organizations, humans can move closer to rational-decision making (Simon 1947). Organizations highlight certain attributes in the
environment for individual members of that organization and provide individual decision makers with standard operating procedures that allow them to make decisions without a high level of search and analysis (Jones 2001).

The behavioral theory of choice suggests several hypotheses concerning what variables will explain bureaucratic decision-making. In this paper, I test these hypotheses using the case of Social Security disability.

**Social Security Disability**

**Discretion in Decision-making**

One policy area where street level bureaucrats operate under high levels of ambiguity is Social Security Disability. Congress extended Social Security to cover persons with disabilities in 1956. To receive financial assistance, a disabled person may qualify for Social Security Disability Insurance (SSDI) or Supplemental Security Income (SSI). In order to do so, potential clients must be assessed as unable to work in the same range of jobs as non-disabled people given their age, education and work experience (Roth 1987). In addition, to qualify for SSDI, recipients must have paid into Social Security an amount determined by their age and employment history and for SSI meet a means test. Both programs are a federal program and the national government provides the funding and determines the rules of eligibility.

Despite the dominance of the federal government in funding and setting eligibility requirements (Dolgoff, Feldstein and Skolnik 1993), the bureaucrats making initial eligibility decisions for the SSDI and SSI program work in state offices of rehabilitation (referred to as Disability Determination Services or DDS). Claimants denied at the DDS
level, can appeal to federal Administrative Law Judges in the Social Security Administration.

High ambiguity exists in the implementation of the Social Security Disability program. Whether or not a claimant is truly unable to work is very subjective. Determining whether or not someone is disabled is not a straightforward procedure in which bureaucrats simply apply rules to individuals (DiNitto 1993). The concept of disability resists precise definition and measurement, giving street-level bureaucrats and bureaucracy high levels of discretion in decision-making. (Berkowitz 1987; Derthick 1990). High levels of uncertainty exist in medical diagnostic decisions that determine whether a patient is considered disabled and studies of diagnostic consistency have found high levels of disagreement between physicians over the interpretation of diagnostic tests such as x-rays, the need for a tonsillectomy, diagnostic of emphysema, heart disease and a variety of other ailments (see Stone 1984 for a review of these studies). Variations exist in how patients experience pain and how their pain limits their physical condition. One person might feel they can work even though with their limitation while another with that same limitation finds work impossible (Stone 1984). The subjectivity in medical decisions is especially pronounced in cases of mental illness (Dow and Boaz 1994). Disagreement between DDS and the Social Security Administration has lead to reversal rates during the appeals process of up to 91% of all appealed denials in mentally ill cases (United States Senate 1983).

In addition to the subjective medical information given to disability determination workers, caseworkers must also take into account a claimant’s age and occupational history. This requires subjective decisions by caseworkers (Stone 1984). What kinds of
jobs a claimant can work in given their physical limitations is not always easy to
determine. In sum, the statutory definition of disability is not sharp enough for us to say
with confidence that any particular decision is or is not a correct application of the statute
(Mashaw 1983). Social Security is indeed policy implementation under high levels of
ambiguity.

Structure of Decision-Making

Examiners in Disability Determination Offices (DDS) make the initial decisions
about whether or not applicants meet the eligibility requirements for the Social Security
Disability program. To qualify for each program, potential clients must be assessed as
unable to work in the same range of jobs as non-disabled people (Roth 1987).

Specifically the program requires:

that a person have an impairment of such severity that he is not only unable to do his
previous work but cannot, considering his age, education, and work experience engage in
any kind of substantial gainful work which exists in the national economy, regardless of
whether such work exists in the immediate area in which he lives or whether a specific
job vacancy exists for him or whether he would be hired if he applied for work
(Berkowitz 1987).

DDS offices distribute applications to examiners on a random basis (phone
interviews with DDS directors). If the examiner feels additional information is needed
such as consultative exams from non-personal physicians or particular medical tests, the
examiner asks the applicant to go see a doctor or psychologist. The examiner then turns
the case over to medical consultants (either physicians or psychologists) who make an
assessment about whether the claimants’ medical condition meets the medical statutory
requirements for disability. If a claimant has both mental and physical ailments,
physicians and psychologists independently assess whether or not the applicant meets the physical requirements or the mental requirements respectively. The consulting physicians and psychologists return the case to the examiner and the examiner assesses the occupational opportunities available to the applicant given his or her medical condition. Ultimately the examiner makes the final decision as to whether or not the applicant meets the criteria for eligibility.

In some cases, the claimant has certain medical conditions that automatically make them eligible for benefits. In other cases, however, the claimant does not have one of these conditions and the examiner must assess whether the combination of conditions and the occupational opportunities available to the claimant meet the eligibility criteria. Although many decisions are ones that clearly meet the eligibility criteria or those that do not, a substantial percentage of cases fall into a gray area. We lack any precise measure of the size of this gray area. Individuals examiners, supervisors and consulting physicians disagree as to how many decisions fall into this category. In a survey of DDS examiners, supervisors and consulting physicians in three different DDS offices, I found that on average, DDS workers believe that 19.6% fall within this category with responses ranging from 0 to 99.\footnote{Respondents were asked “What percent of your cases would you say are cases in which adjudicators could reasonably disagree?”} Illustrative of the fact that high disagreement exists as to how many cases are ambiguous is the fact that the standard deviation for responses is 19%.

What determines the eligibility decisions in these gray area cases? By definition, gray area cases are ambiguous – there is no clear right decision. Consequently, decision-making in the Social Security Disability program is a good case to test the hypotheses arising from the behavioral theory of choice that suggest the determinants of bureaucratic
choice when conditions of ambiguity exist. It is important to note that the behavioral theory of choice allows us to incorporate many mid-level theories and hypotheses of bureaucratic behavior found in the public administration, rational choice and organizational theory literature under one framework.

Methods

To test the hypotheses generating from the behavioral theory of choice, I first made personal visits to two DDS states and had a phone interview with the director of a third state. Through the contacts with directors, I received permission to conduct a mail survey of street level bureaucrats in DDS offices – examiners, consulting physicians and psychologists and supervisors, as well as gained a contextual understanding of how policy implementation worked in these offices. The response rate from the surveys was 37%. A follow-up survey was sent to each respondent to increase the return rate. To avoid bias in the responses, respondents were promised that the name of their state would remain confidential. Although the survey did contain information about which state the respondent worked in, it did not include any identifying information pertaining to the respondent.

In all three states, office policy dictates that applications for DI and SSI are distributed randomly across examiners. This allows us to control for quality of case. Since the cases are randomly assigned, severity of disability of claimants should be randomly distributed across examiners. If street-level bureaucrats make decisions solely on the severity of the medical condition and the strength of the evidence, we would expect to find little variation between examiners in their allowance rates. Examiners
report, however, varying levels of award rates. The average reported award rate is 32.4% with a standard deviation of 16.2% \(^2\) What explains this variation?

The behavioral theory of choice suggests that three types of factors explain this variation, namely hierarchical control, bureaucratic culture and individual ideological views or emotion. I now turn to a discussion of the specific hypotheses suggested by the behavioral theory of choice and apply them to the case of decision-making in the Social Security Disability program.

**Bounded Rationality in Decision-Making**

**Hierarchy**

Much of the literature in political science and public administration has focused on the issue of hierarchical control. A large portion of this literature falls under the rubric of principal-agent models. Principal-agent models focus on the problems that principals have controlling their agents due to moral hazard (hidden actions) and adverse selection (hidden information). The principal-agent literature explores a variety of possible institutional arrangements that will mitigate the problems of moral hazard and adverse selection, however, no consensus exists as to whether this control is actually possible and which mechanisms are most effective. Brehm and Gates (1997) present a game-theoretic model that demonstrates superiors within an organization are incapable of substantially influencing the behavior of street level bureaucrats and find empirical evidence to support this assertion, although they do find that subordinates report that supervisors have a small influence.

\(^2\) Respondants were asked “What percentage of cases to you allow in a typical month?”
A puzzle exists in the literature, however, between principal-agent models and empirical findings of responsiveness in aggregate bureaucratic outputs. The empirical literature demonstrates that bureaucratic outputs move in line with changes in the partisanship of elected officials (Moe 1982, 1985; Wood 1988, 1991; Wood and Waterman 1994). What explains this disjuncture between principal agent models and empirical findings? Brehm and Gates (1997) argue that the similarity in preferences between political principals and bureaucrats explains this puzzle. Bureaucrats are responsive simply because being responsive matches their own preferences. In regards to hierarchy in the bureaucracy, the implications of Brehm and Gates findings are that supervisors don’t matter much, if they matter at all.

Principal agent models, and the overhead democracy literature in general, does not adequately deal with the issue of ambiguity in the policy environment. Leaders can influence their subordinates through two mechanisms, through coercive controls and through education (Brehm and Gates 1997). Most attention in the literature has been focused on the ability of superiors to control through coercive methods, which makes sense when preferences are unambiguous. Under conditions of ambiguity, like eligibility determination in Social Security, however, the educative role may be primary. If subordinates do not know which decision is the correct one nor have a pre-existing preference for a particular decision, it seems reasonable to argue that they will use their supervisors as a source of information. Supervisors can highlight information in the environment for street-level bureaucrats, and by doing so, ultimately influence their decisions. Information processing, rather than control or coercion, is the important factor that explains bureaucratic policy-making (Jones 2003).
Two questions in the DDS survey explore the ‘educative’ role that supervisors play in determining borderline or grey area cases. First, respondents were asked to rate the influence of supervisors in whether or not examiners allowed or denied cases that were neither clear allowances nor denials on a scale ranging from 0 indicating no influence to 3, indicating high influence. Only about 20% of respondents answered that supervisors had no or low influence while 80% indicated that supervisors had moderate or high influence. The modal response was ‘high influence’ with 45% of respondents feeling this way. I also asked respondents to rank in order of importance the sources you use for guidance when making decisions about a case on a scale ranging from 0 (not important) to 3 (very important). Similar with the influence question, the majority of respondents rated supervisors as important or very important with the modal category being very important at 45%. These descriptive statistics suggest that the educative role of supervisors may make them important actors in understanding variation in street-level bureaucratic behavior and their influence should be included in the decision-making model.

Demonstrating that street level bureaucrats report a high ‘educative’ role for their supervisors is different from demonstrating that supervisors actually have an impact on street-level decision-making. To explore whether or not supervisors affect street-level decisions, questions were included on the survey that measured whether or not supervisors were more or less likely to question denials, question allowances, or question denials and allowances equally. Variation in the types of decisions supervisors tend to question exists with 9% of respondents feeling that supervisors were more likely to question allowances, 43% feeling supervisors were more likely to question denials and
45.7% feeling supervisors questioned both equally. If any bias toward questioning types of decision exists, it is toward the denial side, which may be increasing allowance rates across all examiners in the study. Variation does exist, however, across supervisors. The responses indicate that there is some variation in this bias with a large group of supervisors having no bias, others having a bias toward questioning denials and a very small minority focusing on allowances. Assuming that supervisors play an educative role by focusing examiner attention on particular attributes of the policy problem, in this instance, particular attributes of the claimant, we should expect examiner decisions to reflect these biases. Examiners with supervisor with a denial bias should have higher allowance rates than those with supervisors with an allowance bias or no bias.

Supervisor denial bias is therefore included in the model to explain street level decisions.

It is important to note that we cannot discern the mechanism that connects the examiner’s decision with supervisor bias. It could be because he or she takes the cue from his or her supervisor that it is better to err on the side of allowing a border line cases than denying them, the examiners pays more attention to factors that might warrant an allowance, or the examiner spends more time searching for information (educative role). It could also be that he or she fears punishment from supervisory personnel (coercive control). The extant literature suggests the former but we cannot empirically verify that the link between this variable and decisions is not due to coercive control in this research design.

**Culture**

A second factor that should highlight different information for examiners, and therefore, affect decisions, is bureaucratic culture. James Q. Wilson defines bureaucratic
culture as a patterned and enduring difference among systems of coordinated action that lead those systems to respond in different ways to the same stimuli (1984). Bureaucratic culture is to the organization as personality is to the individual. Political culture works to give workers a pre-disposition to act in certain ways. In the language of Bryan Jones (2001), bureaucratic culture causes bounded rationality to show through. Although the concept of bureaucratic culture is highlighted in the bureaucratic politics literature, few studies have systematically explored whether it actually has an impact on bureaucratic decision making. Sense of mission or role orientation and attachment to the bureaucratic rules are two components of culture (Wilson 1984). The on-site visits to two DDS offices revealed two competing role orientations in DDS offices.

The on-site interviews revealed that states varied in whether personnel felt a connection to state government as opposed to the federal government. One director, a state political appointee, had a high level of interaction with state officials through attending the governor’s town meetings, answering state legislator’s inquiries about cases, and testifying before legislative committees regarding disability fraud scandals. Interestingly she believed that her state’s allowance rates were too low and had taken steps to raise them because she did not think it was fair that citizens in her state did not have as high access to the program as citizens in other states. She tracked whether examiners used all possible rules to allow cases and used this information to evaluate performance. She was less concerned with whether examiner’s decisions were sent back for errors from review in the Social Security’s Quality Assurance Program (done at Regional SSA offices in different areas of the country). In contrast, another director spent a lot of time discussing how DDS offices were obligated to follow the federal rules
to protect the Social Security System and U.S. tax payers. She indicated that she gauged the performance of her office from the Social Security Administration’s quality assurance program. She felt strongly that it was her duty to protect the U.S. taxpayers.

Examiners with a greater identity as a state agency should have higher award rates than examiners with a greater identity with the federal government. State governments have an incentive to keep award rates as high as possible in the Social Security Disability Program because awards bring dollars back into the state and it lessens pressure on other social welfare programs in which state government incur a higher percentage of the costs (Keiser 2001). Directors seemed well aware of this. For example, one director stated that she was able to get the state legislature to approve hiring more examiners by telling the state how many dollars were been lost by denied claims.

Bureaucratic culture is notoriously difficult to measure (McCurdy 1990). However, one question was included on the mail survey that attempted to get at whether DDSs examiners felt that the DDS mission was to serve state government and citizens as opposed to serving the federal government and U.S. taxpayers. Respondents were asked “If you had to choose one, to whom do you feel the DDS offices should be most accountable? State citizens or U.S. taxpayers?” Examiners who feel most accountable to state citizens should have higher award rates than examiners who feel more accountable toward U.S. taxpayers, all else equal, because it is in the interest of U.S. taxpayers to keep allowance rates low as possible in any particular state.

In addition to sense of mission or role orientation, attachment to bureaucratic rules is also an important aspect of organizational culture. Organizations influence behavior because humans, to varying degrees, tend to adopt emotional attachments to the
rules in the organizations in which they work (Jones 2001). Competing rule systems exist in different bureaucratic units implementing the Social Security Disability program. DDS offices follow different rules than do ALJs. Scholars of the disability program argue that ALJ rules are much more lenient than DDS rules, which explains the much larger allowance rate for benefits at the ALJ level (Social Security Board 2000).

Examiners who are more attached to DDS rules than ALJ rules or who believe that DDS rules are more accurate at distributing benefits to people who deserve them, should be more likely to have lower award rates, all else equal. To measure this attachment to rules, respondents were asked to respond on a scale from agree strongly to disagree strongly with the statement “The standards used at the DDS level are more likely to grant benefits to people who really cannot work due to their medical condition than ALJ standards.

**Role of Emotion in Decision-Making**

Emotion plays a role in determining to which stimuli in the environment the decision-maker pays attention (Jones 2001; Simon 1947). Each Social Security Disability applicant has multiple characteristics which act as stimuli for the examiner in making a decision on the claim. Which stimuli does the examiner pay the most attention to in deciding to award or deny a claim? If emotion causes decision-makers to pay more attention to some stimuli than others, we should expect ideological views about the disabled and decision-makers' general ideology to play a role in predicting the direction of examiner decisions. Some empirical support exists for the contention that attitudes towards clients affect the decisions street level-bureaucrats make. For example, in an experimental research study, Scott (1987), found that subjects playing the role of social
workers awarded more benefits to 'sympathetic' clients than to 'unsympathetic' ones. Furthermore, clients street level bureaucrats view as troublesome, receive fewer benefits and less information from caseworkers (Hasenfeld and Steinmetiz 1981).

One important aspect of attitude toward claimants is whether examiners feel that claimants are honest about their medical conditions. A high suspicion that claimants are dishonest should repress award rates. To gauge examiners’ attitudes toward claimants, the survey asked claimants to agree or disagree with the statement, "most claimants are honest about their medical conditions." Examiners who feel that claimants, on average, are more honest should have higher award rates than their peers who do not feel this way, all else equal.

In addition to general feelings about claimants, how examiners respond to different information contained in a case file may be mediated by their personal ideology. Although Social Security Disability receives general bi-partisan support, conservatives in general have been less supportive of expanding the program than liberals (Keiser 2001). Conservative ideology tends to hold individuals responsible for their lack of labor market performance more than do liberals (Stone 1997). Respondents were asked to place themselves on a 7 point scale ranging from very liberal (1) to very conservative (7). I expect ideology to have a negative impact on allowance rates.

**Methodology**

As mentioned above, I seek to explain variation in allowance rates. The survey asked examiners “What percentage of cases do you allow in a typical month?” The responses to this question varied tremendously ranging from 2% to 98%. There were several clusters of award rates around 10%, 20%, 25%, 30%, 35% and 40%. Several
responses indicated on the survey that they did not know their allowance rate and were providing their best estimate. The responses on the survey indicate that an interval measure of allowance rates has problems with validity. The difference between 25% and 28% may not be meaningful at all because in reality examiners with these two answers might not differ in their actual allowance rate. What we are predicting with this model is not respondents actual allowance rate but predicting what their best guess of their allowance rate is.

Two approaches exist for dealing with this problem. The first is to transform the interval scale into an ordinal one by creating categories measuring low, medium and high allowance rates and estimate the equation using an ordinal logit model. The second is to assume that examiners best guess estimates are highly influenced by what they believe their peers are doing and to model allowance rates as a rate below or above the average rate of the DDS office the examiner works in and estimate the model using logistic regression. The average allowance rate is the average rate reported by all examiners in that particular state. The text of the paper presents the findings from logistic regression model and the findings from the ordinal logit model are in the appendix.

**Findings**

(table 2 about here)

Overall the model does not perform very well in terms of goodness of fit predicting correctly just 67.2 percent of the cases. Reported allowance rates either are subject to high levels of random noise or some unspecified variable exists that explains a large portion of the variance in allowance rates. Despite the poor performance of the
model in explaining variance in reported allowance rates, some of the hypotheses are supported.

Both identification with rules and role orientation toward state government affect the likelihood that examiners will have higher allowance rates. Identification with rules is significant but in an unexpected direction. Examiners who believe that DDS rules are more likely to award benefits to those who truly cannot work due to their medical condition than ALJ rules are more likely to have higher than average allowance rates than examiners who believe less in the accuracy of these rules. This was contrary in direction to the expected hypothesis. In contrast, the variable measuring role orientation or mission is significant and in the expected direction. Examiners who feel they are most accountable to citizens in their state, as opposed to U.S. taxpayers, are more likely to have higher award rates.

The variable measuring hierarchy failed to support the hypothesis, although it is consistent with the extant literature on the ability of supervisors to control their subordinates. Despite the fact that examiners report that their supervisors played an educative role in their decision-making, this effect failed to translate into influencing their decisions. Examiners who felt their supervisors were more likely to question denials, were no more likely to award cases than their counterparts who did not perceive such a bias.

The variables testing the impact of emotion on bureaucratic decision-making met with mixed success, although both are statistically significant. Contrary to expectations, more conservative examiners are more likely to have a higher allowance rate than are
liberal examiners. In line with expectations, however, examiners who felt that claimants were dishonest about pain were less likely to have higher allowance rates.

**Implications of Findings**

Variables identified as being important in the behavioral theory of choice do have some value in predicting bureaucratic decision-making, although as a group they fail to explain much of the variance in bureaucratic decision-making.

Although bureaucratic culture and emotions do not explain a lot of the variation in allowance rates, they do explain some. The findings support the hypotheses that rule attachment influences bureaucratic decisions. Examiners who feel more strongly that DDS rules produce accurate outcomes have higher allowance rates than those who do not. The direction of this relationship was unexpected. It is possible that examiners who have lower than average award rates and feel that DDS rules are inaccurate do not necessarily believe that their decisions are more accurate, but instead believe that they deny people benefits because they are forced to do so, due to the rules. Examiners with higher allowance rates may like the rules more because they can use them to award more benefits (assuming that denying claims cause examiners some anguish). This explanation is ad hoc and further research is necessary. In contrast to attachment to rules, role identification has an expected impact on allowance rates. Role orientation as either a state agency or a federal agency plays a role in influencing decisions. DDS examiners with a higher state orientation, award more claims.

The statistical significance of the variables measuring bureaucratic culture (rule attachment and mission) illustrate that bureaucratic culture is a concept that exists at both the individual and organizational level. Although we tend to focus on bureaucratic
culture as an organizational attribute, members of a bureaucracy can vary in their attachment to the culture. The variation in individual attachments to the bureaucratic culture makes some agencies more cohesive than others (Meier 1993). The findings suggest that the variation at the individual level does help to explain variation in decisions of street level. Those that are more attached to the culture interpret case information differently than those less attached to the culture.

The findings also illustrate that agencies do vary in their political culture, and that DDS offices as a whole differ in the extent to which they feel most responsible to all U.S. taxpayers as opposed to state citizens. The conclusions I drew regarding role orientation toward the state and federal government via the personal visits to two of the DDS states were backed up by the descriptive statistics for the survey results. Examiners in the state DDS with the observed orientation toward state government instead of the federal government, especially among leadership, were more likely to have a state orientation than examiners in the state without this observed orientation. It should be noted that majorities in all offices felt more accountable to U.S. taxpayers, which illustrates the federal orientation of all DDS offices. Bureaucratic culture is a variable in the literature that is much discussed but is often not subject to verification by different measurements. The verification of the existence of a bureaucratic culture using two different measurement tools supports both our recognition that it does exist and that it may affect how street level bureaucrats make decisions. In order to test whether this variation at the organizational level had any impact on aggregate decisions, we would need a measure of culture in all fifty DDS offices -- something that is virtually impossible given resource and time constraints.
The findings also contribute to the literature on the role that hierarchy plays in bureaucracies. The descriptive statistics overwhelming support the claim that an important function of leaders is educative. Large majorities of examiners reported that their supervisors influenced their decisions and that they used supervisors as a guide in making decisions. Clearly, we should focus on how hierarchy influences decisions through highlighting different sources of information for subordinates. As Bryan Jones suggests (2003), our focus should move away from coercive controls towards information processing because hierarchy plays a stronger role in shaping information than in controlling subordinates through coercive methods.

The finding vis-à-vis hierarchy does support the extant literature that supervisors do not matter much in explaining bureaucratic decisions. However, limitations in the data make drawing this conclusion pre-mature. The descriptive statistics revealed that there was not much variation in bias for allowances versus denials in what types of decisions supervisors question. Respondents were almost evenly split in feeling that their supervisors had no bias and in feeling that their supervisors were more likely to question denials. The direction of this bias may be elevating allowance rates across the board and therefore masking the influence that supervisors have over the decisions that bureaucrats make. It is possible that if a larger bulk of supervisors were more likely to question allowances, supervisor influence may have an impact.

In addition to bureaucratic culture and hierarchy, the findings have implications for the role that emotion plays in bureaucratic decision-making. First, the findings support the hypothesis that bureaucrats' feeling about clients will influence their decisions. Examiners who were more prone to believe claimants, had higher allowance
rates, all else equal. Attitudes about claimants have an impact on how street-level bureaucrats implement programs.

Although personal ideology was statistically significant, it was in the opposite direction that expected. Two possible explanations exist for this finding. The first centers on possible bias in the variable measuring the allowance rate. The allowance rate is self-reported and, as such, is just examiners' best guess at how many cases they have allowed (unless they have specifically been told their allowance rates). Examiners may have psychological incentives for exaggerating or minimizing their allowance rates. Liberals may be more likely to under-estimate and conservatives more likely to exaggerate because they are committed to the idea that their personal ideology should not influence their decisions. The second possible explanation follows the same logic but is focused on the idea that liberal and conservative examiners may not just over-report or under-report their allowance rates, but actually decide gray area cases in the opposite direction than their ideology would suggest because they do not want to be seen or criticized as someone who lets their ideology influence their decisions. Both of these explanations are ad hoc and further research is needed to understand this contrary finding.

Taken together the findings support the behavioral theory of choice, which posits that bureaucratic behavior is explained partly by 'non-rational' factors. The variables measuring orientation toward bureaucratic culture and emotions of examiners have a statistically significant but marginal impact on decision-making. The overall poor performance of the model combined with the support for the hypotheses suggests that the variables that influence bureaucratic decisions away from a more 'rational' model of decision making 'show through' and influence decisions at the margins. This leaves us
with the question of what variables are unspecified. These un-specified variables could be variables that measure the tendency for examiners to award benefits based on the incentives that exist in the environment (rational decision-making). These may be constant across the three offices in the study. Although the biases in decision-making caused by attachment to bureaucratic rules, role-orientation/mission and emotional attachments towards clients only have a marginal impact on individual decision-making, the existence of the biases across the numerous individuals in the system could have a substantial impact on how many claimants are awarded benefits at the aggregate level. In other words, when these biases are aggregated up through the system, they can accumulate to cause a substantive policy impact.
References


Table One: Comparison of DDS’s Role Orientation Toward State or Federal Level

<table>
<thead>
<tr>
<th></th>
<th>State Oriented DDS</th>
<th>Federal Oriented DDS</th>
<th>No Apriori orientation DDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>% accountable to state citizens</td>
<td>44.8</td>
<td>31.8</td>
<td>28.4</td>
</tr>
<tr>
<td>% accountable to U.S. taxpayers</td>
<td>55.2</td>
<td>68.2</td>
<td>71.6</td>
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Table Two: Determinants of Examiners’ Allowance Rates

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>Wald</th>
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<tbody>
<tr>
<td><strong>Hierarchy</strong></td>
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<tr>
<td>Supervisor Denial Bias</td>
<td>-0.397</td>
<td>0.38</td>
<td>1.092</td>
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<td><strong>Bureaucratic Culture</strong></td>
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<td></td>
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<tr>
<td>Rule Attachment</td>
<td>-0.345</td>
<td>0.165</td>
<td>4.403*</td>
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<tr>
<td>Mission/Role orientation</td>
<td>-0.734</td>
<td>0.408</td>
<td>3.228*</td>
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<tr>
<td><strong>Emotion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client Dishonesty</td>
<td>0.535</td>
<td>0.243</td>
<td>4.859*</td>
</tr>
<tr>
<td>Ideology (conservative)</td>
<td>0.326</td>
<td>0.124</td>
<td>6.941*</td>
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<tr>
<td><strong>Constant</strong></td>
<td>1.905</td>
<td>1.076</td>
<td>3.132*</td>
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Log Likelihood Ratio Test
Percentage Correct
N=137

67.2
Appendix A: Survey Questions and Measurement of Variables

**Allowance Rate:** For the logistic regression model, answers were coded 1, if respondents percentage was above average for the state DDS, 0, if below average. For the ordinal logit model, responses were coded 1 if the were 22% or below, 2 if they were 29% or below, 3 if they were 39% or below, 4 if they were 98% or below.

**Question:** What percentage of cases do you allow in a typical month?

**Supervisor Denial Bias:** coded 1 if respondent believed supervisor more likely to question denials, coded 0 if respondent believed supervisor more likely to question allowances, question both equally or did not know.

**Question:** On average, are supervisors and internal QA personnel in your office more inclined to find errors in your decisions on denials or allowances? 1= most likely to question allowances, 2= most likely to question denials, 3= question denials and allowances equally, 4= don’t know.

**Rule Attachment:** Belief that rules used in the DDS to award claims are more accurate in giving benefits to those who truly cannot work than rules used by Administrative Law Judges. Respondents indicating don’t know were excluded from the analysis.

**Question:** The standards used at the DDS level are more likely to grant benefits to people who really cannot work due to their medical condition than ALJ standards. 1= agree strongly, 2= agree, 3 = disagree, 4= disagree strongly, 5= don’t know.

**Mission/Role Orientation:** Identity of examiner toward a role as a state employee versus a federal employee. 1= state orientation, 2= federal orientation

**Question:** If you had to choose one, to whom do you feel DDS officials should be most accountable? 1= citizens of your state, 2= U.S. Taxpayers.

**Client Dishonesty:** Examiners’ feelings about claimant honesty. High values indicate that the examiners feel most claimants are dishonest.

**Question:** Please indicate your feelings about the following statement using the following scale. 1= agree strongly, 2= agree, 3=disagree, 4= disagree strongly, 5= don’t know. Most claimants are honest about the amount of pain they experience.

**Ideology:** Examiner’s ideology on a 7 point scale. High values indicate more conservative.

**Question:** Do you consider yourself a liberal or conservative?
Appendix B:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>Z-Score</th>
<th>Probability</th>
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<td>Mission/Role orientation</td>
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<td>0.366</td>
<td>-2.01</td>
<td>0.044</td>
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<td><strong>Emotion</strong></td>
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<tr>
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Likelihood Ratio Statistic = 21.38, Chi Square p = 0.003, N = 137
Log likelihood = -141.52