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Police Use of Force: a Transactional Approach

William Terrill

Drawing on Tedeschi and Felson's (1994) theory of coercive actions for conceptual guidance as well as principles underlying the notion of a force continuum structure (i.e., proportionality and incrementalism), this research examines 3,544 police-suspect encounters from an observational study of the police in an attempt to better understand the transactional process of the police-suspect encounter. Results indicate, within the context of a force continuum structure, that officers escalated the level of force in about one of five encounters involving nonresistant suspects, and de-escalated the level of force in three of four encounters involving resistant suspects. A series of logistic and multinomial regression models show that a number of factors differentially affect the manner in which officers apply force. The results suggest that before one can begin to judge the appropriateness of police force, one should measure and consider the extent to which force is applied proportionately and incrementally.

Keywords police; use of force; coercion; transactional approach

Introduction

For decades, police researchers have sought to identify why and how officers use force.[1] Using a variety of methods, researchers have examined the extent of force (Adams, 1995; Reiss, 1968), variation in the types of force officers use (Alpert & Dunham, 1997; Klinger, 1995), officer views of force (Muir, 1977; Westley, 1970), deadly force (Fridell & Binder, 1992; Fyfe, 1979), excessive

William Terrill is an Assistant Professor in the College of Criminal Justice at Northeastern University. He has directed several nationally funded research projects and has published numerous scholarly articles on policing, which have appeared in *Criminology, Justice Quarterly, Journal of Research in Crime and Delinquency,* and *Police Quarterly.* He earned his PhD in 2000 from the School of Criminal Justice at Rutgers University, Newark, NJ. Correspondence to: William Terrill, Northeastern University, College of Criminal Justice, 421 Churchill Hall, Boston, MA 02115, USA. E-mail: w.terrill@neu.edu

1. The terms "coercion" and "force" are used interchangeably throughout the article—meant to include both verbal and physical forms of force.

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force (Chevigny, 1969; Klockars, 1995), potential determinants of force (Terrill & Mastrofski, 2002; Worden, 1995), and the number of officers and citizens involved in force incidents (Langan, Greenfeld, Smith, Durose, & Levin, 2001). While we have learned a great deal from these studies, we still know very little about the micro-process of the police-suspect encounter with respect to the use of nonlethal force (Klinger, 1995; Terrill, 2003). According to a recent National Institute of Justice report, previous research findings "... do not address the transactional, or step-by-step unfolding, of police-public encounters. Was suspect resistance the result of police use of force, or did police use force after experiencing suspect resistance?" (1999, p. ix).

Relying on Tedeschi and Felson's (1994) social interactionist theory of coercive actions for conceptual guidance, this research examines 3,544 police-suspect encounters from the Project on Policing Neighborhoods (POPN) study in an attempt to better understand the use of force within the transactional process of the police-suspect encounter. The data available allow for the creation of a sequencing pattern so as to measure successive suspect and police behaviors within each individual encounter, which is critical to understanding the context in which force is used. Knowing that an officer used force in an encounter with a suspect tells us very little without knowing the specific type of force used, how many times it was used, and the level of suspect resistance prior to each use.

The interplay between suspect resistance and police use of force is examined by analytically drawing on the concept of a "force continuum" (Alpert & Dunham, 1997; Garner, Schade, Hepburn, & Buchanan, 1995; McLaughlin, 1992; Terrill, 2003). Continuum guidelines generally focus on the degree of resistance exhibited by a suspect, establish a limited number of categories to characterize the level of resistance, and specify what level of force is encouraged in response. According to McLaughlin:

> [a] force continuum is a guideline representing the appropriate amount of force that should be utilized by a law enforcement officer in generic situations. It should provide a means for escalating force when the subject shows noncompliance and a means for de-escalating force when the subject complies. (1992, p. 65)

By using the continuum as a measuring standard, the intent is to determine the extent to which police apply force proportionally, and when applicable (i.e., multiple sequences are present), incrementally, throughout an encounter. More specifically, the objective is to determine the extent to which officers follow or deviate from a continuum structure. Both the theoretical and practical relevance of this distinction lies within the notion of control. As discussed in greater detail below, applying force that falls within a continuum structure lends evidence to the belief that the intended purpose is one of control. Conversely, behaviors that deviate from the continuum are more likely the result of some other intended purpose.

The following section lays out the theoretical framework. A review of the force literature is then presented, focusing on studies offering insight toward the various types of force officers use in relation to a force continuum and the transactional nature of the police-suspect encounter. This is followed by a discussion showing how the unfolding of events within individual encounters can be integrated with the concept of a continuum to provide a greater understanding of why and how officers use force. Next, the methodology and basic research propositions are presented. Finally, an analysis of systematic field observations of police officers in face-to-face interactions with suspects during routine work shifts is presented.

Theoretical Framework

One consistent theme among law, police, and public policy analysts is that the appropriate amount of police force is that which is reasonably necessary to achieve citizen compliance. However, determining what constitutes "reasonable" force is not always an easy task since one must determine why *and* how force is applied. The following considers various reasons why officers may resort to force, and the extent to which the application of such force can be linked to these reasons.

Tedeschi and Felson's Theory of Coercive Actions

Tedeschi and Felson's social interactionist theory (1994) emphasizes the interplay between actors (i.e., the exchange of behaviors) within a given encounter and the use of situational factors which structure social exchange. Accordingly, the use of coercion is part of a rational decision-making process based on "the expectations of success in achieving outcomes, the values of outcomes, and the expectations and negative values of costs" (Felson & Tedeschi, 1993, p. 296). As such, coercion is viewed as a goal-oriented behavior designed to control others, achieve justice, and/or assert and protect social identities.

By virtue of their legal authority, police officers have a reservoir of coercive tactics, such as verbal commands and threats, restraint techniques (e.g., handcuffing), and impact methods (e.g., use of the baton) at their disposal to ensure citizen compliance (Bittner, 1970; Klockars, 1995). The use of such tactics, however, is restricted to this purpose. The police are not to use force to achieve justice or protect social identities, in Tedeschi and Felson's language, unless such goals fall within the scope of ensuring control. Hence, officers can order a suspect to "stay in the car" during a traffic stop, use handcuffs on a suspect during an arrest, and use mace when faced with an attacking suspect, because each behavior emanates from the need to control and is thereby rooted within the law.

Although control is one reason individuals, in this case police officers, may resort to coercion, such behavior may also be explained by the desire to achieve justice. According to Tedeschi and Felson (1994), the achievement (or restoration) of justice begins with the formation of a grievance, which is based on blameworthiness. Assessing blame is a common task for police officers not only from a legal perspective (e.g., the arrest function), but from a social or moralistic perspective in terms of a norm-based violation (e.g., alcohol use). Thus, suspects engaged in behaviors that officers (or community members) may consider norm violations have a higher degree of blameworthiness and may be more likely to experience enhanced levels of coercion (Wilson, 1968, p. 36). For instance, officers may be more apt to attach blame, and thus likely to resort to a more forceful solution, when dealing with two intoxicated suspects arguing outside a nightclub, as opposed to two sober individuals in the same situation.

A third theoretical reason individuals may use coercion is "to establish or to protect identities" (Felson & Tedeschi, 1993, p. 298). This concern for self-presentation is even greater in the presence of third parties. The importance of establishing and protecting a police officer's identity is well noted within the police literature (Paoline, 2001; Van Maanen, 1978). Officers are socialized to "maintain the edge" and be "one up" on citizens not only to establish control, but to ensure proper respect. As a result, officers confronted with situations that challenge their identity (e.g., displays of citizen disrespect) may counter with a more forceful response.[2] It is one thing for a suspect to politely question an officer's intent during the course of a street stop; it is another to do so in a disrespectful manner (see also Lundman, 1994 with respect to arrest behavior).

Force Continuum

The force continuum is a policy framework used in numerous police departments that is explicitly norm-based, attempts to capture some of the subtleties of using coercion, and acknowledges that coercion in the police-suspect encounter is a dynamic process. The continuum constitutes a simple standard against which police practice may be measured, modeled, and evaluated. As such, it offers a useful example of how to develop more useful measurement and analysis of police use of force.

Force continuum guidelines are built upon Bittner's (1970), now familiar, assertion that police coercion is and must be "situationally justified." Situations confronting officers may vary infinitely, but workable standards to be used on the street cannot mirror that level of complexity. They must be based on a limited number of principles and categories. Thus, a standard force continuum ordinally ranks varying levels of force and resistance along a continuum in terms

2. Felson and Tedeschi conceptualize disrespect as a form or type of coercion. In the present inquiry, suspect disrespect is measured and examined separately from resistance, since disrespectful behavior does not form the basis for a legal response, while resistance does.

of severity, with the explicit purpose of offering officers guidance on how to respond to specific forms of resistance.

Table 1 offers a simple version of a force continuum. In the upper part of the table, the first column indicates the suspect presenting resistance at any given point in the face-to-face interaction with the officer. The second column lists the commensurate level of force to deal with that level of resistance. Department continuum guidelines typically indicate that if a suspect fails to comply in response to the indicated level of coercion or increases the level of resistance, the officer may then escalate to the next level. Conversely, if a suspect does comply or decreases the level of resistance, the officer is expected to de-escalate. The columns in the lower half of the table show what evaluative category each police response may have for a given level of resistance.

There are two inherent principles found within the continuum structure: proportionality and incrementalism. A suspect's polite refusal to obey an officer's command is a much smaller threat than an assault on the officer. Both constitute resistance that would justify police coercion, albeit at markedly different levels. The police are to apply a level of force that is proportional to the resistance that precedes it. Further, a continuum structure anticipates the possibility that a given level of police force may not produce the desired result, so it specifies how to proceed in an incremental manner. For instance, should a given level of police coercion fail to achieve suspect compliance, officers may escalate the level of force, but they should do so in small increments. If researchers have data on what transpired between suspects and officers in

Table 1 Resistance/force continuum and Resistance Force Comparative Scheme (RFCS)

Resistance/force continuum	
Levels of suspect resistance	Levels of police force
1: No resistance	1: No force
2: Passive	2: Command
3: Verbal	3: Threat
4: Defensive	4: Restraint and control
5: Active	5: Pain compliance/takedown
	6: Impact

	Resistance Force Comparative Scheme (RFCS)		
Suspect resistance	Less force	Commensurate force	More force
1	-	1, 2	3, 4, 5, 6
2	1	2, 3	4, 5, 6
3	1, 2	3, 4	5, 6
4	1, 2, 3	4, 5	6
5	1, 2, 3, 4	5, 6	-

face-to-face encounters, they can use a force continuum to evaluate adherence to the principles of proportionality and incrementalism.

The importance of being able to determine the extent to which police officers apply force in a proportional and incremental manner directly arises from a desire to determine a reason for its use and whether it may be tied to a plausible legal explanation (i.e., one of control). In short, force used for the purpose of control should be proportional and incremental, and thus fall within the structural framework of a force continuum, while force used for other purposes (e.g., justice and social identity) is more likely to fall outside the continuum. It is when the *why* and *how* of force usage are linked that offers the greatest insight toward this most crucial state power.

Prior Research

Prior research on police use of force has been multifaceted. The following review focuses on those studies involving variation in force in relation to the concept of a force continuum and inquiries examining the transactional nature of the police-suspect encounter (see Geller & Toch, 1995, for more exhaustive reviews). The intent is to highlight how previous studies in these areas have furthered our understanding of why and how officers use force, and set the stage for how this work can be molded or merged together to offer an even greater understanding.

Variation in Force Types and the Force Continuum

A handful of researchers have examined the various types or forms of force officers use. McLaughlin (1992), as well as Pate and Fridell (1993), were some of the first researchers to closely examine the range of different types of force officers rely on (e.g., handcuffs, macing, baton use, etc.). Klinger (1995), who examined observational data from Metro-Dade, Florida, extended this line of research. He observed that because there are different types of force police use, force can be ranked in terms of severity. Klinger found that officers most frequently use verbal (i.e., commands and threats) and low-level physical forms of force (e.g., firm grip). Garner et al. (1995), relying on arrest reports from Phoenix, Arizona, also found most force usage at the lower end of the continuum. However, Garner and colleagues looked at varying levels of suspect resistance as well. They found that just as officers use various types of force, suspects resort to various levels of resistance ranging from psychological to aggressive tactics.

Several researchers have built upon the force continuum framework and the interplay between resistance and force. In 1997, Alpert and Dunham proposed the use of *force factor* scores (subtracting the highest level of resistance from the highest level of force) to assess relative degrees of force in relation to suspect resistance. A few years later, Terrill (2001, 2003) built upon the idea of *force factor* scores by assessing not only the highest level of resistance and

force within an individual incident, but all instances of resistance and force that occur. Both studies demonstrated the importance of understanding police use of force relative to suspect resistance.

Transactional Process of the Police-Suspect Encounter

Besides counting how often the police use force and distinguishing between various types of force, some scholars have explored a slightly different angle regarding the application of force. This involves an attempt to model the micro-processes of how force is used within police-suspect encounters to determine how officers control or manage the encounter. For instance, Toch (1969), after examining 344 arrest files from Oakland and San Francisco, California, concluded that the typical violent encounter began with a verbal request by an officer, followed by a citizen's failure to abide by the request. The officer then escalated to a command or threat, which the citizen disobeyed, and the cycle of escalation continued on to the point of physical force.

Since Toch's (1969) pioneering work, several researchers have investigated how officers go about managing an encounter. Sykes and Brent (1980, 1983), relying on observational data from a mid-size city, found that officers "take charge" of an encounter not by relying on physical force, but rather by the use of questioning or issuing commands. In another study, conducted in Denver, Colorado, Bayley (1986) proposed that police-citizen encounters move through three stages: contact, processing, and exit. He found that officers use a wide variety of tactics at each stage and that decisions made early in an encounter can affect subsequent decisions to use force. For instance, beginning encounters with tactics such as listening, questioning, or seeking information usually led to a less coercive outcome such as a verbal warning or offering advice. Conversely, taking a more coercive approach at the start (e.g., verbal or physical restraint) had a greater likelihood of leading to a more coercive outcome.

Finally, Fyfe (1988, 1989), using data from the aforementioned Metro-Dade study, examined actions taken by patrol officers during potentially violent situations. Along the lines of Bayley (1986), Fyfe broke down a potentially violent situation into four stages: unassigned time, approach, contact, and resolution. He found that actions taken prior to involvement in potentially violent situations (e.g., knowledge of the patrol beat, places, people) may reduce the need to use force during the encounter. Fyfe also found that some officers in certain situations may not have been aggressive enough in handling potentially violent encounters. That is, they failed to take charge when "it was clearly appropriate to take charge" (Fyfe, 1989, p. 22).

Moving Forward

The studies highlighted here demonstrate the importance of two issues with respect to research on police use of force. First, it is important to recognize and

measure the many different forms of force that officers apply, as well as the many different forms of resistance suspects present. Hence, future researchers are advised to broaden the scope of the dependent variable to include a continuum of force in relation to suspect resistance. Second, it is important to examine the process of how a police-suspect encounter unfolds. As stated by Fridell and Binder, the police-citizen encounter must be "seen to encompass a pattern of interaction between an officer and an opponent and multiple decisions by both" (1992, p. 386). Thus, studies that seek to explain or predict use of force decisions should, when possible, take into account the developmental nature of an encounter.

The present article builds on previous work by Terrill (2001), which examined the application of force from a broader and more diverse perspective. While a similar, although modified, approach to examining police use of force is applied here, the theoretical focus is greatly narrowed and focused in an attempt to illustrate the potential benefit of merging the concept of a force continuum and the transactional nature of the police-suspect encounter. The objective is to determine how officers move up and down the continuum, and what factors may explain such behavior.

Data and Method

Data

The present analysis draws on the observational data set of the Project on Policing Neighborhoods (POPN). Patrol observation was conducted in 12 beats in each city (i.e., Indianapolis and St. Petersburg), with the sample of beats matched as closely as possible across the two sites according to the degree of socioeconomic distress. Socioeconomic distress was measured as the sum of the percentages of families with children headed by a single female, the adult population that is unemployed, and the population below 50 percent of the poverty level—an index similar to one used by Sampson, Raudenbush, and Earls (1997).

Observation was conducted according to Systematic Social Observation (SSO) protocol (see Mastrofski et al., 1998, for a detailed description). Trained field researchers accompanied officers throughout a matched sample of work shifts in each of the selected beats for a total of approximately 240 hours per beat. Busier times of the day and week were over-sampled. Observers took brief field notes and spent the next day transcribing them into detailed narrative accounts and coding them according to a pre-defined protocol.

Observers noted officers' encounters with the public. An encounter was a face-to-face communication between officers and citizens that was more than a passing greeting. Observers recorded contact with approximately 6,500 citizens in Indianapolis and 5,500 citizens in St. Petersburg, with events ranging from less than a minute to several hours. The selection criteria used for the present analysis is based on those interactions with people whom police or other

citizens present placed in the role of suspect (wrongdoers, peace disturbers, or persons for whom complaints were received). Field observers recorded a total of 3,544 police-suspect encounters.

Method

Force is defined as acts that threaten or inflict physical harm on citizens, which includes forms of both verbal and physical force. Suspect resistance is defined as acts that thwart, obstruct, or impede an officer's attempt to elicit information; failure to respond or responding negatively to an officer's commands or threats; and any physical act, proactive or reactive, against an officer's attempt to control the suspect. Force and resistance are ordinally ranked along a continuum in terms of the severity of harm each presents to the other (see top half of Table 1).[3] It is important to note that there is no ideal or commonly accepted specific ranking of force or resistance, either by researchers or by practitioners. Nonetheless, the continuum structure used here is consistent with the general conceptual framework that underlies all specific continuum structures.[4]

Measuring and ranking police force in relation to suspect resistance is a technique similar to Alpert and Dunham's (1997) *force factor*, since it provides a means or analytic tool for measuring and examining police use of force relative to suspect resistance. However, it differs in one key way. Alpert and Dunham only measured the "highest" level of police force and suspect resistance used within each encounter, while this study examines the sequential process of the encounter and measures multiple uses of both force and resistance.

Although observers coded various forms of resistance and force, for each of the 3,544 observed encounters according to a pre-defined protocol, neither the temporal sequencing nor the number of times the suspect resisted or police used force was originally quantified. Hence, additional data for the present analyses were drawn directly from observers' detailed narrative accounts to

3. In terms of police use of force, a command is defined as a statement by an officer that is in the form of an order. A threat involves a command followed by an explicit or implicit intended consequence for not complying. Restraint and control involve pat downs, handcuffing, and a firm grip. Pain compliance/takedown techniques involve holds that cause pain to a specific body part and instances when suspects are thrown, pushed, or shoved to the ground, against a wall, car, or any other surface. Impact methods involve strikes with the body or external weapon including hitting a suspect with the hands, fists, feet, legs, or any other part of the body, as well as the use of any item that is not part of the body. In terms of suspect resistance, passive resistance is defined as suspect behaviors that are unresponsive to police verbal communication or direction. Verbal resistance includes a suspect verbally rejecting police verbal communication or direction. Defensive resistance is defined as suspect attempts to evade police attempts at control. Active resistance includes a suspect attempting or actually attacking/striking an officer.

4. It should be clear that this is not an attempt to determine whether officers are following a particular policy concerning the force continuum. Only one (St. Petersburg) of the two departments had a specific policy regarding the force continuum, and this only detailed the police force side of the continuum, with suspect resistance referred to only in vague terms and not categorized into specific levels. Officers in both departments, however, were trained on the notion of a continuum structure (i.e., proportionality and incrementalism).

capture the sequencing of events within individual encounters. Each instance of resistance and force was coded and placed into sequences within each encounter so as to temporally link resistance behaviors with force behaviors.

A sequence was defined as any occurrence of either suspect resistance, police force, or both. In essence, a sequence pairs the suspect behavior with that of the officer.[5] For a sequence to occur, there must have been some form of resistance or force. There were two exceptions to this. First, encounters where there was neither suspect resistance nor police force were coded into one sequence of "no resistance-no force" to signify that neither behavior was present at any time during the encounter. Second, in instances when another officer was on the scene and used force, when the observed officer did not, a sequence was coded to signify that force had occurred, but distinguished that the sequence was a result of another officer using force as opposed to the observed officer.

In total, there were 6,523 sequences across the 3,544 encounters or 1.8 sequences, on average, per encounter. Tables 2-4 provide a look at the descriptive nature of the sequences. Table 2 shows the number of sequences by the total number of encounters. As shown, most encounters involved only one (n = 2,258) or two sequences (n = 588). Ninety-six percent (n = 3,406) of all encounters involved five or less sequences. Table 3 offers a look at the type of resistance and force used during each of the sequences. Not surprisingly, the general pattern shows that the more severe the resistance or force, the less frequent it is. Finally, Table 4 presents each of the 30 possible sequence combinations of resistance and force, and lists the number of sequences observed in each. This table provides a glimpse of how officers responded to each type of resistance that suspects presented within individual sequences (see Terrill, 2003, for further detail).

The Resistance Force Comparative Scheme (RFCS—see bottom half of Table 1) is used to account for successive suspect and police behaviors throughout each encounter as a means to gauge commensurate force (see Terrill, 2001, for further detail). Development of the RFCS is roughly based on corresponding force categories previously developed in relation to the force continuum (see Alpert & Dunham, 1997). Based on this analytic scheme, a determination was made as to whether the continuum was followed *for each sequence*. Once a determination for each sequence was made, the entire string of sequences was examined, and a determination made as to whether the continuum was

5. For example, an encounter where the officer asks a suspect for her name, followed by the suspect telling the officer her name is "Mickey Mouse," followed by the officer telling the suspect to "sit down and shut up," was classified as one instance of suspect resistance in the form of verbal resistance followed by one instance of police use of force in the form of a verbal command (see explicit definitions of resistance and force in footnote 3). If the exchange between the two actors continues on with subsequent uses of resistance, force, or both (e.g., the suspect then tells the officer "no," and the officer responds with a slap to the head, etc.), the additional forms of resistance/force were also coded resulting in multiple uses of resistance/force. For a more comprehensive description with respect to the coding of these measures, see Terrill (2001).

Table 2 Sequence length breakdown by number of encounters

Sequence length	Number of encounters	Percent of encounter
1	2,258	63.7
2	588	16.6
3	297	8.4
4	159	4.5
5	104	2.9
6	53	1.5
7	27	.8
8	25	.7
9	11	.3
10	3	.1
11	11	.3
12	3	.1
13	4	.1
17	1	.0
Total	3,544	100.0

followed *as a whole*—this is the dependent measure used in the models presented in the Analyses and Findings section.[6]

If the outcome for each sequence was the same for the entire string of sequences, then the final outcome also remained the same. If the outcome in some sequences was that the officer used less force, while in others the officer followed the continuum, then the final outcome recorded was that the officer used less force (i.e., refrained from moving up the continuum despite resistance). If the outcome in some sequences was that the officer used more force, while in others followed the continuum, then the final outcome was that the officer used more force (i.e., moved up the continuum without the presence of commensurate resistance). Finally, if the outcome in some sequences was that the officer used less force, while in others used more force, the final outcome

Table 3 Resistance and force sequence distributions (N = 6,523)

Type of resistance	Number of sequences	Type of force	Number of sequences
None	5,602	None	2,364
Passive	348	Command	2,636
Verbal	383	Threat	479
Defensive	164	Restraint	926
Active	26	Takedown	72
		Impact	46

6. Ten percent (n = 354) of the total number of cases were selected and checked for coding consistency by three external coders. This resulted in a consistency rate ranging from good (κ = .818) to excellent (κ = .908).

Table 4 Resistance/force sequence combinations

Resistance/force combination	Number of sequences	Percent of sequences
No resistance/no force	2,019	30.9
No resistance/command	2,316	35.4
No resistance/threat	400	6.1
No resistance/restraint	839	12.8
No resistance/takedown	21	.3
No resistance/impact	7	.1
Passive/no force	154	2.4
Passive/command	143	2.1
Passive/threat	20	.3
Passive/restraint	29	.4
Passive/takedown	11	.1
Passive/impact	11	.1
Verbal/no force	146	2.2
Verbal/command	148	2.3
Verbal/threat	50	.7
Verbal/restraint	26	.4
Verbal/takedown	7	.1
Verbal/impact	6	.0
Defensive/no force	33	.5
Defensive/command	28	.4
Defensive/threat	9	.1
Defensive/restraint	48	.7
Defensive/takedown	27	.4
Defensive/impact	19	.2
Active/no force	12	.1
Active/command	1	.1
Active/threat	0	.0
Active/restraint	4	.1
Active/takedown	6	.1
Active/impact	3	.1
Total	6,523	100.0

was that the officer used both less and more force (i.e., refrained from and jumped the continuum).[7]

7. Use of the terms less/refrain and more/jump needs to be understood strictly in terms of the "continuum criteria." Less force just means that the officer used less force than what is called for according to the continuum criteria, while more force refers to the use of more force than what is called for according to the continuum criteria. In both instances, this is based on suspect resistance, while accounting for officer and citizen safety issues, as well as arrest. There are cases where, in one encounter, an officer may use physical restraint that is considered less force (e.g., suspect attacks officer), while in another, an officer may issue a threat that is considered more force (e.g., suspect is nonresistant). On the normal scale of severity, physical restraint is obviously more (higher level of force) than a threat, but in the context of the continuum criteria, it is possible for the reverse to be true (as in the previous example)—it depends on what occurred prior in regard to successive suspect and police actions.

It is important to note that a *sliding* scale was applied (as per the basic analytic coding scheme) as the encounter moved from one sequence to another when *repeated* suspect resistance or force was used (i.e., to account for incrementalism). For instance, if a resistant suspect continued the same level of resistance in consecutive sequences, commensurate officer force was coded at the next highest level of force. Further, if an officer chose to use less force after any level of suspect resistance, given the basic coding structure, and the suspect repeated the same level of resistance in the following sequence, the officer was restricted to the basic coding structure options.[8]

In addition to suspect resistance, several additional legal factors are accounted for in the coding of sequences. An arrest usually, although not always, involves some form of physical restraint as the person is taken into custody. As such, the coding of arrest cases allowed an officer to use up to level 4 force—restraint and control—even when the suspect is not resistant. Officer and suspect safety were also taken into account. Whenever an officer safety issue arose (n = 64) (i.e., when a weapon is present or within "jump and reach"), officer force was coded as commensurate regardless of the level of force. When a suspect was in conflict with another citizen on the scene, and this conflict involved calm or agitated verbal conflict between parties (n = 151), commensurate force was increased to include up to restraint and control regardless of the suspect resistance level. If the conflict involved a threat to harm or an actual assault (n = 61), commensurate force included all levels of force.

The basic coding structure (i.e., RFCS) is nothing more than a means to help identify instances when it appears officer force is not commensurate—according to the criteria of the continuum—with suspect resistance (whether less than or more force). An officer is always given at least two levels of force in which to apply commensurate force. The intent is to provide adequate leeway without being overly restrictive of real-world circumstances.

Model Variables

Tedeschi and Felson (1994) posit three reasons why an actor may resort to coercion: control, justice, and social identity. Factors related to control (i.e., resistance, arrest, threat to officer and citizen safety) need not be introduced into the statistical analyses that follow, as these variables are already accounted for in the coding process. Measures of justice and social identify are presented as follows.[9]

8. Of course, all sequence coding is contingent on some degree of temporal separation. For example, a suspect may verbally resist multiple times within the same sequence (e.g., a suspect telling an officer, "No, I will not give you my licence, and I will not put my hands on the car"). Unless the officer had a chance to respond to the first part of the statement (e.g., "I will not give you my licence"), such an instance was coded as the start of one sequence.

9. It should be clear that Tedeschi and Felson's social interactionist theory of coercive actions is used solely for conceptual guidance. That is, the present examination is not a test of the theory per se, but rather an appeal to the theoretical framework.

Justice

In relation to Tedeschi and Felson's (1994) social interactionist theory of coercive actions, three potential influences are examined with respect to achieving justice: alcohol use, emotional state, and mental impairment. According to the authors, alcohol use plays a prominent role in one's decision to use coercion. While they emphasize the role of alcohol from the standpoint of altering one's ability to rationally calculate outcomes, alcohol use by a suspect may also be viewed from a norm violation perspective and thus an enhanced level of blameworthiness. As a result, this may prompt increased levels of force by officers (i.e., a deviation from the continuum in the form of more force). Conversely, suspects not displaying signs of alcohol use may be subjected to decreased levels of force (i.e., a deviation in the form of refraining from the continuum structure).[10]

Suspects displaying signs of emotional or mental impairment are also examined. Suspects demonstrating loud or intense signs of anger, for instance, may prompt officers to use a level of force that is above the confines of the continuum, while calm suspects may prompt lesser force. Relatedly, officers may be more likely to use higher forms of force when interacting with mentally impaired suspects, and less on those not displaying signs of mental illness. As noted by Engel and Silver, deinstitutionalization combined with changes in policing practices (e.g., aggressive order maintenance) have placed police officers in the difficult position of having "to handle the bizarre or disturbing behavior of mentally disordered citizens that others in the community find unacceptable" (2001, p. 226). While the evidence is somewhat mixed (see Engel & Silver, 2001, as well as Teplin, 1984), at least in the context of arrest practices, it is reasonable to posit that such pressure may prompt officers into relying on more coercive means (i.e., a deviation in the form of a jump of the continuum structure).

Social identity

The importance of preserving an officer's identity has been well documented in the police literature (Van Maanen, 1978; Westley, 1970). Similarly, Tedeschi and Felson (1994) note the importance of establishing or protecting one's identity. As a result, several factors are examined here. First, given the relevance of disrespectful behavior within the social interactionist perspective, and the policing literature in general, it is posited that suspect disrespect will lead to a more forceful police response (i.e., a jump of the continuum), while respectful

10. Note that hypothesized deviations from the continuum in terms of refraining are more speculative and exploratory as there is less theoretical guidance in this respect. Attaching blame, for instance, predicts increased force. There is a lesser degree of confidence that the absence of blame would predict a lower likelihood of force to such an extent that the result would go below (i.e., refrain) the continuum structure.

suspects will lead to less force (i.e., refraining from the continuum structure). Second, Tedeschi and Felson predict strong audience effects. With respect to the present inquiry, such an audience is measured in terms of the number of citizen bystanders present during an encounter, as well as the number of officers. It is predicted that larger audiences will lead to a more coercive outcome (i.e., a jump), while smaller audiences will lead to a less coercive outcome (i.e., refraining). Third, it is hypothesized that when an encounter is officer-initiated, police legitimacy is lower than when the officer is invited or called upon (Reiss, 1971). Consequently, it is expected that police will be quicker to assert their authority and to do it more forcefully (e.g., beginning an encounter with a verbal threat even though the suspect displays no demonstrative resistance) during proactive encounters and less likely to rely on a more coercive tactic during reactive encounters.

Additionally, an account is made as to initial forms of suspect resistance and police force. As stated by Felson and Tedeschi, "[c]oercion as an assertive form of self-presentation may be intended to establish an identity as a tough and courageous person" (1993, p. 298). An additional variable (i.e., pattern) was created to capture the combination of resistance and force behaviors throughout the encounter. The purpose of accounting for the pattern of resistance and force is to determine the extent to which initial actions in an encounter help explain actions later in the encounter. Suspects displaying initial resistance may prompt officers to react more forcefully so as to maintain their social identity (i.e., a deviation from the continuum in the form of a jump), while the demonstration of no resistance may cause officers to react less forcefully (i.e., a deviation in the form of refraining from the continuum). Conversely, the initial use of force by officers may be used to signal that they are "in charge" so as to establish their social identity (see also Bayley, 1986; Sykes & Brent, 1980, 1983).[11]

From the original pattern variable, two sets of dummy variables were constructed: one for the logistic model and one for the multinomial model (see Analyses and Findings section for the necessity of two separate models). For the logistic model, encounters that followed a pattern where the officer initially used some form of verbal force were coded as "Verbal." Encounters where the

11. Note that the term initial resistance or force does not necessarily mean this occurred in the "first sequence." Rather, initial refers to the "first instance" of resistance or force used in the encounter. Further, backup officer force actions are included in the pattern variables. How an encounter unfolds is often dependent not only on the observed officers' actions, but on other officers' actions on the scene as well. For example, another officer on the scene may issue a threat (or some other form of force) to a suspect in which the suspect may resist. The observed officer may then respond with physical restraint as a result. Failure to account for these actions would misrepresent what occurred prior to the observed officer using force in this situation. In effect, encounters sometimes evolve as a group process. Therefore, this was taken into account in the coding process by noting when backup officers use force. Thus, in the above example, the observed officers' force would be coded as commensurate as opposed to jumping the continuum, as this is a continuation of force by another officer. Essentially, backup officer force is noted in the coding and keeps the process going without making a determination of whether that officer is staying within the continuum structure.

officer initially used physical force were coded as "Physical." Encounters where no force was used prior to any break in the continuum were coded as "No Force." For the multinomial model, encounters were divided into four distinct patterns. "Suspect Nonphysical" contained those encounters where suspects were initially resistant in the form of passive or verbal resistance. "Suspect Physical" involved those cases where the suspect was initially resistant in the form of defensive or active resistance. "Officer Verbal" involved encounters where the officer initially used verbal force. "Officer Physical" involved those encounters where the officer initially used physical force.

It is also important to note that officers may stay within or deviate from the continuum framework for reasons that counter those laid out here. First, the notion of control underlies all police-suspect encounters. As such, a deviation from the continuum may have less to do with justice or social identity than it does with control (e.g., the use of a firm grip to preemptively physically relocate a nonresistant intoxicated suspect from a public to private location to question them with less distraction). Second, force for the purposes of justice and social identity can play out within the continuum framework (e.g., use of the baton on an aggressively resistant suspect who has punched the officer's partner). In short, officers may be seeking to control a suspect and operate outside the continuum structure, just as they may be seeking justice or social identity and still stay within the confines of the continuum framework.[12] There is simply no way to definitively disentangle these potential explanations. Nonetheless, on the whole, a control explanation is more tenuous when force is applied outside a continuum structure, just as a justice or social identity explanation is less viable when officers apply a level of force commensurate to the level of resistance presented.

Statistical controls

While social interactionist theory centers on the dynamic process of individual encounters, it is not sufficiently clear how social status characteristics (e.g., race, gender, age, class) may affect the likelihood of coercion within the context of the present examination. Nonetheless, prior research has shown such factors to be significant predictors of police use of force: more likely to use force when encountering young, male, black, and poorer suspects (see Terrill & Mastrofski, 2002). Hence, given the lack of certainty as to the influence of such factors within a social interactionist perspective, combined with the importance of examining such indicators, each of these factors is included in the models as control variables.

Finally, three additional control variables are included in the following analyses. First, given the aggressive get-tough policies stressed by Indianapolis

12. Some situations may also be more conducive to counter explanations. For example, situations involving intoxicated suspects where officers exceed the continuum may be more easily linked to control (e.g., more plausible), than incidents involving a disrespectful suspect.

management, compared to a problem-solving focus by St. Petersburg administrators, a site variable is included. Second, a measure is included that accounts for whether the officer anticipated violence prior to arrival on the scene. Third, the type of problem is included to account for those cases most often associated with an increased likelihood of force (Fyfe, 1988).

Table 5 provides an overview of how variables were defined, along with hypothesized relationships to force. The hypothesized relationships, as discussed above and depicted in the table, are in the direction of predicting more force (i.e., a jump of the continuum); these relationships are reversed for predicting less force when officers encounter resistant suspects (i.e., refrain from moving up the continuum). Table 6 provides descriptive statistics for the dependent and each of the independent variables.

Analyses and Findings

Given the design of the research question, it was necessary to estimate two models. Force1 is used in the logistic regression model involving those cases where the suspect never displayed resistance at any point during the encounter. In effect, an officer cannot de-escalate a situation where a suspect never resists, thereby only providing for one of two choices—stay within the continuum framework or go above it. Force2 is used in the model involving cases where a suspect displayed some form of resistance. In these cases, the officer is presented with four options, follow the continuum or deviate in one of three ways (refrain, jump, or refrain and jump). As a result, a multinomial logit model is employed.

Before presenting the relationship between each of the independent measures and the continuum, it is important to note that, on the whole, officers rarely strayed far from the continuum, even in those cases where they did not follow it. A majority of the cases where officers refrained from moving up *or* jumped the continuum involved "minimal" deviation. For example, of the 250 cases where officers refrained (used less force) from moving up the continuum, the nature of refraining in 68 (27.2 percent) of these was in the form of a verbally resistant suspect and the officer following with a command. In another 103 (41.2 percent) cases, the form taken was that of a suspect mildly resisting (passive or verbal) and the officer countering with no force. Thus, the typical refraining case could be categorized as that of involving minimal refraining, as illustrated here:[13]

13. Encounter passages are taken directly from observer narrative accounts, with slight grammatical edits. Several points on narrative accounts: First, O1 refers to the observed officer. O2, O3, O4, and so on refer to other officers on the scene. C1, C2, and C3 refer to citizen one, two, three, and so on. Second, encounter examples are placed into context by listing the problem prior to the example. Finally, in some cases, a debriefing session is included. Observers were asked to elicit the officer's motivation when possible. Hence, the debriefing is included when provided by the observer.

Table 5 Description of independent variables

Variables	Hypothesized effect	Definition
Justice		
Drug/alcohol	+	1 = Suspect shows behavioral effects of drug/alcohol, 0 = other
Fear/anger	+	1 = Suspect displays a heightened state of emotion - fear or anger, 0 = other
Mentally impaired	+	1 = Suspect shows behavioral effects of mental impairment, 0 = other
Social identity		
Disrespect	+	1 = Suspect disrespectful to police in language or gesture, 0 = other
Number of officers	+	Number of officers on scene
Number of bystanders	+	Number of citizen bystanders on scene
Proactive	+	1 = Officer initiates encounter, 0 = other
Pattern—logistic	+	Series of dummy variables that identify what actions occurred prior to any break in the continuum.
Verbal		1 = Officer initially applies verbal force, 0 = other
Physical		1 = Officer initially applies physical force, 0 = other
No force		1 = Officer does not apply force, 0 = other
Pattern—multinomial	+	Series of dummy variables that identify what actions occurred prior to any break in the continuum.
Suspect nonphysical		1 = Suspect initially resists—passive or verbal, 0 = other
Suspect physical		1 = Suspect initially resists—defensive or active, 0 = other
Officer verbal		1 = Officer initially applies verbal force, 0 = other
Officer physical		1 = Officer initially applies physical force, 0 = other
Control		
Male	+	1 = Male, 0 = female
Nonwhite	+	1 = Nonwhite, 0 = white
Age	–	1 = 0-5 years, 2 = 6-12 years, 3 = 13-17 years, 4 = 18-20 years, 5 = 21-29 years, 6 = 30-44 years, 7 = 45-59 years, 8 = 60+
Wealth	–	1 = chronic poverty, 2 = low, 3 = middle, 4 = above middle
Indianapolis	+	1 = Indianapolis, 0 = St. Petersburg
Anticipate violence	+	1 = Indication of violence from dispatcher, other officers, or observed officers' own knowledge (revealed by comments), 0 = other
Type problem	+	1 = Problem involves a dispute, traffic incident, or suspicious person, 0 = other

Table 6 Descriptive statistics

		Nonresistant suspect logistic model		Resistant suspect multinomial model	
Outcome variables	Range	*M*	*SD*	*M*	*SD*
Force1 (logistic) (Follow = 0, *n* = 2519) (More = 1, *n* = 595)	0-1	.19	.39		
Force2 (multinomial) (Follow = 0, *n* = 68) (Less = 1, *n* = 250) (More = 2, *n* = 25) (Both = 3, *n* = 87)	0-3	1.30	.96		
Justice					
Drug/alcohol	0-1	.17	.38	.44	.49
Fear/anger	0-1	.28	.44	.59	.49
Mentally impaired	0-1	.02	.15	.07	.26
Social identity					
Disrespect	0-1	.06	.24	.38	.48
Number of officers	1-26	2.12	1.43	2.82	2.47
Number of bystanders	1-99	3.93	4.71	5.99	9.47
Proactive	0-1	.47	.49	.31	.46
Pattern—logistic					
Verbal	0-1	.18	.38		
Physical	0-1	.06	.23		
No force	0-1	.75	.42		
Pattern—multinomial					
Suspect nonphysical	0-1	.24	.43		
Suspect physical	0-1	.09	.29		
Officer verbal	0-1	.55	.49		
Officer physical	0-1	.10	.31		
Control					
Male	0-1	.71	.41	.76	.42
Nonwhite	0-1	.61	.48	.71	.45
Age	1-8	5.20	1.35	5.27	1.39
Wealth	1-4	2.38	.56	2.21	.53
Indianapolis	0-1	.55	.49	.61	.48
Anticipate violence	0-1	.07	.26	.16	.37
Type problem	0-1	.47	.49	.47	.49

Encounter 1—Dispute—O1 and O2 meet C1 (BM 30's):

> C1 told O1 that he was the person that called. O1 asked what the problem was. C1 began to tell how another resident in the building told him that he could not walk through the lobby without a shirt on and that an argument ensued, at which time the man poked him in the chest. In return, C1 asked the man not to touch him and that if he wanted they could go outside and he would "kick his ass." O1 asked C1 for his identification information. C1 complied until O1 asked for his social security number. C1 said that he was not going to give him his social security number. O1 said that he would be able to find it out on his own. C1 said that he knew he could, but that he knew his rights and that he did not have to disclose it. C1 appeared emotionally distraught and with exaggerated body movements said that he was tired of [providing] his social security number so that anyone could hear it then punch into a computer. O1 shrugged off C1's tirade.

A similar pattern emerged in reference to jumps of the continuum. For example, of the 595 cases where an officer jumped the continuum when dealing with a nonresistant suspect, only 10 (1.6 percent) would be classified as extreme jumps (e.g., an officer striking a nonresistant suspect with a flashlight to the head). As a result, in a great majority of cases, the form of the jump was minimal. The following example illustrates the typical jump:

Encounter 2—Juvenile Involved in a Suspected Altercation:

> C2 began to say (to her grandparents) at this point that they would not "whip" her because the police were there, and she would have them arrested for abusing her. O1 immediately jumped in the conversation and said "Young lady, there is nothing wrong with being disciplined, and if your grandma wants me to, I will hold you down while she whips your little ass."

Force and the Nonresistant Suspect

Overall, officers jumped the continuum in nearly 20 percent of the nonresistant cases (595 of 3,114 cases). Table 7 presents the estimates from the logistic regression.[14] While the model was significant as a whole, it offers a somewhat weak fit to the data. Only 12 percent of the variance is explained as illustrated by the pseudo-R^2. Several individual predictors achieved statistical significance, many of which have been consistent predictors in past research regardless of how force has been conceptualized (Terrill & Mastrofski, 2002; Worden, 1995).

Of the three "justice" measures considered, only the drug/alcohol variable is significantly related to a jump of the continuum. It may be that officers become more frustrated when dealing with these individuals. In the case highlighted

14. In addition to the model estimated here where both sites are combined, separate models were estimated and coefficients compared to determine if there are differences among the independent measures across sites. Results (not shown) indicate that only three of 15 comparisons meet statistical significance (interested readers can obtain a copy of the full results by contacting the author).

Table 7 Logistic regression results for nonresistant suspects

Variables	*B*	*SE*	Odds ratio
Justice			
Drug/alcohol	.69**	.12	1.99
Fear/anger	.07	.11	1.07
Mentally impaired	-.31	.36	.73
Social identity			
Disrespect	−.11	.21	.88
Number of officers	.07*	.03	1.07
Number of bystanders	−.01	.01	.98
Proactive	.41**	.10	1.51
Verbal	1.29**	.11	3.65
Physical	−.95**	.27	.38
Control			
Male	.66**	.12	1.93
Nonwhite	.06	.10	1.06
Age	−.30**	.03	.73
Wealth	−.39**	.09	.67
Indianapolis	.17	.10	1.18
Anticipate violence	.11	.20	1.12
Type problem	−.08	.10	.91
Constant	−.28	.34	.75

N = 3114; pseudo-R^2 .12; model chi-square 984.72**, *p < .05; **p < .01.

below, it appears that the officer had difficulty communicating with the suspect.

Encounter 3—Problem Individual:

> O2 had C1 handcuffed and sitting on someone's front lawn. There were 15 bystanders and two EMS technicians with an ambulance. C1 was extremely intoxicated. O2 was trying to get C1's information, but C1 was almost unconscious. O1 approached C1, smacked him on his chest to get his attention, and asked what his name was. C1 slurred back something in Spanish. O2 said he did not understand Spanish and could not get his information. The EMS guys were laughing at how drunk C1 was. O1 tried to get C1's name and address, but either C1 could not understand English, or he was too drunk to understand English.

In this particular case, the officer chose to strike the suspect in order to get his attention. The officer may have chosen to nudge or shake him instead. Another alternative may have been to issue a threat before initiating any type of physical force. Perhaps the officer felt that neither alternative would have been effective due to his state of intoxication; perhaps, in Tedeschi and Felson's (1994) terminology, the suspect's intoxicated state warranted a degree of blameworthiness that called for additional force. Alternatively, the officer may have simply believed that this higher form of force was necessary to control the

situation, although such an explanation appears more tenuous given no indication of resistance or safety threat.

While several of the "social identity" measures are significantly related to officers jumping the continuum, suspect disrespect interestingly is not. That is, when confronted with a disrespectful challenge, officers did not respond in a forceful manner so as to protect their identify. This is not to say that the police may not respond at all, though. As demonstrated by Mastrofski, Reisig, and McCluskey (2002), such a response can take the form of a reciprocal form of disrespect, as opposed to the use of verbal threats or physical force.

Encounters with an increased number of backup officers, and those where the officer initiated suspect contact, were more likely to result in the officer jumping the continuum. Further, both of the pattern variables (i.e., verbal and physical) are significant. Compared to the reference category (no force), encounters in which an officer on the scene initially used verbal force were over three and a half times more likely to result in a jump of the continuum. Since all these cases involved no suspect resistance, the initial use of verbal force could not have prompted resistance from the suspect, thereby leading to the increased chance of the officer using more force. Rather, it appears that commands are often used to maintain initial control of a suspected offender, which then leads to an eventual threat. In some cases, it appears the threat is used as an "added" effect; in other words, not for the purpose of control, but rather the establishment (or reinforcement) of social identity. For example:

Encounter 4—Problem Individual:

> O1 pulled up behind a parked city bus. O1 walked up one of the bus steps and asked the bus driver what the problem was. C1 stated that the guy sitting behind him (C2) was bleeding and that he could not be on the bus. He informed O1 that they were waiting for another bus, and the guy would not get off. O1 looked at C2 and very sternly told him to get off the bus. C2 held up his hands, and said "What, what, all I want to do is go home." There was a newspaper on his arm where he had been bleeding, and there was a little blood on one of his white shirts. C2 stood up and began stumbling off the bus. O1 asked if he was bleeding. C2 held up his left arm and showed O1: "It's just bleeding a little," he slurred. "I just fell down and scraped it." O1 asked C2 if he had any ID, C2 pulled out a gray electrical cord that was tied around a picture ID; he took it off and handed it to O1. He kept repeating how he just wanted to go home. Another officer pulled up and told C2 if he could stand "like a crane," and stood like one then he could go home. O1 walked back over to the guy sitting on the ground. She asked C2 what his phone number was; he replied that he did not know, but wanted to just go home, and that his mother knew the phone number. O2 carried his things over because C2 could hardly walk. O1 escorted C2 over to a spot near her car. "Sit on the ground," she commanded, "and if you move from this spot, I'll spray you with mace," she told C2 sternly.

In other cases, commands were used prior to the eventual use of physical restraint. It appears that verbal force is used as the initial means of control until physical force can be applied. For instance, as in the following example, it is more difficult to determine if a deviation from the continuum represents an

intent toward establishing one's social identity, or is simply an extension of trying to maintain control.

Encounter 5—Officer Observes Car with Two Suspects in the Park:

> O1 got out of his car and approached the suspect's car. O1 approached the passenger side door, and as he got within a few feet of the car he pulled his gun and yelled at the driver and passenger to put their hands where he could see them. O1 radioed for another car to assist him and told the passenger, C1, to get out of the car while keeping his hands where he could see them. C1 got out of the car and O1 ordered C1 to walk to the front of the car and put his hands on the hood. As this was happening O2 arrived and walked to the driver's side of the car. O2 told C2 to get out of the car and ordered her to walk to the front of the car. At this point O1 patted down C1, and O2 patted down C2.

Debriefing:

> I asked O1 what prompted him to draw his weapon, and he explained that when he walked up on the car, he noticed that the car was running without the keys in it, and there was a screwdriver on the dashboard. O1 stated that the ignition had been punched, which made him think that it had probably been stolen. O1 mentioned that many people who steal cars carry weapons, and he just wanted to be safe. O1 stated that he would rather draw his weapon and not have to use it than not draw it when he needed to use it.

Neither of these examples demonstrates an overly drastic use of force in the sense of takedowns, pain compliance, or striking (as mentioned previously, most deviations from the continuum do not). However, in both cases, an added element of force was used on a nonresistant suspect, calling into question the intent of whether such force usage was the result of trying to "control" the situation. Did the officer in the first example (Encounter 4) have to add in a threat to mace? Did the officer in the second example (Encounter 5) have to pull his gun and then move on to a physical search of the suspect because "many people who steal cars carry weapons?" This may very well be considered good police work. The law concerning the pat down of a suspect stipulates that officers can frisk someone if they believe the person is armed and a threat. Was that the case here? The officer refers to such a threat in this example (in the debriefing session), but certainly not everyone may agree. The purpose here is not one of judging, but rather the actions prior to the point that the "added" element of force is used. Many police officials may consider such uses of force as perfectly proper, while others may be troubled by such actions. Either way, the reason why officers may use such force can be explained within the framework of social interactionist theory—as a means of control or as a means of establishing and maintaining one's identity.

Turning to the remaining statistically significant social identify measure shows that those cases involving the initial use of physical force were less likely to involve a jump in the continuum compared to no force. This may be a result of the observed officer recognizing that the force already used was sufficient to

maintain control of the suspect; and, since the suspect never becomes resistant, there is no need for more force. For example:

Encounter 6—Domestic Argument:

> O1 arrived at the location of a domestic argument and stopped the car in front of the house, an older model duplex. There was already one officer on scene, who was talking to the disputants, in the walkway along the side of the house. Just as O1 arrived, O2 placed C2 against the outside wall of the house and placed him in handcuffs.

The observed officer goes on to deal with suspect one while the other officer deals with suspect two. However, it appears that since suspect two has already been restrained (in this case by O2) and never resists, there is no need to use any further force—especially at a higher level. Theoretically, this suggests that the initial use of physical restraint may serve more of a control purpose than a social identity purpose.

Finally, three of the social status control variables are significantly related to jumps in the continuum. The odds of officers jumping the continuum are increased in encounters involving suspects who were male, young, and poor. While each of these variables is statistically significant at the $p < .01$ level, we see from the odds ratios that none is dramatically more likely to involve a jump of the continuum. For instance, the odds of an officer jumping the continuum when dealing with male suspects, in comparison to female suspects, are just under two to one.

Force and the Resistant Suspect

While an argument may be made that the dependent measure applied here can be ordered, this is not necessarily straightforward, so a potential loss of efficiency was chosen instead of introducing possible bias (see Long, 1997, p. 149). Further, refraining or holding back from following the continuum does not necessarily equate to lower levels of force being applied. Similarly, jumping the continuum does not always mean applying higher forms of force (see footnote 7). Additionally, the intent is to distinguish differences in probability in comparison to that of following the continuum. Use of the multinomial logit allows for following the continuum to be the omitted category, against which to compare deviations from the continuum.

Prior to examining the multivariate model, it is important to note several points concerning the distribution of cases. First, most cases ($n = 250$) involved an officer who was attempting to de-escalate a situation that a suspect was attempting to escalate (i.e., refraining from using force). Second, there was a fair amount of variation across the remaining categories, particularly with respect to following the continuum ($n = 68$) and those cases where officers held back and jumped the continuum in the same encounter ($n = 87$). Further, while 5.8 percent of the cases fall into the category of the officer jumping the

Table 8 Multinomial logistic regression results for resistant suspects

	Probability of less force			Probability of more force			Probability less/more force		
Variables	*B*	*SE*	Odds ratio	*B*	*SE*	Odds ratio	*B*	*SE*	Odds ratio
Justice									
Drug/alcohol	−.35	.33	.70	.38	.57	1.47	−.34	.39	.70
Fear/anger	.02	.33	1.02	1.28*	.61	3.60	.55	.39	1.74
Mentally impaired	.35	.66	1.42	.94	.95	2.58	.18	.83	1.19
Social identity									
Disrespect	−.07	.31	.92	−.85	.57	.42	−1.21*	.40	.29
Number of officers	−.15*	.06	.85	.04	.10	1.05	−.11	.08	.89
Number of bystanders	.00	.01	1.00	−.03	.03	.97	.00	.02	1.00
Proactive	−.14	.32	.86	.53	.55	1.71	.19	.38	1.21
Suspect physical	−1.02*	.51	.35	−2.54**	.89	.07	−1.00	.73	.36
Officer verbal	−.08	.37	.91	−1.45*	.59	.23	.76	.48	2.13
Officer physical	−.53	.54	.58	−2.71*	1.20	.06	.95	.62	2.60
Control									
Male	−.18	.35	.83	.90	.72	2.48	.78	.48	2.18
Nonwhite	−.32	.33	.72	−.71	.54	.48	.07	.40	1.07
Age	−.00	.12	.99	−.25	.20	.77	−.14	.04	.96
Wealth	.10	.28	1.11	−.29	.49	.74	−.33	.48	.79
Indianapolis	−.69*	.33	.49	.12	.57	1.13	−.38	.39	.68
Anticipate violence	.36	.46	1.43	1.32	.69	3.76	.64	.52	1.91
Type problem	−.04	.30	.95	−.62	.55	.53	.29	.37	1.34
Constant	2.74	1.13		.87	1.93		.26	1.37	

N = 430, pseudo-R^2 .21; *p < .05; **p < .01; model chi-square 104.44**.

continuum, it must be remembered that this is based on a relatively small number of cases (n = 25).[15]

Table 8 presents results from the Multinomial model. The model is significant as a whole and explains about 22 percent of the variance.[16] Looking initially at those factors related to instances when officers chose to use less force as per the continuum criteria, we see that few variables are significant. Officers were significantly more likely to refrain from following the continuum when involved in encounters with few backup officers on the scene. Perhaps officers are more cautious in their approach to using force when they feel they do not have enough backup officers should the suspect become overly resistant. Alternatively, with fewer officers present, the need to assert one's identity in the presence of officers may be lessened. Further, officers were less likely to refrain from following the continuum when suspects initially became physically resistant compared to when they initially displayed either passive or verbal resistance (the reference category). That is, an aggressive physical form of resistance was likely to prompt a similar form of force. For example:

Encounter 7—Domestic Dispute Suspect Flees from Officers:

> O1 and O2 jumped into their cars, turned on their lights and sirens, and took off in pursuit of the suspect. O1 went one way, and O2 went the other, but they communicated via radio. About three blocks away, O2 said he caught C2. O1 pulled up behind O2's car, handcuffed C2 (who was standing beside O2's car), put C2 in his car, and returned to the original scene of the encounter where C1 was.

Viewing results from those cases where officers used more force, Table 8 shows that fearful or angry suspects were significantly more likely to be on the receiving end of an officer jumping the continuum. Further, all three of the initial resistance/force measures are significant. Officers were less likely to jump the continuum in those cases where the officer initially used force (both verbal and physical), as well as those where the suspect was initially physically resistant, when compared to those cases where the suspect was initially passively or verbally resistant (the reference category). That officers were *less* likely to jump the continuum in encounters where the officer initially used verbal force is somewhat surprising. Recall that in the analysis of nonresistant suspects, officers were *more* likely to jump the continuum when initially using verbal force. However, it must be remembered that the point of reference in the former case was no force, while in the latter the comparison is with suspect passive/verbal resistance.

15. This raises two issues. First, those factors found to be significantly related to jumping the continuum need to be viewed with caution due to so few cases. Second, although there were a sufficient number of cases within the remaining categories to provide confidence in these estimates, it was decided also to estimate a separate model that excluded the 25 "more" cases. In this model, the direction and effects of the independent variables remained the same.

16. As with the analysis concerning nonresistant suspects, separate models were also estimated and coefficients compared to determine if there are any differences among the independent measures across sites. Results (not shown) indicate that only eight of 48 comparisons meet statistical significance (interested readers can obtain a copy of the full results by contacting the author).

Beyond this, what seems to happen in encounters involving nonresistant suspects, is that officers issue a command and then apply an added threat or physical restraint. In encounters involving a resistant suspect, a similar pattern of behavior often unfolds, but the suspect resists after the initial command. Thus, the behavior on the officer's part is the same, but in the latter case, it is interrupted by suspect resistance. When this occurs, therefore, the added element of a threat or physical force then falls in line with the continuum. For example:

Encounter 8—Traffic

> O1 informed C1 he would have to have the car towed due to the circumstances. C1 became upset and stated it was his mom's boyfriend's car. O1 informed him he should not be driving while suspended. C1 stated he was on his way to work and tried numerous times for a negotiation. O1 finally told C1, and C2 to hit the road. C1 shook his head and stated this was bullshit. O1 told C1 and C2 they both better go now while they had the chance.

The other interesting finding involves initial physical resistance. Officers were less likely to refrain from *and* less likely to jump the continuum when suspects were initially more aggressive at the outset. In these cases, officers stayed close to the continuum. Recall from an earlier example (Encounter 7) that when a suspect fled, the officers chased him down and applied physical restraint, which is in accordance with following the continuum criteria. It appears rare for an officer to allow a suspect to "act up" in the form of physical resistance. However, when such suspect resistance does occur, it appears that officers generally do not go to the extreme of jumping the continuum, either. Officers match physical resistance with physical force, but not in the form of extreme force, for the most part.[17] Overall, initial behavior (i.e., the pattern measures) appears to present the greatest theoretical challenge in terms of interpretation. That is, it is somewhat difficult to assess the extent to which these variables fall within a social identity motive or one more geared toward control.

Finally, the last column in Table 8 shows results from those cases where officers used both less and more force in the same encounter. These encounters involve the most erratic behavior. In essence, officers in these cases swing from one end of the continuum to another as an incident unfolds. Despite this volatility, the only significant predictor uncovered involved encounters where suspects did *not* display disrespectful behavior. That is, when disrespect was absent, officers were more likely to engage in this form of deviation from the continuum (i.e., both holding back and jumping within the same incident). Disrespect has been shown to be a fairly consistent predictor of police use of force in previous studies, but no study has examined the influence of suspect disrespect within the framework applied here.

What seems to drive this type of deviation (i.e., refrain and jump), as evidenced in a majority of these cases (n = 54, 62 percent), is that the officer

17. Of course, there is a "topping off" effect at work in the measurement to some extent. A suspect who displays the highest form of resistance (level five, active) cannot be subjected to a jump in the continuum unless the suspect lowers the level of resistance afterward, and the officer continues with more force.

initially holds back followed by a jump of the continuum, as illustrated in the following:

Encounter 9—Open Container:

> O1, while still in the vehicle, told C1 to dump his beer out. C1 did not react. O1 yelled again for C1 to dump the beer out. C1 did not react or look at O1 but made a slight effort to hide the beer by his side. O1 stopped the vehicle and went over to C1, who was still not reacting to O1. O1 stepped on his foot, grabbed the beer and pressed his shoulder down.

In effect, officers generally did not leap at the opportunity to apply force on a resistant suspect. Rather, officers often gave suspects a "second chance" to comply. However, failure on a suspect's part to take advantage of this extra chance often led to a more forceful outcome, as the officer became frustrated and jumped to higher levels on the continuum. This suggests that holding back from the continuum structure (as opposed to a proportional and incremental change) may actually have a detrimental effect and lead to a more forceful outcome.

Discussion

It is difficult to put the findings into context primarily because there are no baseline data from which to compare. Hence, it is hard to determine how far the police have come with respect to applying force proportionally and incrementally. One can, however, look back at findings from those studies that have considered the transactional aspect of the police-suspect encounter (albeit, not specifically in the context of a force continuum) to determine how officers manage the encounter. For instance, the findings reported here counter Toch's (1969) escalation of violence findings. In the present study, there were many instances where officers could actually have applied more force on "resistant" suspects but chose not to. The cycle of violence described by Toch often did not play out.[18] In this sense, the findings parallel those of Fyfe (1988, 1989), in that officers could have actually been more aggressive.

Perhaps resistant suspects pose more of a challenge or degree of uncertainly, prompting officers to be more cautious and slow to increase force. However, this would seem to contradict what others have speculated (see Bayley & Bittner, 1997)—mainly, that officers are more apt to move in the opposite direction of applying more force when faced with such uncertainty. Unfortunately, too few observer debriefing sessions are available to shed more insight on "why" officers chose to treat such suspects less harshly. The most definitive finding in these types of cases is that most deviations occurred as a result of initial suspect resistance or police force.

In terms of the "nonresistant" encounter, one might be troubled by the fact that officers jumped the continuum nearly 20 percent of the time. Moreover, it

18. It is possible that the inconsistency of the findings reported here with Toch's could stem from the fact that Toch was analyzing incidents that eventuated in assaults on officers.

appears that officers may resort to such an approach for both justice (e.g., intoxication) and social identity (e.g., number of officers on the scene) reasons, and to some extent even for the purpose of control. In these cases, officers engaged in behavior that can be perceived as an attempt to "jack up" the situation (see Muir, 1977). If the suspect takes the bait, then the subsequent force becomes justified in the context of the continuum criteria. However, as uncovered here, quite often the suspect does not resist, yet officers continue being forceful to the point that such behavior falls outside the continuum structure nearly 20 percent of the time. While this may sound rather dramatic, recall that in a great majority of these cases, the form of the jump was minimal in nature. That is, officers primarily resorted to a verbal threat or low-level physical force (e.g., restraint), perhaps in an attempt to make sure the suspect understands whatever message they are trying to convey (e.g., "If I have to come back tonight, you will be sorry"). Further, numerous social status control measures did increase the odds of officers jumping the continuum on nonresistant suspects. Suspects who were male, young, and poor were all more likely to experience a jump of the continuum.

The findings presented here come with two primary cautions. First, the study is based on observational data from officers in only two cities. Second, findings are limited to the continuum criteria established here. However, such an analysis offers a unique picture of the manner in which force is applied. The present inquiry is simply one way of conceptualizing, measuring, and analyzing force along a continuum to determine the application of force.

From a policy perspective, analytic use of the force continuum has much to offer. Historically, police officials have generally used the force continuum solely as a mechanism to guide officer decision-making, but the continuum can also be used from an analysis standpoint as demonstrated here. That is, as a tool from which to examine why and how officers use force. In effect, the continuum provides the foundation for beginning to assess force appropriateness. As uncovered here, officers actually appear to perform quite well, on the whole, when dealing with resistant suspects, while the issue of control can be questioned more readily when dealing with nonresistant suspects.

Combining a consistent data collection strategy (e.g., use of force reports) with a specific force continuum policy would provide administrators the ability to readily track and assess everyday force usage by both individual officers and groups of officers (e.g., by shift or unit; see also Terrill, Alpert, Dunham, & Smith, 2003). For example, within the context of the present findings, officials would discover that officers are more likely to jump the continuum during incidents initiated by the officer (e.g., proactive contacts). Perhaps, officers feel the need to be more forceful during such encounters to establish control; alternatively, in Tedeschi and Felson's (1994) parlance, officers may feel the need to establish their social identity. Police officials, street officers, and even some scholars, may argue the importance of "maintaining control" during the police-suspect encounter, but one has to ask: What exactly needs to be controlled to the point of jumping the continuum if the suspect is compliant in the first place,

and there is no threat to officer or citizen safety? Consequently, managers might address this issue during training sessions.

It is important to note that the force continuum is by no means the only standard by which police use of force should be measured and analyzed. Further, legitimate exceptions may well occur with sufficient frequency as to reduce the capacity of such an approach to guide practice in the field. In particular, what are the circumstances when officers should be encouraged to exert more restraint than the continuum justifies? Under what circumstances should officers accelerate the use of force by "jumping" levels? Proper diagnosis of these exceptional circumstances may well distinguish the mediocre from the skilled police officer that Klockars (1995) holds up as the appropriate standard for judging police use of force. A detailed analysis of these exceptional cases may enable policy-makers to further refine departmental policies that ultimately produce better officer practice in the use of force.

Future research should continue to focus on the transactional nature of the police-suspect encounter. In particular, four specific areas require attention. First, the differential impact that initial verbal commands play in the overall outcome of an encounter needs to be examined more fully. The fact that officers tend to jump the continuum on nonresistant suspects when beginning with verbal force, while refraining from the continuum on resistant suspects, is particularly curious. Detailing an officer's motivation for applying an "added" element of force on a nonresistant suspect can shed light on why officers choose this tactic. Officers may believe this is necessary to "hammer home" the point they are trying to make, but they may also behave this way so as to establish their social identity. Also, issuing a final threat or conducting a pat down search may not be perceived by the officer as inappropriate force, while resorting to a higher level of force (e.g., impact method) on a passive or verbally resistant suspect is. More comprehensive debriefing sessions may address not only the "why" question in the context of this issue, but others as well (e.g., why officers are more likely to jump the continuum on male, young, and poor suspects).

Additional research should also focus on measuring and incorporating noncoercive tactics into sequencing, as well as examining the interplay between such tactics and force. Just as suspect resistance and force were sequenced out here, noncoercive tactics can be added in a similar manner. This would take the transactional approach a step further. Further, future research should attempt to incorporate backup officer actions more adequately into analyses. The application of force is often a group process as opposed to a one-on-one process. Backup officer actions were accounted for here, but only as a control in an attempt to explain the observed officer's actions more adequately. Finally, future work should attempt to apply other theoretical perspectives, beyond the framework used here, for explaining why officers do and do not apply force in a proportional and incremental manner.

In conclusion, scholars ranging from Bittner (1970) to Klockars (1995) to Muir (1977) have observed that the best police work is accomplished when carried out in the least coercive manner possible. Applying force sparingly ultimately serves

to enhance the legitimacy of the institution as a whole. The norm inherent within a force continuum is that force will be applied proportionally and incrementally. By examining force within this context, a better understanding of how and why the police go about applying force in a conservative fashion has been developed.

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