

Title: Social identity and procedural justice in police encounters with the public: Results from a randomised controlled trial

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Abstract

The role of social identity in shaping citizen views of police is central to the Group-Value Model (GVM). The GVM suggests the relationship between public perceptions of fair treatment and views of police legitimacy will be tempered by social identity. Our paper employs a randomised field trial of procedural justice dialogue – the Queensland Community Engagement Trial – to test the role of social identity in the GVM. Under randomised field trial conditions we find social identity is connected to perceptions of procedural justice and legitimacy, but that it does not moderate the effect of procedural justice on legitimacy. We discuss the implications of this finding, concluding that when police use procedurally just dialogue in encounters with the public, they can enhance perceptions of police, regardless of social identification.

Keywords: procedural justice, social identity, police legitimacy, Group-Value Model

Introduction

The Group-Value Model (GVM) explains attitudes and behaviour towards authorities (see Lind and Tyler 1988). According to the GVM, people yield 'self-validation' from group membership and derive a sense of self-worth from treatment by group authorities (Tyler 1989, p. 831; see also Goodman-Delahunty 2010; Lind and Tyler 1988). The GVM emphasises the importance of fair treatment and procedures. When group members are treated fairly by group authorities, their self-esteem is bolstered and they are more likely to accept decisions made by authorities (Smith *et al.* 1998). Identification with the group – or social identification – is a key element of this model. When a person feels they are a part of a group they 'value their status and security within it' and they are 'very concerned with the procedures used by the group to make decisions' (Tyler 2006, p. 174). A person's relationship with the group should therefore 'moderate the importance they place on how they are treated by group authorities' (Smith *et al.* 1998, p. 471).

Theories about police legitimacy are intertwined with the GVM. In policing research, procedural justice (fair and respectful treatment and decision making) is viewed as the key mechanism police can use to enhance perceptions of police legitimacy (Mazerolle *et al.* 2013). Tyler and his colleagues show that when police demonstrate procedural justice, people are more likely to trust the police and believe police are legitimate (Sunshine and Tyler 2003; Tyler and Fagan 2008; Tyler and Huo 2002). This pattern holds in research conducted in the US (e.g. Sunshine and Tyler 2003), Australia (e.g. Murphy *et al.* 2008) and elsewhere (e.g. Jackson *et al.* 2012).

The GVM explains this relationship. Members of society are most likely to support police and other authorities when they are treated fairly (e.g. Tyler and Huo 2002). This is because procedurally fair treatment conveys status and value within a group. When people feel valued by authorities or key representatives of society such as the police, it stands to reason they will feel a normative desire to follow the directives of those representatives. The GVM suggests procedural justice will be less relevant to individuals who do not identify with the group that police represent (i.e. the state/mainstream society) (Huo 2003; Huo *et al.* 1996; Tyler *et al.* 1997). However, while the link

between procedural justice and police legitimacy is well established, and can be explained by the GVM, less is known about the role of social identity in shaping perceptions of police legitimacy (although see Bradford 2014; Huo 2003; Murphy 2013; Murphy and Cherney 2011).

The current study examines the link between social identity, procedural justice and police legitimacy using data collected in the Queensland Community Engagement Trial (QCET). We consider the relationship between social identity, procedural justice and police legitimacy in the context of traffic encounters between police and the public. We begin with a review of the literature, provide an overview of the research site and data, present our findings and discuss the theoretical and practical implications of our study.

Police Legitimacy and the GVM

Legitimacy is integral to modern policing. Legitimacy is defined as ‘a property of an authority or institution that leads people to feel that that authority or institution is entitled to be deferred to and obeyed’ (Sunshine and Tyler 2003, p. 514), and the ‘right to rule and the recognition by the ruled of that right’ (Jackson *et al.* 2012, p. 1051). When police are perceived to be legitimate, people are more likely to cooperate and comply with police and the law. Research shows legitimacy is beneficial in one-on-one encounters with police (e.g. Mastrofski *et al.* 1996) and it is linked to cooperation with police and the law more broadly (e.g. Cherney and Murphy 2013; Jackson *et al.* 2012; Murphy *et al.* 2008; Tyler and Fagan 2008)

So how do police ‘get’ legitimacy? Procedural justice is one answer. Originating with the work of Thibaut and Walker (1975) and developed more recently by Tyler and colleagues (e.g. Sunshine and Tyler 2003; Tyler and Huo 2002), procedural justice theory suggests police and other criminal justice actors will achieve better outcomes when they are viewed as procedurally just during encounters with the public. In the context of policing, procedural justice comprises four aspects: neutrality; trustworthiness; citizen participation, or voice; and respectful, dignified treatment (Tyler 2008; Tyler and Huo 2002; see also Goodman-Delahunty 2010). Neutrality means police undertake their duties and make decisions without bias (Tyler 2008). Trustworthiness refers to the motives of

police officers: the perception that police are honest and can be trusted (Tyler 2008; Tyler and Huo 2002). Respectful treatment and participation mean police treat people with dignity and respect and allow citizens the opportunity to voice their opinions (Tyler 2008).

The GVM employs the concept of social identity to explain the effects of procedurally just treatment on support for authorities. The social identity concept has been extensively examined in social psychology to explain group behaviour (Abrams and Hogg 1990; Tajfel 2010). In the GVM, procedural justice encourages positive attitudes and behaviours towards group authorities because procedurally just treatment reaffirms group membership/identification (Smith *et al.* 1998; Tyler 1989). Fair treatment is important for group members because it communicates they are 'protected and valued members of society' and, consequently, 'they are expected to give positive evaluations about the authorities they have been dealing with' (Murphy 2009, p. 162). On the other hand, when people do not identify with the group, or do not want to be part of the group, procedural justice may not have the same degree of impact upon attitudes towards group authorities. Tyler, Huo and their colleagues (see Huo 2003; Huo *et al.* 1996; Smith *et al.* 1998; Tyler *et al.* 1997) suggest social identity can have a moderating effect on the link between relational aspects of policing (i.e. procedural justice) and the willingness to accept decisions made by authorities (similar to police legitimacy). Huo and colleagues (1996, p. 41; see also Tyler and Lind 1990) explain: 'if the authority figure is perceived to represent a group to which the individual feels little or no attachment, then relational issues may become less relevant.' If procedural justice influences attitudes towards authorities because procedurally just treatment *reaffirms* group membership, the relational elements of procedural justice may not have the same effect if an individual feels disconnected from the group.

Procedural Justice and Social Identity in Prior Research

Research has considered the moderating effect of social identity on the relationship between fair treatment and decision acceptance. Huo *et al.* (1996; see also Murphy and Cherney 2011; Tyler *et al.* 1997) examined whether or not social identity moderated the association between relational attitudes towards authorities (i.e. treatment related factors) and accepting their decisions. Huo *et al.* (1996)

found that having positive perceptions of one's treatment (i.e. relational concerns) was more strongly related to decision acceptance among those who strongly identified with the workplace culture (see also Tyler *et al.* 1997). Huo (2003) also examined this relationship in the context of legal authorities in a survey of Californians. Survey participants reported on their experiences with legal authorities (e.g. a police officer) in the previous 12 months. Huo (2003) then examined whether social identity moderated the relationship between relational evaluations of the authority (similar to procedural justice) and the willingness to accept the decisions made by the authority. Huo (2003) concluded that relational elements of treatment were more important to those who identified strongly with American society.

Procedural justice research draws on the concept of social identity (e.g. Jackson and Sunshine 2007; Sunshine and Tyler 2003; Tyler and Huo 2002). Nevertheless, only a handful of prior studies have explored the empirical link between social identity and procedural justice in the context of policing. These studies have generally conceptualised social identity as a sense of belongingness to the nation-state, the idea being that as police represent the nation-state, social identity will be strongly connected to perceptions of and attitudes toward the police (Bradford 2014; Murphy, 2013). In some of these studies, the idea of identifying with the nation-state is then juxtaposed with the notion of identifying with one's own ethnic group. In their study of Australian citizens, Murphy and Cherney (2011) found ethnicity moderated the relationship between procedural justice and the willingness to cooperate with police; however, they did not find a significant interaction effect when predicting legitimacy. Murphy and Cherney (2011) suggest procedural justice may be less effective for minority groups because these groups have a weaker sense of identification (although they did not find a moderating effect for social identity in their study). Murphy (2013) examined the impact of social identity in an ethnic minority sample in Australia and found procedural justice was actually more likely to promote trust in police when participants identified more strongly with their own ethnic group. Bradford (2014) examined the link between social identity and cooperation with police in London. He found self-reported willingness to cooperate with police and procedural justice beliefs were linked to social identity. Bradford (2014) found social identity mediated the relationship

between procedural justice and cooperation with police, although results varied based on national identity (feelings of citizenship). Most recently, in an Australian panel study, Bradford, Murphy, and Jackson (2014, p. 536) extended previous definitions of social identity based on notions of nationhood or citizenship to also incorporate the idea of the 'upstanding citizen'. Bradford and colleagues (2014, p. 536) propose that 'adhering to group norms and values – and laws – is an important way of expressing one's "Australianess"' and argued that such a conceptualisation of identity is important when studying legal authorities. In their study they found that the relationship between procedural justice and police legitimacy was in fact mediated by such a measure of social identity. When taken together, these somewhat contradictory findings suggest more research is needed to unravel the relationship between social identity, procedural justice and police legitimacy.

The GVM suggests social identity will moderate the effect of procedural justice. At the same time, criminological research emphasises the importance of the procedural justice model when understanding police legitimacy. Considering the uptake by policing organisations of procedural-justice-based policing approaches, the social identity/procedural justice connection is important. Procedural justice is often touted as 'best practice' for police agencies, and police are encouraged to incorporate the principles of procedural justice into their interactions with citizens. However, as demonstrated in this review of the literature, more research is needed to determine whether procedurally just policing matters more or less depending on one's identification with mainstream society.

The Current Study

In this study we employ data collected in the Queensland Community Engagement Trial (QCET), an experimental field trial of procedurally just policing undertaken in Brisbane, Australia. Using a survey of 2,746 respondents, we test whether social identity facilitates the uptake of procedural justice beliefs during an intervention designed to convey procedural justice. Unlike prior studies of social identity and procedural justice, these data allow us to examine the moderating effect of one's social identity on the procedural justice/police legitimacy link under randomised field trial conditions. We hypothesise

that procedural justice matters more for building police legitimacy among those who identify strongly with Australian society.

Method and Data

The trial examines procedural justice and police legitimacy in a high volume, routine encounter between police and the public – random breath tests (RBTs). RBTs in Australia involve police road blocks designed to test if drivers are under the influence of alcohol. The police use a handheld calibrated machine and instruct each driver to blow into a connected tube. If the driver blows over the alcohol limit (.05 grams per 100 milliliters of blood for full licence holders in Queensland), the police ask the driver to step out of his/her car and process the driver onsite utilising more sophisticated breath testing equipment.

RBTs were selected as the experimental vehicle for the trial as they are a common point of contact that police have with the general population – and are a likely avenue to deliver procedurally just policing in the future. The test area was the Metro South Region of the city of Brisbane. Brisbane is Queensland's capital and Australia's third largest city. Mid-sized RBT operations were chosen for the trial as they are more likely to encounter residents living within the region (i.e. larger operations are aimed at drivers commuting through the region). At the time of the trial, an average of nine mid-sized operations were planned per month in the Metro South Region, each involving one supervising officer and a minimum of five officers conducting the RBTs. Between December 2009 and July 2010, 60 RBT operations were randomly assigned to either the control or experimental condition (30 to the control condition and 30 to the experimental condition).

Control Condition

The control condition virtually replicated the business-as-usual procedure for RBTs. In this procedure, officers set up an RBT road block on the side of the road. Seven to 10 drivers are motioned into the road block. Teams of seven to 10 officers then deliver a short mandated message about RBTs before asking drivers to blow into a breath testing device. The entire encounter is completed in around 20 seconds. The only variation to this standard procedure was the distribution of the survey. At the

conclusion of the control condition RBT, the officer provided the driver with a sealed survey envelope. Police handed out 400 surveys to drivers (the total number of drivers stopped) at each of the 30 control RBT operations ($N = 12,000$ surveys).

Experimental Condition

In the experimental condition, police delivered to drivers an extended oral script that operationalised the key ingredients of procedural justice (Mazerolle *et al.* 2013; Mazerolle *et al.* 2012; Murphy *et al.* 2014). Drivers were also provided with a community information bulletin (developed by Queensland Police Service personnel) and a copy of the survey. The script incorporated the four elements of procedural justice. Specifically, police officers communicated neutrality in decision making by explaining the purpose of RBTs (to reduce the number of alcohol related traffic crashes) and that drivers had been pulled over at random. Police demonstrated trustworthy motives by detailing how many deaths there had been on Queensland's roads and how hard it was to tell a person that loved ones had been injured or had died. Citizen participation was encouraged throughout the encounter. Officers provided community information and asked drivers if they had any issues that they thought the police should prioritise, or if they had any other general questions – allowing drivers to have a 'voice' in the interaction. Officers demonstrated dignity and respect by thanking the driver for their time and where possible commenting on something positive the driver had done (e.g. using the correct child restraints).

If, during the breath test, a driver was over the legal alcohol limit (or had committed any other infringement), then normal enforcement actions were taken; however, in such cases, the survey was still provided to the driver. Police handed out 300 surveys to the 300 drivers stopped¹ (with attached community bulletin) at each of the 30 experimental RBT operations ($N = 8,985$ surveys).

Driver Survey

Drawing on measures developed by Murphy and colleagues (2010) and Tom Tyler and colleagues (Tyler 1997, 2004, 2008; Tyler and Fagan 2008; Tyler and Huo 2002), a comprehensive survey was developed incorporating social identity, procedural justice and legitimacy constructs. Drivers were

provided with the survey envelope after completing their breath test and asked to return the completed survey using a postage paid envelope provided. Personal information was not collected during the RBT or in the survey, meaning that it was not possible to contact drivers who did not return their survey, or to follow-up participants.

A total of 20,985 (experimental = 8,985; control = 12,000) surveys were distributed to drivers during the trial and 2,747 surveys were returned (an overall response rate of 13%) (see Antrobus *et al.* 2014 for a discussion). The response rate for the control condition was slightly higher (13.73%) than for the experimental condition (12.30%). There were no significant differences between experimental and control conditions for age, gender or ancestry. The mean age of drivers was 47 with a range from 17 to 90 years (SD = 14.71). Female (50.42%) and male (49.58%) respondents were almost equivalent. The largest percentage (49.17%) of respondents were from Australian ancestry (including Aboriginal and Torres Strait Islanders), followed by Europeans (39.50%) and people who identified themselves as Asian (5.00%) (Mazerolle *et al.* 2013; Mazerolle *et al.* 2012). These characteristics are fairly consistent with Brisbane census data: the average age of Brisbane residents is 35 years and the majority indicate English or Australian ancestries (approximately 53%) (based on ABS 2011).

Measures

All items in the survey capturing perceptions of police were measured using a 5-point Likert scale (1=*Strongly Disagree* to 5=*Strongly Agree*). Our measure of procedural justices captures the four key elements of procedural justice: neutrality, trustworthiness, citizen participation or voice, and respectful or dignified treatment (see Goodman-Delahunty 2010; Tyler 2008; Tyler and Huo 2002). Respondents were asked to indicate their level of agreement with a number of statements about the police *during the last RBT encounter* (e.g. 'The police officer treated me with dignity and respect')², which were computed to form a scale (Alpha = .911).

Police legitimacy is typically difficult to define and operationalise in research (e.g. Bottoms and Tankebe 2012). In this study we measured legitimacy as a multi-dimensional construct comprising three elements: 1) the *obligation to obey police* (e.g. 'I feel a moral obligation to obey

police'; Alpha = .865); 2) *moral alignment* with police (e.g. 'My own feelings about what is right and wrong usually agree with the rules and laws enforced by police'; Alpha = .789); and 3) *disengagement* from police (e.g. 'I do not care if I am not doing the right thing by police'; Alpha = .778). While 'obligation to obey police' is often considered the traditional method of capturing police legitimacy, 'moral alignment with police' has also been used to measure police legitimacy in recent research (Jackson *et al.*, 2013; Jackson *et al.*, 2012). Moral alignment captures the belief that an institution is living up to the moral standards that their position in society demands. Mazerolle *et al.* (2013) also suggest 'disengagement' is an important component of legitimacy. Disengagement emerges from the motivational postures literature (see Braithwaite, 2009) and taps into the idea that authorities and their demands can sometimes be irrelevant to people. Viewing authorities as irrelevant therefore signals that a citizen does not morally align with an authority, nor will the citizen respect or obey that authority. The discriminant validity of these measures of police legitimacy has been tested previously (see Mazerolle *et al.* 2013)³.

Independent variables in the analyses included a dichotomous variable – *condition* – that classified participants into either the experimental or control conditions (experiment = 1; control = -1) and a single item measure of *social identity* ('Do you see yourself first and mainly as a member of the Australian community?' on a 5-point Likert scale (1 = *Strongly Disagree* to 5 = *Strongly Agree*). The social identity item captures the extent of identification with the superordinate group police represent (i.e. Australian society). Although a multi-item scale of social identity is preferable, Murphy and Cherney (2011) found that our single item measure (when used in their study) was highly correlated with the other items contained in a 4-item scale of social identity. The social psychological literature also indicates that a 1-item measure of social identification is often appropriate (see Haslam 2004; Postmes *et al.* 2012).

Demographic variables were also included in the analyses. We operationalised *gender* (male = 1, female = 0), *age*, *education* (Likert scale 1–7 with 7 representing higher levels of education), *employment* (unemployed = 1, other = 0), and speaking a language other than English (*LOTE*) (speaks

a language other than English = 1, speaks English = 0). We mean-centered the variables *social identity* and *procedural justice* for ease of interpretation.

Results

Descriptive Statistics

Univariate and bivariate⁴ (see Table 1) statistics suggest participants generally believed their encounter with police had been procedurally just. Moreover, they indicated positive perceptions of police legitimacy. Participants also reported high levels of social identification: the majority of participants identified first and foremost as a member of the Australian community. As expected, social identity was correlated with both perceptions of procedural justice ($r = .142$) and the elements of legitimacy (Moral alignment $r = .133$; Obligation to obey $r = .221$; Disengagement $r = -.128$). Legitimacy (Moral alignment $r = .300$; Obligation to obey $r = .461$; Disengagement $r = -.336$) and the experimental condition ($r = .184$) were also correlated with procedural justice.

[Insert Table 1]

Structural Equation Modeling

Using Structural Equation Modeling (SEM) in AMOS (Arbuckle and Wothke 1999) we evaluated whether or not the experimentation manipulation of procedural justice and social identity predicted perceptions of procedural justice within the encounter. In addition, we tested the interaction of social identity and the experimental condition on perceptions of procedural justice and on subsequent perceptions of police legitimacy. An interaction effect between the experimental condition and social identity on each of the three elements of legitimacy, and an interaction effect between social identity and procedural justice on the three elements of legitimacy, were also tested (see Figure 1).

Demographic variables were also included in the model (see Table 1 for demographic results). There was less than 6% missing data on the variables of interest, thus, missing data were estimated using the expectation maximum algorithm (Tabachnick and Fidell 2007).

[Insert Figure 1]

We evaluated model fit against Pearson χ^2 goodness-of-fit, the Comparative Fit Index (CFI), the Normed Fit Index (NFI), and the root mean-square error of approximation (RMSEA). The sensitive χ^2 value was statistically significant, $\chi^2(35, N = 2,746) = 396.806, p < .001$, indicating the model produced a variance-covariance matrix that was different from the original variance-covariance matrix. However, this is likely due to the large sample size. The other indices indicated adequate fit of the model: CFI = .909, NFI = .903, and RMSEA = .061 (see Hu and Bentler 1998).

Figure 1 presents the relationships between variables in the model. Table 2 shows the relationships between the demographic variables and core variables in the model. As expected, both the experimental condition and social identity were important predictors of procedural justice (β s = .185 and .136 respectively). The interaction effect between the experimental condition and social identity variables on procedural justice ($\beta = .006$) was not significant: social identity did not moderate the effect of the experimental treatment on procedurally just beliefs.

[Insert Table 2]

Furthermore, perceptions of both procedural justice and social identity impacted on perceptions of legitimacy. Perceptions of greater procedural justice within the RBT encounter were related to higher levels of obligation to obey police and moral alignment (β s = .429 and .278) and less disengagement from police ($\beta = -.307$). Similarly, although somewhat weaker, relationships existed between social identity and legitimacy variables. Drivers who identified more strongly with Australian society were more likely to report higher levels of moral alignment and obligation to obey ($\beta = .088$ and .158) and were less likely to feel disengaged from police authority ($\beta = -.090$). However, contrary to our expectations, none of the interactions between perceptions of procedural justice, social identity, or the experimental condition significantly impacted legitimacy perceptions.

Demographic variables also show some interesting relationships with the core variables within the model (see Table 2). Only gender and education were significantly related to perceptions of procedural justice; females and participants with a lower level of education had better views of the procedural justness of their encounter (β s = $-.122$ and $-.086$). Younger participants, men, and LOTE

participants had lower levels of social identification (β s = .197, $-.062$ and $-.045$). Gender, employment and English-speaking were also variously related to perceptions of legitimacy. Women were more likely to feel an obligation to obey and to indicate moral alignment with police, and were less likely to feel disengaged (β s = $-.106$, $-.074$ and $.162$). Similarly, participants from an English-speaking background felt greater moral alignment with, and less disengagement from, the police (β s = $-.063$ and $.079$). Finally, participants who were employed were more likely to feel an obligation to obey police than those who were unemployed (β = $.039$). Nevertheless, the core relationships still hold when these variables are controlled for.

Discussion

The GVM explains the relationship between procedural justice and legitimacy as a function of group membership. People want to belong to groups and, when they do, they derive a sense of self-worth from membership (Smith *et al.* 1998; Tyler 1989). Being treated fairly by group authorities is desired because fair treatment reaffirms feelings of self-worth and belonging (Huo *et al.* 1996; Smith *et al.* 1998; Tyler 1989). Furthermore, when a person feels part of a group they have an increased stake in the way group authorities make decisions and are subsequently more concerned about procedural fairness and the processes through which authorities exercise their powers (Tyler 2006). Procedural justice is therefore an important contributor to attitudes and behaviour towards group authorities.

Prior research examines the link between social identity, procedural justice and decision acceptance. These studies show that social identity does in fact moderate the effect of relational perceptions of authorities on attitudes and behaviour towards those authorities (Huo 2003; Huo *et al.* 1996). In the context of policing, the GVM indicates that when people identify with the group that the police represent (e.g. Australian society), procedural justice will be very important for determining attitudes and behaviour towards the police. It follows that when people identify less strongly with mainstream society, procedural justice will be less important when predicting these attitudes.

In this paper we sought to test this relationship in the context of encounters between the police and the public. Using field experimentation data (QCET, see Mazerolle *et al.* 2013; Mazerolle

et al. 2012), we examined the impact of social identity on perceptions of police (procedural justice and police legitimacy). The unique experimental setting allowed us to assess whether social identity impacts upon perceptions of procedural justice and police legitimacy during encounters and whether social identity moderates the procedural justice–legitimacy relationship.

We found that social identity was related to beliefs about procedural justice and police legitimacy. In our sample, identifying with mainstream Australian society was associated with the perception that a police encounter was procedurally fair. That is, participants were more likely to believe that the police treated them with dignity and respect, were polite and fair, and allowed participants to express their views, when they identified first and foremost with Australian society. We also found social identity was positively related to police legitimacy: people who identified first and foremost with Australian society were more likely to believe the police were legitimate. These findings are consistent with prior research on attitudes to authorities (Huo 2003; Huo *et al.* 1996; Tyler *et al.* 1997).

On the other hand, social identity did not moderate the effect of a procedurally just encounter on beliefs in procedural justice, nor did it moderate the effect of procedural justice beliefs on police legitimacy. The GVM indicates that when one identifies strongly with the social identity that the authority represents (the police in this instance), procedural justice will be more effective in encouraging positive attitudes and behaviours towards authorities (such as decision acceptance). However, we found that procedurally just encounters had a positive effect on beliefs about procedural justice, regardless of social identity. In the same way, procedural justice beliefs were positively and significantly related to police legitimacy and were not tempered by identification.

This is good news for police: while the GVM implies that social identity is central to the efficacy of procedurally fair treatment, our research suggests that police are able to encourage procedural justice beliefs and perceptions of police legitimacy among members of the public, regardless of whether or not a person identifies first and foremost with mainstream Australian society. This result leads us to believe that procedurally just dialogue is not only important for those people

who strongly identify with the group the authority represents (Huo *et al.* 1996; Lind and Tyler 1988; Smith *et al.* 1998), but also for those who do not. This is not to say social identity is irrelevant; as Tyler and his colleagues suggest, social identity matters for procedural justice (Huo *et al.* 1996; Lind and Tyler 1988; Tyler 1989; Tyler *et al.* 1997), and social identity was a predictor of procedural justice and police legitimacy in our study. Rather, the link between procedural justice and police legitimacy does not depend on social identification.

The idea that police can encourage perceptions of procedural justice among citizens, regardless of citizens' feelings of solidarity with mainstream society, is noteworthy in the context of QCET. QCET sought to enhance motorists' perceptions of police – to encourage positive beliefs about procedural justice and perceptions of police legitimacy among a group of people from the general population. Police can impact public perceptions of police through their interactions with the public (Murphy 2009), and yet ordinary people rarely come into direct contact with the police (Hohl *et al.* 2010). In Australia, RBTs (as utilised in QCET) are often the only opportunity for law-abiding people to come into contact with police and these interactions are short (around 20 seconds) and to the point. QCET demonstrates that police can incorporate the principles of procedural justice into their interactions with citizens and, moreover, that the efficacy of these efforts will not be undermined if citizens do not identify with mainstream society.

We found that the efficacy of procedurally just policing is not dependent on social identification. These findings speak to the significance of the ever-shifting composition of Western societies. In Australia, approximately 60% of the population growth is attributed to net-overseas migration (based on Department of Immigration and Citizenship 2012). The US and the UK are undergoing similar population shifts. Tyler and colleagues (1997) suggest that changes in the demographic composition of Western societies and the subsequent increasing diversity in cultural norms and identities will challenge the ability of authorities to maintain order (see also Rose 1993). The QCET findings demonstrate that during encounters, police can actively encourage procedural justice and legitimacy beliefs, regardless of how individuals feel about their social identity.

Limitations and Future Directions

Our study is not without limitations. First, we used a single item measure of social identity, and while we justify the use of this measure based on the findings of prior research (Haslam 2004; Murphy and Cherney 2011; Postmes *et al.* 2013), future research could incorporate additional items to increase the reliability of the measure. Moreover, new measures of social identity, taking into account law-abidingness such as that used by Bradford *et al.* (2014) may offer an improvement. Second there are limitations associated with the use of the RBT encounter. The RBT encounter is quite benign in nature and relatively specific. It may be that in the context of different police encounters, social identity processes may play a more important role in moderating the effect of procedural justice. For example, in the counterterrorism policing context, some groups in society may feel that simply being questioned about such matters casts aspersions about their loyalty and identification with Australia (Cherney and Murphy 2013). Here procedural justice may matter less. Alternatively, they may fundamentally disagree with the policing approach employed and so procedural justice may matter differently to such groups, regardless of social identification. Lastly, many of the coefficients presented in our results (see Figure 1 and Table 2) are small. This suggests there is more to understanding legitimacy than just procedural justice and social identity. Future research should therefore seek to develop a more complete picture of the antecedents of legitimacy.

Future research should also continue to explore the longitudinal consequences of social identity and procedural justice. The Group Engagement Model (GEM) extends the GVM to suggest that the receipt of procedural justice might bolster or even foster one's identity with society. That is, fair procedures may 'shape people's social identity within groups and social identity in turn influences attitudes, values and behaviors' (Tyler and Blader 2003, p. 349). Fair treatment received by the police is thought to nurture a feeling of societal belonging and this sense of social identity then fosters the commitment to group norms (i.e. the obligation to obey police): 'Fairness promotes a sense of inclusion and value, while unfairness communicates denigration and exclusion' (Bradford 2014, p. 22). Research has begun to examine the longitudinal relationships between these two constructs in order to unravel their reciprocal nature in Australia (Bradford *et al.* 2014). We suggest future research

should continue to explore the complex dynamic between social identity, procedural justice and perceptions of police. Further trials of the procedural justice approach and the flow on effects for social identity should be investigated.

Conclusion

Our data show that social identity does not moderate the relationship between procedurally just encounters and procedural justice beliefs on perceptions of legitimacy (contrary to Huo 2003; Huo *et al.* 1996; Smith *et al.* 1998). These findings indicate that procedurally just treatment can have a positive influence on perceptions of legitimacy and this connection is not dependent on social identification – at least in the case of police RBT encounters with the public. Having a strong affiliation with mainstream society is not a prerequisite for the procedural justice–legitimacy effect. All in all, these findings support the use of random encounters between the police and the public, through vehicles like QCET, for improving perceptions of police. ,

Notes

1. With the exception of one operation where a significant rain event led officers to hand out 285 surveys.
2. For a detailed outline of the survey measures see Mazerolle *et al.* (2012) and Mazerolle *et al.* (2013).
3. To fit with recent theoretical developments in legitimacy theory (e.g. Jackson *et al.*, 2012) we have changed the names of these variables for the current paper (i.e. 'consistency of views' in Mazerolle, Antrobus *et al.*, 2013 is changed to 'moral alignment' in the current paper).
4. For further information regarding the findings of the QCET see Mazerolle *et al.* (2013) and Mazerolle *et al.* (2012).

DRAFT

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References

- Abrams, D. and Hogg, M. A., 1990. *Social identity theory: Constructive and critical advances*. New York: Springer-Verlag Publishing.
- Antrobus, E., H. Elffers, G. White, and Mazerolle, L., 2014. Non-response bias in randomized control experiments in criminology: Putting the Queensland Community Engagement Trial (QCET) under a microscope. *Evaluation review* [online first]. Available from: <http://erx.sagepub.com/content/37/3-4/197.long> [Accessed 30 May 2014].
- Arbuckle, J. L. and Wothke, W., 1999. *Amos 4.0 user's guide*. Chicago: Small Waters Corporation.
- Australian Bureau of Statistics, 2011. *Census Quick Stats—Greater Brisbane*. Available from: http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/quickstat/3GBRI?opendocument&navpos=220 [Accessed 12 March 2014].
- Bottoms, A. and Tankebe, J., 2012. Beyond procedural justice: A dialogic approach to legitimacy in criminal justice. *Journal of criminal law and criminology*, 102, 120-170.
- Bradford, B., 2014. Policing and social identity: Procedural justice, inclusion and cooperation between police and public, *Policing and society*, 24(1), 22-43.
- Bradford, B., Murphy, K., & Jackson, J., 2014. Officers as Mirrors: Policing, Procedural Justice and the (Re)Production of Social Identity. *British Journal of Criminology*, 54(4), 527-550. doi: 10.1093/bjc/azu021
- Braithwaite, V., 2009. *Defiance in taxation and governance*. Cheltenham, UK: Edward Elgar.
- Byrne, B. M., 2010. *Structural equation modelling*. 2nd ed. New York: Routledge.
- Cherney, A. and Murphy, K., 2013. Policing terrorism with procedural justice: The role of police legitimacy and law legitimacy. *Australian and New Zealand journal of criminology*, 46(3), 403-421.

Department of Immigration and Citizenship, 2012. *Fact sheet 15 - Population growth*.

Available from: <http://www.immi.gov.au/media/fact-sheets/15population.htm>

[Accessed 12 March 2014].

Goodman-Delahunty, J., 2010. Four ingredients: New recipes for procedural justice in Australian policing. *Policing*, 4(4), 403-410.

Haslam, S., 2004. *Psychology in organizations: The social identity approach*. London: Sage.

Hohl, K., Bradford, B., and Stanko, E. A., 2010. Influencing trust and confidence in the London Metropolitan Police. *British journal of criminology*, 50, 491-513.

Hu, L. and Bentler, P. M., 1999. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling*, 6, 1-55.

Huo, Y. J., 2003. Procedural justice and social regulation across group boundaries: Does subgroup identity undermine relationship-based governance? *Personality and social psychology bulletin*, 29(3), 336-348.

Huo, Y. J., Smith, H. J., Tyler, T. R. and Lind, E. A., 1996. Superordinate identification, subgroup identification, and justice concerns: Is separatism the problem; is assimilation the answer? *Psychological science*, 7(1), 40-45.

Jackson, J., Bradford, B., Hough, M., Myhill, M., A., Quinton, P., and Tyler, T. R., 2012. Why do people comply with the law?: Legitimacy and the influence of legal institutions. *British journal of criminology*, 52, 1051-1071.

Jackson, J., Bradford, B., Stanko, B., & Hohl, K. (2013). *Just Authority? Trust in the police in England and Wales*. Oxon, UK: Routledge.

Lind, A. E. and Tyler, T., 1988. *The social psychology of procedural justice*. New York: Plenum Press.

- Mastrofski, S. D., Snipes, J. B., and Supina, A. E., 1996. Compliance on demand: The public's response to specific police requests. *Journal of research in crime and delinquency*, 33(3), 269-305.
- Mazerolle, L., Antrobus, E., Bennett, S., and Tyler, T., 2013. Shaping citizen perceptions of police legitimacy: A randomized field trial of procedural justice. *Criminology*, 51(1), 33-64.
- Mazerolle, L., Bennett, S., Antrobus, E., and Eggins, E., 2012. Procedural justice, routine encounters and citizen perceptions of police: Main findings from the Queensland Community Engagement Trial (QCET). *Journal of experimental criminology*, 8(4), 343-367.
- Mazerolle, L., Bennett, S., Davis, J., Sargeant, E., and Manning, M., 2013. Procedural justice and police legitimacy: A systematic review of the research evidence. *Journal of experimental criminology*, 9(3), 245-274.
- Murphy, K., 2009. Public satisfaction with police: The importance of procedural justice and police performance in police-citizen encounters. *Australian and New Zealand journal of criminology*, 42(2), 149-178.
- Murphy, K., 2013. Policing at the margins: Fostering trust and cooperation among ethnic minority groups. *Journal of policing, intelligence and counter terrorism*, 8(2), 184-199.
- Murphy, K., Mazerolle, L. and Bennett, S. (2014). Promoting trust in police: Findings from a randomized experimental field trial of procedural justice policing. *Policing & Society*, 24(4), 405-424, DOI: 10.1080/10439463.2013.862246.
- Murphy, K. and Cherney, A., 2011. Fostering cooperation with the police: How do ethnic minorities in Australia respond to procedural justice-based policing? *Australian and New Zealand journal of criminology*, 44(2), 235-257.

- Murphy, K., Hinds, L., and Fleming, J., 2008. Encouraging public cooperation and support for police. *Policing and society*, 18(2), 136-155.
- Postmes, T., Haslam, S. A., and Jans, L., 2013. A single-item measure of social identification: Reliability, validity, and utility. *British journal of social psychology*, 52(4), 597-617.
- Rose, P., 1993. Of every hue and caste: Race, immigration, and perceptions of pluralism. *Annals of the American academy of political and social science*, 530, 187-202.
- Smith, H. J., Tyler, T. R., Huo, Y. J., Ortiz, D. J. and Lind, E. A., 1998. The self-relevant implications of the group-value model: Group membership, self-worth, and treatment quality. *Journal of experimental social psychology*, 34(5), 470-493.
- Sunshine, J., and Tyler, T. R., 2003. The role of procedural justice and legitimacy in shaping public support for policing. *Law and society review*, 37(3), 513-548.
- Tabachnick, B. G. and Fidell, L. S., 2007. *Using multivariate statistics*. 5th ed. Boston: Pearson/Allyn and Bacon.
- Tajfel, H., 2010. *Social identity and intergroup relations*. Cambridge: Cambridge University Press.
- Tankebe, J., 2008. Police effectiveness and police trustworthiness in Ghana: An empirical appraisal. *Criminology and criminal justice*, 8(2), 185-202.
- Thibaut, J. and Walker, L., 1975. *Procedural justice: A psychological analysis*. Hillsdale: Erlbaum.
- Tyler, T. R., 1989. The psychology of procedural justice: A test of the group-value model. *Journal of personality and social psychology*, 57(5), 830-838.
- Tyler, T. R., 1997. The psychology of legitimacy: A relational perspective on voluntary deference to authorities. *Personality and social psychology review*, 1(4), 323-345.
- Tyler, T. R., 2006. *Why people obey the law*. Princeton: Princeton University Press.

- Tyler, T. R., 2008. Psychology and institutional design. *Review of law and economics*, 4(3), 801–887.
- Tyler, T. R., Boeckmann, R. J., Smith, H. J. and Huo, Y. J., 1997. *Social justice in a diverse society*. Boulder: Westview Press.
- Tyler, T. R. and Blader, S. L., 2003. The group engagement model: Procedural justice, social identity, and cooperative behaviour. *Personality and social psychology review*, 7(4), 349-361.
- Tyler, T. R. and Fagan, J., 2008. Legitimacy and cooperation: Why do people help the police fight crime in their communities? *Ohio State journal of criminal law*, 6, 231-276.
- Tyler, T. R. and Huo, Y. J., 2002. *Trust in the law*. New York: Russell Sage.
- Tyler, T. R. and Lind, E. A. (1990). Intrinsic versus community-based justice models: When does group membership matter? *Journal of social issues*, 46, 83-94.

Table 1 Descriptive Statistics and Correlation Matrix

	Mean	SD	1		2		3		4		5		6		7		8		9		10	
1. Procedural justice	4.052	0.728																				
2. Social Identity	4.161	0.784	.142	***																		
3. Condition	39.949%	-	.184	***	-.007																	
4. Moral Alignment	3.955	0.705	.300	***	.133	**	.005															
5. Obligation to Obey	4.440	0.577	.461	***	.221	**	.014		.434	***												
6. Disengagement	2.050	0.717	-.336	***	-.128	**	-.021		-.316	***	-.461	***										
7. Gender	49.136%	-	-.120	***	-.027		.027		-.114	***	-.153	***	.210	**								
8. Age	47.189	14.709	.037		.196	**	-.003		.015		.056	**	.030		-.150	***						
9. Education	5.250	1.319	-.105	***	-.041	*	-.017		-.051	**	.067	**	.018		.035		-.150	***				
10. Employment	12.279%	-	.052	**	.108	**	.006		.041	*	.070	***	.018		.123	***	.533	***	-.042	*		
11. LOTE	13.542%	-	-.049	*	-.064	**	-.014		-.088	***	-.028		.106	**	.105	***	.064	**	-.070	***	.533	***

*** Correlation is significant at the .001 level. ** Correlation is significant at the .01 level. * Correlation is significant at the .05 level. Dichotomous variables are coded as follows: Condition (experiment=1, control=-1); Gender (male=1, female=0); Employment (unemployed=1, other=0); and LOTE (speaks a language other than English=1, speaks English=0).

Figure 1 Simplified path model diagram.

[Figure Attached]

Note: In order to simplify the presentation, error terms and demographic variables are not shown. Standardized coefficients are shown. All coefficients represented by bold lines are significant at $p < .001$. Coefficients represented with broken lines have $p > .077$.

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Table 2 Demographic Coefficients for Path Model

Predictor	Criterion	Standardised Coefficient	Unstd. Coeff.	
			B	S.E.
Age	Social Identity	.197 ***	.010	.001
	Procedural Justice	.002	.000	.001
	Moral Alignment	-.021	-.001	.001
	Obligation	.011	.000	.001
	Disengage	.023	.001	.001
Gender	Social Identity	-.062 **	-.097	.030
	Procedural Justice	-.122 ***	-.179	.028
	Moral Alignment	-.074 ***	-.104	.027
	Obligation	-.106 ***	-.123	.020
	Disengage	.162 ***	.233	.026
Education	Social Identity	-.006	-.004	.012
	Procedural Justice	-.086 ***	-.048	.011
	Moral Alignment	-.009	-.005	.010
	Obligation	-.009	-.004	.008
	Disengage	-.025	-.013	.010
Employment	Social Identity	.008	.019	.054
	Procedural Justice	.041	.091	.049
	Moral Alignment	.033	.072	.047
	Obligation	.039 *	.069	.035
	Disengage	.006	.013	.046
LOTE	Social Identity	-.045 *	-.102	.044
	Procedural Justice	-.019	-.041	.040
	Moral Alignment	-.063 ***	-.130	.038
	Obligation	.014	.023	.028
	Disengage	.079 ***	.166	.038

Note: *** Correlation is significant at the .001 level. ** Correlation is significant at the .01 level. * Correlation is significant at the .05 level. Dichotomous variables are coded as follows: Gender (male=1, female=0); Employment (unemployed=1, other=0); and LOTE (speaks a language other than English=1, speaks English=0).