EVIDENCE BASED POLICING CENTRE

Understanding the Motivations of Fleeing Drivers

Literature review of youth motivations

Performance & Research Insights Unit

Evidence Based Policing Centre

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Produced by:

Kate Mora, Senior Research Insights Advisor EBP

Ryan Jones, Research Insights Advisor EBP

Reviewed by:

Erena McAllum, Manager Performance & Research Insights

Released by:

Bruce O'Brien, Director Evidence Based Policing

Contents

1. Executive summary

Background and purpose:

Fleeing drivers present a unique challenge to police, with 3796 events recorded in 2017 (IPCA, 2019). While most pursuits are abandoned, others end in crashes, injury and even fatalities. The Independent Police Conduct Authority (IPCA) reviewed a sample of fleeing driver events and found offenders were commonly young, Maori, male, often with criminal histories and traffic offending, and without a current drivers licence. While the review could identify who is likely to engage in this behaviour, it could not address why. The Evidence Based Policing Centre (EBPC) was therefore commissioned to undertake a programme of research examining the motivations of offenders who flee police. This report examines what previous research about young people's perceptions of police, and their driving behaviour can tell us about their motivations to flee police.

Method:

This paper uses a systematic review of academic and published literature for both perceptions of police and theories of young driver behaviour.

Results:

- As is relatively well-known, young people in general, are more likely to have negative attitudes towards police which can often translate into reduced compliance with police requests, such as vehicle stops.
- The quality of the interactions with police of both individuals, and their peers and family (vicarious influence) strongly influences their perceptions, particularly where these were negative.
- The most consistent finding is the importance of perceived procedural justice; young people in particular need to feel they are being treated respectfully and not presumed guilty when they feel they have done nothing wrong in order to comply with police. These findings are generally magnified for those from minority groups.
- Self-control and emotional reactions have also been found to affect perceptions of the fairness of sanctions and consequently influence compliance behaviour; a large body of literature supports the theory that adolescents and young adults are often not fully matured in these areas (for a review see Steinberg, 2012).
- Youths (especially males) who engage in risky driving behaviours are more likely to engage in other risky behaviours with risk-taking part of their lifestyle. Some level of risk-taking is considered developmentally normative at this age, and may have an evolutionary basis.

- Psychosocial theories have been proposed that include those focussed on personality traits such as sensation seeking and reinforcement sensitivity, through to planned behaviour and discounting of risk.
- There is an important distinction between intention and willingness to engage in risky driving behaviour. Within the context of motivations for fleeing police, this distinction would differentiate those who may seek out pursuits (show intention), those who may be disposed to engaging in the right circumstances (show willingness), and those who are purely motivated by situational factors.

Conclusion:

The findings of this literature review provide some background for the possible motivations of young fleeing drivers. There will be many cases where situational factors influence decision making in choosing to flee police; these situational motivations will be examined further in later stages of research. Here, we have reviewed relevant literature that suggests there may be attitudes toward the police and perceived treatment by authority figures in general that may motivate some individuals to have an oppositional approach to police requests. In these cases, the vehicle and the driving behaviour may be of no circumstance, with the motivating factor being eluding police. Conversely, for some it will be the risk taking and "joyriding" that occurs in the chase that motivates the behaviour. These motivators may apply for offenders of all age groups, but research on cognitive and social development of adolescents and young adults suggests these may be particularly relevant for individuals at this developmental stage.

2. Background

"What can the literature on young people's perceptions of police and their general driving behaviour (e.g. risk perception and attitudes) tell us about their likely motivations to flee police".

In early 2019, the Independent Police Conduct Authority (IPCA) in conjunction with New Zealand Police released a thematic review and recommendations based on a sample of fleeing driver cases in New Zealand (IPCA, 2019). This review included an examination of the characteristics of drivers who flee police. Offenders were found to be commonly young, Maori, male, often with criminal histories and traffic offending, and without a current drivers licence. However, while the review was able to identify characteristics of offenders, it was outside the scope and available data to examine the motivations of these offenders for fleeing police.

As one of eight recommendations from the report, the Evidence Based Policing Centre (EBPC) was commissioned to undertake six research tranches examining fleeing drivers' motivations for fleeing police. The IPCA review called for a particular focus on young people, and alcohol and/or drug impaired drivers. This report presents the results of the first of the six research tranches that examines previous literature to give some background to why young people are particularly likely to flee police.

This issue was recently highlighted in a series of features in the media where experts suggested the key motivations for young people fleeing police were adrenalin and thrill-seeking, such as recreating computer games (Leask, 2019). Young people were also thought to ignore consequences due to their stage of brain development not allowing an accurate risk assessment (Leask, 2019). However, when young people were asked to respond, they suggested they also felt high levels of fear, shame, anxiety, and distrust in the police in pursuit (Leask, 2019a). Many were also under the influence or engaging in criminal activity (Leask, 2019a).

The reasons offenders give for fleeing police are likely to be many, and complex. However, based on previous research and observed trends, we propose that these motivations may largely fall into three categories:

- Situational; these are the types of motivations related to fleeing at that particular time, in those particular circumstances (e.g. being under the influence, having something to hide, fleeing the scene of a crime etc.).
- The second relates to attitudes and reactions to those pursuing them (e.g. fear of police, attitudes toward police, baiting etc.).
- The final relates to the attractions of driving in a risky manner (e.g. thrill seeking, peer influences, joyriding).

This review focusses on the extensive existing research relevant to perceptions of police, and the attractions of risky driving behaviour for young people. Situational and individual factors (such as family background and experiences) will be examined in later research tranches, and in ongoing work being done in police districts, primarily through qualitative methods.

3. Purpose

Adolescents form one of the most studied populations regarding their generally more dangerous driving behaviour and decision making. Ultimately, the decision to stop for, or flee police is also likely to be influenced by the driver's attitudes to authority and their perceived treatment by police. This research paper examines these two influences in turn, and then presents how the findings can be applied to possible motivations for young people fleeing police. Later stages of the EBPC research into the motivations of fleeing drivers will examine the topic through qualitative methods working with offenders. However, prior to these research stages, it is important to understand some of the possible motivators already examined in the research literature.

4. Method

A wide-ranging search of relevant literature was conducted by staff at New Zealand Police Knowledge and Information Services. This search was supplemented by additional searches by EBPC staff, and by identifying further articles referenced in the first wave of literature. Papers were then assessed and categorised for relevance to the research question by research staff at EBPC.

Given the size of the body of literature for both perceptions of police and particularly adolescent driving behaviour, the systematic review of the literature incorporated only those papers directly relevant to the research question and is not exhaustive of all available literature. For example, research into adolescent/juvenile perceptions of police is a small subset of all the research on perceptions of police. The wider perceptions literature was scanned for relevant findings, but is not reviewed in detail here with the focus on research using younger samples. Similarly, within the area of adolescent driving behaviours, only those research papers that relate to the types of driving behaviours seen in fleeing driver events (e.g. speeding, risk taking, decision making), and a selection of relevant behavioural and psychosocial theories are included. These theories can be broadly described as motivational or personality based (Mann, 2010).

5. Findings

This section presents the results of the review of literature on first perceptions of police, then relevant findings from the driving behaviour literature. The relationship between these two themes and applicability to understanding the motivations of young fleeing drivers is then discussed.

5.1 Perceptions of police

The decision to comply with police instructions (such as to stop when signalled) is influenced by the attitude of the offender to police and their authority. The majority of research on perceptions of police has looked across the general population, rather than specifically focussing on young people. However, one of the most consistent findings is that age has an impact on perception, with younger people generally shown to have more negative perceptions of police than older adults (Brown &

Benedict, 2002). Young people particularly value being treated respectfully with mana, that they have nothing to fear, and not feeling judged as having done something wrong when they have not.

Key insights

- Young people have been shown to have generally more negative attitudes to police and these attitudes often translate into reduced compliance with police requests.
- The quality of the interactions with police of both individuals, and their peers and family (vicarious influence) strongly influences their perceptions, particularly where these were negative.
- The most consistent finding is the importance of perceived procedural justice; young people in particular need to feel they are being treated respectfully and not presumed guilty when they feel they have done nothing wrong in order to comply with police. These findings are generally magnified for those from minority groups.
- Self-control and emotional reactions have also been found to mediate perceptions of sanctions and influence compliance behaviour; a large body of literature supports the theory that adolescents and young adults are often not fully matured in these areas (for a review see Steinberg, 2012).

Police interactions

Where research has focussed specifically on young people, it has generally been in the context of evaluating the effects of programmes to facilitate better relationships between youth and police (Goodrich, Anderson & LaMotte, 2014; Police Foundation, 2018). Considerable work has been undertaken in the United Kingdom and reviewed by the Police Foundation (2018) to develop a tailored approach to dealing with young people, as negative interactions have been shown to have long-term consequences for offending. The quality of previous interactions with police has been shown to impact both youth and police perceptions of one another, and their future interactions (Goodrich et al., 2014).

In a review of all current work at the time of its publication, Brown and Benedict (2002) found that the greatest impact on youth perceptions of police was the quality of previous contact; previous negative contact decreases police favourability, previous positive contact increases favourability. Skogan (2006) attempted to quantify the effects of both positive and negative experiences and found a large asymmetry with negative experiences having four to fourteen times as great an impact as a positive experience. Criminal record was not generally related to perceptions in the work reviewed by Brown and Benedict (2002). However, an attempt to build a predictive model of what influences youth attitudes to police, Brick, Taylor and Esbensen (2009) found that when other demographic, contact, behavioural, subcultural and community characteristic variables are controlled for, only past arrests affected perception.

The effects of gender have also been mixed in the literature, however perceptions of females tend to be more positive, which Taylor et al (2001) suggest is a result of differential offending and treatment by police, with females more likely to receive warnings than formal sanctions.

The effect of police interactions on perceptions has also been shown to extend to those of peers and family (vicarious conduct, Hurst & Frank, 2000; Rosenbaum, Schuck, Costello, Hawkins & Ring, 2005), and even that observed in the media (Dirikx & Van den Bulck, 2014). Commitment to delinquent peers and pro-delinquent attitudes have also been shown to be strongly related to negative perceptions (Brick et al., 2009), as well as reluctance to cooperate with police (Clayman & Skinns, 2012). There is also evidence of attitude alignment between children and their parents which can also

act as a buffer to negative experiences affecting perceptions of police (Sindall, McCarthy & Brunton-Smith, 2016).

Procedural Justice

One of the most common themes in predicting youth attitudes toward police across a number of cultures is the importance of procedural justice (e.g. Liu & Liu, 2018; Murphy, 2015; Norman 2009; Police Foundation, 2018; Slocum & Wiley, 2018). Procedural justice relates to the perceived fairness and respectfulness of treatment by decision-makers, in this case, police (Murphy, 2015). Murphy (2015) found young people value procedural justice more than older people, and where they feel they are treated fairly they are more likely to comply with and defer to police authority.

Murphy suggests a number of social psychology theories to explain why procedural justice is so important to youth including it affecting their perceived place in society (Group Value Model), which is more uncertain in youth as their identity is still forming (self-uncertainty). Young people often report feeling that they attract unwarranted suspicion from police and are presumed guilty (Gau & Brunson, 2010; Norman, 2009). Gau and Brunson (2010) found that youth in their study were generally ambivalent to police, but that when they felt they had done nothing wrong they were more likely to defy officer requests and be more openly hostile.

Ethnicity

The findings of the above studies have also been shown to be intensified amongst minority groups, with racial background often a strong predictor of the favourability of perceptions of police (Wheelock, Stroshine & O'Hear, 2019) particularly amongst young people (Sivasubramaniam & Goodman-Delahunty, 2008). The latter study suggested attitudes within their study were influenced by perceptions of police honesty and the targeting of certain groups (Sivasubramaniam & Goodman-Delahunty, 2008).

Tyler and Wakslak (2004) developed models to examine subjective experiences of feeling profiled and how these feelings affected perceptions of police. They found that while minority groups were more likely to feel profiled and believe it is widespread, this belief could be moderated by perceived procedural justice. This finding is relevant as those who feel negatively profiled, are also less likely to obey police requests (Tyler & Wakslak, 2004). However, it should be noted that the vast majority of research examining racial differences has focussed on African American communities (Taylor, Turner, Esbensen & Winfree, 2001).

Only one, reasonably old, piece of in-depth research was found examining Maori perceptions of police. In an interview study with Maori (Te Whaiti & Roguski, 1998) youth experiences were not directly examined, but parents and grandparents showed a loss of trust in police and concern for young people being harassed or labelled criminal. However, it should be noted that newer strategies put in place by New Zealand Police since this research may have helped to mitigate these perceptions (e.g. Youth Policing Plan, NZ Police, 2012; Youth Crime Action Plan, Ministry of Justice, 2013). Again, Te Whaiti and Roguski (1998) report vicarious effects of observing police activity as well as direct contact.

The perceptions of ethnic minorities in New Zealand (anyone not identifying as Pakeha, Maori or Pacific) have also been previously studied, and while the focus was again not youth, participants believed they would be more likely to be considered in the wrong in dealings with police even as victims (Ho, Cooper & Rauschmayr, 2006).

Personality and emotion

Piquero, Gomez-Smith and Langton (2004) applied an older theory of self-control (see Gottfredson & Hirschi, 1990) to explain individual differences in emotions towards, and acceptance of, sanctions and long-term consequences. They suggest that those with low self-control will view sanctions as unfair and subsequently feel more anger, making them more hostile to consequences. In their study, where sanctions for a hypothetical speeding scenario were viewed as unfair, participants felt more anger, particularly those with low self-control (Piquero et al., 2004). The authors suggest these people will therefore be less likely to comply with police, and view most, if not all, police actions as illegitimate (Piquero et al., 2004).

Murphy and Tyler (2008) also examine the mediating effects of emotion on perceived procedural justice and subsequent compliance behaviour. They examined both positive and negative emotion, and found both mediated effects on future behaviour (i.e. those who felt negative emotions about a perceived procedural injustice were less likely to comply years later, while positive emotions were related to increased compliance, Murphy & Tyler, 2008).

5.2 Driving behaviour research and theory

In addition to possibly being motivated by the avoidance of (or lack of respect for) those in pursuit, there is some suggestion in the literature that fleeing drivers may be attracted to engaging in risky driving behaviour. A large body of research has been dedicated to explaining why younger drivers often drive in a more risky manner, which may be relevant to why some young drivers seek to engage in police pursuits. Young drivers are consistently overrepresented in road crash statistics both in New Zealand and internationally. The Ministry of Transport reports that young male drivers 15-19 years old are eight times more likely to crash than the lowest risk male age group (females are six times more likely, Ministry of Transport, 2017), and almost a third of all fatal crashes involve a driver 15 to 24 years old. Drivers under 25 are also more than twice as likely to have speed or alcohol as a factor in a fatal crash as older drivers (Ministry of Transport, 2017).

Key insights

- Youths (especially males) who engage in risky driving behaviours are more likely to engage in other risky behaviours with risk taking part of their lifestyle. Some level of risk taking is considered developmentally normative at this age, and may have an evolutionary basis.
- Psychosocial theories have been proposed that include those focussed on personality traits such as sensation seeking and reinforcement sensitivity, through to planned behaviour and discounting of risk.
- There is an important distinction between intention and willingness to engage in risky driving behaviour. Within the context of motivations for fleeing police, this distinction would differentiate between those who may seek out pursuits, compared to those who may be disposed to engaging in the right circumstances, and those who are purely motivated by situational factors.

Risk taking

A number of studies have found links between risky driving and other risky behaviours in youth populations, with many researchers suggesting a strong evolutionary basis for such behaviour (e.g. Ellis et al., 2011; Steinberg, 2012). Fergusson, Swain-Campbell and Horwood (2003) followed a cohort of New Zealand adolescents to examine correlates of risky driving behaviour and found gender

(males), alcohol and/or cannabis use, and criminal offending were related to risky driving; risky driving was also strongly correlated with crash risk.

In an Australian review of literature encapsulating both risky driving and other behaviours, the authors argue that some level of risk taking is considered developmentally normative, with age-related biological, cognitive, emotional and social developmental factors all at play (Palamara, Molnar, Eby, Kopinanthan, Langford, Gorman & Broughton, 2013). For young males in particular, risky driving has been described as part of a wider lifestyle of anti-social behaviour (Bina, Gaziano & Bonino, 2006).

Psychosocial theories

Multiple researchers have suggested that adolescence is a time of developing social status, particularly for males, and that they use risky behaviour as one such mechanism (e.g. Ellis et al., 2011). Dawes (2000) specifically examined the culture of "joyriding" through qualitative interviews with offenders. In addition to more practical reasons such as lack of transport options and geographic isolation, this behaviour appears to be influenced by desire for social standing within peer groups and excitement through risk taking (Dawes, 2000).

Another influence on young driver behaviour and attitudes is role modelling from their parents (Brookland, Begg, Langley & Ameratunga, 2008; Palamara et al., 2013). Brookland et al. (2013) followed young drivers through the graduated licensing system (from learners, to restricted, to full licenses) and had young people and their parents complete self-reports of risky driving behaviour. They found significant but weak correlations between parent and youth driving errors and violations (Brookland, et al., 2008). A lack of parental monitoring and family connectedness has been found to increase the risk of driving offences and crash involvement, as well as substance use (Shope, Waller, Raghunathan, & Patil, 2001).

Other researchers have focused on the variability in psychosocial maturity among young people to account for differences in driving behaviour, with those less mature showing more problem driving behaviours (Bingham, Shope, Zakraksek & Raghunathan, 2008). While a proportion of drivers continue engaging in risky driving behaviours over their lifetime, many who are high risk drivers in their teens show a decrease in risky behaviour by their late twenties (Vasallo, Lahausse & Edwards, 2016).

A multitude of psychosocial theories have been proposed for adolescent and young adult risk taking behaviour. Harbeck and Glendon (2013) examined differences in reported risky driving behaviours in the context of reinforcement sensitivity. They suggest that people differ in the emphasis they put on perceived risks in their decision making based on how sensitive they are to the reward (e.g. fun) versus the potential consequences of risky driving.

Similarly, Hatfield, Fernandes and Job (2014) suggest high levels of thrill and adventure seeking traits reducing the inhibitive effects of perceived risk on driving behaviours. Males in particular have been shown to exhibit lower risk perception (e.g. Ivers, Senserrick, Boufous, Stevenson, Chen, Woodward & Norton, 2009) and greater effects of reward sensitivity (Scott-Parker, Watson, King & Hyde, 2013).

Sensation seeking is another personality trait often applied to youth driving behaviour. Sensation seeking is defined as:

"the seeking of varied, novel, complex, and intense sensations and experiences and the willingness to take physical, social, legal, and financial risks for the sake of such experiences" (Zuckerman, 1994).

Research suggests a number of hypotheses as to why sensation seeking affects risky driving (Jonah, 1997). Some authors suggest that those high in sensation seeking perceive less risk or discount it due to their own perceived ability; others suggest they perceive the risk, but accept it in order to get the experience which in turn reduces their perception of risk as they see no negative consequences (Jonah, 1997). However, while young people do score consistently higher on this measure, other research has suggested their aberrant driving behaviour is better accounted for by other theories (e.g. Zhang, Qu, Tao, Xue, 2019).

Driver intent

Researchers note the importance of differentiating between *intentions* and *willingness* to engage in risky driving behaviour (Scott-Parker, Watson, King & Hyde, 2014). *Intention* suggests pre-planning and reasoning in decision making, while *willingness* is more spontaneous; when asking youth to report their engagement in risky driving behaviour, few report an intention to, while many report a willingness to.

Harbeck and Glendon (2018) apply a Prototype Willingness Model to risky driving behaviour which suggests behaviours are based on an interaction between a person's attitudes towards, and willingness to engage in, a behaviour, influenced by situational factors. For example, youth who identify themselves as similar to a "risky driver prototype" and rated this as a favourable model, as well as indicating a behavioural willingness to engage in risky driving behaviour showed higher reported risky driving behaviour (Harbeck & Glendon, 2018).

Within the context of fleeing drivers, it may be that for some offenders an interaction between situational factors and willingness to engage motivates their behaviour, while others will endeavour to create the situation intentionally. The Theory of Planned Behaviour (Ajzen, 1991) has been used to explain conscious decisions to violate traffic rules (Jafarpour & Rahimi-Movaghar, 2014) which combines attitudes (e.g. favourability of speeding), norms (e.g. views of peers) and perceived control (e.g. overestimation of driving ability) to explain decision making.

5.3 Application to young fleeing drivers

Young people are more likely to comply with the requests of authority figures if they feel they will be respected and are not being unfairly targeted. Therefore, previous research on perceptions of police suggest some possible motivating factors for fleeing police could include:

- Feeling stereotyped/targeted by police
- Not believing in the authority of police
- Previous negative interactions, including vicariously (which could lead to fear or mistrust)
- Emotional reactions to sanctions

Previous research on youth risky driving would also suggest that there are some young people that will engage in the type of behaviour seen in fleeing driver events due to being attracted to this behaviour. Possible motivating factors for these individuals could include:

- General attraction to a risky lifestyle
- Differences in reward sensitivity and risk perception
- Decision making and psychosocial maturity
- Peer and family influences and role modelling

It will be important to maintain a distinction between those offenders who may deliberately seek these events versus those who will engage in them under certain circumstances (e.g. the situational factors mentioned in the introduction; when under the influence, in the context of other offending etc.).

While outside of the direct scope of the research question, brain and cognitive development within adolescence and young adulthood may provide some basis for many of the findings presented. Researchers have, and continue to find (see Steinberg, 2012 for a review), brain structure changes up to the age of 25 (and possibly beyond) that include:

- Improvements in cognitive abilities and logical reasoning
- Dopamine increase (related to sensation seeking)
- Development of prefrontal connections (implicated in forward planning, risk and reward, complicated decisions etc.)
- Change to the limbic system (responsible for emotional processing and self-control)

Ongoing research at the University of Otago is also examining the impacts of brain development on behaviours such as self-control with New Zealand cohorts. Steinberg (2012), and others, therefore argue that teenagers are not as mature as adults in either their brain structure or function as adults, and need to be treated differently in research related to decision making and motivation.

6. Conclusion

The findings of this literature review provide some background for the possible motivations of young fleeing drivers. As previously stated, there will be many cases where situational factors influence decision making in choosing to flee police. These situational motivations will be examined further in later stages of this research. Here, we have reviewed relevant literature that suggests there may be attitudes toward the police and perceived treatment by authority figures in general that may motivate some individuals to have an oppositional approach to police requests. In these cases, the vehicle and the driving behaviour may be of no circumstance, with the motivating factor being eluding police. Conversely, for some it will be the risk taking and “joyriding” that occurs in the chase that motivates the behaviour. These motivators may apply for offenders of all age groups, but research on cognitive and social development of adolescents and young adults suggests these may be particularly relevant for individuals at this developmental stage. There was also little research found within a New Zealand context, particularly around Maori, indicating the need for the future stages of this research.

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