

Summary

Background and objectives

Policymakers have become increasingly interested in using behavioural science to strengthen the effectiveness and efficiency of policies. To contribute to these efforts, the WODC (Research and Documentation centre) of the Ministry of Justice and Security has commissioned research to collect and review *scientific knowledge on behaviour* regarding five topics that are of interest for the Directorate-General for the Administration of Justice and Law Enforcement (DGRR). The aim is to gather knowledge that can provide suggestions on ways to stimulate lawful and legitimate behaviour and prevent illegal behaviour without restricting an individual's freedom of choice. The five topics of interest are:

1. Sexting
2. Violence during football games
3. Employee theft
4. Digitalizing dispute solutions, and
5. Neighbourhood nuisance and conflict.

For each of these topics, we conducted a literature study into factors that contribute to the manifestation of behaviours related to the topic in question. Each chapter describes aspects of scientific knowledge that can be linked to respective (problematic) behaviour and the stimulation of positive, legitimate behaviours. When topics relate to unlawful behaviour, the focus of our attention is on *first offenders*, that is people for whom illegal behaviours are *not* the expression of a habit. This overview of currently available knowledge is supposed to serve as a starting point for more detailed research into the different behaviour determinants that play a role in the discussed areas.

The literature review

The following steps are conducted for each topic:

- (1) Collection and integration of scientific literature that may explain how the behaviour manifests itself and how lawful, legitimate and desirable behaviour can be stimulated
- (2) Collection and evaluation of examples regarding positive behaviour influence and behaviour change, making use of related problem areas if necessary
- (3) Formulating suggestions of measures that may stimulate positive behaviours regarding the provided topics based on the discussed literature

The focus of our literature search was in the area of social psychology. Experimental as well as observational studies were included. The majority of research findings are based on quantitative data, but qualitative studies were also taken into account. By doing so, the report aims to provide an overview of behaviour knowledge that is relevant for each of the five topics.

Five topics

The five provided topics cover a spectrum of behaviours involving different target groups and desirable behaviours. Each of the topics is briefly described below:

Sexting

Target group: adolescents/young adults

Target behaviour: Preventing adolescents/young adults from becoming victims/perpetrators of norm deviating sexual behaviour such as “sexting” (sending sexually suggestive messages/photos), “sexchatting” (pervasive sexual online communication) and “sextortion” (sexual extortion). (WODC startnotitie)

Description: The reviewed literature suggests divergent views on the dangers of sexting. Whereas sexting has been linked to a number of impulsive, damaging behaviours, there are also views suggesting that sexting is not necessarily deviant behaviour. Despite certain risks being associated with sexting, sharing sexually suggestive messages with a romantic partner can also be seen as a normal part of sexuality (Döring, 2014). Adolescents become sexually active and go through a phase of sexual development and emancipation. Some researchers suggest that sexting can be an expression of this normal development. It is thus important to take a nuanced stance when it comes to the discourse on sexting: sexting *can* be a problem, but *does not have to be* a problem. One important deciding factor may be how explicit the content of the sext is. Whereas sexually suggestive messages do not have to be norm deviating, sexually explicit messages can be more clearly categorized as deviant. Another important factor determining the risk associated with sexting is the receiver of the message; sharing sexually suggestive pictures with someone you know personally and trust is less risky than sharing sexually suggestive pictures with someone you have only met online. One of the most prominent risks of sexting is the *unwanted distribution of sexually suggestive messages or pictures* and subsequently *cyberbullying*. It may thus be advantageous to direct efforts at combatting ‘slut shaming’ and ‘revenge porn’, that is when intimate pictures are being distributed without permission to intentionally harm someone. Additionally, it seems

crucial to provide young people with tools that help them reduce the likelihood that messages they send online become harmful to them.

Violence during football games

Target group: first time offenders showing vandalism/violence during football games

Target behaviour: Preventing disruptive and illegal behaviours of individuals or groups of people that threaten public order or safety during football matches (cf. Centraal Informatiepunt Voetbalvandalisme, 2015). The goal is to propagate positive behaviour so that football games become more enjoyable for everyone.

Description: Every year there are about 800 disturbances of public order and security inside and outside the football stadium. It involves all kinds of incidents, ranging from fighting and abuse to destruction and arson. In creating insight into the factors contributing to football vandalism, it is important to distinguish between different types of football vandalism. On the one hand there is violence that develops relatively spontaneously, for example as a result of high-level emotions during the match. Regular supporters can also be involved in this kind of vandalism. In addition, more organized violence occurs between groups of hooligans, which are often relatively separate from a match (van Limbergen, Colaers, & Walgrave, 1989). We have particularly aimed to gain insight into the former form of vandalism. The number of people who have a relatively stable tendency to display criminal behaviour is presumably overrepresented in the group of hooligans. This makes the group more difficult to influence. However, the social context in which members of this group operate offers opportunities to limit their influence on regular supporters. The interaction between hooligans and fanatic supporters is potentially a dangerous mix and understanding the role of social identities is key in curtailing football vandalism. Specifically, when the fanatic supporter feels unjustly treated by the authorities as a hooligan, he may identify with the group of hooligans on the basis of a shared sense of victimhood. By approaching and trusting the regular supporter, he may identify less quickly with the hooligan and will keep the latter minority isolated. By strengthening the social identity of the regular supporters group, this group could also become relatively more attractive to young fans than the group of hooligans. Such a social identity approach aimed at increasing identification with positive groups could contribute to reducing the social problem of football vandalism in the longer term.

Employee theft

Target group: Every employee who can steal goods from his/her workplace (WODC startnotitie).

Target behaviour: Preventing employees from stealing from their workplace (WODC startnotitie).

Description: 39.490 retail thefts were registered in 2016¹ (CBS, 2017). Currently, efforts are mostly directed at preventing theft from unknown ‘outsiders’ and relatively little attention is given to thefts committed by employees. In order to better understand employee theft, we extended our literature search to counterproductive work behaviour which has prompted more scientific attention. Counterproductive work behaviour is an umbrella term for work related behaviour ranging from less damaging behaviours, such as extending breaks, to clearly illegal behaviours such as internal fraud and theft. Counterproductive work behaviour is oftentimes the result of a combination or interaction of individual and situational factors. For the majority of people, illegal actions like stealing violate moral norms and values. Individuals thus need a reason that allows them to justify stealing in order to maintain a positive self-image (Aquino & Reed, 2002; Ayal, Gino, Barkan, & Ariely, 2015; Bandura, 1999). Identifying these reasons and subsequently creating circumstances in which they cannot be used to justify immoral behaviour may thus be essential in preventing employee theft.

Digital dispute solution

Target group: Citizens involved in conflicts with other citizens who are seeking a legal solution.

Target behaviour: Making the digital solution of dispute more efficient and effective.

Description: The number of legal conflicts that appear before court has increased significantly in recent years. In addition, existing legal procedures often fail to provide a good solution to everyday legal problems such as conflicts between neighbours, divorces and redundancies. In an effort to contribute to a more efficient dispute resolution, a few years ago, the Legal Assistance Council and Tilburg University developed the so-called Rechtwijzer (www.rechtwijzer.nl), which aims to help people who are dealing with a conflict. However, the Rechtwijzer is not yet used very often. One reason for this could be that the Rechtwijzer is not yet sufficiently able to deal with the emotions that can arise in civil legal conflicts. In the effective resolution of conflicts, it is important to recognize the influence that emotions can have on the course of a conflict. For example, if a person experiences anger, this reduces not only the chance of finding a solution but also

¹ Preliminary numbers for 2016

increases the risk of escalation. Conversely, experiencing guilt about one's own role in a conflict contributes to a more cooperative approach. The success of digital dispute resolution in e-commerce conflicts (such as SquareTrade) shows that a simple, accessible and transparent procedure can indeed be effective in limiting the potential disruptive effects of negative emotions in conflict. Emphasizing a fair procedure and one's own role within the conflict is important here. Understanding the psychological factors that can influence communication about conflicts in online environments is crucial in further developing forms of digital dispute resolution that deal with conflicts that are more complex (and emotional) than those in the online marketplace. A more effective design of digital dispute resolution will help citizens involved in conflicts make way for resources like the Rechtwijzer.

Neighbourhood nuisance and conflict

Target group: Individuals involved in neighbourhood nuisance and/or beginning neighbour disputes

Target behaviour: The prevention and de-escalation of neighbour disputes due to nuisance and disturbance

Description: Neighbourhood nuisance and disputes are societal issues that cause stress for everyone involved. When people live close together, a certain degree of disturbance by neighbours may be inevitable from time to time. In order to maintain an enjoyable living situation, preventing an escalation from a minor incident to a seemingly unsolvable dispute is needed. Accordingly, efforts have been made to find ways to reduce neighbour nuisance in order to prevent and resolve conflicts. Nevertheless, it often takes three to four years until action can be taken against individuals who cause structural nuisance in a neighbourhood². These relatively long processing times are undesirable for the parties involved. Yet, most people do not want to cause nuisance for others and in beginning conflicts, people may not even be aware of the fact that they are causing problems. Many nuisance-related disputes represent cases of *asymmetric* perceptions of conflict, in that one party experiences more conflict and disruption than the other does. In order to prevent initial nuisance to escalate into a conflict, it is important to emphasize cooperative norms and uphold procedural justice when dealing with disputes.

Current state of knowledge

² <https://www.hetccv-woonoverlast.nl/doc/publicaties/handreiking-gedragsaanwijzing.pdf>

As can be seen, each of the five topics refers to different desirable or undesirable and sometimes even illegitimate or criminal behaviours. Each of the discussed behaviours can be related to (situational and individual) determinants that specifically play a role in the manifestation of the discussed behaviour (see individual chapters in the report). However, some behaviour determinants play a role in several topics. Table S.1 summarizes these central determinants and shows the topics in which they play a more prominent role.

Table S1. Central determinants of behaviour per topic

<i>Topic</i>	Social norms	Group processes	Procedural justice/trust	Attributions and emotions
Sexting	x	x		
Football vandalism	x	x	x	
Employee theft	x	x	x	x
Dispute solution			x	x
Neighbour conflict	x	x	x	x

(Social) norms. People’s behaviour is strongly guided by (social) norms. Norms refer to what most people (i.e. “what is normal”, descriptive norm) and what relevant others approve and disapprove of (i.e. prescriptive norm). Norms can also be personal, which refer to moral standards that people uphold. (Perceived) norms play a role in stimulating and supporting legitimate behaviours regarding sexting, football violence, employee theft, and in combatting neighbourhood nuisance.

Research has shown, for example, that a positive attitude and the norms people perceive toward sexting in their environment are the best predictors of whether people engage in sexting (Walrave et al., 2015). Young people who think that a majority of their peers send sexually suggestive messages to others and who think positively about sexting are more likely to engage in sexting themselves. Similarly, regarding football violence we find that criminal and violent behaviour can be predicted by positive attitudes and perceived social norms regarding criminality. It thus seems that when people expect the majority of others in their environment to consider certain behaviour normative, they are more likely to act in a similar way.

Social norms are not always stated explicitly and sometimes it may seem ambiguous which behaviour is socially accepted in a certain situation. This can result in a discrepancy between behaviour that people perceive as normative and behaviour that is actually normative. This was found in a study on alcohol consumption among students in the US, which showed that

students have a tendency to overestimate other students' alcohol consumption. Interestingly, over time students adjusted and thus increased their own consumption of alcohol to the standard they perceived as the norm (Prentice & Miller, 1993).

In order to stimulate normative behaviour, we may thus emphasize realistic norms on a descriptive (e.g. "Most adolescents do not sext") and prescriptive level (e.g. "It is not accepted to distribute intimate photos of others without their consent", cf. Chapter 2). In some situations, it may also be sufficient to make personal norms more salient, for example when behaviour is not in line with a positive self-concept (e.g. employee theft, cf. Chapter 4).

Perceived norms have a strong influence on human behaviour - people have a tendency to portray behaviour that is socially accepted or recommended by experts. Social norms form the basis of many behavioural tendencies that are used in designing *choice architecture*, like choosing the default response: People often choose passively and assume that the default response is the normative response (Everett, Caviola, Kahane, Savulescu, & Faber, 2015). Accordingly, research has shown that the effect of the default response is mediated by the perception that the default represents the social norm (Everett et al., 2015). This has been used in several European countries including Austria and Spain to increase the number of organ donations, for example. These countries employ a so-called opt-out system, in which citizens more or less automatically become organ donors unless they "opt out".³ The use of social norms is thus a powerful tool to stimulate and support lawful and legitimate behaviour.

Group processes. A person's identity and self-concept are not only based on their individual traits and achievements, they are also derived from membership in relevant social groups. This idea forms the basis of the *Social Identity Approach* (Tajfel, 1974). 'Groups' are diverse and can refer to an individual's nationality, ethnicity, gender, profession, or also a group of football fans, for instance.

The so-called 'social' identity knows two important parameters (cf. Leach et al., 2008). The first parameter is the evaluation of a particular group (also called collective self-esteem), and the second is the value in belonging to that group (identification). When identifying with a group, we have a tendency to adhere to the norms of that group. Group norms can stimulate positive and negative behaviours. Adhering to (perceived) group norms plays a role in sexting among adolescents or vandalism among football fans, for example (see above).

According to the social identity approach, people strive for positive distinctiveness of their own group compared to other groups. In that sense, group processes can lead to conflict between groups (e.g. violence between football fans, employee theft). However, at the same time such group processes can also lead to a more constructive conflict solution. A strong

³ https://www.kcwj.nl/sites/default/files/Factsheet_Keuzearchitectuur.pdf

identification with a group can result in more solidarity with other ingroup members, for example (Spaaij, 2008).

A crucial insight gained by the literature is that identification with groups is not static but dynamic. People belong to different social groups and the situation determines which group membership is most salient at a given moment. The literature on fan violence has for example shown that the category of fanatic football fans is relatively heterogeneous and that fans identify with different subgroup depending on situational factors. The subgroup one identifies with (e.g. celebrating fan or hooligan) has a considerable impact on the norms that are most dominant in a particular situation, and subsequently, influence behaviour. This provides an opportunity for developing effective ways to nudge behaviour toward more positive, legitimate behaviour ('celebrating football') instead of restraining unlawful behaviours such as vandalism.

A social identity approach may also be worth investigating with regard to other topics discussed in the current report such as employee theft, sexting, or neighbourhood conflicts. Identification with a particular neighbourhood might, for example, increase tolerance toward neighbours from other cultural backgrounds (cf. Ufkes, Otten, Van Der Zee, Giebels, & Dovidio, 2012).

Procedural justice and trust. Perceived injustice is a strong motivator, it may initiate conflict, intensify conflict, and it may prevent people from accepting a solution to a conflict. In the topics discussed in this report, perceived (in)justice plays a prominent role in explaining employee theft, vandalism of football fans, the success of digital dispute solutions, and neighbourhood conflicts (Chapters 3, 4, 5, 6).

In the chapter on neighbourhood nuisance, we report that parties who are in conflict with each other often believe that their opponent's behaviour is unjustified and unfair, a perception which often leads to a further escalation of conflict. Perceived *justice* is thus crucial in the solution of conflicts. Research on procedural justice has shown that the degree to which people trust an executing institution (e.g. government, police) influences the degree to which they are willing to behave according to the rules that are implemented by that institution. This has been shown with regard to conserving water (Tyler & Degoey, 1996), paying taxes (Scholz & Lubell, 1998; Torgler, 2003) and following rules within a company (Kim & Mauborgne, 1993). People are, for example, more likely to accept a disadvantageous outcome if they believe that the procedure that has led to that outcome was just (cf. Deutsch, 2000b; Lind, Kulik, Ambrose & Park, 1993).

Transparent procedures that uphold the six aspects that contribute to the perception of procedural justice and make them salient (consistency, accuracy, the possibility to correct, control, impartiality, and ethics; Makkai & Braithwaite, 1996) thus seem to be crucial when solving conflicts (e.g. in a neighbour dispute or regarding digital tools of dispute solution).

Attributions and emotions. Our response to another person's behaviour is largely determined by our interpretation of their behaviour. We talk about a so-called *attribution-emotion-behaviour link* (Allred, 2000). How we interpret a particular behaviour or situation is partly determined by our relationship with that person. We have the tendency to see our own (negative) behaviour as more justified and benevolent than behaviour of an opponent (*self-serving bias*; Malle, 2006). For example, if we think that someone intentionally behaves disruptively, we are more likely to respond with anger and more likely to consider retaliating. At the same time, the actor is more likely to overestimate the influence of external circumstances on his own disruptive behaviour (*bias of the accused*). This discrepancy can result in a destructive cycle in which actors of a conflict continue to respond counterproductively toward each other. Examples can be found in conflicts regarding neighbourhood nuisance (Chapter 6), digital dispute solutions (Chapter 5), but also regarding employee theft (Chapter 4), when employees feel unfairly treated and commit theft in order to retaliate.

Developing awareness and understanding for the perspective of the opponent promotes constructive conflict solution. Some research suggests that perceptual biases, for example in the attribution of behaviour (e.g. accuser bias) can be weakened by making people aware of their egoistic tendencies to explain behaviour or by training perspective taking (Chen, Froehle & Morran, 1997). For instance, research has shown that we are less likely to attribute disruptive behaviour to a person's (arguably more stable) personality (i.e. accuser bias) when we take their perspective of the situation into account (Chen et al., 1997; Regan & Totten, 1975).

Conclusions and suggestions

This report provides an overview of the current scientific knowledge on factors that influence behaviour in the above mentioned five areas. The goal of this report was to gather knowledge in order to spark ideas for ways in which current policies can be made more effective and efficient. Where possible, we translate the presented findings into possible interventions which can be tested on a larger scale using a randomized design. Presented theories and suggestions are based on current knowledge in the field. Scientific knowledge continuously evolves and revising and stringently testing the efficiency of interventions can provide an important addition to these efforts.

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