Halfe the world knowes not how the other halfe lies: Investigation of verbal and non-verbal signs of deception exhibited by criminal offenders and non-offenders

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Purpose. This study examined the verbal and non-verbal behaviours exhibited by criminal offender and non-offender participants while they related planned truthful and deceptive accounts about emotional autobiographical events.

Methods. In a 2 × 2 (participant group × veracity) quasi-experimental design, offenders (N = 27) and university students (N = 38) provided videotaped accounts of four autobiographical emotional events: two honest and two fabricated (counter-balanced). Patterns of behaviour exhibited during the truthful and the deceptive accounts were then compared.

Results. In general, offenders and non-offenders showed similar patterns of deceptive behaviour. Deceptive accounts by both groups contained fewer details than honest accounts. Deception was associated with an increase in illustrator usage and self-manipulations; however, univariate analyses indicated only that offenders exhibited significantly more self-manipulations when lying. A significant interaction emerged in which offenders showed a reduction in smiles when lying about the emotional events, while students showed no difference.

Conclusions. Offenders and students showed similar patterns of lying on most cues. However, unlike non-offenders, offenders smiled less and showed an increase in self-manipulations when lying. We theorize that offenders may have been aware that smiling and laughing are negatively related to perceived credibility in the speaker and used self-manipulations to distract listeners from the content of their lies.

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Numerous wrongful convictions in Canada and elsewhere have highlighted the problem of lying in forensic settings. For example, in the 2001 inquiry into Thomas Sophonow’s wrongful murder conviction in Manitoba, former Supreme Court of Canada Justice Peter Cory observed that witnesses frequently use deception and many – in particular, criminals acting as police informants – are ‘smooth and convincing liars’. He argued that legal decision makers need a better understanding of credibility assessment (e.g. Wilson, 2003). The importance of this recommendation is bolstered by empirical findings that deception detection is difficult (e.g. Bond & DePaulo, 2006; Ekman & O’Sullivan, 1991; Vrij, 2000). Further, both laypersons and legal decision makers lack valid knowledge concerning deception (e.g. Ekman & O’Sullivan, 1991; Kaufmann, Drevland, Wessel, Overskeid, & Magnussen, 2003; Porter, Woodworth, & Birt, 2000; Vrij, 2004), often relying on simple heuristics and tunnel vision decision making (e.g. Meissner & Kassin, 2002; Porter, McCabe, Woodworth, & Peace, 2007).

In our view, this situation requires the communication of relevant, empirically based findings on deception to legal decision makers as soon as they are available. But what meaningful information about cues to deception can researchers share with legal staff at present? Arguably, the large body of research on deceptive behaviour is sufficiently extensive to warrant strong conclusions about correlates of deception (e.g. DePaulo & Morris, 2005). However, due to the questionable generalizability of the findings, the application of such findings in forensic settings may be premature. Nearly all studies examining deceptive behaviour have involved university student participants, while few have examined the behaviour of experienced criminals. In DePaulo et al.’s (2003) widely cited meta-analysis, only 3 out of 120 deception studies in the dataset had examined deception among forensic samples compared with 101 among student participants.

It is possible that deception is such an innate, hard-wired aspect of human behaviour that its manifestations will be similar regardless of one’s criminal status or background in general (Bond & Robinson, 1988). For example, Bond and Atoum (2000) concluded that there are strong cross-cultural similarities in deceptive behaviour. Nonetheless, we suspect that the particular experiential histories and affective features of criminal offenders may lead to lying behaviours that differ from those of others (see Bond & Lee, 2005). One factor that may influence patterns of lying by seasoned criminals is their relatively high level of practice. For example, many serious offenders often maintain lies for years or decades (e.g. Porter & Woodworth, 2007). With extensive experience in deceiving others, offenders may gain progressive insight into the best strategies with which to deceive and become successful, ‘smooth’ liars (e.g. DePaulo & DePaulo, 1989; Porter & Yuille, 1995). In support of this hypothesis, Granhag, Andersson, Strömwall, and Hartwig (2004) found that offenders’ beliefs about deception were less stereotypical and more accurate than those of correctional staff and students. Reflecting this heightened knowledge, one study found that offenders outperform students in detecting lies (Hartwig, Granhag, Strömwall, & Andersson, 2004). Further, this increased practice and knowledge may make lying easier for offenders than others. Accordingly, Granhag et al. found that whereas 94.4% of students believed that lying required more mental effort than telling the truth, only 59.8% of criminal offenders reported this view.

If offenders do find lying to be relatively easy, deceptive behaviours associated with the ‘attempted behavioural control’ approach (see Vrij, 2000), emphasizing the liar’s forced efforts to make an honest impression, may be less pronounced among offender than non-offender deceivers. In non-offender samples, liars tend to exhibit over-controlled behaviour, using fewer ‘illustrators’ (body movements, such as gestures, used
to consciously convey information) and self-manipulations (e.g. Granhag & Strömwall, 2002) than truth-tellers. Further, to avoid seeming nervous and making speech errors, non-offender deceivers may consciously reduce their rate of speech, as found by Vrij in a review of forty deception studies. We hypothesize that because offenders may find lying to be considerably easier than non-offenders (and they may be better actors in general), they will not show the same pattern of over-controlled behaviour. Instead, we predict that offenders will be more comfortable lying and not show a decrease in illustrator use or self-manipulators during deception. Instead, it is possible that they will show an increase in these cues to actively distract the listener’s attention from their fabricated stories, a long-standing observation concerning interview behaviour by psychopathic offenders (e.g. Hare, 2003). Further, instead of slowing their rate of speech when lying, we predict that either they will show no difference as a function of veracity, or increase their speech rate slightly to enhance their credibility with a smooth vocal delivery. We also hypothesize that criminal offenders will find it easier to create and maintain false information to ‘keep the story straight’. As such, while their deceptive narratives may be less detailed than their honest stories, the difference may be less pronounced that the robust pattern witnessed in non-offenders (e.g. DePaulo et al., 2003).

A second factor that may lead to different patterns of lying in criminal offenders and non-offenders relates to affect. Many offenders have particular emotional features such as a lack of remorse and low anxiety (e.g. Hare, 1996; Patrick, 2006; Porter & Woodworth, 2006) that likely facilitate successful lying, while most people must deal with emotional ‘interference’ (e.g. Vrij, 2000). Because guilt and fear are expected to increase signs of stress, cues such as nervous smiles, speech hesitations and disturbances (e.g. Vrij, Edwards, & Bull, 2001; Vrij, Edwards, Roberts, & Bull, 2000), along with fidgeting (e.g. DePaulo et al., 2003) may be more evident in non-offenders when lying than among criminal offenders. Further, as found by Newman, Pennebaker, Berry, and Richards (2003) in a series of studies, guilt over lying can lead to a distancing and an avoidance of responsibility manifested by the use of fewer self-references (I, me, my, we). We hypothesize that criminal offenders may be less affected by guilt than others and are unlikely to exhibit a difference in their use of self-referencing when lying and telling the truth.

Little research has carefully addressed the behavioural correlates of deceptive behaviour in criminal suspects/offenders. Vrij and Mann (2001) examined the behaviours of a murderer during his police interview, both prior to and during his confession. A major finding was that he generally did not show behaviours associated with anxiety despite the high stakes associated with the outcome of the interview. However, both his preconfession and confession interview lies were associated with longer pauses, slower speech and a higher frequency of speech disturbances relative to his preconfession truth telling. The authors concluded that the murderer was ‘working harder’ (cognitively) at lying than telling the truth, which appears to be at odds with our prediction that criminal offenders may find lying to be easy. However, as acknowledged by the authors, this individual might have been a particularly unskilled (or skilled for that matter) liar and his pattern of deceptive behaviour may be atypical for offenders. Additionally, the circumstances of his deceptions were extreme; he knew that he was the prime suspect in a murder case and could go to prison for life if his lies failed. Following from this case study, Mann, Vrij, and Bull (2002) examined the videotaped police interviews of sixteen criminal suspects. The sample comprised a diverse group of individuals in terms of gender, age and the nature of their suspected crimes (thefts, arsons, sexual assaults and murders).
The researchers compared the suspects' behaviour during the interview when they were known to be lying or telling the truth on various verbal and non-verbal cues. The results indicated that only two cues differed as a function of veracity; the suspects paused longer and blinked less frequently when lying but there were no differences in terms of gaze aversion, illustrators, hand/arm movements, or speech disturbances. Thus, similar to Vrij and Mann's findings, there was no evidence that nervousness played a role in the suspects' deceptive behaviour. Although there was limited evidence that cognitive load played a limited role in their deception behaviour, it did not appear that the suspects were over-controlling their behaviour as is typically seen among non-offender samples (e.g. DePaulo et al., 2003).

The present study

In summary, little research has addressed behavioural cues to deception among criminal offenders. As such, the criminal status of the liar was not one of the many variables identified by DePaulo et al. (2003) as potential moderators of the association between deception and behavioural cues. However, it seems to us that this is a critical omission. There are two good reasons to hypothesize that patterns of deception among offenders will differ from those established among non-offender samples. The first is that offenders may be more practiced in lying, have more accurate knowledge about cues to deception and find it to be a considerably easier task when compared with non-offenders. The second is that offenders may not experience the same level of anxiety or guilt over lying as non-offenders. In fact, instead of being a negative experience as for most people, some offenders may even enjoy deceiving others (e.g. Ekman, 1992/2001; Vrij & Mann, 2004). Given these conditions, it is likely that offenders will not show the same pattern of cues associated with over-controlled behaviour or masked nervousness that is seen among non-offenders. However, no research to date has directly compared the behavioural cues exhibited by offenders and non-offenders during a common deception task.

In this study, we had offenders and students prepare stories about personally experienced events with an emotional component. Given a relatively small sample of offenders, we selected specific verbal and non-verbal cues that would allow an examination of our hypothesis that offenders would be considerably more comfortable than non-offenders during deception. The cues selected were very similar to those used in previous studies on deception by offenders (e.g. Mann et al., 2002) and during mock police interrogations (e.g. Granhag & Strömwall, 2002). We made the following predictions concerning deception cues among the two samples:

(1) **Non-Verbal Behaviours**: We predicted that criminal offenders would show either no difference in their use of **illustrators**, **self-manipulations** and **head movements** when lying and telling the truth, or would show an increase in their use when lying in order to actively distract the listener's attention from the story's details. Conversely, we predicted that non-offenders would show a decrease in these cues when lying in an attempt to prevent the betrayal of their lies. We predicted that offenders would show no difference in **smiling** or laughing behaviour when lying and telling the truth, or possibly reduce their smiling behaviours if they are aware that emotional

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1 Although we had originally planned on coding for gaze aversion, the interviewer was positioned slightly to the camera's side making it difficult to measure this behaviour.
reactions such as smiling or laughing can be negatively related to perceived credibility (Riggio, Tucker, & Widaman, 1987). Non-offenders, however, may show an increase in smiling and laughing when lying as subtle signs of nervousness and anxiety or no difference when lying or telling the truth as found in DePaulo et al.’s (2003) meta-analysis.

(2) Verbal Behaviours: In line with our assumption that criminal offenders would be more practiced and skilled at lying than others, we predicted that they would provide as much detail in their planned lies as in their truthful stories. We predicted that non-offenders would provide less detail when lying in order to simplify their task and ‘keep the story straight’, in line with the typical finding with non-offenders (DePaulo et al., 2003). Further, we predicted that the speech rate of the offenders would be similar when lying and telling the truth, or possibly even increase slightly during lying in order to impress the listener with a coherent, smooth delivery. We predicted that the speech rate of non-offenders would decrease when lying because of the increased difficulty of maintaining the story details and controlling signs of nervousness in speech. We also predicted that non-offenders would exhibit an increase in their use of speech pauses (both filled and unfilled pauses) when lying in order to provide time to create and maintain false details. In contrast, we expected that offenders would show no such increase because of their elevated lying skills and lack of nervousness. On the contrary, it was possible that offenders would show a decrease in speech pauses in order to impress the interviewer with a coherent, smooth delivery. Finally, we predicted that non-offenders would ‘distance’ themselves when lying through the use of fewer self-references (‘I’, ‘me’, ‘my’, ‘we’), as found by Newman et al. (2005). It was predicted that offenders would show no difference in self-referencing during lies and truth-telling.

Method
Participants
The offender sample comprised 27 adult males currently serving federal sentences at a medium security prison in eastern Canada. Their mean age was 31.7 years ($SD = 10.1$). Participation was completely voluntary. Offenders who expressed an interest in participating were scheduled to meet with a researcher, after which informed consent was obtained and the interview session scheduled. The student sample consisted of 38 students attending a university in eastern Canada. Their mean age was 20.8 years ($SD = 5.7$). Females comprised 69.4% of the sample. In return for participation, they received one course credit point.

Procedure
Eliciting the truthful and fabricated stories
Each participant was asked to plan and describe four emotional events, two completely honest and two completely fabricated. Participants were provided 10 minutes to plan each event description (a break was provided after each description to plan the subsequent account). Participants were asked to provide a ‘credible and believable’ description of each event in no more than 5 minutes. They were informed that their

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2 For all analyses potential gender differences within the student group were examined but there were no significant differences on any of the behavioural cues.
videotaped stories subsequently would be viewed by various groups to attempt to assess their honesty. The events (true and fabricated) had to have occurred within 5 years preceding the interview. The participants were asked to provide their complete recollection of the event, including when it occurred, its location, people present at the time and all factual details that they could recall. Beforehand, participants were provided a list of potential types of events that they could discuss (however, ultimately it was up to the participant in light of their particular experiential histories). These included a success/award, a positive relationship event, a fun/exciting experience on a trip, a serious accident, a medical procedure, or an embarrassing situation. They were asked to provide one positive and one negative event for each of the truthful and the fabricated story types. They were asked not to discuss any events relating to crime. Interviewers did not interject or request elaboration of details during the provision of the narratives. The order of the events was counterbalanced. The participants were videotaped during each account with a camera placed directly in front of them as they were seated in a chair.

Coding the non-verbal and verbal behaviours
Each video was coded for the four non-verbal cues mentioned above: frequency (per minute) of illustrators, frequency (per minute) of self manipulations (number of times participant touched/scratched their hand, head or body), frequency (per minute) of clear head movements (nods, shakes) and frequency (per minute) of smiles/laughs. Each video was transcribed verbatim to allow verbal cues to be coded. Each story was coded for length in terms of the number of individual details, number of words and response length in seconds. The number of individual details refers to the amount of detail contained within each story with each distinct piece of information being scored as one detail (e.g. blue car includes two details, object and colour). Speech rate was calculated by coding the number of words spoken per minute. Additionally, the stories were coded for the frequency (per minute) of filled pauses/speech hesitations (‘umm’, ‘ahh’, ‘well’, etc.), frequency (per minute) of unfilled speech pauses (greater than two seconds in duration) and frequency (per minute) of self-references (‘I’, ‘me’, ‘my’, ‘we’). A second coder coded 20% of the videos in order to assess the inter-rater reliability of the cues.

Results
Reliability check
An inter-rater reliability check was conducted on all cues except speech rate and response length. Correlational analyses indicated that coding for all non-verbal cues (illustrators, self-manipulations, head movements and smiles) was reliable, with correlations ranging from .62 to .99 (all ps < .01), and no mean differences (t tests) between raters. Similarly, for all verbal cues (details, filled pauses, unfilled pauses and self-references) coding was reliable, with correlations from .69 to .99 (all ps < .001) and no mean differences between raters.

Amount of detail in the truthful and fabricated accounts
It was first necessary to compare the mean account lengths of the truthful and fabricated narratives (Porter & Yuille, 1996). If differences in length of the stories were found, the dependent variables could not be analysed by a simple tally but rather by frequency per minute scoring. A 2 × 2 analysis of variance (ANOVA) with veracity and participant
Detection of deception in criminal offenders

Effects of veracity and participant condition on cues to deception

The means and standard deviations of the cues to deception for each participant condition can be found in Table 1. To examine the potential influence of story veracity and participant condition on cues to deception, a 2 × 2 MANOVA was conducted with veracity (a within-subjects factor) and participant condition (a between-subjects factor) as the independent variables and the verbal and the non-verbal behaviours (frequency per minute) as the dependent measures. At the multivariate level, there was a main effect of veracity, F(9, 54) = 2.11, p < .05, no multivariate main effect of participant condition, F(9, 54) = 1.95, p > .05 and a significant participant/veracity interaction, F(9, 54) = 2.15, p < .05. Univariate analyses on veracity condition indicated that truthful and fabricated accounts differed on both illustrators (F(1, 62) = 5.86, p < .05) and self-manipulations (F(1, 62) = 4.83, p < .05) overall. Specifically, fabricated stories were associated with a higher frequency of illustrators, F(1, 62) = 5.86, p < .05 (M = 6.73, SD = 6.02) and self-manipulations, F(1, 62) = 4.83, p < .05 (M = 7.62, SD = 6.12) than the truthful stories (M = 5.67, SD = 5.72 and M = 6.60, SD = 5.35, respectively) (see Table 2 for results of univariate analyses of cue usage between truthful and fabricated stories). Follow-up comparisons indicated that the effect for illustrators was global but for offenders and students individually, the effect was of marginal significance (p = .079 and p = .095, respectively). Follow-up comparisons for self-manipulations indicated a significant difference for offenders only (p < .05). Univariate analyses on the interaction effect indicated only a significant interaction of participant condition and smiling frequency, F(1, 62) = 7.14, p < .01. Pairwise comparisons for this interaction established that students did not differ in their rate of smiles during truth-telling (M = 2.87, SD = 2.97) and deception (M = 3.17, SD = 3.28), t(37) = 1.6, p = .11, whereas offenders smiled significantly less frequently when lying (M = 0.61, SD = 0.77) than telling the truth (M = 1.0, SD = 1.14), t(25) = 2.57, p > .05. There was a marginally significant interaction between participant condition and speech rate, F(1, 62) = 3.61, p = .06.

Discussion

As members of the judiciary have highlighted, lies told by criminal offenders and the failure of decision makers to identify them have led to numerous miscarriages of justice. Observing that many such individuals are ‘smooth and convincing liars’, Justice Cory called for the dissemination of information concerning deception detection within the criminal justice system. However, despite an impressive body of research on deception
While acknowledging the exploratory nature of this study, we hypothesized that increased practice, a higher level of accurate knowledge about deception cues and a lack of emotional ‘interference’ would facilitate planned lying by offenders relative to a non-offender sample. First, we predicted that offenders would show either no difference or an increase in their body movements (illustrators, self-manipulations) when lying whereas students would show a decrease in such cues when lying. Our findings only partially supported these predictions. Although taken together, the groups exhibited a higher usage of illustrators during deception; individually the effect was not significant. However, as predicted, offenders used self-manipulations at a higher rate when lying, whereas non-offenders showed no such change. The overall increase in illustrator usage contrasts a long-standing contention in the literature that

**Table 1.** Means and standard deviations of the frequency of cue use as a function of veracity and participant type

<table>
<thead>
<tr>
<th>Cue type</th>
<th>Truthful stories</th>
<th>Fabricated stories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head movements</td>
<td>8.10 (4.70)</td>
<td>8.15 (4.55)</td>
</tr>
<tr>
<td>Smiles</td>
<td>2.87 (2.97)</td>
<td>3.17 (3.28)</td>
</tr>
<tr>
<td>Illustrators</td>
<td>6.51 (5.76)</td>
<td>7.53 (5.69)</td>
</tr>
<tr>
<td>Self-manipulations</td>
<td>7.34 (4.41)</td>
<td>8.03 (4.98)</td>
</tr>
<tr>
<td>Filled pauses</td>
<td>6.53 (3.71)</td>
<td>7.03 (4.13)</td>
</tr>
<tr>
<td>Pauses</td>
<td>1.37 (1.34)</td>
<td>1.38 (1.34)</td>
</tr>
<tr>
<td>Self-references</td>
<td>11.95 (4.64)</td>
<td>13.28 (5.68)</td>
</tr>
<tr>
<td>Speech rate</td>
<td>184.48 (29.94)</td>
<td>183.77 (26.30)</td>
</tr>
<tr>
<td>Offenders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head movements</td>
<td>7.24 (5.52)</td>
<td>7.84 (5.56)</td>
</tr>
<tr>
<td>Smiles*</td>
<td>1.00 (1.14)</td>
<td>.61 (.77)</td>
</tr>
<tr>
<td>Illustrators</td>
<td>4.45 (5.53)</td>
<td>5.55 (6.39)</td>
</tr>
<tr>
<td>Self-manipulations*</td>
<td>5.52 (6.44)</td>
<td>7.02 (7.55)</td>
</tr>
<tr>
<td>Filled pauses</td>
<td>6.12 (3.42)</td>
<td>6.13 (4.05)</td>
</tr>
<tr>
<td>Pauses</td>
<td>2.31 (1.63)</td>
<td>1.99 (1.62)</td>
</tr>
<tr>
<td>Self-references</td>
<td>13.26 (4.87)</td>
<td>12.23 (4.13)</td>
</tr>
<tr>
<td>Speech rate</td>
<td>170.12 (26.79)</td>
<td>177.90 (21.96)</td>
</tr>
</tbody>
</table>

**Table 2.** Means and standard deviations of the frequency of cue use as a function of veracity

<table>
<thead>
<tr>
<th>Cue type</th>
<th>Truthful stories</th>
<th>Fabricated stories</th>
<th>F value (1,62)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head movements</td>
<td>7.75 (5.03)</td>
<td>8.03 (4.95)</td>
<td>0.94</td>
</tr>
<tr>
<td>Smiles</td>
<td>2.11 (2.56)</td>
<td>2.13 (2.86)</td>
<td>0.12</td>
</tr>
<tr>
<td>Illustrators</td>
<td>5.67 (5.72)</td>
<td>6.73 (6.02)</td>
<td>5.86*</td>
</tr>
<tr>
<td>Self-manipulations</td>
<td>6.60 (5.35)</td>
<td>7.62 (6.12)</td>
<td>4.83*</td>
</tr>
<tr>
<td>Filled pauses</td>
<td>6.37 (3.58)</td>
<td>6.66 (4.09)</td>
<td>0.71</td>
</tr>
<tr>
<td>Pauses</td>
<td>1.75 (1.53)</td>
<td>1.63 (1.48)</td>
<td>1.59</td>
</tr>
<tr>
<td>Self-references</td>
<td>12.48 (4.74)</td>
<td>12.85 (5.09)</td>
<td>0.04</td>
</tr>
<tr>
<td>Speech rate</td>
<td>178.65 (29.35)</td>
<td>181.39 (24.61)</td>
<td>2.50</td>
</tr>
</tbody>
</table>

*p < .05.

(see DePaulo et al., 2003; Vrij, 2000), few studies have examined cues to deception in criminal offenders.
deception is associated with fewer illustrators (e.g. Ekman, Friesen, & Scherer, 1976). While DePaulo et al. (2003) found a significant negative relation between deception and illustrator use ($d = -0.14$), this is a very small effect size (Cohen, 1977). Further, in Vrij's (2000) review of deception studies, most studies in which illustrators had been coded found no relationship between such illustrators and deception, while two studies found an increase in illustrator use during deception (Bond, Kahler, & Paolicelli, 1985; DeTurck & Miller, 1985). The variable findings suggest that illustrator usage use may be highly context-dependent. The type of lie, motivation, planning and consequences may all play contributing roles in patterns of illustrator usage. We theorize that offenders may have used self-manipulations to distract listeners from their speech content during deception (Klaver, Lee, & Hart, 2007). Another possible interpretation is that the increased self-manipulations were occurring on a subconscious level and signifying nervousness. It would be useful in future studies to focus on the subjective experience of lying for offenders. For example, we could ask them after the task whether they showed an increase or decrease in such cues (to examine whether the change was conscious) and whether they had a goal in mind in exhibiting the behavioural change.

Another prediction was that offenders would show either no difference in smiling/laughing behaviour when lying and telling the truth or a slight decrease when lying. Further, we predicted that non-offenders would show no such decrease; rather they would either show no change (as suggested by DePaulo et al., 2003) or smile nervously more often when lying. We found an interaction such that the offenders smiled significantly less often when lying than telling the truth, while students showed no such difference. The reduction in smiling seen in the offenders could be interpreted as resulting from their increased knowledge about deception and impression management. Riggio et al. (1987) found that emotional reactions such as smiling or laughing are negatively related to perceived credibility in the speaker when he/she is either lying or telling the truth. The authors speculated that judges view such behaviour as evidence that the speaker is exhibiting signs of unintentionally losing their ‘serious face’, due to the embarrassment of lying. The reduction seen in offenders could reflect a successful suppression of such signs, in line with the attempted behavioural control approach. In other words, they may have been more effective liars. Another tenable interpretation was that the reduction in smiling behaviour witnessed in the offenders resulted from increased cognitive load. While the relatively high level of experience presumably characterizing offenders would cast doubt on this interpretation, again, it would be useful to inquire about the offender participants’ knowledge of this pattern in future studies.

Turning to the possible verbal cues to deception, we found that honest and deceptive accounts differed in their richness of detail for both groups. In line with the content complexity approach, participants gave less detail when lying than telling the truth. Thus, even relatively sophisticated deceivers are unwilling or, perhaps more likely, unable to provide as much information in their false stories. Further, a marginally significant interaction suggested a trend such that offenders somewhat increased their speech rate when lying while students showed no such pattern, a finding that requires further investigation with a larger sample. Finally, we found no differences in the use of self-references by either participant group. It is possible that avoidance of self-referencing would be more prevalent in lies of greater consequence involving the concealment of incriminating, ‘guilty’ information.
Some limitations to this work should be noted, especially given that several of our predictions were not supported. Obviously, our deception task did not resemble lying in forensic contexts in terms of motivation, content, or consequence. Further, although the incentive for lying successfully did not differ between the groups, the incentive for participation was different. We were not permitted (by correctional system officials) to offer any incentive for the offenders to participate. Students, however, participated in return for a course credit point. As such, whereas most or all eligible students may have chosen to sign up, only those offenders who found the task inherently interesting would choose to do so, raising the possibility of a self-selection bias. It is possible, for example, that offenders choosing to participate were the most experienced deceivers and/or those who enjoyed lying to others the most. The same results may not have been obtained had a random sample of offenders taken part. As such, further use of the case study and in situ approaches pioneered by Vrij and colleagues is needed. Another possible limitation concerns the ‘ground truth’ of the stories selected by the participants. It was not possible for us to ascertain the actual veracity of the stories provided, a potential problem in many deception studies requiring participants to fabricate true and false autobiographical events (as well as other types of research methodologies such as surveys). While there would be no obvious incentive for lying to the experimenter in this manner, we must acknowledge the possibility that a small number of participants may not have cooperated. Nonetheless, we felt that eliciting stories of emotionally provocative, personal experiences was a better approach than having the two groups lie about a more banal and simplistic stimulus such as a videotaped or staged event. Such personally significant stories are richer in detail and emotion, more complex and potentially more difficult to falsify than other types of contrived events. Additionally, (in Canada at least) offenders often are asked to describe such autobiographical events in their developmental histories preceding the crime during sentencing hearings, treatment sessions and parole hearings. It could be argued that a better approach would be to ask the offenders about their crime. However, this was not possible for two reasons. First, the correctional system in Canada will not permit offenders to lie about their crimes or any other transgressions in psychological experiments because it might condone lying about such events with correctional/parole staff and/or give them practice in these types of lies. Second, it would not be possible to ask the students about an equivalent event. Future research should consider innovative ways of addressing the ground truth issue while including the use of personally salient events.

In conclusion, this exploratory study indicated that in many ways offenders and non-offenders behave similarly when lying about personal experiences. Notable differences included that offenders smile less and show more self-manipulations during deception. This pattern likely reflects a greater sophistication in offenders’ knowledge of how to appear credible. Alternatively, it could be interpreted as signifying nervousness or increased cognitive load. The next step in our research programme will be to ask the participants about the subjective experience of lying (and their strategies) and to examine whether offenders are more or less convincing liars to observers.

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References


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