The aim of the research was to evaluate the predictive validity of the self-assessment questionnaire within the Offender Assessment System (OASys), the national risk and need assessment tool for adult offenders in England and Wales. The self-assessment questionnaire (SAQ) provides offenders with the opportunity to comment upon how they see their lives, covering a range of individual-level and social problems and their perceived likelihood of further offending. When completed, practitioners are encouraged to review the contents of the SAQ prior to the offender interview and completion of the core OASys assessment and initial sentence plan. An assessment of predictive validity is thus important to ensure that the SAQ measures what it is intended to measure – offending-related problems and likelihood of further offending.

Key points

The OASys SAQ provides offenders with the opportunity to comment upon how they see their lives. An evaluation of the predictive validity of the SAQ was undertaken to ensure that the tool measures what it is intended to measure – offending-related problems and likelihood of further offending. The results of the analysis have the following implications for practitioners.

-Attention should be paid to whether offenders have realistic perceptions of their own likelihood of re-offending and the links between criminogenic problems and offending. About two-fifths of the offenders wrongly predicted that they would not re-offend and about a quarter of those offenders who thought they had no problems had re-offended.

-To help ensure that relevant offending-related factors are recognised and that differences in opinion are discussed, assessors should be encouraged to pay close attention to the offenders' perceptions when completing the core OASys assessment and conducting the prior interview. While the SAQ, on its own, was less predictive than the core practitioner assessment, all the SAQ questions were associated with re-offending and a combined model for predicting re-offending included the offenders' own predictions regarding their further offending and four problem questions from the SAQ rather than corresponding questions in the core assessment.

Implications for the future use and development of OASys are shown below.

-Reasons for non-completion of the SAQ should be explored and completion in all eligible cases encouraged, helping to ensure that offenders' views are fully considered. Offenders' views will thus feed into the core OASys assessment where appropriate, contributing to the measurement of criminogenic needs and the prediction of further offending.

-Consideration should be given to introducing a closer alignment between the structure of the SAQ and the core OASys assessment, assisting practitioners to compare views.
**Approach**

Predictive validity was tested using a sample of 9,065 offenders. This sample, which should not be seen as representative of all offenders, was restricted to those offenders with two-year re-offending data and sufficiently complete data from the core OASys assessment, risk of serious harm assessment and the SAQ. To guide the analysis, the following three research questions were set.

1. How accurate are the offenders’ judgments regarding their likelihood of further offending?
2. Are the SAQ individual-level and social problem questions predictive of re-offending?
3. How does the predictive validity of the SAQ compare to the current predictors?

To test the predictive validity of individual SAQ questions, chi-square tests were used. The final part of the SAQ enables offenders to elaborate upon their views regarding their likelihood of further offending. A linguistic-based text mining tool was used to process this qualitative data and to extract concepts, which were then grouped into higher-level categories. To test the predictive validity of the SAQ as a whole, alongside the current predictors, logistic regression models were used, with the full sample being divided into construction (60%; n=5,402) and validation samples (40%; n=3,663).

**Results**

**The accuracy of the offenders’ judgments regarding their likelihood of further offending**

For the total sample, 45% of the offenders had re-offended in the 24 months (at liberty) since the date of their community sentence or discharge from custody.

Question 28 of the SAQ, which asks offenders whether they think that they are likely to offend in the future, was associated with re-offending over this period. About one-third (34%; n=5,081) of the definitely not respondents, over half (56%; n=3,256) of the unlikely respondents and three-quarters (75%; n=608) of the quite likely responders had re-offended. While the re-offending rate for the quite likely responders was higher than the re-offending rate for the very likely responders (67%; n=120), this difference was not statistically significant.

When collapsing the responses so that definitely not and unlikely equated to a negative prediction and quite likely and very likely equated to a positive prediction, the offenders’ predictions proved correct in about three-fifths (59%) of the cases. The offender wrongly predicted that he or she would not re-offend in about two-fifths (39%) of the cases.

**The predictive validity of the SAQ individual-level and social problem questions**

Questions 1 to 27 of the SAQ address a range of ‘external’ social problems encompassing accommodation, employment and finances, relationships and lifestyle, as well as ‘internal’ individual characteristics, covering values, perceptions, reasoning, beliefs, attitudes and goals. All 27 questions were associated with re-offending (p<.05). For each question, with the exception of ‘being lonely’, those offenders who responded that it was a problem were statistically significantly more likely to re-offend than those who responded that it was not a problem. For eight of the questions, including ‘being lonely’, those offenders who thought that the problem was linked to their offending were statistically significantly more likely to re-offend than those who responded that it was a problem (but not linked to their offending).

When scoring each of the 27 questions (0 = no problem, 1 = problem but not linked to offending and

<table>
<thead>
<tr>
<th>Likely to offend in the future?</th>
<th>Re-offended</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Definitely not/Unlikely</td>
<td>3,558 (39.2%)</td>
<td>4,779 (52.7%)*</td>
</tr>
<tr>
<td>Quite likely/Very likely</td>
<td>537 (5.9%)*</td>
<td>191 (2.1%)</td>
</tr>
<tr>
<td>Total</td>
<td>4,095 (45.2%)</td>
<td>4,970 (54.8%)</td>
</tr>
</tbody>
</table>

* These cells represent correct predictions
2 = linked to offending) and calculating a total raw score (range 0 to 54), the 24-month re-offending rate was found to increase to two-thirds (67%) for those who scored at least 26. However, about a quarter (27%) of those offenders who thought that they had no problems (score of 0) had also re-offended.

Table 2: 24-month re-offending rate by SAQ raw problems score

<table>
<thead>
<tr>
<th>Raw problems score</th>
<th>n (% of sample)</th>
<th>24-month re-offending rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1,216 (13%)</td>
<td>27%</td>
</tr>
<tr>
<td>1-5</td>
<td>2,371 (26%)</td>
<td>36%</td>
</tr>
<tr>
<td>6-10</td>
<td>2,041 (23%)</td>
<td>45%</td>
</tr>
<tr>
<td>11-15</td>
<td>1,495 (17%)</td>
<td>54%</td>
</tr>
<tr>
<td>16-20</td>
<td>966 (11%)</td>
<td>60%</td>
</tr>
<tr>
<td>21-25</td>
<td>528 (5.8%)</td>
<td>63%</td>
</tr>
<tr>
<td>26+</td>
<td>448 (4.9%)</td>
<td>67%</td>
</tr>
<tr>
<td>Total</td>
<td>9,065 (100%)</td>
<td>45%</td>
</tr>
</tbody>
</table>

Question 28 also asks ‘why do you think this is?’, enabling offenders to elaborate upon their views regarding their likelihood of further offending. When analysing the links between the most common response categories and 24-month re-offending, the strongest association was found for the category of ‘drugs’, which covered concepts relating to addiction, detoxification and relapse, specific types of drugs, substance misuse programmes and drugs workers. Of those who made some such reference to drugs, two-thirds (67%) had re-offended in the following 24-month period (n=603), compared to 44% of those who did not mention drugs (n=8,462).

How does the predictive validity of the SAQ compare to current predictors?

To compare the predictive validity of items within the SAQ and the core OASys assessment, the cases within the construction sample were selected and all SAQ questions and all 73 scored OASys questions entered into a regression model. The Offender Group Reconviction Scale (OGRS 3) score was also entered to control for static criminal history and offender demographic factors. This score, which provides a percentage prediction of proven re-offending, is calculated automatically within OASys but it can also be calculated as a stand-alone predictor. The optimum model included the OGRS 3 score, eight questions from the core OASys assessment and five questions from the SAQ. Those SAQ questions remaining in the model are shown below.

- Are any of these a problem for you?
  - Understanding other people’s feelings (2)
  - Being lonely (8)
  - Doing things on the spur of the moment (13)
  - Repeating the same mistakes (14)

Two of these questions (2 and 8) were moderating the impact of the other problems/links to offending – those offenders who thought that ‘understanding other people’s feelings’ was linked to their offending or that ‘being lonely’ was a problem were less likely to re-offend than those who thought otherwise.

This model achieved a high level of discrimination for the validation sample – nearly eight out of ten randomly selected re-offenders had higher scores than randomly selected non re-offenders. To fully test the predictive validity of the SAQ alongside the current predictors, several models were constructed and compared. The above model was most accurate, although a model combining OGRS 3 and the scored OASys questions (but not the SAQ questions) performed almost as well. On its own, the self-assessment was found to be less predictive than the core OASys assessment and the static OGRS 3 predictor, with the model based purely upon SAQ questions achieving the lowest level of discrimination.

Implications

The SAQ, on its own, was less predictive than the core practitioner-completed assessment. However, all the questions in the SAQ were found to be associated with re-offending and the combined core OASys, SAQ and OGRS 3 model for predicting re-offending included the offenders’ own predictions regarding their further offending and four problem questions from the SAQ rather than corresponding questions in the core assessment – three questions related to the offenders’ thinking and behaviour and one question related to their emotional wellbeing. To help ensure that relevant offending-related factors are recognised and that differences in opinion are
discussed, assessors should thus be encouraged to pay close attention to the offenders’ perceptions when completing the core OASys assessment and conducting the prior interview. Attention should also be paid to whether offenders have realistic perceptions of their own likelihood of re-offending and the link between particular criminogenic problems and offending. About two-fifths of the offenders wrongly predicted that they would not re-offend and about a quarter of those offenders who thought they had no problems had re-offended.

Bearing in mind that the questions in the SAQ were associated with re-offending and that some SAQ questions remained in the optimum model for predicting re-offending, reasons for non-completion of the SAQ should be explored and completion in all eligible cases encouraged. Consideration should also be given to introducing a closer alignment between the structure of the SAQ and the core OASys assessment, assisting practitioners to compare views.

Note: A full report of this research is included in the OASys Data Evaluation and Analysis Team - Compendium of research and analysis on the Offender Assessment system 2006-2008.