Report to the Advisory Committee of the ACC funded Jade Speaks Project on the progress of the evaluation (2)

Geoff Bridgman  19/09/2017

Base statistics

- 2300 records from children
- 600-800 6-month follow-up records to come
- 44 teachers from 8 schools have provided 88 records from 44 classrooms with 1320 children taking part in the JSU project.
- 1101 or 83% of the children attempted a JSU or CAU pre-test and 964 or 73% completed all the key elements (demographic data, psychometric tests)
- 697 or 53% of the children completed the JSU post-assessment and 544 or 41% of the children completed all key elements (demographic data, psychometric tests, key skills learned, satisfaction evaluations)
- 561 or 43% did a pre-test but no complete post-test (this includes CAU post-tests which doubled as CAU-JSU pre-tests).
- 346 or 26% did a post-test, but no complete pre-test (again, this includes CAU post-tests which doubled as CAU-JSU pre-tests).
- 578 or 44% completed both pre-and post-tests for JSU (demographic data, psychometric tests)

Reasons for non-completion were parent or child refusal (5%, but higher in classes where the delivery of the programme had been less sure-footed), children not present on the day, teacher workload/disorganisation/sick leave (e.g. there was one class that had no post-tests done).

We had planned on a 25% attrition rate on successful completion of the pre-test. We dropped 40% when we look at those children who successfully did pre-and post-tests. We set out to get a sample of at least 400 completed questionnaires for both pre and JSU post conditions, so 578 students completing both pre and pre and post assessments and 697 evaluating the JSU programme is an excellent outcome.

What do the psychometric test tell us?

Pre-tests: Both the CORS and the CES-DC have high split-half correlations (CORS r=0.70; CES-DC r=0.49, n=933), high Cronbach’s alpha (CORS=0.62, CES-DC=0.81) and an intercorrelation of r=0.58, (p<0.00001, n=933). When we run ANOVAs on the mean scores for level, age, gender, culture and schools, there are no significances with these groups except for schools.

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1 Even in schools where satisfaction ratings were lower, there were always classes where the satisfaction ratings were high – e.g. and an average of 1.5 on the “would you recommend the JSU project to other children” breakdown to roughly 50% yes, 45% maybe, and 5% no
The only significant difference between schools is between Waikowhai and Tarawera, with the former having lower levels of depression (Q-TEST post-hoc analysis. CES-DC has reverse scoring – high score suggests higher risk of depression). As such both tests seem reliable. Our experience with the teachers and the pencil and paper version of the CORS suggests that the teachers found the test useful in helping them identify issues of concern that the children had. Another confirmatory test of validity will be the correlation between teacher and child assessment of CORS which has yet to done.

Looking across the pre and post-tests there is very little change in either psychometric test across the six assessment points. In fact, there may be a small advantage to the CAU group.

Both tests have cut-off indications at >15 for CES-DC and <33 for CORS that the child is at risk of depression/mental illness. Both the JSU and CAU children show a big drop in the percent of at risk children from pre to post-test on CES-DC, but only the JSU group shows this change with CORS, with the CAU group only dropping to 37% after JSU has been introduced.
Another area where we can see a highly significant impact of the psychometric tests is in the correlations between the pre-test score and the change in score between pre-test and post-test CES-DC and CORS scores on the JSU programme. These correlations are between $r=-0.46$ and $r=-0.58$ ($p<0.00001$) and this means that the children who score lower in the pre-test are likely to show a greater change across the programme.

Less powerful, but still having a significant impact are the correlations between pre-test scores, and particularly the CORS school subscale and the satisfaction scores of the children. Children who are less happy with school ($<6$) have felt that JSU is less interesting, fun and helpful and are less likely to recommend JSU to a friend, than children who are happier with school ($r=0.15$ to $0.25$, $p<0.001$).
Both these findings support the validity of the psychometric tests and that JSU may be more relevant for the more vulnerable children.

We asked teachers to rate the vulnerability of their pre-programme children on a number of different measures shown below. These measures are aggregated into an average. They show a very high degree of vulnerability in areas in which JSU is highly relevant – not being able to talk about feelings, not knowing how to stay safe, not supportive of other children.

We found that the mean child self-assessment of their level of depression using the CES-DC is significantly correlated with teacher assessment of child vulnerability at school, and, in particular, with the degree to which children at the school have supportive parents/caregivers (n=560 children in 7 schools).
In their assessment of change, teachers rated that the biggest change as occurring in the areas that 2-3 months ago they had suggested were the greatest areas of vulnerability in the school. There was a significant correlation between these ratings except for bullying and overall rating of change ($r=0.30$ to $0.65$; $p<0.05$ to $<0.0001$). The average score for the overall rating of change is 4.0 indicating that either JSU has been of considerable value for a minority of children, or some value for a majority of children. On average in the four key areas relating to JSU things were a bit better and heading towards a lot better.

Teachers were asked to rate the JSU programme in terms of the following features (1=not at all, 2=not sure, 3=slightly helpful, 4=helpful, 5=very helpful):
The average rating was “helpful” with the key features being more than helpful. The teacher rated the programme a “practical”, with about half feeling that it needed extra resources. Overall the views of the teachers were that the programme met clear needs within the school, had components that worked and was successful in making positive changes in children’s lives.

The children also rated the programme very positively. Below are their ratings for the 1st round of JSU on how interesting, fun and useful the JSU programme was. 83% felt it was useful and a third felt it was a lot of use.

The next figure shows the children’s satisfaction ratings for the second round where the CAU group is given access to the programme. Here the number of children who found the programme very useful has jumped to 45%
Finally, the children were asked whether they would recommend the programme to a friend. Their responses are shown below. Apart from the very small percent saying no they would not recommend the programme, what is pleasing is the jump in yes from 49% to 55%.

In total the quantitative data gives strong support for the JSU programme. Teachers and children across a very diversity of situations in intermediate education have found the programme delivers an important piece of the Health curriculum. Our more detailed analysis of the psychometric test are beginning to demonstrate ways in the programme works for the most vulnerable which will inform changes that we make for the future.