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‘Promoting Widening Participation and Higher Education: Lessons from a four- year intervention programme’

*Catrin Pinheiro-Torres and Carole Portman Smith
Brunel University*

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Corresponding Author:

Catrin Pinheiro-Torres

Brunel University

Uxbridge

UB8 3PH

Catrin.Pinheiro-Torres@brunel.ac.uk

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Abstract

Since the labour government came to power in 1997, a major policy has been to increase the participation rates of those entering higher education, particularly those from lower-socio economic backgrounds. Just over 10 years later, little has changed. The Brunel Urban Scholars programme is a 4 year long intervention programme for students from lower socio-economic backgrounds aged 12-16. It aims, through university style teaching, emersion in a university environment, and regular interaction with undergraduates, to enhance these students’ aspirations and higher education orientation. Findings from the first 2 years suggest that higher education orientation has increased. Aspirations are showing some signs of increasing, but are more gradual. This evidence supports previous findings from pilot programmes that change is slow, and justifies and suggests the need for a longer intervention programmes.

Context

A major policy of the Labour government, since 1997, has been to increase the number of young people attending University, particularly those students from backgrounds of relative deprivation, through the initiative of ‘Widening Participation’ (Blunkett 2000). The aim of the initiative is to ensure that all those with the ability to attend University do so. A recent study has criticised the United Kingdom’s top universities for favouring students from independent schools, as well as showing that overall University intake of students from state schools and disadvantaged backgrounds has fallen (Taylor, 2006). Only 10% of those from the poorest fifth of families have acquired a degree by the age of 23, compared with 44% from the richest fifth (Smith, 2008).

Background

The Brunel Urban Scholars programme is a four- year university based intervention programme for higher ability students, aged 12-16, from disadvantaged areas. It is located within the government’s Aim Higher and Widening Participation initiatives. The students attend the programme one Saturday per month on the Brunel University campus. The programme hopes to make a positive impact on promoting widening participation. It also attempts to explore the effects of a multi-faceted intervention programme on the Higher Education orientation of the students. The aim of the programme is not to push the scholars towards University, but to raise

aspirations generally and change their possible attitude that 'University is not for us' (Koshy and Casey 2008).

The scholars come from nine London boroughs, seven of which are classified as experiencing relative deprivation in the Department for Communities and Local Government Index of Local Deprivation (DfCLG 2007). All Scholars were selected using two main criteria; the first, having the potential to follow a cognitively challenging programme and secondly, priority was given to those from lower socio-economic backgrounds, with further preference for students whose parents had not received any form of Higher Education or those receiving free school meals. The University research team and practitioners acknowledge the danger of labelling students, as well as issues with reliability of any identifications made. Sampling is a research necessity, and the existing *Gifted and Talented* initiative, which was an existing government policy, provided us with an opportunity sample (Brown and Dowling, 1999).

Rationale for Components of the Intervention

The programme has a number of key components each of which is designed to meet the stated aims of the overall programme. English, Maths and Science are taught through a problem solving approach to promote engagement with learning and develop the basic skills which are often lacking (Casey and Koshy, 2005). Study skills and exam revision sessions help to tackle underachievement and promote independent learning. Critical Thinking is taught as a discrete subject and infused within other sessions. This component helps develop higher order thinking skills, develops rationality, encourages self-reflection and aids the decision making process. These are thought to be useful skills for the Scholars to have when considering future pathways (Sternberg, 2007). Choices available are discussed during careers advice sessions, which include advice on writing CVs and practice interviews, to enhance their self confidence and presentation skills.

Visiting professionals encourage students to consider a range of professions and provide opportunities for the Scholars to discover exactly what steps will be needed for them to achieve their goals. Visiting role models and regular contact with student (undergraduate) ambassadors from similar backgrounds are designed to encourage the Scholars to have higher aspirations, especially towards Higher Education. Motivational speakers encourage Scholars to have no fear of failure and they often

demonstrate how setbacks and hardships can be overcome. Parents' meetings also provided opportunities to highlight what might be possible for their children and ways in which they could support them.

Methodology

The effectiveness of the programme is continually evaluated through qualitative and quantitative techniques, using a *Design Experiment methodology* which is growing in popularity (Gorard et al, 2004). It enables data to be collected before, during and after the intervention, to be used in the refinement of theories and the intervention programme design modification (Burkhart and Schoenfeld, 2003). This modification requires regular data collection and swift analysis. The programme has also gathered data on another cohort of students from the same Local Authorities and from similar backgrounds. This group will start the programme in October 2008, and so will act as a comparison for the influence of the programme on our current scholars' Higher Education orientation. This paper specifically focuses on emerging evidence of higher and further education orientation, and raising aspirations.

Data Sources

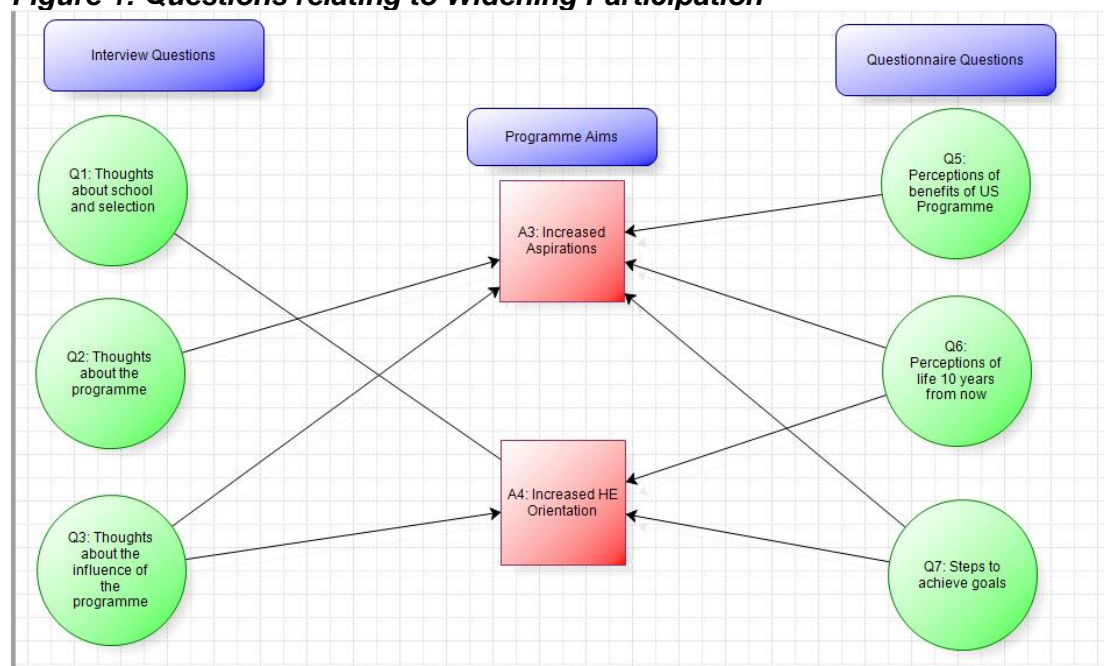
Questionnaires are used to gather data relating to the key aims of the programme, both Scholars and parents are asked to complete questionnaires and these are cross-referenced. Scholars are asked to reflect on their future pathways and steps required to achieve them. Semi-structured interviews are used to further probe the findings from these responses. In addition, a focal group provides immediate monthly feedback on the sessions. We acknowledge that if Scholars are to attend on a regular basis and invest in their futures, they must be motivated by sessions which they perceive to be both enjoyable and beneficial. Subject tutor and session observers' evaluations are also completed to monitor the impact of the teaching during each session. The comparator group data is not presented in this paper.

Data Analysis

This paper presents the interim findings after a period of 18 months of a four-year intervention programme. It discusses two types of the previously mentioned data: questionnaires completed by scholars and interviews with scholars. The programme has five main aims, which guide the analysis of all data. A full list of aims can be found in Appendix 1A; aims 3 and 4 are discussed here as they are of most relevance to the issue of Widening Participation. These data are included because

they contain the most relevant and succinct examples of the programme achieving the desired aims of increasing scholars' aspirations and higher education orientation. Consequently, only responses from the questions which provide responses relating to these aims are included in this paper. A complete questionnaire and interview schedule can be found in Appendix 1B. To aid the reader, Figure 1 maps the questions from each data source to the relevant aims of the programme.

Figure 1: Questions relating to Widening Participation



We have a total of 105 scholars on the Urban Scholars programme register, all of whom are expected to complete a questionnaire twice a year. Average attendance on the programme is 81%. The start of year 8 questionnaire was completed by 85 scholars and the start of year 9 was completed by 97 scholars. The questionnaire is open-ended, as it was felt important to allow the scholars to express themselves freely, which resulted in a wide variety of responses and made the analysis complex. We have included those responses relevant to widening participation, with the remainder being too vague or lacking relevance to the question being asked. For example, the following quotations taken from responses to question 6 have been omitted due to lack of relevance.

“I want to be a woman with a good life” (response from the start of year 8)

“I don’t really know because I haven’t quite thought about it yet” (response from the start of year 9).

A sample of 24 scholars was interviewed. This sample was randomly stratified, selecting every fifth scholar on an alphabetised list to be interviewed.

Results

Aim 3: Increased Aspirations

There are two main findings which show increase aspirations;

1. Overall aspirations were seen to have increased with career aspirations seeing the biggest increase.
2. Some scholars were more aware of the need to continue education post-18 in order to achieve their goals, as well as the hard work that it would require.

Question 6: What kind of life do you think you will have in 10 years from now?

Responses to question 6 were coded in two ways. Firstly, the scholars' career, lifestyle and general/overall aspirations were judged on how high they were. More thorough information about the coding frame can be found in Appendix 2. The responses were also coded for Higher Education orientation, which will be discussed in further detail in the next section.

High career aspirations increased from 49 scholars at the start of year 8, to 58 at the start of year 9. Lifestyle aspirations increased from 22 to 33; and general aspirations increased from 41 to 51. Thus we can see career aspirations were already fairly high when the scholars began the programme in year 8. It is possible that the information given to Scholars and their families prior to starting the programme and their attendance on a University campus may have influenced their responses to this question, encouraging higher aspirations. The small increase in high aspirations between the start of year 8 and start of year 9 suggests signs of increasing aspirations.

Lifestyle aspirations, as judged by the programme team, also increased from the start of year 8 to the start of year 9. Increased lifestyle aspirations may be attributed to many aspects, both internal and external to the programme. External factors could include growing up/increased maturity, the media and family relations. These

increased aspirations may be partially attributed to components of the programme, such as motivational speakers from the same backgrounds as the scholars and talks from the student ambassadors (who are about 10 years older than the scholars). It became apparent from the responses that scholars still had slightly unrealistic ideas about achievable lifestyle goals, cost of living and how long certain degrees take, so a session incorporating all of these characteristics will be delivered to the scholars in the autumn term, 2008.

This certain lack of understanding can be seen in the slight increase in general aspirations, which is a combined measure of career and lifestyle aspirations. There is only a slight increase because those scholars with high career goals generally did not have high lifestyle aspirations and vice versa. It may be that high career and lifestyle aspirations will ensue once the scholars gain more realistic perceptions. Further detail and evidence of this can be found in the cross-tabulation tables (Appendix 3).

.....
Question 7: What do you think you will have to do in the next 10
years to lead the kind of life you described in answer to question 6?
.....

Responses from question 7 show that the number of scholars stating following the full academic path, and 'work hard and get good grades' increased from 11 scholars at the start of year 8 to 23 scholars at the start of year 9. This increase may be taken as an increase in aspirations as more scholars desire to attend further education. It may also be that it shows increasing maturity as scholars realise that hard work is necessary to achieve. The programme encourages these ideas, as well as regularly asking scholars to take challenges and not be afraid of failure.

.....
Question 5: What difference do you think this programme will make
to you?
.....

Question 5 also provides examples of increasing aspirations. Scholars became increasingly aware of the possibility of the programme helping with their future, as well as it broadening their goals for the future. This increased from 7 scholars at the start of year 8 to 15 scholars at the start of year 9, showing that just over twice as many scholars had increasing aspirations and awareness of their future pathways.

Question 2: What do you think of the programme so far?

Question 3: Is the programme influencing you in any way?

During the interviews, there were examples of the programme raising aspirations from questions 2 and 3. Responses for these questions overlap, and so the following responses relating to increasing aspirations are presented below;

Question 2 "The one that we did with Scott, he said that we should try and start doing what we want to be in the future, start preparing for it, so that helped me because I've started joining some clubs, and I've been doing something in science because I want to be a doctor, so that advice was good" (Jinal, 13)

Question 2 "I liked the dreams and aspirations [session], especially when the speech with the guy, yea the boxers when they came in, I liked that speech... [I started] to think about where I am going and what I want to do... [question 3] the speech did, I thought about what I was going to do later, and how I wanted to progress to do that" (Molly, 12)

The quotes above suggest that the programme raises aspirations through numerous means, but primarily through being selected for the programme and attending the programme, talks from inspirational speakers and interaction with the student ambassadors.

Examples of increasing aspiration from question 4 cross over with aim 4; increased higher education orientation, as increases in aim 4 are often synonymous with increasing aspirations. There was a fairly even distribution of different types of careers among the scholars spoken to, making it hard to suggest the programme increased aspirations in this area. Thus, we will consider the programmes influence on increasing aspirations when we consider the next aim, increased higher education orientation.

A4: Higher Education Orientation

Two main points surrounding scholars Higher Education orientation can be highlighted;

1. Scholars HE orientation increased between the start of year 8 and start of year 9. There was no relationship found between those scholars displaying HE orientation coming from families with HE experience and vice versa.
2. Interviews showed that the programme has made some scholars think more about attending university.

Scholars' higher education cannot be assessed fully without consideration of their background. A full cross-tabulation of scholars HE orientation by their parents' educational history can be found in Appendix 4A. In summary, there were 15 scholars with HE orientation whose parents have some experience with higher education. This compares to 25 scholars whose parents had no higher education to speak of. There were also 10 scholars whose parents' had experience of HE who displayed no HE orientation. This evidence thus suggests that parents' educational experience has little influence over the scholars' hopes for their own future. Table 1 below shows that the scholars have increased HE orientation, which could be a result of something else. Whilst there may be other external factors, we could argue that the influence of the programme, through emphasis on careers and the inclusion of motivational speakers, has played a significant role in these increases. It is also speculated that being on a university campus on a regular basis influences this response, as university may not previously have been in the scholars' lifeworld.

Table 1: Do the scholars display Higher Education Orientation?

	Start of Year 8	Start of Year 9
	Frequency	Frequency
Yes	41	50
No	20	27
Too hard to tell	14	4

Further evidence of increasing HE orientation can be found in Appendix 4B which shows that 19 scholars who had responses other than 'yes' at the start of year 8 displayed HE orientation by the start of year 9. Only 10 scholars changed their minds about Higher Education, with the remaining scholars not displaying this orientation. This increased orientation may continue, as the scholars continue attending the university intervention programme.

Question 7: What do you think you will have to do in the next 10 years to lead the kind of life you described in answer to question 6?

Question 7 also provides similar examples of HE orientation and increasing aspirations as seen previously. Here there is an increase from 9 to 18 responses relating to 'pay attention and work hard' and following the full academic path. Consistent with previous questions, it is apparent that scholars of this age seem to have little awareness of long-term planning. Sessions specifically designed to encourage self-reflection and goal setting will be delivered to encouraging longer term planning. Thus, if the aims of the programme are to be realised, one would expect a further increase in HE orientation as they progress.

Question 1: You have been selected for the Brunel Urban Scholars programme, how do you feel about being chosen?

Question 3: Is the programme influencing you in any way?

Questions 1 and 3 from the interviews provide examples of the programme's influence on increasing Higher Education orientation. From the interviews it was found that 20 of the 24 scholars' interviews showed interest in Higher Education. Responses to question 4, which asks scholars about their future, showed that the scholars interviewed already displayed Higher Education orientation. Question 3, however, produced responses which attributed increasing Higher Education orientation to the programme. Examples of this are presented below:

"Well it's making me think that maybe I'd like to go to university when I grow up... [it's only been recently, as [before] I thought of university, it's like, it's a lot of work and I'm not really up to that, but I'm trying my best to be up to it" (Connor, 13).

"Well its helping me we want to go to university because, when I'm older I want to get a job, but I need to go to university to get a good one, so it's making me want to go there" (Thomas, 13)

"When I was younger I never thought I'd go to university, but now it's really influencing me, like on my English and stuff, I'm really enjoying it, and when I'm older I'd like to go university" (Aisha, 13).

The above responses suggest that the programme has encouraged the scholars to go to university. This in turn suggests the programme is also increasing aspirations (aim 3) as it has provided a positive shift in the scholars' attitudes towards their future.

In Figure 1, question 1 also has a tentative link to Higher Education orientation. This is partially because of some overlap with question 3. Below is a quotation taken from responses to question 1, which shows some signs that attending the programme influences Higher Education orientation.

“You get a really good idea of how university might be... because firstly being at the university and I've never heard of this university before so it's quite new to me, and seeing the lecture rooms and all the other rooms” (Bhaveshri, 13).

Conclusion

The D&R methodology affords the programme directors the opportunity to make changes which respond to emerging findings. Analysis of data so far suggests some 'resistance to change' as found in previous research by Hatcher (1998); who suggested that extended periods of time are needed for positive changes to take place and for these to become permanent rather than temporary changes. This slow change and need for extended intervention periods is consistent with findings of our pilot programme (Koshy and Casey 2008), and justifies sustained intervention over four years.

It is possible that scholars experience some cognitive conflicts, and a period of reflection and accommodation may be necessary for real change to take place. We have presented evidence of gradual change, as it is hoped that the aims of the programme will be met after the four years and the scholars have time to reflect on their experiences.

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Appendix 1A: Programme Aims

- A1: Engagement with learning; increasing interest and liking for school, increased interest in academic subjects, increased interest and enjoyment of US programme;
- A2: Understanding of self and life world; general understanding of personality and emotions, understanding of own ability and capacity to learn, importance and influence of friends and family, confidence with self and life;
- A3: Increased aspirations; move towards more professional, focused and realistic career goals, move towards wanting a good life for themselves;
- A4: Increased HE orientation; increased desire to attend to education post-A-level, or increasing realisation that it is a viable option;
- A5: Increased academic achievement; examination grades exceed predicted grades.

A3 and A4 are discussed in this paper, as they are most relevant to Widening Participation.

Appendix 1B: Questionnaire and Interview Format

The questionnaires are formatted in a way so that almost all questions have a box which is the size of half an A4 sheet for the scholars to answer in. The questions are as follows;

- 1A. What do you like / dislike about school?
- 1B. Write down the names of the subjects you like and give your reasons.
- 2A. Please tell us about how you spend your time when you are not in school, tell us about any hobbies you have.
- 2B. If you had an opportunity to develop a hobby what would it be?
- 3A. What are your thoughts on the Urban Scholars Programme?
- 3B. Are there any aspects of the Urban Scholars Programme which you are worried about?
- 4A. What do you think the phrase 'gifted and talented' means?
- 4B. What do you think are the abilities you have that make you gifted and talented?
- 5. What difference do you think this programme will make to you?
- 6. What kind of life do you think you will have 10 years from now?
- 7. What do you think you will have to do in the next 10 years to lead the kind of life you described in answer to question 6?

Interviews with scholars were semi-structured. The set questions are provided below.

1. You have been selected for the Brunel Urban Scholars Programme, how do you feel about being chosen?

Possible probe questions:

Do you have a G&T programme within school?

Have you heard the words G&T?

How are you doing in school?

How would you describe your achievement in school? (Explain the achievement if necessary.)

Some schools use the words setting and streaming, do you know what they mean?

Do you have sets in school, what sets are you in?

Do you think you are doing as well as you could in school subjects?

2. What do you think of the programme so far?

Possible probe questions:

Do you like anything in particular?

Why do you like it?

Can you give an example ?

Is there anything you have not enjoyed? Why?

Think about the lessons, which were the most enjoyable, why? Least enjoyable, why?

Is there any part of the programme that worries you?

Do you think we can improve the programme?

If yes... how?

3. Is the programme influencing you in any way?

Possible probe questions:

Is it influencing you in school?

How? Why?

Can you give me an example of when in school?

Is it influencing you out of school?

In what way?

How why?

Can you give me an example when outside of school?

4. Now we are going to think about the future, where do you think you will be in ten years time?

Possible probe questions:

Where do you think you will be?

How do you think you will get there?

What will you have to do to achieve this?

Do you think you will be able to do all of this?

Appendix 2: Coding Frame for Aspirations

Career:

- High: professional/sport/famous
- Middle: non-professional/high paid job/good job
- Low: just a job/don't know, etc.

Lifestyle:

- High: big house/car/own house/family
- Middle: comfortable lifestyle/friends/by self/social life
- Low: living at home/other

General:

- High aspirations: aspiration in **both** career and lifestyle
- Middle aspirations: high in either career or lifestyle (and middle in the other) or middle in both
- Low aspirations: middle in one and low in the other or low in both

Appendix 3

The cross tabulation tables (A1, A2, and A3) represent the relationship between career and lifestyle aspirations at the start of year 8, end of year 8 and start of year 9. It was noted previously that high career aspirations did not correspond with high lifestyle aspirations, which was why the increase in general aspirations was small. The tables below show, firstly, that the main reason for this is that desired lifestyles are often not mentioned by the scholars. We do see that scholars having both high career and lifestyle aspiration increases over time, but this does not represent a significant majority, which further explains the slight increase in general aspirations. (Please note that all cross-tabulations tables included in the appendices do not contain the non-response, and so total in the cross-tabulation tables are different to the completed questionnaire totals included in the paper.)

Table A1: Relationship between career and lifestyle aspirations at the start of year 8

<u>START OF YEAR 8</u>		Lifestyle Aspirations					Total
		High	Middle	Low	Don't know	Not mentioned	
Career Aspirations	High	17	7	1	0	24	49
	Middle	4	7	2	0	6	19
	Low	0	1	0	0	0	1
	Don't know	0	1	1	2	0	4
	Not mentioned	1	1	0	0	0	2
	Total	22	17	4	2	30	75

Table A2: Relationship between career and lifestyle aspirations at the end of year 8

<u>END OF YEAR 8</u>		Lifestyle Aspirations					Total
		High	Middle	Low	Don't know	Not mentioned	
Career Aspirations	High	20	1	0	0	16	37
	Middle	4	5	0	0	3	12
	Low	1	1	0	0	0	2
	Don't know	1	0	1	7	0	9
	Not mentioned	4	6	0	0	0	10
	Total	30	13	1	7	19	70

Table A3: Relationship between career and lifestyle aspirations at the start of year 9

<u>START OF YEAR 9</u>		Lifestyle Aspirations					Total
		High	Middle	Low	Don't know	Not mentioned	
Career Aspirations	High	24	8	0	1	25	58
	Middle	8	4	1	0	5	18
	Low	1	3	0	0	0	4
	Don't know	0	0	1	10	0	11
	Total	33	15	2	11	30	91

Appendix 4A: Cross-tabulation of parents' education and scholars' HE orientation

A4: Relationship between parents' experience of education and the scholars displaying HE orientation

Scholars HE orientation start yr 9 compared to parents education		Parents education level													
		GCSE/ equivalent	A levels	Degree	Degree as mature student	Degree from abroad	Currently doing a degree	Postgrad	NVQ/ work based training	Apprenticeship	Currently studying to catch up GCSEs/A levels	No qualifications	No response	No questionnaire	Total
Scholars HE orientation	Yes	7	3	4	3	5	1	2	11	1	0	3	3	7	50
	No	1	1	4	1	3	0	2	3	2	1	0	1	8	27
	No response	0	1	1	0	0	1	0	0	0	0	0	0	1	4
	Too hard to tell	0	2	0	1	0	0	0	0	0	1	0	0	2	6
	Ran out of time	0	0	0	0	1	0	1	0	0	0	0	0	0	2
	Don't know	2	1	2	0	0	0	0	0	1	0	0	0	2	8
	No questionnaire	3	1	0	0	0	0	0	0	0	0	0	0	4	8
	Total	13	9	11	5	9	2	5	14	4	2	3	4	24	105

Appendix 4B: Cross-tabulation of the scholars displaying HE orientation at the start of year 8 and start of year 9

A5: Relationship between scholars' HE orientation at the start of year 8 and start of year 9

<u>HE orientation?</u>		Start of year 9					
		Yes	No	No response	Too hard to tell	I don't know	Total
Start of year 8	Yes	27	6	1	0	2	36
	No	6	8	1	2	3	20
	No response	3	4	1	0	1	9
	Too hard to tell	10	2	0	1	0	13
Total		46	20	3	3	6	78

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