

Forth Valley ADP Social Influence Programme

Summary evaluation 2014-18

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Health Promotion Service

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This programme of work would not have taken place without dedication and commitment from a number of partners.

THE PEOPLE WHO MADE IT HAPPEN:

- Helen Clapperton (Barnardo's) delivered the intervention
- Janet Moran set up the data and administration systems
- The class teachers who will continue with this work now that external facilitation has ended, and;

Lastly, but most importantly, the young people who took part in this programme evaluation.

THE FUNDERS:

- Forth Valley Alcohol and Drug Partnerships
- Forth Valley Tobacco Action Group
- Forth Valley Sexual Health and Blood Borne Virus Group
- NHS Forth Valley Health Promotion Service

CONTINUATION OF THE WORK IN FORTH VALLEY

A flexible toolkit together with a short training session is available on request. Interest from wider partners is also welcome and arrangements can be made by contacting either helen.clapperton@barnardos.org.uk or janet.moran2@nhs.net.

Final Evaluation Report

Social Influence Programme 2014-2018

Participants

Between September 2014 and May 2018, 1461 secondary school pupils, from 10 schools took part: 5 from Falkirk, 2 from Clackmannanshire and 3 from Stirling. Table 1, below, summarises participation by year group, schools and number of participants at baseline and follow-up.

Table 1

Year Group	Participating School(s)	Before No. Pupils	After No. pupils
S1	Falkirk High School	191	172
S2	Alloa Academy Alva Academy Balfron High School Bo'ness Academy Grangemouth High School St. Modan's High School St. Mungo's High School Wallace High School	642	638
S3	Alva Academy Larbert High School St.Mungo's High School Wallace High School	628	585
	Total	1461	1395

*66 lost responses at follow-up (4.5%).

In all cases, whole school year groups participated. The method of equalising numbers lost to follow-up is explained in detail in the full report. In summary, numbers lost at follow-up were apportioned across all response options consistent with the pattern of responses found at baseline. This method assumes no change and is therefore the most conservative approach to equalising baseline and follow-up data.

Exclusions

A pilot took place in 1 Stirling school (n=46 S3 pupils) during 2017-18. These data have been excluded from the analysis because the method of delivery changed to accommodate timetabling factors specific to the school. These changes did not prove to be successful and are reported in full in the 2017-18 local authority report.

The Programme

The social influence programme was delivered in the school between September 2014 and June 2018.

The programme consists of 3 x 50 min interactive lessons. The first lesson is a survey of pupils' attitude and behaviours. The data from this survey is analysed by the pupils themselves and used in lesson 2 to create social norms marketing posters that promote the positive and responsible behaviours of the majority. Lesson 3 focuses on understanding how we make errors in our judgement about what is 'normal' for our peer group. A further lesson repeats the original survey a minimum of 6 weeks later. The purpose of the follow-up is to evaluate the impact of the programme.

Behavioural Norms at Baseline

Table 2, below, shows the baseline normative positions for all schools and by year group. Before the Intervention the majority of pupils who completed both surveys reported that ***they do not use tobacco, alcohol or cannabis.***

Table 2: normative position at baseline				
Behaviour	All pupils n = 1461	S1 n = 191	S2 n = 642	S3 n = 628
Use cannabis	93%	100%	80%	89%
Smoke tobacco	87%	96%	92%	81%
Get drunk	85%	98%	73%	78%
Drink alcohol	72%	95%	76%	61%

Amongst pupils who report using any substance, alcohol use was the most prevalent.

Scope for behavioural change across all 4 measures was found. Tables 1 to 4, below, examine the impact of the programme on all pupils *who reported using substances (S1-S3)*.

Table 3				
In the last 30 days how often did you drink alcohol?				
Response	Direction of change	No of pupils who changed	S1-S3 pupils 1461	
			Before	After
I consumed alcohol in the last 30 days	Improved	201 (50%)	405	204

Table 4				
In the last 30 days how often did you get drunk?				
Response	Direction of change	No of pupils who changed	S1-S3 pupils 1353	
			Before	After
I got drunk in the last 30 days	Improved	96 (47%)	206	110

Table 5				
In the last 30 days how often did you smoke cigarettes?				
Response	Direction of change	No of pupils who changed	S1-S3 pupils 1461	
			Before	After
I smoked cigarettes in the last 30 days	Improved	97 (53%)	184	87

Table 6				
In the last 30 days how often did you use cannabis?				
Response	Direction of change	No of pupils who changed	S1-S3 pupils 1353	
			Before	After
I used cannabis in the last 30 days	Improved	45 (50%)	89	44

Attitudinal Change

As the programme evolved over the years, core attitudinal questions changed to reflect current issues and in 2016 a core set were agreed. The tables below show data from this time frame only simply because we have consistent data from that time period.

Table 5, below, shows reported improvements in all 4 of the attitudes surveyed. Attitudes are important because they may underpin risk behaviours and tend to emerge before the risk behaviours themselves. Improvement is defined as fewer pupils agreeing with negative survey statements:

1. **Cannabis is a harmless drug**
2. **It's okay for people of our age to drink alcohol**
3. **Sexting is a bit of a laugh**
4. **Using sexualised language to describe someone is a bit of a laugh**

Table 7 Changes in Attitudes	Direction of change	No of pupils who changed	All pupils 830	
			Before	After
"Cannabis is a harmless drug"	Improved	81 (30%)	266	185
"It's okay to drink alcohol at our age"	Improved	71 (35%)	203	132
"Taking a photo of yourself in your underwear and sexting it to a friend is a bit of a laugh"	Improved	40 (27%)	148	108
"Describing someone using language like 'slag' 'slut' 'gay' is a bit of a laugh"	Improved	77 (34%)	228	151

A further question explored exposure to second hand smoke. While this is not an attitudinal question it provides interesting information on a current health issue.

Exposure to Second Hand Smoke at Home

At the start of the programme 625 of the 830 participating pupils *were not exposed to second hand smoke* this increased to 699 at the follow-up.

Statistical Analysis

The binomial probability of positive improvement across all measures surveyed (14 out of 15 possibilities) was $p= 0.00024414063$, a statistically significant finding.

However, the programme has always prioritised practical significance over statistical significance therefore impact is reported in table format showing the actual number of pupils reporting positive change at Forth Valley level (Tables 1-7 above) and by year group (tables 8-10 below).

Recommendations

Meaningful change occurred across all of the survey measures. Continuation of the programme is recommended during the school year 2018-2019. This continuation would provide capacity for 3 further schools to be supported to enhance their curriculum with the programme.

As shown in the year group analysis below, placement of the programme continues to work best with S2 and S3 pupils. S2 and S3 appears to be the age group when substance use emerges at a level where bigger change is reported and where more potential for change exists at baseline. It is also an age where substance using behaviours have not yet become fully established and therefore more likely to be influenced by social processes.

For schools currently involved, resource support and further workforce development is available by contacting the project officer, Helen Clapperton at helen.clapperton@barnardos.org.uk

Analysis of Findings by Year Group: S1

Table 8: Number of pupils who changed behaviour post intervention in S1.

Response	Direction of change	No of pupils who changed	S1- 191 pupils	
			Before	After
I smoked cigarettes in the last 30 days	Improved	2 (29%)	7	5
I drank alcohol in the last 30 days	Remained stable	0	9	9
I got drunk in the last 30 days	Improved	1 (33%)	3	2
I used cannabis in the last 30 days	No scope for improvement	0	0	0

Analysis of Findings by Year Group: S2

Table 9. Number of pupils who changed behaviour post intervention in S2

Response	Direction of change	No of pupils who changed	S2 pupils 642	
			Before	After
I smoked cigarettes in the last 30 days	Improvement	31 (54%)	57	26
I drank alcohol in the last 30 days	Improvement	88 (58%)	151	63
I got drunk in the last 30 days	Improvement	37 (56%)	66	29
I used cannabis in the last 30 days	Improvement	10 (53%)	19	9

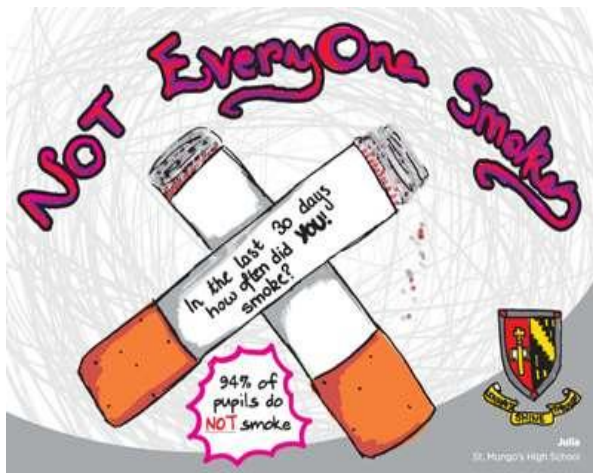
Analysis of Findings by Year Group: S3 data

Table 10. Number of pupils who changed behaviour post intervention in S3

Response	Direction of change	No of pupils who changed	S3 n=628	
			Before	After
I smoked cigarettes in the last 30 days	Improvement	63 (52.5%)	120	57
I drank alcohol in the last 30 days	Improvement	112 (46%)	245	133
I got drunk in the last 30 days	Improvement	28 (20%)	137	109
I used cannabis in the last 30 days	Improvement	35 (50%)	70	35

Appendix 1

Example of pupils' social norms marketing designs



REFERENCES

1. Asch, S. E. (1951). Effects of group pressure upon the modification and distortion of judgments. In H. Guetzkow. (Ed.), *Groups, Leadership and Men*. Pittsburgh: Carnegie.
2. Prentice, D. A. (2008). Mobilizing and weakening peer influence as mechanisms for changing behavior. *Understanding peer influence in children and adolescents*, 161–180.
3. Miller, D.T. and McFarland, C. (1987) Pluralistic ignorance: when similarity is interpreted as dissimilarity. *Journal of Personality and Social Psychology*, 53, 298–305.
4. Miller, D. T. & McFarland, C. (1991). When social comparison goes awry: The case of pluralistic ignorance.(In J. Suls & T. Wills (Eds.), *Social comparison: Contemporary theory and research* (pp. 287–313). Hillsdale, NJ: Erlbaum.
5. Jones, E.E. & Davis, K. From acts to dispositions. In L. Berkowitz (ed.), *Advances in Experimental Social Psychology*, 2. London and New York: Academic Press, 1965.
6. Perkins, H.W.& Berkowitz, A.D. (1986) "Using Student Alcohol Surveys: Notes on Clinical and Educational Program Applications." *Journal of Alcohol and Drug Education*, 31, (2) 44-51.
7. Baer, J. S., Stacy, A., & Larimer, M. E. (1991). Biases in the perception of drinking norms among college students. *Journal of Studies on Alcohol*, 52, 580–586.
8. Graham, J.W., Marks, G. and Hansen, W.B. (1991) Social influence processes affecting adolescent substance use. *Journal of Applied Psychology*, 76, 291–298.
9. McAlaney, J. & McMahan, J. (2007). Normative beliefs, misperceptions and heavy episodic drinking in a British student sample. *J Stud Alcohol Drugs*, 68(3), 385-392.
10. Martinus, T., Melson, A.J., Davies, J.B., McLaughlin, A. (2012). The ‘social norms’ approach to alcohol misuse prevention: Testing transferability in a Scottish secondary school context. *Drugs: Education Prevention and Policy*, 19 (2) 111-119.
11. Iannotti, R.J. and Bush, P.J. (1992). Perceived vs. actual friends’ use of alcohol, cigarettes, marijuana and cocaine: which has the most influence? *Journal of Youth and Adolescence*, 21, 375–389.
12. Downs, W.R. (1987) A panel study of normative structure, adolescent alcohol use and peer alcohol use. *Journal of Studies on Alcohol*, 48, 167–175. https://academic.oup.com/her/search-results?page=1&q=Downs%2C%20W.R.&fl_SiteID=5164&allJournals=1&SearchSourceType=1

13. Botvin, G.J., Botvin, E.M., Baker, E., Dusenbury, L. and Goldberg, C.J. (1992) The false consensus effect: predicting adolescents' tobacco use from normative expectations. *Psychological Reports*, 70, 171–178.
14. Marks, G., Graham, J.W. and Hansen, W.B. (1992). Social projection and social conformity in adolescent alcohol use: a longitudinal analysis. *Personality and Social Psychology Bulletin*, 18, 96–101.
15. Haines, M. P., Perkins, H. W., Rice, R. M., & Barker, G. (2005). *A guide to marketing social norms for health promotion in schools and communities*
16. Balvig, F., & Holmberg, L. (2011). The ripple effect: A randomized trial of a social norms intervention in a Danish middle school Setting. *Journal of Scandinavian Studies in Criminology and Crime Prevention*, 12(01), 3-19.
17. The Children's Society. 2015. The Good Childhood Report 2015.
<http://www.childrenssociety.org.uk/what-we-do/resources-and-publications/the-good-childhood-report-2015>