

Examining the utility of a framework to assess the transferability of complex public health interventions: findings from the Healthy School Ethos intervention

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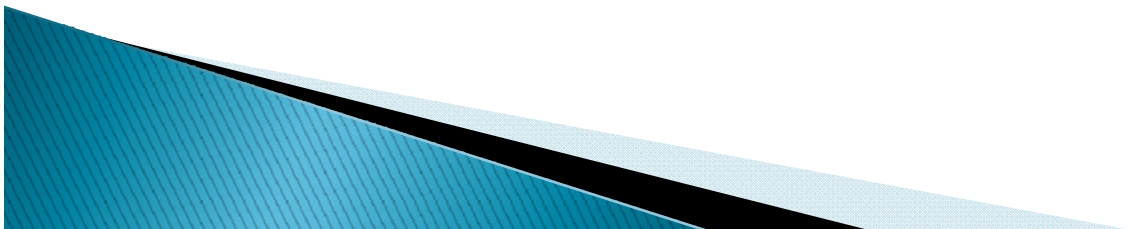
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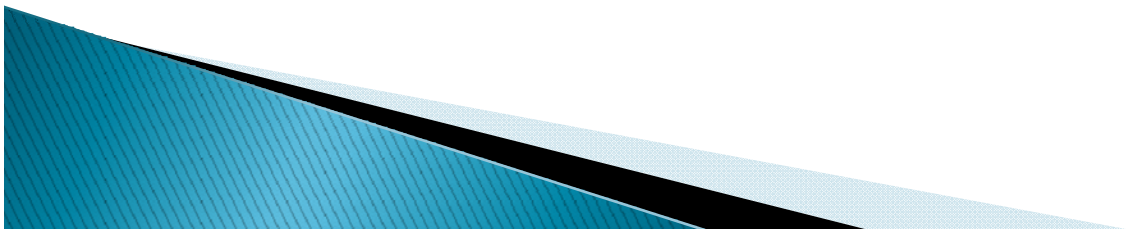
Introduction

- ▶ Can't assume that an intervention effective in one place/time similarly so elsewhere.
- ▶ Evaluations need to inform potential adopters about transferability.
- ▶ CONSORT and TREND include expectations for reporting generalisability but no details.

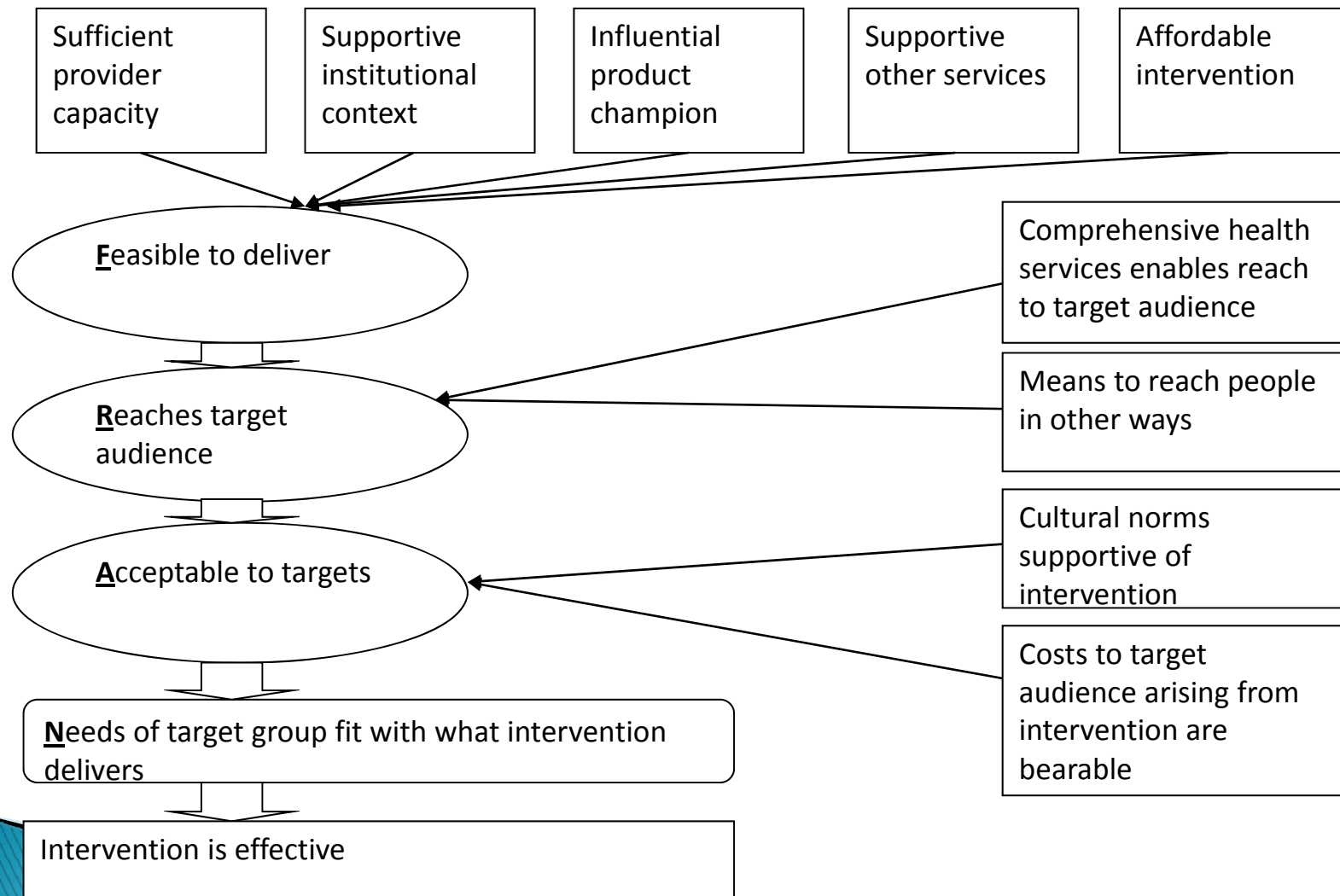


Introduction

- ▶ Our 'FRAN' framework theorises how context determines an intervention's **F**easibility, **R**each, **A**ceptability and ability to meet **N**eeds.
- ▶ But has not been empirically examined.
- ▶ We examine its utility in retrospectively assessing how much context mattered with 'Healthy School Ethos', an English school-environment intervention modelled on the Australian 'Gatehouse' project.



Transferability framework

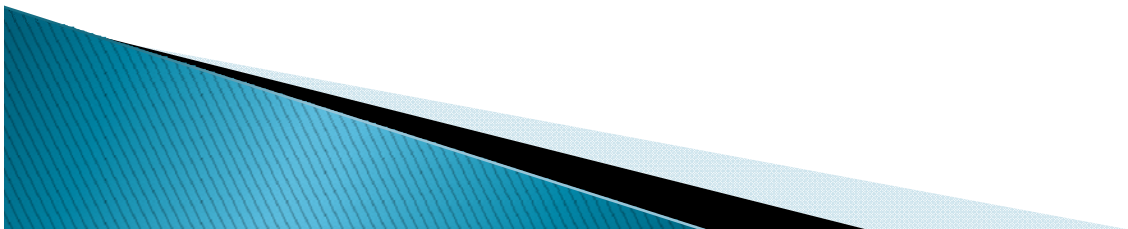


The Gatehouse intervention

Informed by social ecological model

Aimed to reduce substance use and other risk behaviours among secondary-school students via:

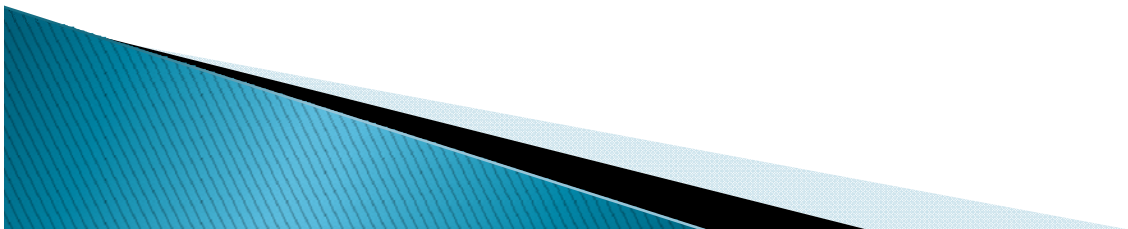
- ▶ a curriculum teaching social and emotional skills
- ▶ actions to help schools become environments that enable students to feel *safe*, have high *self-regard* and *communicate well* (theorised as influences on risk behaviour)



The Gatehouse intervention

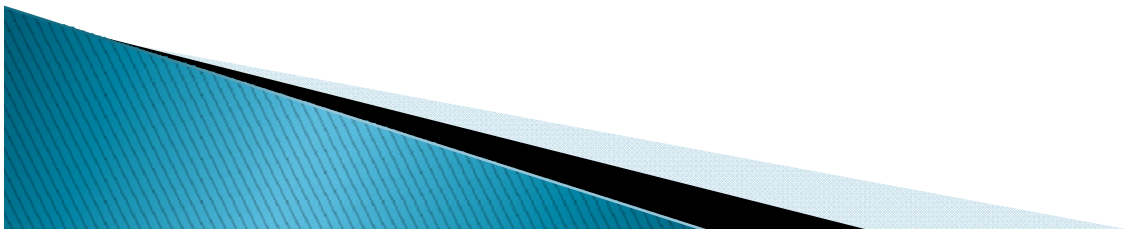
Intervention involved standardized 'functions' (but not 'contents') comprising:

- ▶ a survey of student needs
- ▶ an Action Team comprising staff and sometimes students and parents - charged with deciding local actions to address these needs
- ▶ a facilitator to support decisions and delivery
- ▶ training to enable staff to foster inclusive classrooms, deliver the local actions and teach the curriculum



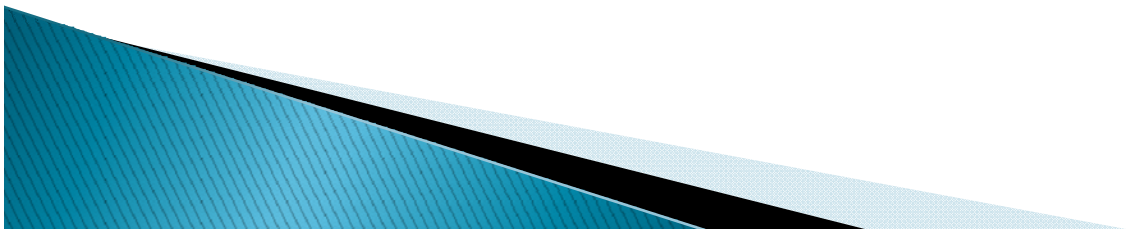
Gatehouse outcome evaluation

- ▶ Cluster-randomized trial in 25 secondary schools conducted 1997-2001
- ▶ Prevalence of health risk behaviours significantly lower in intervention schools



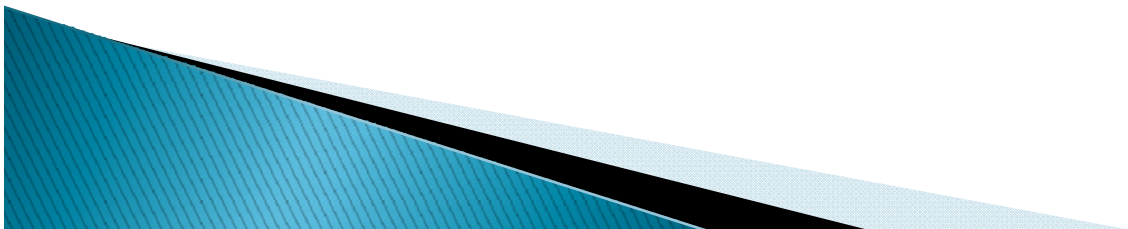
Gatehouse process evaluation

- ▶ Appears to meet requirements of our framework
- ▶ **Provider capacity** – facilitators' previous experience in schools and informal skills
- ▶ **Provider institution** – wider team had expertise in health/education, helped facilitator to re-frame health issues as educational issues
- ▶ **'Product champion'** – build enthusiasm, maintain momentum etc. in schools



Gatehouse process evaluation

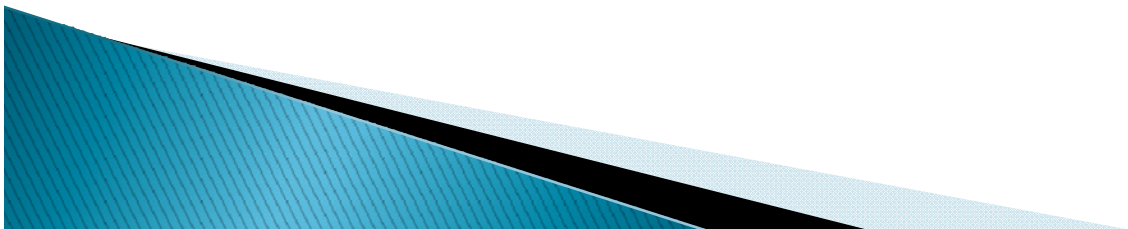
- ▶ **Supportive 'other services'** – i.e. schools - valued holistic approach, staff as change agents, flexibility
- ▶ **Affordable** - externally funded
- ▶ **Feasible** – components were synergistic e.g. survey motivated action, curriculum increased profile
- ▶ **Reach** – e.g. through curriculum and various actions
- ▶ **Acceptable to targets** – students liked
- ▶ **Fit with needs** – baseline deficits in safety, self-regard and communication



Healthy School Ethos intervention

Healthy School Ethos intervention very similar to Gatehouse, except:

- ▶ Focus on *safety, engagement* and *anxiety* based on local formative research
- ▶ Lacked curriculum component
- ▶ More student participation in Action Teams etc.

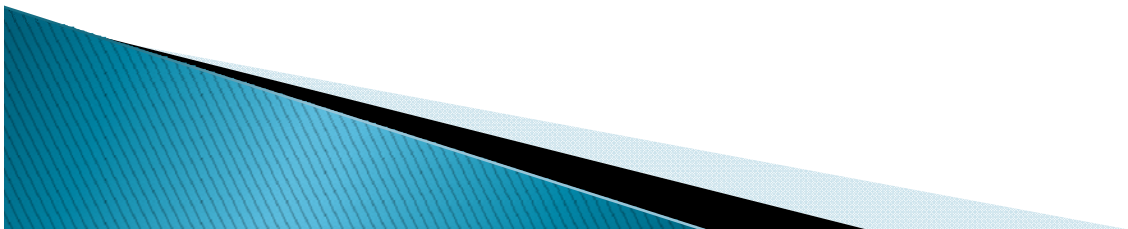


Healthy School Ethos intervention

But would it be as successful?

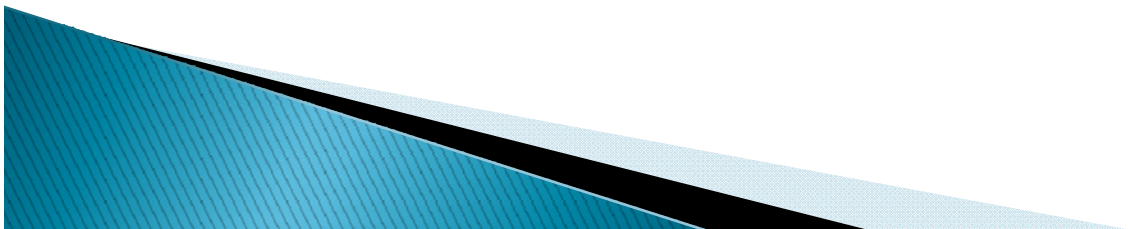
Might hypothesise that there would be problems with:

- ▶ school support - because of pressure on schools from parental choice, 'high-stakes' testing, local league tables
- ▶ reach - because of absence of curriculum



Quantitative methods

- ▶ Two intervention ('Woodbridge' & 'Hillside') versus two comparison schools matched on inspection rating and minority-ethnic/ disadvantaged students.
- ▶ Baseline surveys of year-7 (age 11/12) students at baseline (n=614) and follow-up (n=735).
- ▶ Intention-to-treat analyses adjusting for clustering by school.
- ▶ Analysis adjusted for potential confounders (gender, SES and baseline measure of outcomes)

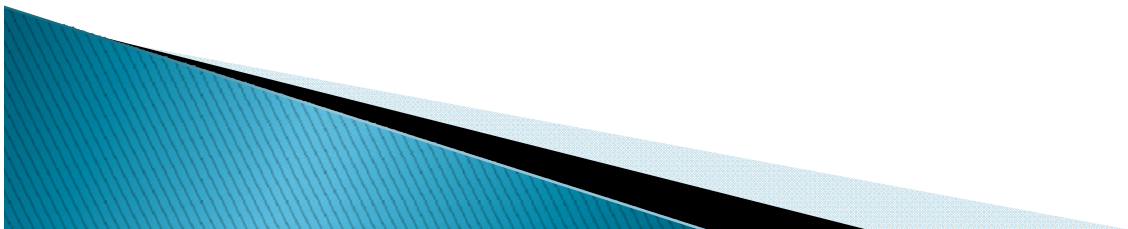


Qualitative methods

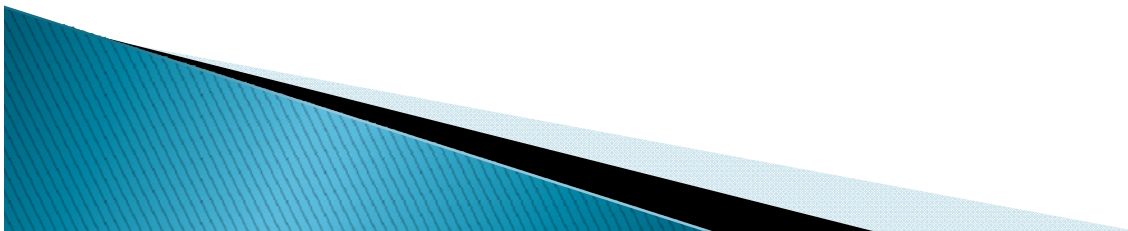
Semi-structured interviews

- ▶ intervention providers (n=3)
- ▶ intervention school staff (n=13)
- ▶ students (n=45).

Thematic-content analysis.

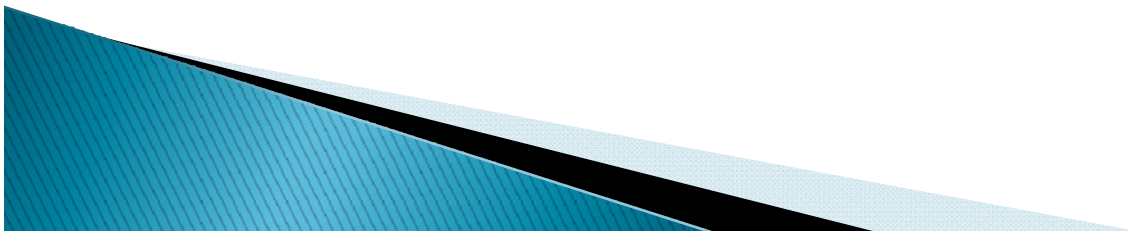


Qualitative findings



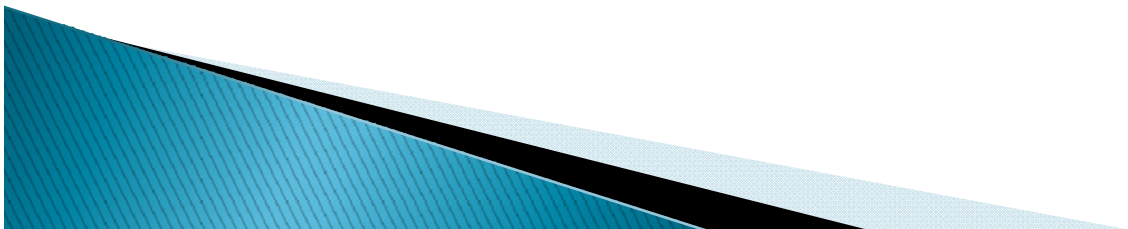
Good facilitator capacity to deliver the intervention, was a former school principal.

Provider institutional context – collaboration of public health and education researchers with advice from Gatehouse team.



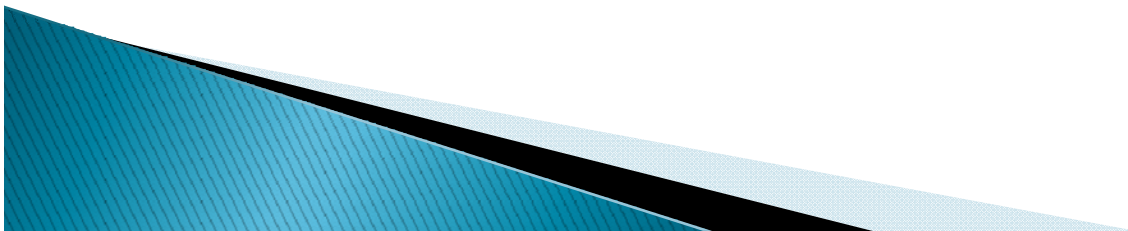
Product championing by facilitator initially unsuccessful resulting in confusion and lack of interest.

“The initial presentation that [he] made to staff, I think if you were doing that again, he could talk about ... how it’s impacted on other schools. Because we were coming in very cold on that and staff, sort of, attended the briefing and thought, yeah, okay, what’s that about?”
(Assistant Principal, Hillside)



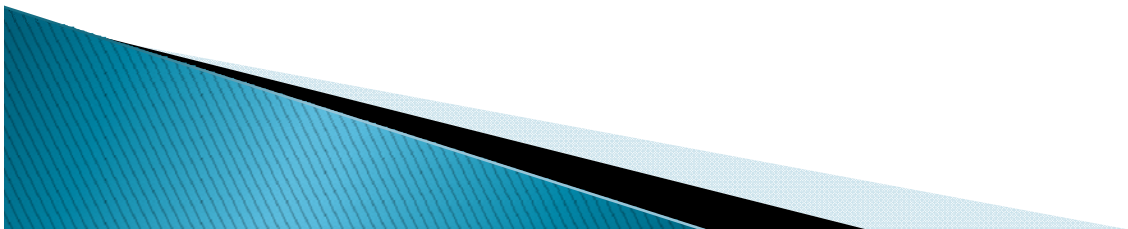
Product championing improved with time.

“I think it wasn’t until about the second, you know, well, into the second meeting that you got some idea that actually this isn’t about healthy lifestyles.” (Teacher on Action Team, Woodbridge)




Training capacity weak - main facilitator could not provide this so we commissioned large consultancy firm which sub-contracted to freelancer. Poor lines of communication and ineffectual training.

“At the end of the first session ...it wasn't a set task that we had. [It was] “Well, go away and think about your inclusive practice. Think about ways you can do this...” It wasn't “Right, I want you to go and observe another teacher....” And I – you got the impression that if you don't do it, then so what?” (Teacher, Woodbridge)

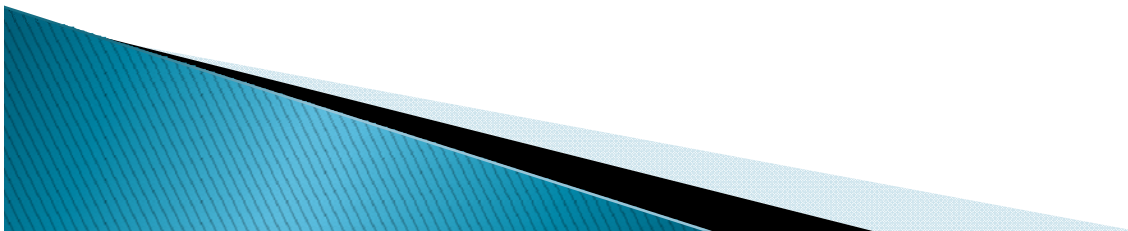


Good support from schools, despite external pressures.
For one school HSE actually functioned as part of school's strategy for improving league-table position.

“These are the things that we want to do as a school. If we can get a certain percentage [achieving 5 GCSE passes], this year we want to get 57%... So yeah, there will be ... enlightened Heads who think [HSE] is important and you will have other Heads who don't think it's so important... In a council estate in East London, you need this stuff, 'cause actually, with this – it's only this stuff that gets you your results. “ (Deputy principal, Woodbridge)



- ▶ Other school also supportive – saw HSE as means of re-engaging disaffected students
- ▶ But gave HSE less priority because was already popular and doing well academically



Affordability was critical:

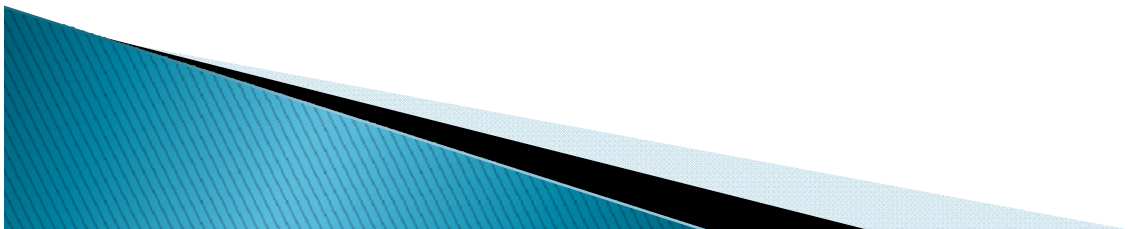
R: “Yeah, and what did you think about it, when you first saw it?”

P: “There’s money.”

R: “Yeah? That was your first thought? Just that there’s money?”

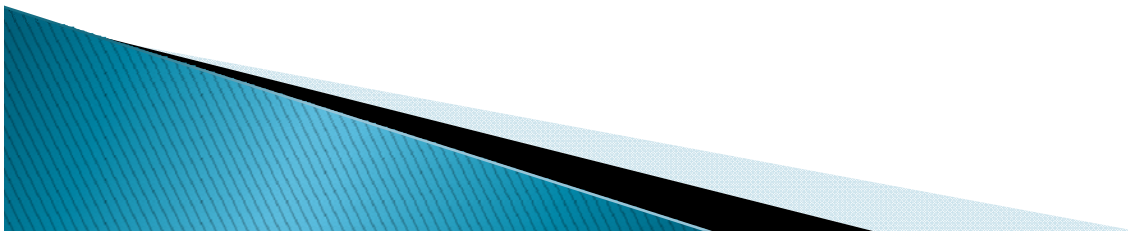
P: “Yeah.”

Deputy principal, Woodbridge



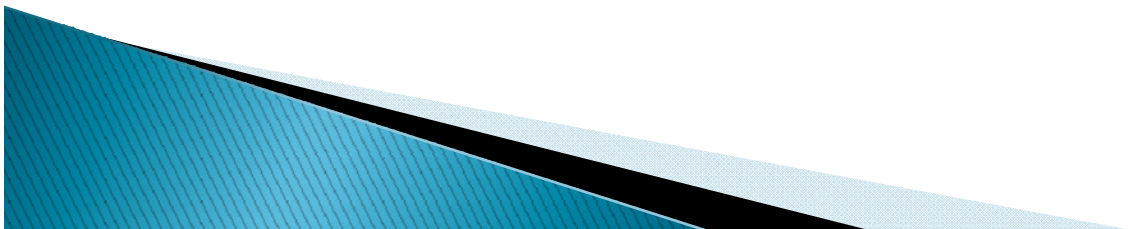
Feasibility highest when actions supported by senior staff - most clear in Woodbridge where the intense involvement of the deputy principal (to whom principal delegated lots of authority) led to a raft of actions - e.g. rewriting school rules, peer mediators - being achieved successfully.

Feasibility lowest where support less whole-hearted – e.g. neither school wanted to review and revise all school policies since they had existing timetable for this



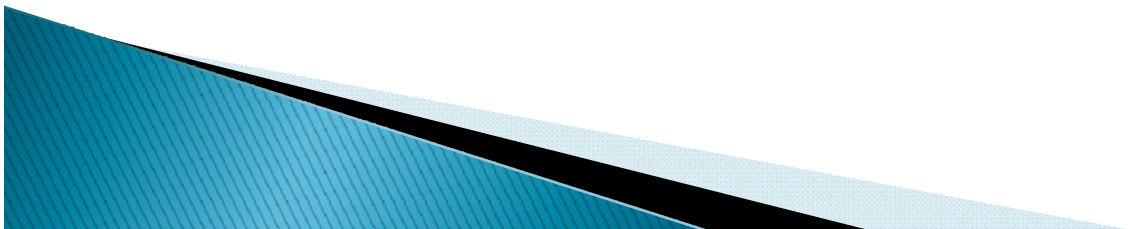
Feasibility low when actions required radical departure from existing culture. For example, Hillside had a strongly academic ethos. Although committed to revising its reward system, this proved difficult in practice.

“Well, yeah, because there was a certain reluctance to engage in a debate about who should be rewarded and what for... They had a, sort of, very much a traditional format about, you know, the high achievers were being rewarded.” (Facilitator)



Acceptability to students high, almost all valued HSE, despite some being initially sceptical:

“You feel like you’re a part of something and because you have a say in it as well... I was speaking to some younger students, they felt so happy about it, especially year-seven students, they said, ‘I can’t believe this is happening and we’re having a say in the rules...’” (Student Action Team member, Woodbridge)



Quantitative findings

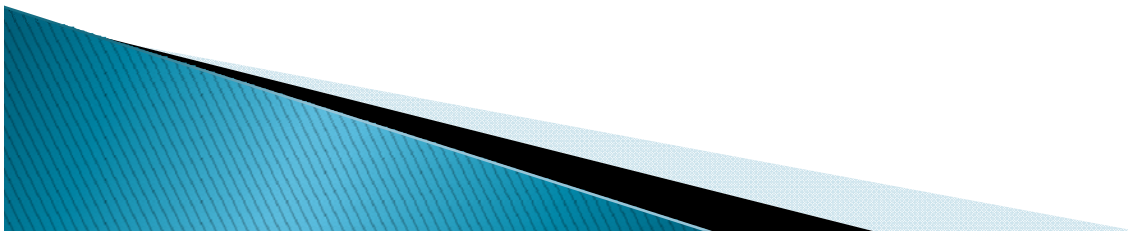


Table 2: Baseline needs

Need	n (%) N=295
<i>Anxiety</i> : Worried couldn't do work in primary school	185 (63.1)
<i>Engagement</i> : Liked primary school not much/not at all	93 (31.9)
<i>Safety</i> : Feels safe in this school	263 (91.0)

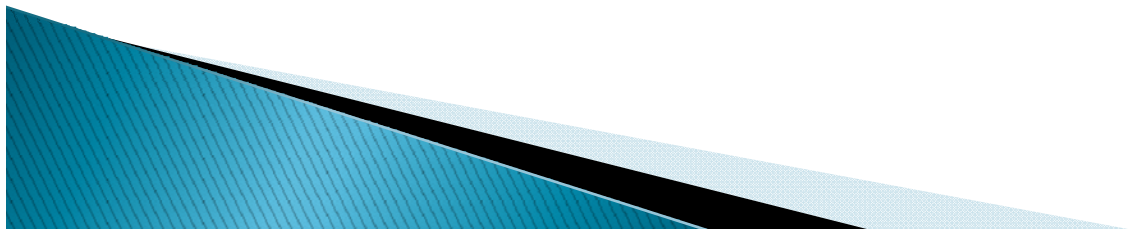
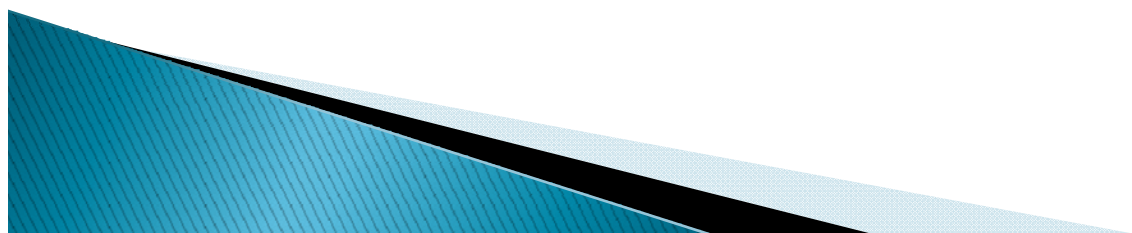


Table 3: Awareness and outcomes at follow-up

Outcome	Intervention n (%) N=388	Control n (%) N=347	Adj OR (95% CI)
Aware of HSE	223 (58.7)	96 (28.8)	3.86 (1.93,7.75)
<i>Anxiety</i> : Worried couldn't do work in this school	276 (71.9)	240 (71.2)	1.13 (0.62,2.04)
<i>Engagement</i> : Does not like school	161 (41.8)	156 (45.9)	0.75 (0.41,1.37)
<i>Safety</i> : Feels safe in school	331 (86.9)	220 (66.7)	2.89 (1.63,5.15)
Believes will try drugs in future	9 (2.4)	13 (3.9)	0.71 (0.26,1.92)
Believes will smoke in future	41 (11.1)	48 (14.8)	0.83 (0.43,1.61)



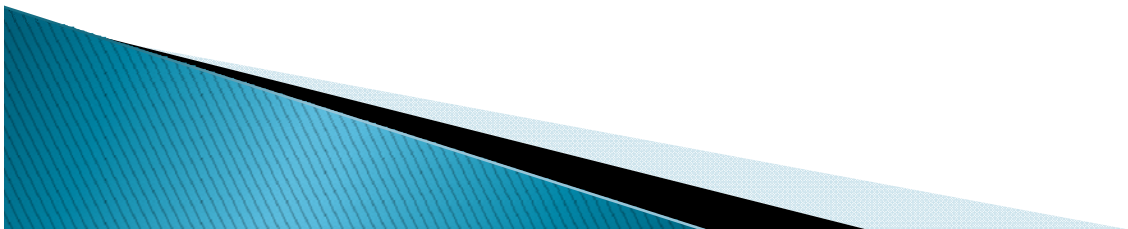
Summary of key findings

The project faced a number of (surmountable) challenges

- ▶ initially poor product championing
- ▶ poor capacity to deliver training
- ▶ schools being unsupportive of some aspects of project
- ▶ harder in more academically successful school

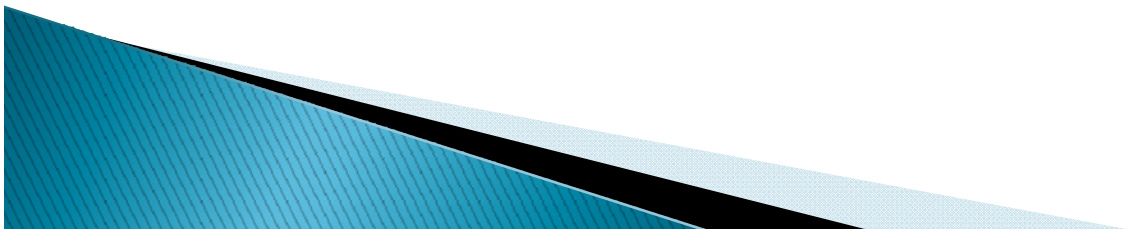
No indication that:

- ▶ differences in the policy context in England undermined the project
- ▶ absence of a curriculum element reduced awareness (or reach).



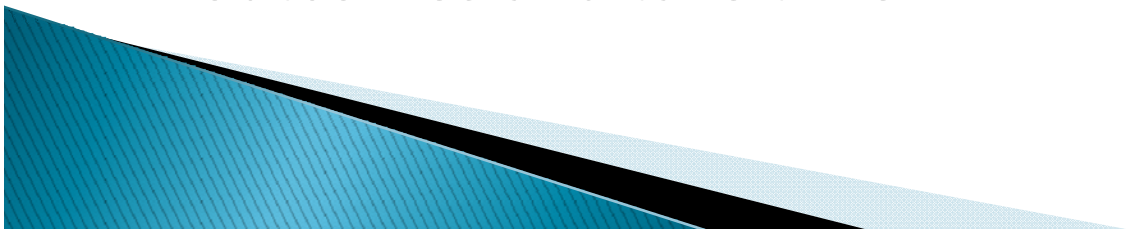
Limitations

- ▶ Post hoc, largely qualitative assessment precluded testing of clearly operationalised hypotheses regarding feasibility, acceptability.
- ▶ Small sample weakens ability to test hypotheses relating to quantitative measures of needs, reach and outcomes.
- ▶ Examined awareness not reach.



Implications for research and policy

- ▶ Framework useful in guiding consideration of transferability.
- ▶ Key contextual factors = provider commitment, existing priorities of schools, authority of school staff involved
- ▶ Deficit model may not always explain challenges
- ▶ Some challenges probably time-dependant = e.g. improving product championing, challenging school ethos
- ▶ School interventions need to emphasise education outcomes and take time



Implications for research and policy

- ▶ Framework is blunt instrument - cannot determine when problems sufficient for an intervention to fail e.g. HSE training.
- ▶ Will vary enormously between interventions – frameworks might best be used to inform consideration of transferability in intervention-specific ‘logic models’.
- ▶ Scope for prospective, quantitative testing.

