THE BEHAVIOURAL INSIGHTS TEAM.

Increasing social trust with an ice-breaking exercise – an RCT carried out with NCS participants[1]

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Executive Summary

This paper reports the results of a small scale randomised controlled trial carried out by the Behavioural Insights Team in partnership with the National Citizens Service (NCS) and The Challenge, a charity that acts as a delivery organisation for NCS.

NCS is the largest youth movement for 100 years and in 2016 more than 80,000 young people aged 16–17 took part in the programme. This trial was conducted as part of the Summer 2016 NCS programme. Young people are put into small groups with whom they will spend the four weeks of the programme, and with whom they are expected to complete a social action project. As part of this trial, 50 such groups, consisting of 750 young people, were assigned at random to receive one of four sets of instructions at the beginning of the course:

- One quarter of the teams were given no specific instructions as part of this experiment. These young people serve as a control group for this trial.
- Another quarter of the teams were given an "ice breaker" task and asked to discuss their similarities as a group.
- A third quarter of the teams were given a similar ice breaker, in which they were asked to discuss their differences as a group.
- A final group of teams were asked to discuss their strengths and weaknesses as a team.

Participants were then surveyed four weeks later to ascertain their level of social trust, and were asked to complete a task intended to measure their creativity. Our main findings are:

- There is a statistically significant positive impact overall of the similarities exercise on general social trust, relative to the control group.
- The effect of the similarities exercise is particularly concentrated on people with lower levels of social trust, with no effect at all on participants with only average levels of social trust. The effect on low trust participants is the equivalent of moving from the 25th percentile to the 50th for social trust.
- None of the other exercise have statistically significant effects overall
- The differences exercise has a statistically significant and positive effect for participants who have high levels of social trust.

- None of the interventions affect participants' creativity.

These effects are modest in size, but substantial in comparison to the level of trust in the population. Although further research is needed, we believe that these findings represent a valuable step towards developing a suite of interventions that can reliably increase social cohesion amongst young people.

Figure 1: Effects of the Ice Breakers on Trust
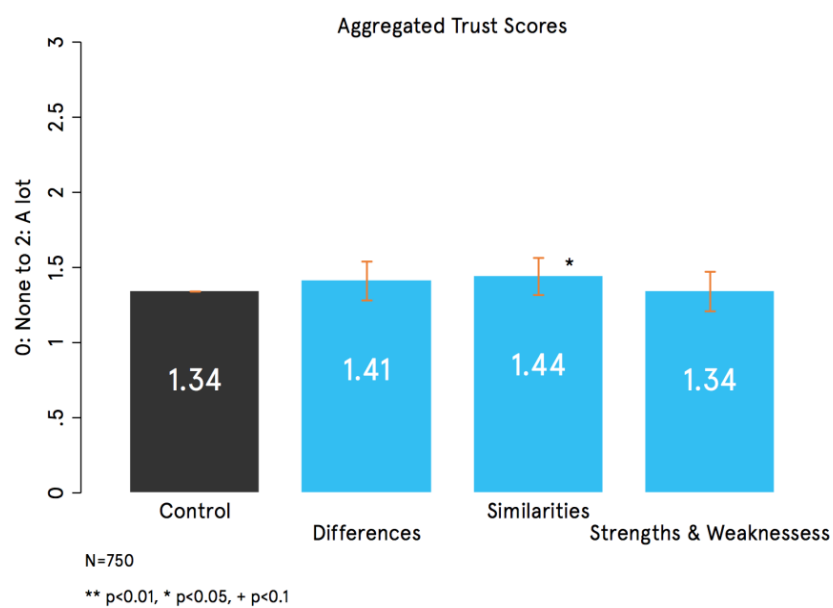
1. Introduction and background

National Citizens' Service was set up in 2010 by the UK government, to provide an opportunity for young people to take part in social action projects, including fundraising in their local community, awareness raising about global warming, or volunteering in old people's homes at an early age (15-17 years old), mostly over the summer after their GCSEs. The NCS Trust was established to help NCS expand independently of government. In 2016, more than 80,000 young people took part in the programme, more than 10 per cent of all eligible young people in the UK.

Over the last twelve months, the Behavioural Insights Team (BIT) have been working with the National Citizens Service (NCS) on a range of randomised controlled trials that aim to have an impact on three aspects of the NCS programme: – people's propensity to sign up to NCS, their propensity to show up to NCS (to attend and complete the programme), and the quality of the curriculum itself.

This paper reports the results of the first of the curriculum improvement trials that BIT have conducted jointly with NCS and with *The Challenge*, one of the NCS delivery organisations. As part of NCS, participants are assigned to be part of a diverse group working together throughout their time on the programme, and particularly on their social action project. One of NCS's core goals is to increase people's exposure to people of different backgrounds, and to foster understanding between different groups. To facilitate this, we have developed interventions based on the established academic literature on social trust and group cohesion, which are administered at the beginning of the programme, when participants are first assigned to their group, as part of an ice-breaking exercise.

Although this research project suffered from some data integrity issues that caused roughly 75 per cent of the data not be returned to BIT for analysis, the design of the trial still allows us to interpret the results as providing causal evidence of the effectiveness of our interventions.

2.   Previous Research

Group Cohesion

Social cohesion refers to the strength of interaction between members of a society and the sense that people in a society tend to conform to the same set of rules or be aiming towards the same goals. Academic research supports the idea that socially cohesive groups are more productive[1], have greater well-being[2] and, by definition, are less prone to conflict[3]. Specifically, positive interactions between groups, as opposed to mere contact, has been shown to increase trust and decrease prejudicial tendencies towards an out-group[3]. Creating a structure where groups work towards a common goal, where they are of equal status and are supported by an authoritative team leader has been shown to produce positive results[4].

Simply exposing groups to each other does not necessarily result in positive outcomes. However, smaller changes, such as hearing about a positive interaction that a friend had with someone from another group can reduce prejudicial attitudes[5,6].

Biases in Judgement

The behavioural science literature has taught us that shortcuts are very common in decision-making. People rely heavily on what is often referred to as 'system one' thinking – the mental processes that deal with information fast and frugally[7]. Judgements are made within a very short space of time and are formed based on a small set of information. These decisions often follow consistent patterns, such that people behave in the same way and are affected by the same types of cognitive biases. In terms of how biases affect social judgements, for example we find that when someone has similar qualities or values to us, we're more likely to rate them more highly[8]. There are a number of incidences when these behavioural biases can impede people's judgement and decision-making, which can additionally be exacerbated in group contexts (e.g. through Groupthink; see Turner & Pratkanis[9]). Where group members are diverse and people are likely to perceive differences between themselves and others, behavioural interventions may assist in overcoming the automated judgements produced by 'system one'.

The model employed by NCS involves the social mixing of diverse backgrounds. This approach is supported by organisational behaviour research showing that teams made up of diverse members with a wide variety of skills and backgrounds tend to produce better outputs. However, at times, the perceptions of other group members are more positive in groups with shared behaviours or interests (e.g. Herring, 2009[10]; McLeod et al., 1996[11]). This may involve an initial time-related cost however, such that individuals used to interacting or working in specific ways may have to adjust their behaviour to that of the rest of the group. On this basis we hypothesise that prompting individuals to think about the qualities and characteristics of the team during the orientation phase will enable them to harness both the individual and collective strengths sooner. In an open and relaxed dialogue they will acknowledge these characteristics, firstly enabling them to become more familiar with one another, and secondly exploring what collective skills they possess.

Similarities

As discussed above, people tend to rate others who are more similar to them more highly than those dissimilar to them. This also holds for people being more open and trusting of people similar to them (e.g. Behavioural Insights Team, 2014[12]; Herring, 2009[10]). In the labour market, this tendency to like people who are more similar to you can explain a portion of labour market discrimination against groups that are currently under-represented in management, such as non-white or female applicants. For example, those with 'white sounding' names or male names are much more likely to be called for interview than otherwise, despite otherwise identical applications being used[13,14].

There is also some evidence supporting this hypothesis from the behavioural science literature on social norms. Hallsworth et al. (2017)[15] find, for example, that telling people that "9 out of 10 people in Oxford pay their taxes on time" has a significantly greater effect on tax compliance than a more general message that "9 out 10 people in the UK pay their tax on time". This suggests that we are more likely to conform to the behaviour of a smaller group that we feel more similar to than a larger, but more distant group. We hypothesise that having groups discuss their similarities could enable bonds to form between individuals sooner, by helping them to identify the similarities that they share, rather than focusing on their differences.

Differences

Although intuition may favour harmony, a pilot study found groups instructed to discuss differences rather than similarities were more cohesive[16]. Through a short intervention simply asking groups to do this, survey measures found individuals to feel closer to other group members, and behavioural measures found an increase in the number of and creativity of ideas produced within the group (as rated by reviewers). Researchers believe that intimate and meaningful relationships require self-disclosure in order to mature from shallow interactions to more in-depth and sustained relationships[17,18]. This may be due to feelings of reciprocity, such that when one person shares an intimate or private fact about themselves, others are more likely to share similar experiences. Inducing reciprocity, the compulsion to return a favour, has been documented in much of the cooperation and social capital literature[19]. Additionally in the behavioural literature, interventions inducing reciprocity have increased charitable donations[20] and propensity to register as an organ donor[12]. What the charitable giving literature finds is that even where a small gift is given, people return the favour in much larger ways[1].

In discussing differences, we hypothesise that as groups will be encouraged to self-disclose something that makes them different from other people, a feeling of reciprocity will be instilled in other group members. We think that this effect could occur because participants are taking a risk in revealing a way in which they differ from the group (compared to what might be their more natural instinct to conform and minimise differences), and that other group members, seeing this risk being taken, will reciprocate.

If effective, we believe that this will result in increased cohesion through earlier self-disclosure and feelings of trust, and as described above translate to enhanced individual and group level outcomes.

Weaknesses & complementary strengths

As mentioned in the literature above in the 'differences' section, the disclosure of intimate and private experiences, such as perceived weaknesses, is an integral factor in developing strong and meaningful relationships[17,18]. The distinction with discussing differences within a group however, is that discussing individual weaknesses, or 'areas for improvement', requires a deeper level of introspection and honesty. Self-reflection is a common tool used across many areas of psychology from organisational behaviour to clinical psychology. For example,

organisations and employees have used it when reviewing performance[21,22] (Gioia et al., 2000), clinicians use it to inform their practice and clients engage in it as part of their psychological therapies[23]. In our trial, the next stage is the sharing of this reflection with the wider group to build relationships and to encourage reciprocity. The purpose here is to make individual differences salient (i.e. different people have different challenges), as well as shared challenges among the group members (i.e. people often share similar challenges).

There are some instances where disclosure does not build trust. What has been shown to be most effective is where disclosure is orientated towards a collective goal rather than for self-motivated purposes[24]. From this, we frame the activity around how the team can benefit from the disclosure of a personal challenge. This disclosure therefore resembles a contribution to a public good from which the entire team can benefit, and so we might expect this contribution to be reciprocated by the other team members[19,20,25] is reinforced: individuals are encouraged to offer skills that they hold to another in the group in order to foster collaboration and teamwork. The activity makes salient the diverse nature of the group and all the many skills that diversity can offer.

We hypothesise that this more in-depth reflection of one's own skills, followed by an interactive group activity where individuals will be able to offer and receive skills will encourage deeper levels of self-disclosure as well as strong reciprocal ties between group members.
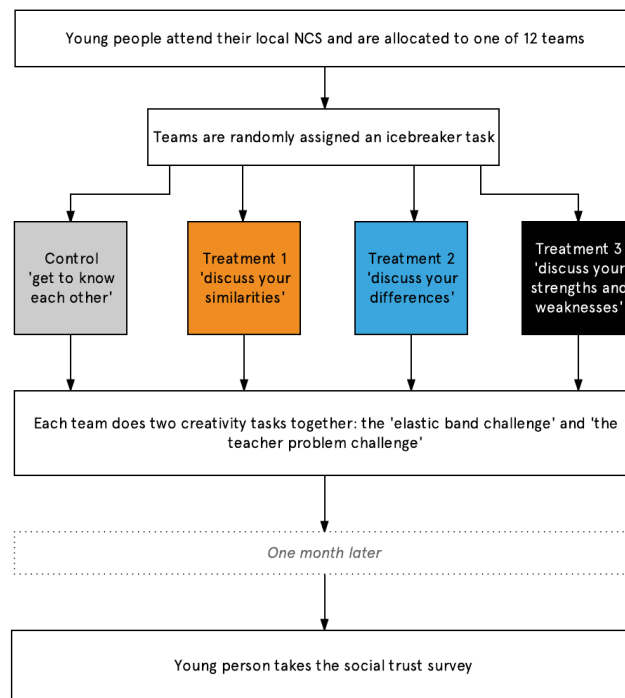
3.   Experiment Design

This experiment is designed as a cluster randomised controlled trial. In a cluster randomised trial, groups of people, in this case teams of students, are randomly assigned to receive an intervention, as opposed to individual students being assigned. A randomised controlled trial represents the best standard of causal evidence, and the use of a clustered design is necessary for this experiment as we are interested in both individual participants' feelings of trust towards society, and entire teams' performance on a group task.

Participants in the trial were approximately 4000 young people assigned to groups of 10–12 as part of the NCS programme administered by The Challenge. Random assignment to one of four conditions, detailed below, was conducted by BIT researchers, and the relevant intervention materials were sent to field sites.

At the field site, team leaders received a series of instructions on how to administer the trial, and set the young people to work on the tasks. At the end of the experimental period, team leaders administered the outcome measure tests, and returned the boxes containing the materials and responses to BIT.

Due to confusion by some team leaders, a substantial but random portion of the data were not returned to the correct boxes for return to BIT, but instead were merged across different teams. This administrative error means that for the majority of our datapoints, we are unable to identify the group to which 75 per cent of our data belongs. This leaves 750 observations in total, spread between the 4 conditions. See the figure below for a diagram that shows the process of the trial.

Figure 2: Trial Process


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┌─────────────────────────────────────────────────────────────┐
│ Young people attend their local NCS and are allocated to one │
│                       of 12 teams                            │
└─────────────────────────────────────────────────────────────┘
            ┌─────────────────────────────────────┐
            │ Teams are randomly assigned an      │
            │ icebreaker task                     │
            └─────────────────────────────────────┘

┌──────────┐   ┌──────────┐   ┌──────────┐   ┌──────────┐
│ Control  │   │Treatment1│   │Treatment2│   │Treatment3│
│'get to   │   │'discuss  │   │'discuss  │   │'discuss  │
│know each │   │your      │   │your      │   │your      │
│other'    │   │similariti│   │differences│  │strengths │
│          │   │es'       │   │'         │   │and       │
│          │   │          │   │          │   │weaknesses│
└──────────┘   └──────────┘   └──────────┘   └──────────┘

┌─────────────────────────────────────────────────────────────┐
│ Each team does two creativity tasks together: the 'elastic   │
│ band challenge' and 'the teacher problem challenge'          │
└─────────────────────────────────────────────────────────────┘

              One month later

┌─────────────────────────────────────────────────────────────┐
│       Young person takes the social trust survey             │
└─────────────────────────────────────────────────────────────┘
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Exercises

NCS sessions consist of a variety of activities and are facilitated by team leaders. These are overseen by group leaders who manage the NCS delivery in a particular area. This small group facilitation format made it relatively easy to randomised the type of activity delivered to the 10–12 teams across multiple sites.

The different activities were written into the facilitator handout, so as not to disrupt the normal flow of the sessions. The language and types of activities were developed in collaboration with NCS and the Challenge in the West Midlands, to ensure consistent and effective communication. Copies of the activities can be seen in figures 2–5.

Figure 3: Instructions for the Control exercise

ICEBREAKER 'GETTING TO KNOW': 10MINS

This is a short ice breaker activity for groups to get to know each other.

- Double check everyone knows what an icebreaker is.
- Ask them to spend 5 minutes getting to know each other by talking about themselves, their interests, hobbies and life experiences.
- Encourage them to be as open as possible. Maybe take it in turns to each say one thing about themselves or give each member of the group 30 seconds.
- Ask them to write down all the topics they discussed, either as they come up or at the end of the five minutes...

Figure 4: Instructions for the Similarities exercise

ICEBREAKER 'OUR SIMILARITIES': 10MINS

- Double check everyone knows what an icebreaker is.
- Explain that the aim of this activity is for everyone to get to know each other a bit more and that everyone should have a pen and some paper.
- Explain to the team they'll be working together for a while now and that you'd like them to get to know each other
- Ask them to spend 5 minutes thinking about their similarities, encourage the team to be as open as possible and explain that everyone has some things in common.
- Suggest that they take turns individually talking about their personal lives, what they like or dislike, interests, hobbies or life experiences in general and so forth in order to find commonalities
- Ask them to write down, on a piece of paper, as many similarities as they can find in the whole group. They may decide to take turns noting down each other's similarities as they go along or list them out at the end for five minutes.

Figure 5: Instructions for the Differences exercise

ICEBREAKER 'OUR DIFFERENCES': 10MINS

- Double check everyone knows what an icebreaker is.
- Explain that the aim of this activity is for everyone to get to know each other a bit more and that everyone should have a pen and some paper.
- Explain to the team they'll be working together for a while now and that you'd like them to get to know each other
- Ask them to spend 5 minutes thinking about their differences, encourage the team to be as open as possible and explain that no one is exactly the same
- Suggest that they take turns individually talking about their personal lives, what they like or dislike, interests, hobbies or life experiences in general and so forth in order to find commonalities
- Ask them to write down, on a piece of paper, as many similarities as they can find in the whole group. They may decide to take turns noting down each other's differences as they go along or list them out at the end for five minutes.

Figure 6: Instructions for the Strengths and Weaknesses exercise

ICEBREAKER 'OUR STRENGTHS AND WEAKNESSES': 10MINS

- Double check everyone knows what an icebreaker is.
- Explain that the aim of this activity is for everyone to get to know each other a bit more and that everyone should have a pen and some paper.
- Explain to the team they'll be working together for a while now and that you'd like them to get to know each other
- Ask them to spend about two and a half minutes thinking about their weaknesses. Underline that no one is perfect, everyone has strengths and weaknesses, maybe give an example yourself.
- Encourage the team to be as open as possible. Suggest they take it in turns talking about things they are not so good at such as past challenges and mistakes, things you may want to improve or change.
- Ask them to write down as many weaknesses as you can find in the whole group.
- Then spend the rest of the time finding people in your group who have complementary strengths. To the best of your ability, try to find as many complementary strengths as possible and list them next to each weakness.

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4.   Results

We have two main outcome measures for this trial: survey questions about trust and creativity.

Trust

Four weeks after completing the exercises, participants were asked to complete a survey. As well as collecting some basic demographic characteristics, they were asked to complete an individual survey which contained a series of questions related to social trust. These are:

Would you say that you trust...

1.   *Most of the people in your neighbourhood*

2.   *Many of the people in your neighbourhood*

3.   *A few of the people in your neighbourhood*

4.   *Or that you do not trust people in your neighbourhood?*

Participants give scores to these questions on scale ranging from "Never" (coded as 0) to "Always" (coded as 4). Overall, we find that general levels of social trust are low among participants in the trial, suggesting that there is considerable scope for improvement.

Our main trial results are analysed using linear regression analysis, with standard errors clustered at the level of the team. We find a statistically significant positive impact of the similarities intervention on social trust on these measures, raising scores by approximately 6 per cent. The differences intervention has a similarly sized positive effect, but this is not statistically significant. The Strengths and Weaknesses intervention does not appear to have any effects.

Figure 7: Main results for trust scores

Aggregated Trust Scores

N=750

** p<0.01, * p<0.05, + p<0.1

Having found a statistically significant result in our main analysis, we can conduct additional analyses to see how different groups respond to our interventions. We conduct quantile regressions, shown in the figures below, to identify whether people with low levels of social trust (evaluated at the 25th percentile) are affected more or less by our intervention than participants with medium (median) trust, or people with high social trust (at the 75th percentile).

Interestingly, we find that the similarities intervention has no effect at the median, but is significantly effective for participants with both high and low levels of social trust. This is particularly pronounced for young people with low levels of social trust, with a participant at the 25th percentile of trust in the similarities treatment displaying the same level of social trust as the median person in the control group.

Interestingly, we also see a significant effect of the differences intervention for people who have high levels of social trust. This is consistent with a hypothesis that once people have a sufficient level of trust to feel secure, they are more comfortable to be challenged by the differences between themselves and others in a way that they might not be at lower levels of social trust.

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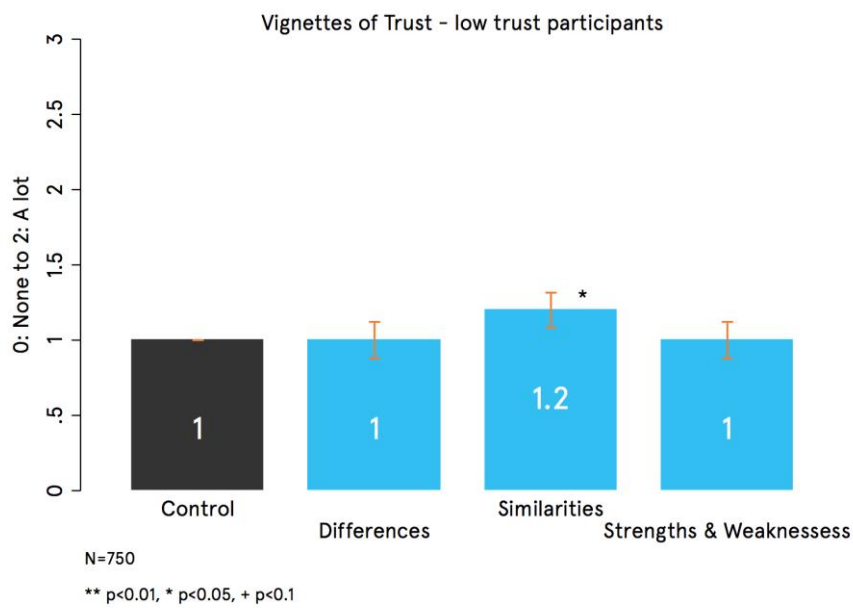Figure 8: Effects on trust for low trust participants
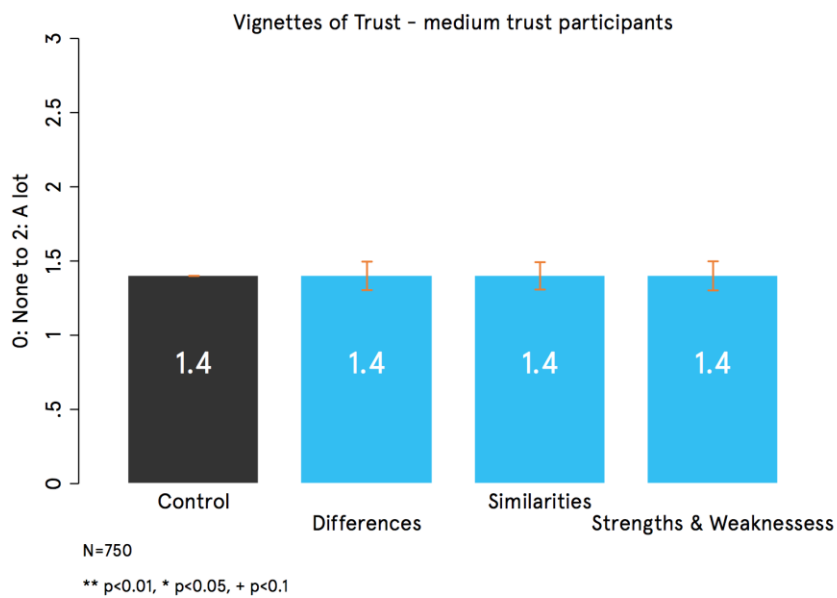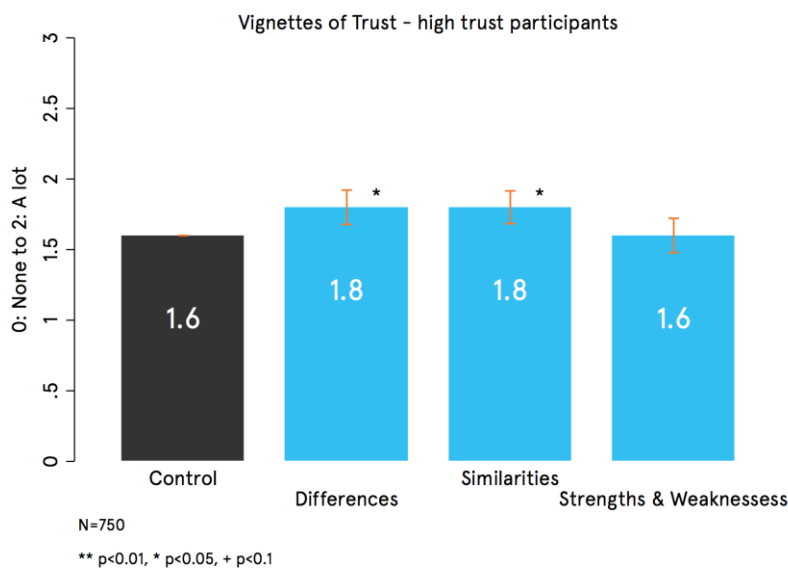

Vignettes of Trust - low trust participants

Figure 9: Effects on trust for medium trust participants

Vignettes of Trust - medium trust participants

Figure 10: Effects on trust for high trust participants

Vignettes of Trust – high trust participants

N=750

** p<0.01, * p<0.05, + p<0.1

Creativity task

In order to assess team's creativity, we used performance on a modified version of the Teacher Problem as our outcome measure. Team (not individual) performance is assessed, and the task requires team members to work together to come up with solutions for a national policy issue (in this case, the UK's teacher recruitment problem). Teams were asked to write down as many solutions as possible on specific sheets of paper for the problem.

After the experiment concluded, volunteers (Master of Public Policy Students at Harvard University's Kennedy School of Government), rated each idea on a five-point scale for effectiveness and feasibility, while blinded to groups' treatment assignment. Volunteers were given instructions on the criteria to use to judge ideas. In order to maximise statistical power, participants were also asked to individually complete an 'elastic band' challenge at the beginning of the study, in which they were asked to list as many uses for an elastic band as they could in one minute. The number of responses given was used as a covariate in our analysis. Because this exercise was conducted by entire teams, this analysis is conducted using one observation per team.

The results of this analysis are shown in the figure below. We do not find any statistically significant results in this analysis.

Figure 11: Effects of performance in the group creativity task

Teacher Challenge: Harvard assessed overall scores

Total N=52
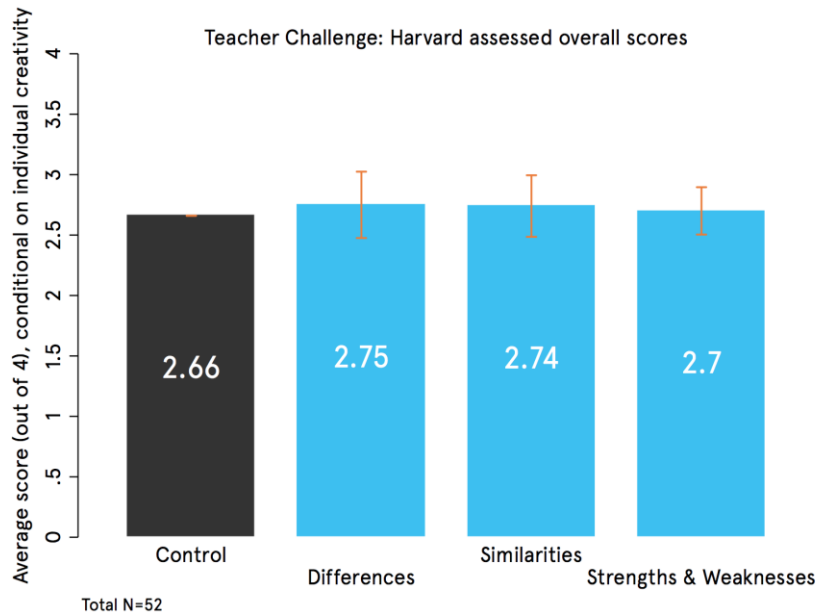
Conclusions

We have conducted a large scale randomised trial to test the impact of different ice breaking exercises on social trust and group level creativity as part of the NCS curriculum. Although data loss means that this study is much smaller than anticipated, we still find statistically significant results of our similarity intervention on social trust, both overall, and for people with high and low trust. Our Differences ice-breaking exercise has a significant effect on people with high levels of trust, but is otherwise ineffective. We find no effect of any of our interventions on teams' creativity when working together.

This study is not large enough to warrant claiming victory in our efforts attempting to increase social cohesion, and the data issues prevent us from conducting meaningful sub-group analysis that would allow us to shed more interesting light on the issues. However, these early indicative findings are encouraging, and suggest some avenues for future research.

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