

Report on Exeter University “Stoic week” 2013 by Tim LeBonⁱ

Management Summary

- 1) Stoic Week 2013 had a significant positive impact on well-being as evaluated by a variety of well-established measures. This result reinforces the positive results of Stoic Week 2012, and adds weight to the previous evidence as the sample size was over eight times larger than in 2012.
- 2) The Stoic Attitudes and Behaviours Scale (SABS) has been developed by the team since Stoic week 2012. It was piloted for the first time in Stoic Week. Whilst the scale has not been fully validated yet, the findings reported below suggests some extremely positive and potentially important results.
- 3) Stoic week itself received very positive feedback, and the many enhancements to the booklet, audio recordings, blog and other features were appreciated. The quantitative feedback from Stoic week is contained in Appendix B
- 4) A Stoic Day event in London was both well-attended and well-received. A report of the feedback obtained on the day (written by Keith Stewart) is included in Appendix C.

This report will focus primarily on an analysis on points 1 and 2 above i.e the well-being and SABS scales and their implications.

Discussion

A) Whether Stoicism is Positively Associated with Well-Being; The Stoic Attitudes and Behaviours Scale

2441 individuals, recruited via the internet as part of 2013 Stoic Week, took the Stoic Attitudes and Behaviour Scale (SABS). Most of these participants additionally took 3 scales related to well-being, specifically life satisfaction, flourishing and positive and negative emotions. This means that for the first time we can determine whether there exists a positive relationship between well-being and Stoic attitudes and behaviours. The tests carried out last year and described below which measure *changes* in well-being make a good case for Stoicism having a positive effect. They are open to some objections; it could be suggested that effect may have been largely a placebo effect for example. This cross-sectional test determines whether at any one time, before any deliberate interventions, being Stoic affects well-being.

The SABS is a 19 item questionnaire using a 7 point Likert scale. The SABS consists of 12 attitudes and 7 behaviours, including 6 reversed items (i.e. non Stoic attitudes or behaviours). The items are as follows. Behaviours are indicated by (b) and Attitudes by (a). Reversed items are in *italics*. Two additional questions were added to help assess its validity. A further question asked how much participants knew about Stoicism; one reason this question is included is to determine whether knowledge of Stoicism is associated with well-being.

¹ As long as you have the right attitude, you can lead a good life even in the worst of (a)

conditions, such as being tortured or being held prisoner.

- 2 It doesn't really matter what other people think about me as long as I do the right thing. (a)
- 3 *It can sometimes be a good thing to get angry when people are really rude, selfish or inconsiderate.* (a)
- 4 *It's more important to feel good than to do good.* (a)
- 5 Peace of mind comes from abandoning fears and desires about things outside our control. (a)
- 6 *If bad things happen to you, you are bound to feel upset* (a)
- 7 The only things truly under our control in life are our judgements and voluntary actions. (a)
- 8 Virtue (or human excellence) consists in perfecting our rational nature, through cultivating wisdom (a)
- 9 *There's no overall plan to the universe.* (a)
- 10 To flourish as a human being all you need is rationality and a good character; things like money, status, health and good luck are not essential. (a)
- 11 I consider myself to be a part of the human race, in the same way that a limb is a part of the human body. It is my duty to contribute to its welfare. (a)
- 12 The cosmos is a single, wise, living thing. (a)
- 13 I try to anticipate future misfortunes and rehearse rising above them. (b)
- 14 I often contemplate the smallness and transience of human life in relation to the totality of space and time. (b)
- 15 *If I was honest I'd have to admit that I often do what is enjoyable and comfortable rather than what I believe to be the right thing.* (b)
- 16 I try to contemplate what the ideal wise and good person would do when faced with various misfortunes in life. (b)
- 17 I make an effort to pay continual attention to the nature of my judgments and actions. (b)
- 18 *I spend quite a lot of time dwelling on what's gone wrong in the past or worrying about the future.* (b)
- 19 When an upsetting thought enters my mind the first thing I do is remind myself it's just an impression in my mind and not the thing it claims to represent. (b)
- Additional questions*
- I know quite a lot about Stoicism. (k)
- My way of looking at life is very Stoic. (v)
- I act like a good Stoic would most of the time (v)

Some Questions Answered

Whilst it must be stressed that SABS requires further work for it to become a fully validated instrument (see recommendations section below) it already shows considerable promise. In particular it can help us answer three important sets of questions.

Question 1

Are Stoic attitudes and behaviours associated with well-being, flourishing and positive emotions? Are attitudes or behaviours more important? How about the reversed-item non-Stoic attitudes and behaviours?

The headline news is that Stoic attitudes and behaviours are associated with happiness, positive emotions and flourishing. By contrast, the non-Stoic attitudes and behaviours which are part of the scale proved to be negatively related with well-being. This was found using a large sample (2441 people filled in the SABS questionnaire) before participants were subject to any Stoic interventions. It provides good empirical evidence for concluding that Stoicism is conducive to well-being (but see qualifications below).

Stoic attitudes and behaviours demonstrated positive correlations with happiness (satisfaction with life) (Pearson's r correlation=.36), flourishing (correlation=.44) and positive emotions (correlation=.4). The reversed items demonstrated negative correlations of .33, .38 and .37 respectively.

Stoic *behaviours* appear to be more associated with well-being than Stoic attitudes. The Stoic attitudes had correlation values of .23, .28 and .27 with happiness, flourishing and positive emotions were respectively. In contrast the Stoic behaviours exhibited correlations of .41, .5 and .42. The high correlation of Stoic behaviours with flourishing is particularly noteworthy.

It is possible to go further, and discover *which* Stoic attitudes and behaviours are most beneficial.

	Stoic Attitude(a) or Behaviour (b)	Correlation
1	I make an effort to pay continual attention to the nature of my judgments and actions.(b)	0.28
2	When an upsetting thought enters my mind the first thing I do is remind myself it's just an impression in my mind and not the thing it claims to represent.(b)	0.27
3	I consider myself to be a part of the human race, in the same way that a limb is a part of the human body. It is my duty to contribute to its welfare.(a)	0.22

Table 1: Highest correlations of Stoic attitudes and behaviours with Subjective Well-Being (Satisfaction with Life) before Stoic week (n=2272 correlation >.2)

Table 1 (above) shows the Stoic behaviours and attitudes most associated with satisfaction with life (happiness).

	Stoic Attitude(a) or Behaviour (b)	Correlation
1	I make an effort to pay continual attention to the nature of my judgments and actions. (b)	0.34
2	When an upsetting thought enters my mind the first thing I do is remind myself it's just an impression in my mind and not the thing it claims to represent. (b)	0.32
3	I consider myself to be a part of the human race, in the same way that a limb is a part of the human body. It is my duty to contribute to its welfare.(a)	0.31

4	I try to contemplate what the ideal wise and good person would do when faced with various misfortunes in life. (b)	0.26
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Table 2: Highest correlations of Stoic attitudes and behaviours with Flourishing before Stoic week (n=2441, correlation >.2)

A similar story emerges with regards to flourishing; the same three items reappearing on top.

	Stoic Attitude(a) or Behaviour (b)	Correlation
1	When an upsetting thought enters my mind the first thing I do is remind myself it's just an impression in my mind and not the thing it claims to represent. (b)	0.31
2	I consider myself to be a part of the human race, in the same way that a limb is a part of the human body. It is my duty to contribute to its welfare. (a)	0.23
3	I make an effort to pay continual attention to the nature of my judgments and actions.(b)	0.22

Table 3: Highest correlations with Emotions before Stoic week (n=2193, correlation >.2)

The same 3 items are most significant as with flourishing and life satisfaction; although the order has changed; reminding oneself that a thought is just an impression is most associated with positive emotions and the absence of negative emotions.

Delving deeper still, it is possible to say which aspects of Stoicism are most associated with *specific* emotions (such as being content, joyful and happy). Again

“When an upsetting thought enters my mind the first thing I do is remind myself it’s just an impression in my mind and not the thing it claims to represent.”

proved the most significant with regards to all the emotions except for “afraid”, for which Stoicism does not appear to be a particularly effective antidote..

There were in some cases a strong association between non-Stoic attitudes and behaviours and low well-being. In particular the item

“I spend quite a lot of time dwelling on what’s gone wrong in the past or worrying about the future.” proved to have a strong association with nearly every aspect of low well-being. For example, it had a correlation of -.47 with Life Satisfaction, -.47 with flourishing and -.51 with negative emotions. Item 15,

“If I was honest I’d have to admit that I often do what is enjoyable and comfortable rather than what I believe to be the right thing.”

also turned out to have a significant negative association with well-being.

Some Stoic attitudes and behaviours appear to have a weak or no association with well-being, as do some of the non-Stoic attitudes and behaviours measured. Items which exhibited a correlation of less than .1 with *all* measures of well-being were :-

Virtue (or human excellence) consists in perfecting our rational nature, through cultivating wisdom

I often contemplate the smallness and transience of human life in relation to the totality of space and time.

Items which had a correlation of .1 or less with *most* measures of well-being were:-

As long as you have the right attitude, you can lead a good life even in the worst of conditions, such as being tortured or being held prisoner. (.1 with flourishing and positive emotions)

It can sometimes be a good thing to get angry when people are really rude, selfish or inconsiderate.(non-Stoic)

(correlated .14 with negative emotions, only .09 with anger)

It’s more important to feel good than to do good. (non-Stoic)

(correlated -.11 with flourishing)

Analysis the SABS data can also help answer the question “Is knowing a lot about Stoicism sufficient to enhance well-being?”. The correlations between this question and well-being were .1 (life satisfaction, .13 (flourishing) and .09 (emotions). It can be inferred that knowing about Stoicism is moderately conducive to well-being, but practising Stoicism is considerably more effective.

Finally, it is possible to say *which* emotions are most associated with Stoic attitudes and behaviours.

Emotions	Correlation with being stoic
Joyful	0.34
Contented	0.32
Positive	0.32
Good	0.31
Happy	0.31
Pleasant	0.30
Afraid	-0.12
Angry	-0.19
Unpleasant	-0.20
Sad	-0.21
Bad	-0.27
Negative	-0.32

Table 4: Correlations between overall SABS scores and specific emotions as measured by SPANE

Somewhat counterintuitively, positive emotions have a somewhat stronger association with Stoicism than do negative emotions. This suggests that Stoicism could play a role in Positive psychology and the development of well-being, as much if not more than alleviating negative emotions. Non-Stoics might be surprised to see **joy** as the emotion that empirical findings suggest is most associated with practising Stoicism.

Question 2

*How Stoic were the 2441 people who completed the SABS questionnaire before Stoic week?
Which aspects of Stoicism did they identify most with?*

Table 5 below gives the respondents’ average answers as to how much they subscribed to the Stoic attitudes (a) and behaviours (b) at the start of Stoic week. Non-Stoic attitudes and behaviours are in *italics*.

Rank	Item	Score/7
1	Peace of mind comes from abandoning fears and desires about things outside our control. (a)	6.0
2	The only things truly under our control in life are our judgements and voluntary actions. (a)	5.8
3	It doesn’t really matter what other people think about me as long as I do the right thing. (a)	5.7
4	I consider myself to be a part of the human race, in the same way that a limb is a part of the human body. It is my duty to contribute to its welfare. (a)	5.5
5	Virtue (or human excellence) consists in perfecting our rational nature, through cultivating wisdom (a)	5.4
6	I make an effort to pay continual attention to the nature of my judgments and actions. (b)	5.3
7	I often contemplate the smallness and transience of human life in relation to the totality of space and time. (b)	5.3

8	<i>There's no overall plan to the universe. (a)</i>	5.1
9	As long as you have the right attitude, you can lead a good life even in the worst of conditions, such as being tortured or being held prisoner. (a)	4.9
10	I try to contemplate what the ideal wise and good person would do when faced with various misfortunes in life. (b)	4.9
11	<i>I spend quite a lot of time dwelling on what's gone wrong in the past or worrying about the future. (b)</i>	4.7
12	To flourish as a human being all you need is rationality and a good character; things like money, status, health and good luck are not essential.(a)	4.7
13	<i>If I was honest I'd have to admit that I often do what is enjoyable and comfortable rather than what I believe to be the right thing. (b)</i>	4.6
14	I try to anticipate future misfortunes and rehearse rising above them. (b)	4.5
15	<i>It can sometimes be a good thing to get angry when people are really rude, selfish or inconsiderate. (a)</i>	4.5
16	<i>If bad things happen to you, you are bound to feel upset (a)</i>	4.5
17	When an upsetting thought enters my mind the first thing I do is remind myself it's just an impression in my mind and not the thing it claims to represent. (b)	3.9
18	The cosmos is a single, wise, living thing. (a)	3.7
19	<i>It's more important to feel good than to do good. (a)</i>	2.7

Table 5: Average scores (out of 7 for participants) for each SABS item before Stoic week (n=2441)

Participants identified equally strongly on average with Stoic attitudes as behaviours (average score for both =4.5).

The average scores for the additional SABS items and totals were as follows:

I know quite a lot about Stoicism	3.3
My way of looking at life is very Stoic	4.3
I act like a good Stoic would most of the time	3.9
Average Attitudes	25
Average Behaviours	14.6
Average SABS score	39.6

Table 6 below gives the comparative scores per item at the end of Stoic week.

	In what ways were people most Stoic at the end of the week?	Average Score	Rank before
1	Peace of mind comes from abandoning fears and desires about things outside our control.	6.3	1
2	The only things truly under our control in life are our judgements and voluntary actions.	6.3	2
3	It doesn't really matter what other people think about me as long as I do the right thing.	6.2	3
4	I consider myself to be a part of the human race, in the same way that a limb is a part of the human body. It is my duty to contribute to its welfare.	6.1	4
5	Virtue (or human excellence) consists in perfecting our rational nature, through cultivating wisdom	6.0	5
6	I make an effort to pay continual attention to the nature of my judgments and actions.	5.8	6
7	I often contemplate the smallness and transience of human life in relation to the totality of space and time.	5.7	7
8	As long as you have the right attitude, you can lead a good life even in the worst of conditions, such as being tortured or being held prisoner.	5.6	9

9	To flourish as a human being all you need is rationality and a good character; things like money, status, health and good luck are not essential.	5.5	12
10	I try to contemplate what the ideal wise and good person would do when faced with various misfortunes in life.	5.5	10
11	I try to anticipate future misfortunes and rehearse rising above them.	5.4	14
12	When an upsetting thought enters my mind the first thing I do is remind myself it's just an impression in my mind and not the thing it claims to represent.	5.1	17
13	<i>There's no overall plan to the universe.</i>	4.6	8
14	The cosmos is a single, wise, living thing.	4.3	18
15	If I was honest I'd have to admit that I often do what is enjoyable and comfortable rather than what I believe to be the right thing.	4.2	13
16	<i>If bad things happen to you, you are bound to feel upset</i>	3.7	16
17	<i>I spend quite a lot of time dwelling on what's gone wrong in the past or worrying about the future.</i>	3.7	11
18	<i>It can sometimes be a good thing to get angry when people are really rude, selfish or inconsiderate.</i>	3.6	15
19	<i>It's more important to feel good than to do good.</i>	2.4	19

Table 6: Average scores out of 7 for participants for each SABS item after Stoic week (n=356)

There was little change in the ranking of Stoic items, though the level of Stoicism increased significantly. There was a similar fall in the rankings on non-Stoic items, especially the items about rumination and there being “no plan to the universe”.

The average scores for the additional SABS items at the end of the week were as follows:

I know quite a lot about Stoicism	5
My way of looking at life is very stoic	5.2
I act like a good Stoic would most of the time	4.5
Average Attitudes	31.9
Average Behaviours	19.6
Average SABS score	51.6

These all showed a substantial increase.

3) Which Stoic attitudes and behaviours shifted the most as a result of Stoic week? Which shifted least?

Table 7 below gives the changes per item from before to the end of Stoic week. Note that to make the comparison fairer, the “change” column excludes participants who dropped out of Stoic week. i.e. the “before” (n=356) scores relates only to the participants who completed both questionnaires.

Item	Score before (n=356)	Score before (all)	Score after (n=356)	Change
When an upsetting thought enters my mind the first thing I do is remind myself it's just an impression in my mind and not the thing	3.9	3.9	5.1	1.2

it claims to represent.				
<i>I spend quite a lot of time dwelling on what's gone wrong in the past or worrying about the future.</i>	4.7	4.7	3.7	-1.0
I try to anticipate future misfortunes and rehearse rising above them.	4.6	4.5	5.4	0.8
<i>It can sometimes be a good thing to get angry when people are really rude, selfish or inconsiderate.</i>	4.3	4.5	3.6	-0.8
<i>If bad things happen to you, you are bound to feel upset</i>	4.5		3.7	-0.8
I try to contemplate what the ideal wise and good person would do when faced with various misfortunes in life.	4.8	4.9	5.5	0.7
To flourish as a human being all you need is rationality and a good character; things like money, status, health and good luck are not essential.	4.9	4.7	5.5	0.6
I make an effort to pay continual attention to the nature of my judgments and actions.	5.3	5.3	5.8	0.6
It doesn't really matter what other people think about me as long as I do the right thing.	5.7	5.7	6.2	0.5
The cosmos is a single, wise, living thing.	3.7	3.7	4.3	0.5
Virtue (or human excellence) consists in perfecting our rational nature, through cultivating wisdom	5.5	5.4	6.0	0.5
As long as you have the right attitude, you can lead a good life even in the worst of conditions, such as being tortured or being held prisoner.	5.1	4.9	5.6	0.5
The only things truly under our control in life are our judgements and voluntary actions.	5.9	5.8	6.3	0.4
Peace of mind comes from abandoning fears and desires about things outside our control.	5.9	6.0	6.3	0.4
I often contemplate the smallness and transience of human life in relation to the totality of space and time.	5.3	5.3	5.7	0.3
<i>There's no overall plan to the universe.</i>	4.8	5.1	4.6	-0.3
I consider myself to be a part of the human race, in the same way that a limb is a part of the human body. It is my duty to contribute to its welfare.	5.8	5.5	6.1	0.3
<i>If I was honest I'd have to admit that I often do what is enjoyable and comfortable rather than what I believe to be the right thing.</i>	4.5	4.6	4.2	-0.3
<i>It's more important to feel good than to do good.</i>	2.5	2.7	2.4	-0.1

Table 7: Changes in scores from before and after Stoic week per SABS item (n=356)

The items that changed the most were

- When an upsetting thought enters my mind the first thing I do is remind myself it's just an impression in my mind and not the thing it claims to represent.
- I spend quite a lot of time dwelling on what's gone wrong in the past or worrying about the future

This is particularly noteworthy as there was some concern that Stoic exercises might increase rumination, which recent research has shown to be one of the factors associated with poor mental health (e.g. depression). The reverse seems to be the case. This may be because the exercises have been very carefully worded to avoid this danger. It should also be noted that all nineteen items changed in the anticipated direction.

The following table shows the start and end scores for the additional SABS items:-

Item	Start score (all)	Start score (n=356)	End score	Change
I know quite a lot about Stoicism	3.3	3.7	5	1.3

My way of looking at life is very stoic	4.3	4.3	5.2	.9
I act like a good Stoic would most of the time	3.9	3.7	4.5	1.8
Average Attitudes	25	26.2	31.9	5.7
Average Behaviours	14.6	14.8	19.6	4.8
Average SABS score	39.6	41	51.6	10.5

All the items increased in the expected direction, with a very significant 20% change in the average SABS score.

B) Changes in Well-Being during Stoic Week

These results were derived by analysis the answers of the 356 participants who completed all 9 surveys. Excluded are 50 participants who completed some but not all surveys or gave inconsistent identification and a further 1600 people who completed surveys only at the start of the week. This compares with 42 participants who completed all surveys last year (i.e there were eight and a half times more this year). Participation was almost equally divided between males (51.5%) and females (49.5%). 25% of participants were aged between 50 and 60 though participation was fairly even between the 20 -70 age ranges.

General Comments

On each of the three measures, the participants who responded to all surveys improved on average between 9% and 14%. This is impressive considering these measures are not the most sensitive to short-term changes. Indeed, the SPANE asks about the last 4 weeks, of which the experiment formed only one week so one would hardly expect drastic change. However, this must be balanced with reasons to be more cautious about the results, especially the relatively high rate of drop out (see **Limitations** section below)

Impact on Life Satisfaction

The SWLS is a short 5-item instrument designed to measure global cognitive judgments of satisfaction with one's life. This scale is widely used as part of the measure of Subjective Well-being (also known as happiness).

Participants reported a 14% increase in life satisfaction overall (compared to 11% in 2012). As in 2012, the 2 questions which saw the biggest increase were :-

In most ways my life is close to my ideal. Increased by 18% (16% in 2012)

If I could live my life over, I would change almost nothing. Increased by 17% (15% in 2012)

It may be significant that the same 2 questions showed the biggest increase 2 years running. Perhaps this is linked to the Stoic exercises and reading enhancing the participant's acceptance.

Impact on emotions and related experiences

The SPANE is a 12-item questionnaire includes six items to assess positive feelings and six items to assess negative feelings. For both the positive and negative items, three of the items are general (e.g., positive, negative) and three per subscale are more specific (e.g., joyful, sad). Along with the Life Satisfaction scale, presence of positive and absence of negative emotions forms the other part of Subjective Well-being.

Overall, there was an 8% improvement (9% 2012). There was a slight tendency to reduce negative emotions more than increase emotions (11% decrease compared to 9% increase) but this was less pronounced than last year (12% and 5%)

Amongst, negative emotions, the biggest decrease was for

Angry 13% decrease

Negative 12%

Bad 11%

Impact on Flourishing

The Flourishing Scale is a brief 8-item summary measure of the respondent's self-perceived success in important areas such as relationships, self-esteem, purpose, and optimism. The scale provides a single psychological well-being score. This scale was developed by Ed Diener and associates to measure a broader conception of well-being than purely subjective life satisfaction and presence of positive and absence of negative emotions.

Participants reported on average a 9% increase in Flourishing at end of Stoic week (compared with 10% in 2012).

Participating in Stoic week had most impact on the following components:-

I am optimistic about my future Increased by 18% (16% 2012)

I lead a purposeful and meaningful life Increased by 10% (13% 2012)

These mirrored the items showing the most significant changes in 2012. It appears then that Stoicism has a positive effect on optimism and purpose and meaning.

Analysis of the SABS questionnaires received *after* Stoic week suggests which aspects of Stoicism were most associated with well-being at the end of the week. This provides some clues as to which were the most “active ingredients” of the Stoic week interventions in 2013.

Which aspects of Stoicism were most associated with Life Satisfaction at the end of the week?	Correlation after	Correlation before	Change
<i>I spend quite a lot of time dwelling on what's gone wrong in the past or worrying about the future. (b, reversed item)</i>	-.5	-.47	-.03
I consider myself to be a part of the human race, in the same way that a limb is a part of the human body. It is my duty to contribute to its welfare.(a)	0.30	.22	.08
I make an effort to pay continual attention to the nature of my judgments and actions.(b)	0.28	.28	0
I try to anticipate future misfortunes and rehearse rising above them. (b)	0.26	.16	.1
Peace of mind comes from abandoning fears and desires about things outside our control. (a)	0.25	.11	.14
When an upsetting thought enters my mind the first thing I do is remind myself it's just an impression in my mind and not the thing it claims to represent. (b)	0.25	.27	-.02

Table 8: Highest correlations with Life Satisfaction after Stoic week (n=356, correlation >= .25)

Which aspects of Stoicism were most associated with flourishing at the end of the week?	Correlation after	Correlation after	Change
<i>I spend quite a lot of time dwelling on what's gone wrong in the past or worrying about the future. (b, reversed item)</i>	-0.48	-.47	-.01

I make an effort to pay continual attention to the nature of my judgments and actions.(b)	0.43	.34	.09
I consider myself to be a part of the human race, in the same way that a limb is a part of the human body. It is my duty to contribute to its welfare. (a)	0.37	.31	.06
When an upsetting thought enters my mind the first thing I do is remind myself it's just an impression in my mind and not the thing it claims to represent (b).	0.36	.32	.04
I try to contemplate what the ideal wise and good person would do when faced with various misfortunes in life. (b)	0.35	.26	.09

Table 9: Highest correlations with Flourishing after Stoic week (n=356, correlation >.3)

Which aspects of Stoicism were most associated with balance of positive over negative emotions at the end of the week?	SPANE correlation	Before	Change
<i>I spend quite a lot of time dwelling on what's gone wrong in the past or worrying about the future. (b, reversed item)</i>	-.58	-.58	0
I try to anticipate future misfortunes and rehearse rising above them. (b)	0.33	.08	.25
I try to contemplate what the ideal wise and good person would do when faced with various misfortunes in life. (b)	0.31	.14	.27
When an upsetting thought enters my mind the first thing I do is remind myself it's just an impression in my mind and not the thing it claims to represent. (b)	0.30	.31	-.01
I make an effort to pay continual attention to the nature of my judgments and actions. (b)	0.27	.22	.05
It doesn't really matter what other people think about me as long as I do the right thing. (a)	0.26	.19	.07

Table 10: Highest correlations with positive emotions after Stoic week (n=356, correlation >.25)

In terms of specific emotions, the following attitudes and behaviours were most significant after Stoic week

Contentment

I try to anticipate future misfortunes and rehearse rising above them.	0.27
It doesn't really matter what other people think about me as long as I do the right thing.	0.27

Anger

<i>When an upsetting thought enters my mind the first thing I do is remind myself it's just an impression in my mind and not the thing it claims to represent.</i>	-0.27
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Joyful

I try to contemplate what the ideal wise and good person would do when faced with various misfortunes in life.	0.26
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Happy

I try to contemplate what the ideal wise and good person would do when faced with various misfortunes in life.	0.36
I try to anticipate future misfortunes and rehearse rising above them.	0.33

Sadness

<i>I try to anticipate future misfortunes and rehearse rising above them.</i>	-0.28
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Finally, it is also possible to try to detect changes in which Stoic items during Stoic week led to changes in well-being by looking at the correlations between changes in the SABS scale items per person before and after Stoic week and corresponding changes to their well-being.

It doesn't really matter what other people think about me as long as I do the right thing.	0.32
When an upsetting thought enters my mind the first thing I do is remind myself it's just an impression in my mind and not the thing it claims to represent.	0.25
I make an effort to pay continual attention to the nature of my judgments and actions.	0.24
I try to anticipate future misfortunes and rehearse rising above them.	0.21

Table 11: Correlations of changes in life satisfaction and changes in SABS (n=356, correlation $\geq .2$)

It doesn't really matter what other people think about me as long as I do the right thing.	0.29
When an upsetting thought enters my mind the first thing I do is remind myself it's just an impression in my mind and not the thing it claims to represent.	0.27
I try to anticipate future misfortunes and rehearse rising above them.	0.26
I try to contemplate what the ideal wise and good person would do when faced with various misfortunes in life.	0.20

Table 12: Correlations of changes in flourishing and changes in SABS (n=356, correlation $\geq .2$)

Changes in these five items were strongly associated with changes in well-being; they may well be part of the “active ingredients” for change.

Conclusions

- 1) Stoicism is associated with all aspects of well-being, especially flourishing and also positive emotions and life satisfaction
- 2) Prior to any specific Stoic interventions, Stoic behaviours have a stronger association than attitudes. The most significant behaviours and attitudes in terms of well-being are:-
 - I make an effort to pay continual attention to the nature of my judgments and actions
 - When an upsetting thought enters my mind the first thing I do is remind myself it's just an impression in my mind and not the thing it claims to represent.
 - I consider myself to be a part of the human race, in the same way that a limb is a part of the human body. It is my duty to contribute to its welfare. and
 - *I spend quite a lot of time dwelling on what's gone wrong in the past or worrying about the future (this is a reversed item associated with low levels of well-being)*
- 3) There are some Stoic attitudes and behaviour which, at least prior to Stoic training, are not strongly associated with well-being. These include
 - Virtue (or human excellence) consists in perfecting our rational nature, through cultivating wisdom
 - I often contemplate the smallness and transience of human life in relation to the totality of space and time.

- 4) Stoicism seems somewhat more associated with positive emotions than the absence of negative emotions, and is particularly associated with joy and contentment.
- 5) Participating in Stoic week significantly increased well-being, giving similar results to 2012, but on a larger scale. The Stoic attitudes and behaviours that increased most during Stoic week were :-

- When an upsetting thought enters my mind the first thing I do is remind myself it's just an impression in my mind and not the thing it claims to represent.
- I spend quite a lot of time dwelling on what's gone wrong in the past or worrying about the future.* (reduced)
- I try to anticipate future misfortunes and rehearse rising above them.
- It can sometimes be a good thing to get angry when people are really rude, selfish or inconsiderate.
- If bad things happen to you, you are bound to feel upset
- I try to contemplate what the ideal wise and good person would do when faced with various misfortunes in life.

It is likely that the activities and readings that influenced these were the most “active ingredients”.

Similarly, the following changes Stoic attitudes and behaviours were associated with the largest increases in well-being.

- It doesn't really matter what other people think about me as long as I do the right thing.
- When an upsetting thought enters my mind the first thing I do is remind myself it's just an impression in my mind and not the thing it claims to represent.
- I make an effort to pay continual attention to the nature of my judgments and actions.
- I try to anticipate future misfortunes and rehearse rising above them.
- I try to contemplate what the ideal wise and good person would do when faced with various misfortunes in life.

- 6) One item was highly correlated with well-being but did not change much during Stoic week, namely
- I consider myself to be a part of the human race, in the same way that a limb is a part of the human body. It is my duty to contribute to its welfare.

It is likely that including more readings and exercises which emphasise this aspect of Stoicism could further increase well-being.

- 7) In 2012 an interesting finding was that Stoicism appeared to have a greater impact on some aspects of well-being more than others. By and large these findings have been replicated in 2013. This finding has implications for the possible benefits of Stoicism. For example, Stoicism as one might expect is strong in increasing people's sense of acceptance. Stoicism might have the strongest fit where a sense of acceptance is

importance, e.g. people with long term health conditions, the elderly, people with anger management problems.

C) Satisfaction with Stoic week

Participants rated satisfaction as 7.35 in terms of it fulfilling their hopes (7.2 in 2012) . On average they spent 38 minutes a day on exercises (35 minutes a day in 2012). Overall they gave it 4 out of 5 in terms of improving with knowledge having a slight lead over the other possibilities (3.6 for becoming wiser and a better person, 3.5 for improving relationships)). In 2012 the respective figures were 3.7 and 3.3/3.4.

In appendix B you can find a wide range of feedback on the participants' experiences.

D) Stoic Day

This year an innovation was a one-day event at Birbeck College featuring a round table discussion and workshops. This was well-received and well-attended; further details are to be found in Appendix C.

Limitations of the study

The SABS has not yet fully validated and further work on validating it as an instrument is an important next step. Furthermore, the analysis of SABS is correlational, and correlation does not equal causation. There is always the possibility that other factors are causing both well-being and Stoicism or that high well-being causes high Stoicism.

The research on the well-being questionnaires suffers from most of the same limitation as in 2012, except for the sample being larger and the intention to do a follow up in 2014. These include:-

- Absence of control group.
 - o We do not know how much of the effect is due to being part of an experiment or other placebo features as opposed to being connected specifically with Stoicism.
- Absence of a follow-up.
 - o We do not at present know if the benefits are maintained. However, this year we are planning to carry out a follow-up at 6 months which will inform us about the persistence or otherwise of the benefits of Stoic Week.
- The group was self-selecting.
 - o Presumably this group had a greater interest and sympathy with Stoic ideas than the general population.
- Relatively high drop-out rate.
 - o 85% did not fill in the post-survey questionnaires (compared to 66% in 2012).

Questionnaire	No at start	No at end	% Completed	% Dropout
Satisfaction with Life	2272	352	0.15	0.85
Flourish	2719	371	0.14	0.86
Spane	2193	355	0.16	0.84
Sabs	2441	357	0.15	0.85

Table 13: Dropout rate for each of the questionnaires

Some feedback was obtained from a small group of people who did not complete the second set of questionnaires. This suggests the following

- For some people booklet was too much to take in, and they would like simplified summaries to be made available as well
- emails each day with clear instructions of what to do would enhance engagement
- The font would be easier to read on some devices if it was larger

There was also some (valid) criticism of the questionnaires in that they do not automatically tell you your scores. This is due to limitations of the free service used and this should be addressed before next Stoic week. This will require either development effort using Google forms or expenditure on a paid-for survey service.

Suggestions for future research

The large improvements shown by participants creates a strong case for carrying out further research. Three of the most promising and relatively easy to implement researches are controlled experiments for the most promising Stoic interventions and further development of a Stoic attitude scale and on-line courses.

1) Further development of the SABS

SABS has already yielded significant results. Further development, which ideally should be done before next Stoic week, could include

- a) Re-writing some items in simplified English. Some participants have commented that the scale both assumes knowledge of Stoic jargon (e.g. "impressions") and a high reading age followed by Further feedback from the general public on clarity of the questions
- b) Further feedback from Stoic experts to assesses the comprehensiveness of the scale. Feedback has already been elicited via a Stoic internet group; ideally the current scale could be shown to such a list again and to more academics for comment
- c) Further investigation of its psychometric properties e.g. its test-retest reliability, internal consistency and validity
 - a. Further small-scale testing on people who identify themselves as Stoics to ensure validity (i.e. does it capture Stoic Attitudes and Behaviours)
 - b. Further research on whether there are other scales that measure similar attitudes and behaviours (possibly mindfulness and resilience scales) to further test validity
 - c. Test and retest of subjects without specific interventions in between times to ensure reliability

The findings from this study strengthens the case for further funding to enable these to be carried out.

- 2) Following the example of Positive Psychology, it would be relatively straightforward to conduct further research on the effects of some of the interventions that proved most popular and most effective in this study. Such a study would involve
 - Creating and publicising a web site offering free Stoic activities
 - Asking participants to carry out a specific exercise each day for a week

- Participants would randomly be assigned one of (e.g.) 5 interventions. One should be a control.
- Participants would take questionnaires at the start of the week, at the end of the week and at a suitable follow-up (e.g. 6 months)
- Participants would be given an incentive to complete all questionnaires (perhaps the offer of a £50 book token) which would be given to one person who completed all questionnaires. The Positive Psychology researchers in addition e-mailed or texted reminders at regular intervals which almost certainly increased compliance and alleviated the problem of high drop-outs.

For this study to be more representative of the general public, people who have already taken part in Stoic week would probably best to be excluded. Participants could be found via the internet eg on positive psychology or self-help lists.

As with this study, we would set out various exclusion criteria (e.g. serious mental health problems). Note that each participant would *only* be asked to carry out one intervention each day. They should *not* be taken as part of a “Stoic week” which includes other activities, as this makes it more difficult to tell which activities are having an effect.

- 3) Further uses of the scales during Stoic weeks and on-line training courses. A number of suggestions for improvement of the courses are implied by the SABS results e.g. to focus more on items with high correlation with well-being. Different versions of the courses could be implemented, testing whether changing the course to emphasise items associated with well-being result in higher improvements in well-being.

Appendix A Results from the 3 Well-Being Surveys

1) Changes in Life Satisfaction (SWL survey)

Overall there was a 14 % improvement in Life Satisfaction as follows (last year, 2012, increased by 11%)

____ In most ways my life is close to my ideal. *Increased by 18% (2012 16%)*

____ If I could live my life over, I would change almost nothing. *Increased by 17% (2012 15%)*

____ The conditions of my life are excellent. *Increased by 11% (2012 9%)*

____ I am satisfied with my life. *Increased by 14% (2012 8%)*

____ So far I have gotten the important things I want in life. *Increased by 11% (2012 8%)*

353 people submitted valid questionnaire at the start and end of Stoic Week. 2256 filled in the first questionnaire. 6.5% persisted, 93.5% dropout. This compares with 66% dropout in 2012.

2) Changes in emotions and related experiences (SPANE survey)

Overall, positive emotions increased on average by 9% (2012 5%). Negative emotions decreased on average by 11% (2012 12%).

The results from the Scale of Positive and Negative Experience (SPANE) were as follows:

Positive Experiences and Emotions	Negative Experiences and Emotions
Good Increase 7% (2012 6%)	Unpleasant Decrease 8% (2012 14%)
Positive Increase 8% (2012 6%)	Afraid Decrease 10% (2012 11%)
Contented Increase 12% (2012 5%)	Negative Decrease 12% (2012 10%)
Pleasant Increase 8% (2012 3%)	Sad Decrease 10% (2012 10%)
Happy Increase 9% (2012 3%)	Angry Decrease 13% (2012 8%)
Joyful Increase 12% (2012 1%)	Bad Decrease 11% (2012 7%)

3) Changes in overall well-being (Flourishing scale)

Overall there was a 9% (10% in 2012) increase in flourishing, as follows:-

I am optimistic about my future *Increased by 18% (16%)*



I lead a purposeful and meaningful life *Increased by 10% (13%)*

I am engaged and interested in my daily activities *Increased by 10% (11%)*








My social relationships are supportive and rewarding *Increased by 10% (9%)*
People respect me *Increased by 5% (9%)*
I actively contribute to the happiness and well-being of others *Increased by 8% (8%)*
I am competent and capable in the activities that are important to me *Increased by 5% (8%)*
I am a good person and live a good life *Increased by 8% (8%)*

Appendix B Report from Living Like A Stoic 2013 - Your Overall Experience

2) Are you male or female?












		Response (%)	Responses
Male		51.49	207
Female		48.51	195
Answered Question			402
Skipped Question			0

3) How old are you?

		Response (%)	Responses
20 years old or younger		3.24	13
21-30 years old		16.96	68
31-40 years old		18.45	74
41-50 years old		19.20	77
51-60 years old		25.69	103
61-70 years old		14.46	58
71 years old or older		2.00	8
Answered Question			401
Skipped Question			1

*6) On a scale of 0-10 to what extent did you get what you hoped for out of Stoic week?

Average: 7.35/10
Response (%) Responses

0		0.25	1
1		0.25	1
2		1.24	5
3		2.99	12
4		2.74	11
5		7.96	32
6		10.70	43
7		20.90	84
8		27.86	112
9		11.94	48
10		13.18	53
Answered Question			402
Skipped Question			0

7) The audio recordings For each audio recording suggested at <http://blogs.exeter.ac.uk/stoicismtoday/2013/11/24/audio-recordings-for-stoic-week-2013/> a)if you did not do it, leave blank b)If you did it, how stars would you give it?

	1	2	3	4	5	Responses	Total	Average/5
Morning meditation routine	3.20%	3.65%	26.94%	42.47%	23.74%	219	832	3.8
Evening meditation routine	2.70%	4.86%	24.86%	39.46%	28.11%	185	713	3.9
Morning meditation routine (exercise only)	3.57%	2.38%	25.00%	38.10%	30.95%	168	656	3.9
Evening meditation routine (exercise only)	3.73%	4.97%	21.74%	38.51%	31.06%	161	625	3.9
Stoic Mindfulness and Premeditation Exercise	4.14%	3.45%	17.93%	40.69%	33.79%	145	575	4.0

The View from Above Exercise	6.90%	4.83%	15.17%	32.41%	40.69%	145	573	4.0
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9) Please rate each of the following exercise/activity suggested in booklet. If you did not a particular exercise, leave that answer blank

	1	2	3	4	5	Responses	Total	Average/5
Early Morning Meditation	1.53%	4.59%	16.51%	40.67%	36.70%	327	1329	4.1
Late Evening Meditation	1.56%	4.05%	16.82%	41.12%	36.45%	321	1306	4.1
Stoic self-monitoring record	8.53%	13.27%	26.07%	26.07%	26.07%	211	734	3.5
Monday lunchtime exercise: What's in our Power? (what do we and dont we have control over)	1.60%	1.60%	10.86%	34.50%	51.44%	313	1354	4.3
Tuesday's Lunchtime Exercise: Stoic Simplicity (simple food etc, focus on own conduct)	1.67%	4.67%	20.67%	38.33%	34.67%	300	1199	4.0
Wednesday's Lunchtime Exercise: Stoic Acceptance & Stoic Action (serenity prayer)	1.03%	3.42%	13.70%	42.81%	39.04%	292	1213	4.2
Thursday's Lunchtime Exercise: The Practice of Stoic Mindfulness (awareness of judgements and impressions)	1.06%	2.11%	14.44%	39.08%	43.31%	284	1197	4.2
Friday's Lunchtime Exercise: Controlling Emotions (premeditation of possible future adversities)	3.93%	5.36%	21.07%	35.71%	33.93%	280	1093	3.9
Saturday's Lunchtime Exercise: Philanthropy (concentric circles)	2.67%	6.11%	19.47%	40.46%	31.30%	262	1026	3.9

Sunday's Lunchtime Exercise: The View from Above	3.04%	6.08%	14.83%	37.26%	38.78%	263	1059	4.0
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13) On average how long did you spend on being a Stoic each day in the last week ?

Average 38 minutes per day


		Response (%)	Responses
Less than five minutes		3.05	12
5 minutes - 15 minutes		15.01	59
15-30 minutes		23.41	92
30 minutes to 45 minutes		22.65	89
45 minutes to an hour		13.49	53
More than an hour		22.39	88

14) How much do you think Stoic week has helped you

	1	2	3	4	5	Response s	Total	Average/ 5
Relationships (friendships, getting on with people)	6.94%	11.94%	27.78%	34.72%	18.61%	360	1246	3.5
Becoming a better person	5.21%	9.32%	28.49%	36.44%	20.55%	365	1306	3.6
Becoming wiser	5.26%	10.80%	27.70%	33.52%	22.71%	361	1291	3.6
Your knowledge of Stoicism	2.67%	5.08%	18.98%	32.35%	40.91%	374	1510	4.0
Overall	4.36%	3.54%	21.53%	46.32%	24.25%	367	1404	3.8

17) Has Stoic week made you want to learn more about Stoicism?

		Response (%)	Responses
Yes		93.28	375
No		4.23	17

No Answer		2.49	10
Answered Question			392
Skipped Question			10

18) How would you rate the free downloadable booklet associated with the Stoic project?

	1	2	3	4	5	Responses	Total	Average Rating (/5)
Easy to follow	0.54%	1.61%	11.02%	30.11%	56.72%	372	1640	4.4
Well structured	0.54%	0.81%	12.43%	33.24%	52.97%	370	1618	4.4
Useful information	0.54%	0.54%	8.09%	31.00%	59.84%	371	1666	4.5

21) How would you rate the Exeter Stoic website <http://blogs.exeter.ac.uk/stoicismtoday/>

1	2	3	4	5	Responses	Total	Average /5
1.23%	5.54%	23.38%	41.54%	28.31%	325	1268	3.9

Appendix C Report feedback questionnaires from the ‘Stoic for Everyday Life’ event, London 30th November 2013 (by Keith Stewart)

There were 107 filled-in questionnaires from the event. There follows the responses to each question and a selection of the qualitative feedback.

How did you hear about today?

Internet (29.91%),
Family or Friends (20.56%),
London Philosophy Group (20.56%),
Facebook (11.21%),
Other (10.28%)
Birkbeck (7.48%),

Note:

The internet category incorporates the following: Eventbrite Website, Google Search, Stoicism Today Blog and Twitter.

The London Philosophy Group category includes meetup.com.

Finally, the ‘Other’ category incorporates: The Spectator, Jules Evan's Newsletter, LinkedIn, Posters (Underground), The Guardian, Radio 4, John Sellers (Philos-L), Conversation with Jules and Conversation with John Sellers.

How would you rate it?

Excellent (47.66%), Very Good (33.64%), Good (16.82%), Satisfactory (1.87%), Poor (0%)

Note: Where people had circled more than one answer, I used the one which was the most negative. For example if someone had circled both ‘Very Good’ and ‘Good’, the response was classed as ‘Good’. This only occurred in a handful of cases.

What did you like best about the event?

Stimulating* (44.86%),
Panel and Roundtable Discussion (20.56%),
Workshops (27.10%),
Applied Philosophy (6.54%),
No Response (0.93%)

*The 'Stimulating' category covers a wide range of responses ranging from liking everything to the event being motivating to find out more about Stoicism.

Did the day give helpful advice for your daily life?

Yes (71.03%), Positive Response (19.63%), No (2.80%), Negative Response (0.93%), No Response to the Question (5.61%)

Which afternoon workshops did you attend?

Putting Stoicism into Practice in Daily Life (24.30%),
Stoic Mindfulness (21.50%)
Guided Stoic Practices (15.89%),
Stoicism and Christianity (11.68%),
Stoicism in the Workplace (11.68%),
Stoicism and Positive Psychology (7.94%),
Stoicism in Schools (3.74%)

Selection of comments

Thank you very much I really appreciated the range of speakers, and everyone's enthusiasm.'

'... As an AHRC funded PhD student, I'm very impressed on the momentum this project has gained, it is exemplary. Thank you all for an utterly thought provoking and an idea rich day. ...'.

'Thank you so much for your endeavour and generosity. I appreciate and respect all your skills and learning.'

'Really good day for wide audience.'

'I am not really into Stoicism. Nevertheless I found today interesting.'

'In all a very good day. I had some interesting conversations with participants.'

'Thank you! You're keeping philosophy alive and I for one am very grateful indeed.'

'Thanks to all of you for organising this event and giving the benefit of your expertise.'

'Thoroughly enjoyable, felt happier!'

'It made me decide I will never call myself a Stoic although many of the practices are useful.' x

'I would like to see this event being repeated next year.'

'Thank you for everything! A really inspiring and fascinating day spent well. Will keep in touch.'

'Loved the whole day, very glad I came.'

ⁱ I would like to thank Keith Stewart for help with correlation of the SABS data and the whole of the team for their help with producing this report. Donald Robertson deserves a special mention having a particularly key role in the development of the SABS.