Report on Stoic Week 2020   Tim LeBon and Greg Lopez

The ninth annual Stoic Week took place in October 2020. This year's theme was: *Stoicism during a Pandemic: Care for Ourselves, Others and our World*.

From a research perspective we were investigating 3 questions:

1) Is Stoicism a good life philosophy for lockdown?
2) Can we predict who will benefit most from Stoic Week?[i]
3) What is the relationship of Epictetus's "3 disciplines " to well-being and to Stoicism as measured by the SABS?

This report provides answers to these three questions. Details of the course contents, measures used and further statistical findings are provided in the appendices.

1)Is Stoicism a good life philosophy for lockdown?

There were significant improvements in the well-being of participants over the course of Stoic Week.

	Life Satisfaction	Flourishing	Positive Emotions	Negative Emotions
Change	13% Increase	11% Increase	11% Increase	19% reduction

Table 1: Impact of taking part in Stoic Week

Other findings of note

- Participants degree of Stoicism (as measured by SABS) increased by 9%
- Participants' stated their knowledge of Stoicism as having increased by 24%
- Participants' identifying themselves as a Stoic increased by 16%
- There was a significant change in scores on some personality traits, especially emotional stability (18% increase), agreeableness and conscientiousness, but no significant change in openness to experience or extraversion. (see appendix C for more details)

- Some of the Stoic Attitudes and Behaviour Scale (SABS) items most related to well-being (#48 and #33) improved by very significant amounts, as shown in table 2 below.

#	Statement	% Change
48	Even when I can't do anything more about a problem I still worry about it a lot.	28
33	I spend quite a lot of time worrying about the future.	23
3	If bad things happen to you, you are bound to feel distressed.	21
19	I spend quite a lot of time dwelling on what has gone wrong in the past.	20
23	I cannot really be harmed by what other people say.	19
45	Every day I spend some time thinking about how I can best face challenges in the day ahead.	18
4	Having good understanding and good character is all that is required in order to be happy.	17
8	Bad luck could stop me being happy.	17
39	It is right to feel intense and overwhelming grief after a significant loss	17
38	When a negative thought enters my mind, I remind myself that it is just an interpretation of the situation.	17

Table 2 – SABS items with the biggest improvement

The top 4 items are strongly connected with Stoic management of the emotions.

The qualitative feedback given at the end of Stoic Week were also very positive.

Sample comments from Participants at end of Stoic Week 2020

Just want to thank you for offering the course. It has been so helpful to me in this time of … uncertainty pain and challenge.
It was wonderful and it taught me a lot about self control.
Well researched with depth of knowledge to a historic way of thinking!
This has been a fabulous free course and resource. The exercises are easy to follow and incorporate in my daily life.
Excellent experience.
Very helpful and thought provoking

How did Stoic Week 2020 compare with previous Stoic Weeks?

Stoic Week has consistently led to significant improvements in well-being since its inception in 2012, so a key question we were interested in is – was Stoic Week *more* beneficial in 2020 than in previous years?

	Stoic Week 2020	Stoic Week 2019	Stoic Week 2018	Stoic Week 2017	Stoic Week 2016	Stoic Week 2015	Stoic Week 2014
Increase in Flourishing	11%	7.5%	8%	10%	10%	10%	10%
Increase in Satisfaction with Life	13%	11.5%	12%	14%	15%	15%	16%
Increase in Positive Emotions	11%	9.5%	9.5%	11%	10%	10%	11%
Reduction in Negative Emotions	19%	17%	14%	14%	14%	14%	16%
Increase In Stoic Attitudes and Behaviours	9%	8%	10%	9%	11%	13%	12%
No of participants at start	1608	1725	3702	2870	1803	2503	1953
Valid questionnaires completed at end	527	416	852	689	270	726	566
Completion Rate	30%	24%	23%	24%	15%	29%	29%

Table 3 Overall Findings Stoic Week 2020 - Impact of taking part in Stoic Week

It can be seen that Stoic Week 2020 showed improvements over 2019 and 2018 in terms of most measurements. For example, flourishing increased by 11% - the highest ever and a nearly 50% increase on 2019. Life satisfaction and positive emotions also increased by more than in 2019 and negative reductions, which had decreased by a record 17% in 2019, increased even more (19%) in 2020.

It would however be premature to conclude from this that Stoicism works *better* in lockdown than in normal times. The changes could also be partly attributed to random

variations or to changes in the delivery of the course this year. The [course content] was very similar to 2019, with additional lockdown-related examples being added. However there were 2 enhancements that may have improved the efficacy of the course.

- As requested by many participants, a reminder of the day's materials were sent once a day by email as a "prompt"
- Short instructional videos related to course material were provided for each day

These 2 enhancements may be partly responsible for the improved completion rates, which increased from 24% to 30% , i.e. an increase in 25%. Again, we cannot be certain whether this improvement was due to the above enhancements or due to the different conditions caused by the pandemic or both [ii].

2)Can we predict who will benefit the most from Stoic Week?

We also dove into some demographic and personality data to see if we could discover whether some people benefited more from Stoic Week 2020 than others.

In terms of personality traits, we found people who started Stoic Week 2020 with lower conscientiousness and lower emotional stability (the opposite of neuroticism) benefited more from Stoic Week than those who started Stoic Week with higher levels of these two traits. More specifically, conscientiousness and stability were quite highly predictive of Flourishing improvement over the course of Stoic Week and moderately predictive of improvement in life satisfaction.

However, the other three personality traits we measured (openness to experience, extraversion, and agreeableness) didn't really affect how much people got out of Stoic Week.[iii]

People who put in more time seemed to get a bit more benefit for life satisfaction (SWL) and emotions (SPANE), but not flourishing. However, the relationship was very weak.[iv]

Finally, some demographic variables had some effect on the outcomes while others didn't. Gender had no association with any outcome. However, younger people tended to get slightly more benefit, as did people who participated in fewer Stoic Weeks in the past. [v]

3)What is the relationship of Epictetus's "3 disciplines" to well-being and to Stoicism as measured by the SABS?

The 3 Disciplines (or topics) (*topoi*)' found in Epictetus's *Discourses* were used by Epictetus as a pedagogic device for teaching Stoicism. Many modern Stoics including Pierre Hadot, Donald Robertson, Massimo Pigliucci, Greg Lopez and Ryan Holiday have emphasised the 3 disciplines in their presentations of Stoicism.

The 3 disciplines are

- The discipline of desire (or will)– concerned with Stoic acceptance and with having the appropriate desires and aversions
- The discipline of action - concerned with doing the right things and with virtue, duty and philanthropy.
- The discipline of assent (sometimes called perception or judgement)– concerned with Stoic mindfulness of how we perceive and judge things

Pigliucci & Lopez created a scale (here called the "Three Disciplines Scale") to measure each discipline and to give a total score. In Stoic Week 2020 we measured participants on each scale at the beginning and end of Stoic Week. We could therefore answer these 3 questions

1) How much each discipline (as measured by the Scale) is associated with well-being and the SABS

Scale	SWL	SPANE	Positive Emotions	Negative Emotions	Flourish	SABS
Discipline of assent	0.3	0.3	0.3	0.2	0.4	0.5
Discipline of action	0.4	0.4	0.3	0.3	0.5	0.5
Discipline of desire	0.3	0.4	0.3	0.4	0.4	0.5
3 disciplines (total)	0.4	0.4	0.4	0.4	0.5	0.6

Table 4 Correlations between 3 Disciplines scales and well-being and SABS scale at the start of Stoic Week 2020

As can be seen in table 4, there was a moderate association between each of the 3 disciplines and each well-being measure. Unsurprisingly, the discipline of action had a fairly high correlation with Flourishing and Satisfaction with Life (SWL). Less predictable was the relatively low correlation between the discipline of assent with negative emotions. There was also a moderate to high correlation between the 3 disciplines and the SABS, providing some support for the scale's validity

2) Does Stoic Week improve people's scores in each of the 3 Disciplines?
   Each of the three disciplines showed significant increase as a result of Stoic Week as shown in table 5. The discipline of desire increased the most. This suggest that Stoic Week does help people progress in each area.

Discipline of:	Desire	Action	Assent
% Increase	13.6	8.6	9.5

Table 5 Changes in 3 disciplines scores during Stoic Week 2020

3) Do changes in any of the 3 disciplines predict changes in well-being?

Finally, it is interesting to see how changes in the 3 disciplines relate to changes in well-being over the course of Stoic Week.

	Emotions	Negative Emotions	Positive Emotions	Life Satisfaction	Flourish
3 Disciplines Total	0.39	0.37	0.30	0.33	0.43
Discipline of Desire	0.31	0.31	0.22	0.26	0.34
Discipline of Action	0.30	0.30	0.21	0.29	0.32
Discipline of Assent	0.26	0.22	0.24	0.19	0.29
SABS	0.45	0.38	0.40	0.36	0.53

Table 6 Correlations of changes during Stoic Week 2020

Table 6 shows the correlation between changes in each of the 3 disciplines, the 3 disciplines total and the SABS with changes in each of the well-being scales. The higher the figure, the more a change is well-being has been associated with a change in the scale. For example, changes in the discipline of desire have a .31 association with changes in emotions.

It can be noted that

- Each of the 3 disciplines has a moderate association with changes in well-being
- There is no clear "winner" amongst the 3 disciplines in terms of impact on well-being
- The SABS has a somewhat higher association with changes in well-being than the three disciplines

Conclusions

1) People benefitted somewhat more from Stoic Week during the pandemic than in more normal times. This is consistent with the findings of SMRT from earlier in 2020[vi]. It does not surprise us that Stoicism is particularly suited for a pandemic and so we would encourage organisations and individuals to run Stoic courses to aid resilience at such times. It should be added that the positive results from previous Stoic Weeks would lead us to the conclusion that "Stoicism is not just for a pandemic it is for life".

2) The innovations of including daily e-mail prompts and short instructional videos may have in part been responsible for improved completion rates and should be retained.
3) There is a case for pre-screening people to see who would benefit most. These would include younger people, those who haven't done Stoic Week before and those having low starting conscientiousness and emotionality stability.
4) The 3 Disciplines Scales provides a useful brief measurement tool. Each of the 3 disciplines is correlated with well-being, with the discipline of desire having the strongest association. Changes in well-being appear equally associated with changes in each of the 3 disciplines.

Appendices

Appendix A Course Content

Stoic Week is an e-learning programme developed by the Modern Stoicism team. In 2020 the training consisted of a booklet, available on-line and also in pdf form and also short instructional videos and a discussion groups on Teachable. It was facilitated by Tim LeBon.

Participants are invited to "live like a Stoic" for a week, undertaking an e-learning course and potentially interacting with other students through on-line forums. As well as providing a useful resource for participants who wish to learn about how to practice Stoicism, this and other Modern Stoicism programmes are aimed at increasing what we know about the potential benefits of Stoicism. To this end, participants were asked to fill in a set of questionnaires at the beginning and end of the course. These included the SABS 5.0, a questionnaire designed by the Modern Stoicism team to measure someone's degree of Stoicism and3 standard well-being questionnaires we have used in previous Stoic Weeks . 2 questionnaires used for the first time by us in Stoic Week 2020 – the TIPI which measures the "big 5" personality traits and the short Stoicism Scale devised by Pigliucci and Lopez in their *Handbook for New Stoics* which we are referring to as the "Three Disciplines Scale" since it is based around the 3 Disciplines of Epictetus. We were also interested in looking at ways to increase engagement and retention as this has been identified as it is important that courses engage as many participants as possible. Unless participants, opted out of email communication, they were emailed the contents of the day at the beginning of the day. The short instructional videos provided each day were also an innovation in Stoic Week 2020.

STOIC WEEK 2020 – DAY BY DAY

MONDAY: PROGRESS | TUESDAY: HAPPINESS | WEDNESDAY: VIRTUE | THURSDAY: COMMUNITY

FRIDAY: EMOTIONS | SATURDAY: RESILIENCE | SUNDAY: NATURE

Daily exercises included:-

- Reading morning text for reflection
- Morning Meditation (4 min)
- Stoic Mindfulness throughout the day
  - Stoic self-monitoring record sheet
  - Instruction to observe thoughts, acts and feelings throughout the day
- Midday exercise
- Stoic Evening meditation (6 mins)
- Evening text for reflection

Also an optional

- Stoic Attitude Meditation audio recording (15 mins)

Appendix B Demographics

Gender

Gender	No	%
Male	971	57
Female	706	42
Other	11	.6
Decline to state	10	.6

Table B 1- Gender

Stoic Week comprised 57% male and 42% female.

My main reasons for taking part in the course are

Why did people take part in Stoic Week?

The above Wordcloud indicates that people wanted to learn about Stoicism so they understood it and could practice it in their daily life.

Where did Stoic Week 2020 participants live?

Country	Number	%
United States	578	34.0%
United Kingdom	333	19.6%
Canada	163	9.6%
Australia	57	3.4%
Netherlands	49	2.9%
Spain	44	2.6%
Germany	40	2.4%
Ireland {Republic}	25	1.5%
Mexico	23	1.4%
Poland	22	1.3%
France	20	1.2%
Greece	18	1.1%
Sweden	18	1.1%
Austria	14	0.8%
Philippines	14	0.8%
India	13	0.8%
Portugal	13	0.8%
Brazil	12	0.7%
New Zealand	12	0.7%
Romania	12	0.7%
Norway	11	0.7%
Russian Federation	11	0.7%
Argentina	10	0.6%
Peru	10	0.6%
Belgium	9	0.5%

Indonesia	9	0.5%
Switzerland	9	0.5%
Ukraine	9	0.5%
Singapore	8	0.5%
Italy	7	0.4%
Belarus	6	0.4%
Finland	6	0.4%
Hungary	6	0.4%
Japan	6	0.4%
Chile	5	0.3%
Lithuania	5	0.3%

Table B2 - Countries taking part in Stoic Week

Following patterns observed in previous years, most participants came from USA, UK and Canada.

Knowledge of Stoicism

Participants were asked to rate their knowledge of Stoicism at the start and end of Stoic week from 0 (none) 1(Novice), 2 (I know a bit) 3 (I know quite a lot but am not an expert) 4 expert)

At the start of Stoic Week they rated themselves as follows, with an average score of 1.9 (between Novice and "I know a bit")

At the end of Stoic Week they rated themselves as follows, with an average score of 2.3 (between "I know a bit" and "I know quite a lot but am not an expert") an increase of 25%

How would you describe your prior knowledge of Stoicism?

.700 Responses

Answer	Count	Percent
0	115	6.77%
1	434	25.56%
2	774	45.58%
3	362	21.32%
4	13	0.77%

How much did participants identify with being a Stoic?

Participants were asked "To what extent do you consider yourself to be a Stoic?" at the start and end of Stoic Week

Definitely not a Stoic

More not a Stoic than a Stoic

Neutral or I don't know

I am more a Stoic than not a Stoic

I consider myself to be a Stoic

At the start of Stoic Week the scores were

Answer	Count	Percent
0	90	5.30%
1	187	11.01%
2	603	35.51%
3	655	38.57%
4	163	9.60%

The average score at the start of Stoic Week was 2.4 and at the end 2.8 (moving nearer "Neutral" to "I am more a Stoic than not a Stoic" an increase of 18%

How long did people spend each day doing Stoic Week?

Participants were asked how long on average they spent on Stoic Week – the average was just under 30 minutes a day.

How highly did participants rate Stoic Week 2020?

People were asked to rate Stoic Week on a rating 0-10. The average rating was 8.3

The TIPI is a 10-item measure of the Big Five (or Five-Factor Model) dimensions.

"Big 5" personality traits of Extraversion, Agreeableness , Conscientiousness, Emotional Stability & Openness to Experience

Here are a number of personality traits that may or may not apply to you. Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other.

1 = Disagree strongly

2 = Disagree moderately

3 = Disagree a little

4 = Neither agree nor disagree

5 = Agree a little

6 = Agree moderately

7 = Agree strongly

I see myself as:

1. _____ Extraverted, enthusiastic.

2. _____ Critical, quarrelsome.

3. _____ Dependable, self-disciplined.

4. _____ Anxious, easily upset.

5. _____ Open to new experiences, complex.

6. _____ Reserved, quiet.

7. _____ Sympathetic, warm.

8. _____ Disorganized, careless.

9. _____ Calm, emotionally stable.

10. _____ Conventional, uncreative.

TIPI scale scoring ("R" denotes reverse-scored items):

Extraversion: 1, 6R; Agreeableness: 2R, 7; Conscientiousness; 3, 8R; Emotional Stability: 4R, 9; Openness to Experiences: 5, 10R.

Reference

Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2003). A Very Brief Measure of the Big Five Personality Domains. *Journal of Research in Personality, 37, 504-528.*

Trait	Extraversion	Agreeableness	Conscientiousness	Emotional Stability	Openness to Experiences
% Increase	0.0	13	12	18	3
Start Score	7.2	9.7	10.4	8.7	10.9
End Score	7.2	11.0	11.7	10.3	11.3

Table C1 – Changes in personality traits during Stoic Week

We observed a significant increase in emotional stability, conscientiousness and agreeableness over Stoic week but no significant change in openness to experience or extraversion.

This scale was devised by Massimo Pigliucci and Greg Lopez for their book A Handbook for New Stoics (52 Week by Week Lessons) published in 2019.

Used with permission of the authors.

Below are 9 statements.
Using the scale below, indicate the extent to which you agree with each statement .
If the statement doesn't describe you at all , select the circle at the extreme left of the line.
If the statement describes you perfectly, select the circle at the extreme right.
If you are between the two extremes, pick an intermediate circle that best describes where you stand.
Please answer according to what you actually do and what you actually think rather than what you think you ought to do or ought to think.

1*.I get really upset when I don't get what I want or things don't go my way

2*.I put a lot of effort into avoiding things I don't like or that I'm afraid of

3*.I spend a lot of time pursuing comfort and pleasure

4*.I tend to act impulsively, on the basis of my initial urges without questioning them

5*.I shy away from my responsibilities in life

6*.I can be selfish, and don't care much about other people's well-being

7*.I rarely notice what I'm thinking throughout the day

8*.I'm not very aware of my emotions and urges at any given moment.

9*.I usually take my thoughts and feelings as a given, without stopping to question them.

Questions 1-3 relate to the discipline of desire, 4-6 to the discipline of action and 7-9 to the discipline of assent.

All the items are reverse-scored, as indicated by an asterisk above, so for example a high score on question 1 "describes me perfectly" would indicate a low rating for the discipline of desire.

Appendix E Stoic Attitudes and Behaviour Scale 5.0 (SABS 5.0)

#	Item	Reversed?	Average adjusted score start of Stoic Week 2020	% increase by end of Stoic Week 2020
1	I think about my life as an ongoing project to become a better person.	No	6.2	4.2
2	It can sometimes be a good thing to become angry at people.	Yes	4.4	10.8
3	If bad things happen to you, you are bound to feel distressed.	Yes	3.7	20.5
4	Having good understanding and good character is all that is required in order to be happy.	No	4.7	17.4
5	Viewing other people as fellow-members of the brother/sisterhood of humankind helps me to avoid feeling angry and resentful.	No	5.5	9.1
6	The universe is benevolent in its overall plan.	No	4.0	12.8
7	I regularly spend time reflecting on what is most important to enable me to live a good and happy life.	No	5.3	11.8
8	Bad luck could stop me being happy.	Yes	4.4	17.3
9	I do the right thing even when I feel afraid.	No	5.1	10.1
10	It is my duty to help others.	No	5.8	5.9
11	Sometimes a controlled experience of anger can be helpful in resolving conflicts with others	Yes	3.6	10.3
12	I usually do the right thing.	No	5.6	7.2
13	I do not act on urges when it would be unwise to act on them	No	5.0	10.7
14	I am committed to helping humanity in general.	No	5.6	7.2
15	I treat everyone fairly.	No	5.5	7.6
16	To flourish as a human being all you need is good character and understanding of what really matters in life	No	5.3	11.5
17	If things don't go well for my friends, I can't lead a good life.	Yes	5.2	1.8

18	I take active steps to reduce the suffering of others.	No	5.1	9.5
19	I spend quite a lot of time dwelling on what has gone wrong in the past.	Yes	4.0	19.6
20	It is possible to lead a happy life even after the death of someone we love.	No	5.9	5.3
21	The universe embodies wisdom.	No	4.6	8.3
22	When making an important decision I ask myself "What really matters here?"	No	5.6	9.3
23	I cannot really be harmed by what other people say.	No	4.8	18.7
24	The universe is a living thing.	No	5.0	4.6
25	I need quite a lot of money in order to be happy.	Yes	5.2	7.5
26	When I have a problem, I am good at taking constructive action in a timely manner.	No	5.1	9.6
27	We can't really control other people.	No	6.3	3.9
28	There is a rational and orderly plan in the universe and in the causes of events.	No	3.7	16.4
29	When making a significant decision I reflect on what a good role model would do.	No	4.7	11.9
30	Nothing except our judgements and voluntary actions are truly under our control in life.	No	6.2	5.5
31	I pay attention to my judgements about good or bad things or people as I am making them.	No	5.2	11.1
32	I need to be well thought of by others in order to be happy.	Yes	4.5	16.0
33	I spend quite a lot of time worrying about the future.	Yes	3.8	22.6
34	It is good to think about life as an ongoing journey towards becoming a better person.	No	6.3	3.4
35	I am committed to helping my friends.	No	5.8	5.0
36	I pay attention to my thoughts about what I intend to do before I act on them.	No	5.3	10.1
37	I want to become a better person ethically.	No	6.5	1.9
38	When a negative thought enters my mind, I remind myself that it is just an interpretation of the situation.	No	4.8	16.6
39	It is right to feel intense and overwhelming grief after a significant loss	No	2.7	16.7

40	I view other people as fellow-members of the brother/sisterhood of humankind.	No	5.6	6.3
41	If things don't go well for me, I can't lead a good life.	Yes	5.0	8.4
42	I can't control how I feel.	Yes	5.0	10.5
43	I need to be in good health in order to be happy.	Yes	4.1	13.7
44	I am committed to helping my family.	No	6.2	2.5
45	Every day I spend some time thinking about how I can best face challenges in the day ahead.	No	4.8	17.7
46	Our voluntary actions are among the only things truly under our control in life.	No	6.0	5.8
47	As long as you have the right attitude, you can lead a good life even in the most difficult circumstances.	No	5.9	6.8
48	Even when I can't do anything more about a problem, I still worry about it a lot.	Yes	3.6	28.3
49	I care about the suffering of others	No	5.9	3.5
50	I often do what I feel like doing rather than doing what I believe to be the right thing.	Yes	4.8	12.8
51	Our judgements are amongst the only things truly under our control in life.	No	5.9	7.0
52	I see my happiness as fully compatible with caring for other people.	No	5.7	6.8
53	The best idea is to give up trying to control people and instead focus on our own actions and our judgements and character.	No	6.4	3.3
54	There is no overall plan to the universe.	Yes	3.5	14.2
55	I think about what the ideal wise and good person would do when faced with misfortunes in life.	No	4.8	12.1
56	If things don't go well for my family, I can't lead a good life.	Yes	4.5	12.7
57	I am committed to helping in my local community.	No	5.0	10.5
58	It does not help me to get angry	No	5.9	4.7
59	It is possible to lead a happy life even when we have lost success or wealth.	No	5.7	6.5
60	We can sometimes influence how others behave, but we can't completely control other people.	No	6.3	1.5

	Total Score		306->335	9%

Table E1 - Stoic Week participant scores for SABS 5.0

<u>Instructions to Stoic Week participants</u>

For each of the above items, please mark on a 7-point Likert scale whether you agree with it from Strongly Agree (7) to Strongly disagree (1) as follows:

Strongly Agree 7

Agree 6

Slightly Agree 5

Neither agree or disagree 4

Slightly disagree 3

Disagree 2

Strongly Disagree 1

Please respond according to what you yourself think, not what you think the answer ought to be or what you ought to think.

<u>SCORING</u>

To obtain the scores for reverse-coded items, subtract the score from 8 (e.g., a score of 7 becomes 1).

The higher the score, the more Stoic your attitudes and beliefs are. The possible scores range from 60 (minimum Stoic) to 480 (maximum Stoic).

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).

Question	Theme
Q1. In most ways my life is close to my ideal	Life is ideal
Q2. The conditions of my life are excellent	Externals met
Q3. So far, I have got the important things I want in life.	Needs met
Q4. I am satisfied with my life	Satisfaction
Q5. If I could live my life over, I would change almost nothing	Acceptance

Using a 1-7 Likert scale, users score between 35 (extremely satisfied) and 5 (extremely dissatisfied)

#	Item	Average score start of Stoic Week 2020	% change at end of Stoic Week 2020
1	In most ways my life is close to my ideal.	4.6	14
2	The conditions of my life are excellent	5.0	11
3	So far, I have got the important things I want in life	5.0	11
4	I am satisfied with my life	4.9	12
5	If I could live my life over, I would change almost nothing	3.8	21
	All Items	23.2	13

Table F1 - Stoic Week 2020 participant scores for Satisfaction with Life

The SWL scale was developed by Ed Diener, Robert A. Emmons, Randy J. Larsen, and Sharon Griffin as noted in the 1985 article in the *Journal of Personality Assessment*. See http://internal.psychology.illinois.edu/~ediener/SWLS.html

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 the presence of positive and absence of negative emotions.

#	Flourishing Scale Item	Average score start Stoic Week 2020	% change at end of Stoic Week 2020
1	I lead a purposeful and meaningful life.	4.9	14
2	My social relationships are supportive and rewarding.	5.0	11
3	I am engaged and interested in my daily activities.	5.1	12
4	I actively contribute to the happiness and well-being of others.	5.2	10
5	I am competent and capable in the activities that are important to me	5.5	9
6	I am a good person and live a good life.	5.4	10
7	I am optimistic about my future.	5.2	15
8	People respect me.	5.3	8
	All Items	41.5	11

Table G1 - Stoic Week 2020 participant scores for Flourishing

Reference: Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D., Oishi, S., & Biswas-Diener, R. (2009). New measures of well-being: Flourishing and positive and negative feelings. *Social Indicators Research, 39*, 247-266.
http://internal.psychology.illinois.edu/~ediener/FS.html

Appendix H: The Scale of Positive and Negative Emotions (SPANE)

The SPANE is a 12-item questionnaire that includes six items to assess positive feelings and six questions to assess negative emotions. 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, the presence of positive and absence of negative emotions forms the other part of Subjective Well-being. Users are asked to select a number between 1 (very rarely or never) and 5 (very often or always) to indicate how often they have experienced the emotion in the last 4 weeks.

#	SPANE Scale Item	Average score at start of Stoic Week 2020	% change at end of Stoic Week 2020
1	Positive	3.8	12
2	Negative	3.6	-21
3	Good	-3.0	9
4	Bad	3.6	-21
5	Pleasant	-2.6	9
6	Unpleasant	3.6	-21
7	Happy	-2.6	11
8	Sad	3.4	-18
9	Afraid	-2.6	-18
10	Joyful	-2.4	11
11	Angry	3.1	-21
12	Contented	-2.6	14
	SPANE POSITIVE ITEMS	20.7	11
	SPANE NEGATIVE ITEMS	-15.9	-20
	All Items	4.8	(135%)

Table H1 - Stoic Week participant scores for SPANE

Reference: Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi. D., Oishi, S., & Biswas-Diener, R. (2009). New measures of well-being: Flourishing and positive and negative feelings. *Social Indicators Research, 39*, 247-266.
http://internal.psychology.illinois.edu/~ediener/SPANE.html

Scale	SWL	SPANE	Positive Emotions	Negative Emotions	Flourish	3 Disciplines Total	SABS	Discipline of desire	Discipline of Action	Discipline of Assent	Extraversion	Agreeableness	Conscientiousness	Emotional Stability	Openness to Experiences
Stoic identity	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.0	0.2	0.2	0.3	0.1
Stoic experience	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	-0.1	0.1	0.1	0.1	0.0
Stoic knowledge	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.2	-0.1	0.1	0.1	0.2	0.1
Openness to Experience	0.2	0.2	0.2	0.1	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.1	0.2	1.0
Emotional Stability	0.5	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.4	0.3	0.1	0.4	0.4	1.0	0.2
Conscientiousness	0.4	0.4	0.3	0.3	0.4	0.5	0.4	0.4	0.6	0.3	0.0	0.2	1.0	0.4	0.1
Agreeableness	0.3	0.3	0.3	0.2	0.4	0.4	0.4	0.3	0.4	0.2	0.1	1.0	0.2	0.4	0.2
Extraversion	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	1.0	0.1	0.0	0.1	0.3
Discipline of assent	0.3	0.3	0.3	0.2	0.4	0.8	0.5	0.4	0.5	1.0	0.1	0.2	0.3	0.3	0.3
Discipline of action	0.4	0.4	0.3	0.3	0.5	0.8	0.5	0.6	1.0	0.5	0.1	0.4	0.6	0.4	0.2
Discipline of desire	0.3	0.4	0.3	0.4	0.4	0.8	0.5	1.0	0.6	0.4	0.1	0.3	0.4	0.5	0.2
SABS	0.5	0.5	0.5	0.4	0.6	0.6	1.0	0.5	0.5	0.5	0.1	0.4	0.4	0.5	0.3
3 disciplines (total)	0.4	0.4	0.4	0.4	0.5	1.0	0.6	0.8	0.8	0.8	0.1	0.4	0.5	0.5	0.3
Flourish	0.7	0.7	0.7	0.5	1.0	0.5	0.6	0.4	0.5	0.4	0.2	0.4	0.4	0.5	0.3

Negative Emotions	0.5	0.9	0.6	1.0	0.5	0.4	0.4	0.4	0.3	0.2	0.1	0.2	0.3	0.6	0.1
Positive Emotions	0.6	0.9	1.0	0.6	0.7	0.4	0.5	0.3	0.3	0.3	0.2	0.3	0.3	0.5	0.2
SPANE	0.6	1.0	0.9	0.9	0.7	0.4	0.5	0.4	0.4	0.3	0.2	0.3	0.4	0.6	0.2
SWL	1.0	0.6	0.6	0.5	0.7	0.4	0.5	0.3	0.4	0.3	0.2	0.3	0.4	0.5	0.2

Table I1 - Correlations between items and scales at the start of Stoic Week 2020

[i] Greg Lopez wrote this part of the report

[ii] Drop-out rates for Stoic Weeks have actually been quite low compared to other on-line trainings – see https://www.learningrevolution.net/online-course-retention-rate/

[iii] These findings were consistent across all three of our main outcomes (SWL, SPANE, and Flourishing) and across metrics, including raw correlation coefficients, simple linear regression, and ridge regression using a random 80% sample from our data. The results are all shown in the table below. "Correlation" is the raw correlation coefficient, "Simple linear regression" is the non-normalized coefficient from a simple linear regression, and "Ridge regression" is the non-normalized coefficient fitting against 80% of the data with an optimal lambda selected via cross-validation.
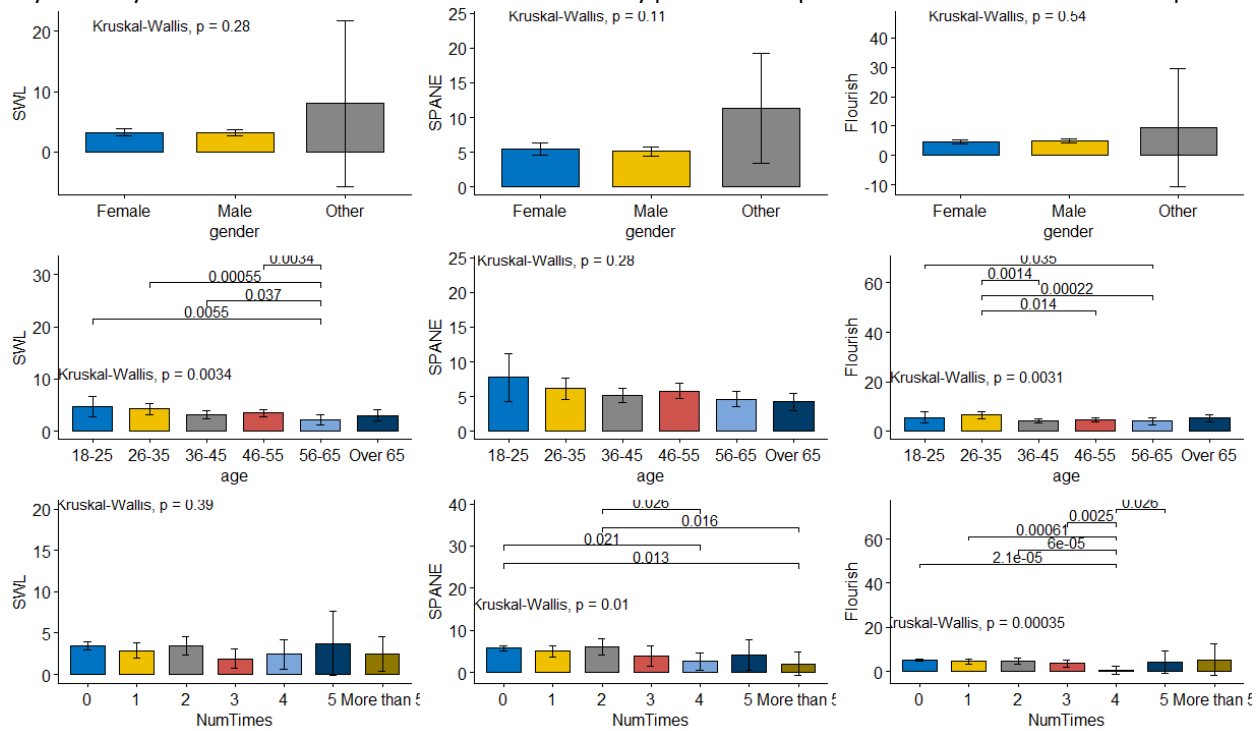
		Starting personality trait vs. change in outcome over the course of Stoic Week 2020		
		SWL (Multiple R-squared: 0.09) (Ridge R-squared against test data: 0.15)	**SPANE** (Multiple R-squared: 0.11) (Ridge R-squared against test data: 0.08)	**Flourishing** (Multiple R-squared: 0.13) (Ridge R-squared against test data: 0.24)
Extraversion	Correlation	0.00	-0.02	-0.05
	Simple linear regression	0.00	0.01	-0.01
	Ridge regression	0.01	0.01	-0.03
Agreeableness	Correlation	-0.11	-0.14	-0.14
	Simple linear regression	0.03	-0.03	0.01
	Ridge regression	-0.02	-0.04	-0.01
Conscientiousness	Correlation	-0.27	-0.22	-0.27

	Simple linear regression	-0.31	-0.26	-0.35
	Ridge regression	-0.18	-0.28	-0.24
Stability	Correlation	-0.27	-0.28	-0.31
	Simple linear regression	-0.27	-0.38	-0.41
	Ridge regression	-0.23	-0.29	-0.29
Openness	Correlation	0.03	-0.07	-0.11
	Simple linear regression	0.11	-0.09	-0.15
	Ridge regression	0.12	-0.09	-0.13

[iv] By linear regression, every minute per day spent on Stoic Week yielded a 0.02 point increase in SWL (R-squared 0.01) and a 0.04 increase in SPANE (R-squared 0.02). There was no statistically significant effect of time on Flourishing.

By one-way ANOVA via the Kruskal-Wallis test followed by pairwise comparisons. Results are shown in the plot below:

See https://modernstoicism.com/wp-content/uploads/2020/09/SMRT-2020-Results-1.0.pdf