

Report on Stoic Week 2021

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The ninth annual Stoic Week took place in October 2021. This year's theme was: *Stoicism and Wellbeing*. Stoic Week 2021 was written and facilitated by Tim LeBon and Eve Riches, with support from the Modern Stoicism team and a group of volunteers. This report summarises the findings from Stoic Week 2021 in terms of its contribution to Stoic research.

Previous Stoic Weeks have demonstrated that a week of Stoicism appears to have significant benefits. This year, we were particularly interested in building on this research to answer the following three questions.

- 1) Does Stoicism improve wellbeing as it is measured by the World Health Organisation?
- 2) Can we improve wellbeing *more* by tailoring Stoic materials to focus on wellbeing?
- 3) In 2020, we already introduced some enhancements intended to increase the number of people who completed the course. Could we further improve retention rates?

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) Does Stoicism improve wellbeing as measured by the World Health Organisation

The 5-item World Health Organization Well-Being Index (WHO-5) is one of the most widely used questionnaires for assessing subjective psychological well-being. It has the advantage of being very short, consisting of just 5 questions. It is also valid screening tool for depression and has been widely used as an outcome measure in many clinical trials. We were interested in finding out if there was a strong positive association between wellbeing as measured by the WHO-5 and the SABS 5.0 (Stoic Attitudes and Behaviour Scale) which measures an individual's degree of Stoicism

#	Question	Average item score	SABS correlation
1	I have felt cheerful in good spirits	2.7	0.5
2	I have felt calm and relaxed	2.6	0.54

3	I have felt active and vigorous	2.5	0.42
4	I woke up feeling fresh and rested	2.2	0.4
5	My daily life has been filled with things that interest me	2.9	0.47
TOTAL		13	0.57

Table 1 – Correlations between WHO-5 items and SABS at the start of Stoic Week 2021

As can be seen from table 1, the SABS as a whole had a .57 correlation with WHO-5 as a whole -which, given that the sample was large (1369 participants filled in the questionnaires at the start of Stoic Week) means that the chances of this correlation being by chance is infinitesimal. There was also a high and significant correlationⁱ for each WHO-5 item with the SABS-5. These findings provide further evidence that Stoicism is associated with wellbeing, however wellbeing is measured.

We were also interested in learning whether wellbeing as measured by the WHO-5 increased after participants “lived like Stoics for a week” as instructed in Stoic Week.

#	Item	Start	End	Increase
1	I have felt cheerful in good spirits	2.8	3.4	12.5%
2	I have felt calm and relaxed	2.7	3.4	25.5%
3	I woke up feeling fresh and rested	2.6	3.1	18.5%
4	I have felt active and vigorous	2.3	3.3	40.3%
5	My daily life has been filled with things that interest me	3.1	3.7	20.2%
	Overall	13	17	24.9%

Table 2 - Changes in WHO-5 items during Stoic Week

As shown in table 2 above, there were significant improvements in the wellbeing of participants over the course of Stoic Week. Of particular note is the 40% increase in item 4 “I have felt active and vigorous” This finding supports [previous research](#) which has shown a strong relationship between Stoicism and zest.

2) Is wellbeing increased *more* by tailoring Stoic materials to focus on wellbeing?

In 2021 the theme of Stoic Week was wellbeing, and to some extent the materials were tailored to increase wellbeing, as opposed, for example to focusing on resilience, virtue, or community (though these are other topics were covered). It was not anticipated that any increase in wellbeing compared to previous years

would be large, since there is a significant overlap between each of these concepts and wellbeing – for example if Stoic Week one year were to focus purely on virtue, we would certainly expect wellbeing to increase as well as virtue.

	Stoic Week 2021	Stoic Week 2020	Stoic Week 2019	Stoic Week 2018	Stoic Week 2017	Stoic Week 2016	Stoic Week 2015	Stoic Week 2014
Increase in Flourishing	11.5%	11%	7.5%	8%	10%	10%	10%	10%
Increase in Satisfaction with Life	14.5%	13%	11.5%	12%	14%	15%	15%	16%
Increase in Positive Emotions	13%	11%	9.5%	9.5%	11%	10%	10%	11%
Reduction in Negative Emotions	21%	19%	17%	14%	14%	14%	14%	16%
Increase In Stoic Attitudes and Behaviours	11%	9%	8%	10%	9%	11%	13%	12%

Table 3 Overall Findings Stoic Week 2021 - Impact of taking part in Stoic Week

Table 3 above shows the comparative increases in wellbeing and other measures for the last 8 Stoic Weeks. Subjective wellbeing is defined by psychologists in a very specific way – *wellbeing equals life satisfaction plus positive emotions minus negative emotions*. As can be seen from rows 3, 4 and 5 in table 3, participants experienced a significant increase in each of these measures compared to the start of Stoic Week, and a marked increase compared to that experienced in Stoic Week 2020.

Although the conditions created by COVID-19 may be partially responsible for the increased impact of Stoicism and wellbeing, this would also have applied to Stoic Week 2020, which also took place during the Covid-19 pandemic. We would therefore tentatively conclude that the focus on wellbeing may have had led to Stoic Week having a greater impact on wellbeing. ⁱⁱ

3) Could we further increase the percentage of participants who completed Stoic Week?

Stoic Week has always had a relatively high completion rate compared to other free, internet-based programmes -the average retention rate for Massive Open Online Courses (MOOCs) being 15%ⁱⁱⁱ and Stoic Week completion rates range from the lowest, 15% in 2016 to 30% in 2020%

In the previous Stoic Week, 2020, we aimed to increase the retention rate by sending a daily email prompt and including short videos to each day from a variety of Stoic experts. These two enhancements may be partly responsible for the improved completion rates in 2020 (from 24% to 30%) although it is possible that Stoic Week 2020 taking place during lockdown may also have been partially responsible.

We aimed to increase the retention rate further in 2021 by retaining the two enhancements from 2020 and in addition

- simplified the language used in the handbook
- offered for the first time the handbook as an editable pdf,
- provided an audio version of the handbook
- included a “lunchtime card” which summarised a Stoic quotation or idea to replace the longer lunchtime exercise which some participants had indicated was hard to fit in to their work schedule.
- Expanded the range of videos provided
- Stoics from Germany and Spain provided translations of Stoic Week in their languages (thank you Christian Barth and Kellys Rodríguez!)

See Appendix A for further details of course content

	Stoic Week 2021	Stoic Week 2020	Stoic Week 2019	Stoic Week 2018	Stoic Week 2017	Stoic Week 2016	Stoic Week 2015	Stoic Week 2014
No of participants at start (valid questionnaires)	1369	1608	1725	3702	2870	1803	2503	1953
Valid questionnaires	459	527	416	852	689	270	726	566

completed at end								
Completion Rate	33%	30%	24%	23%	24%	15%	29%	29%

Table 4 Comparison of completion rates in Stoic Weeks over time

As can be seen from table 4 above, the completion rate increased from 30% to 33%. It is impossible to be certain which of the factors mentioned contributed most to this, or the extent to which COVID-19 again played a part. However, it was very positive to note that deliberate effort did seem to have an impact in improving completion rates for the course.

4) Other findings of note

If you wanted to ask one question to find out how Stoic someone was what question do you think you would ask?

One way to determine this – and a shortcut to administering the whole 60 item SABS – is to calculate the correlation between individual SABS questions and the SABS as a whole and pick the question with the highest correlations

The answer is not – “how much Stoicism do you know?” - the correlation between that item and Stoicism as measured by the SABS is just .3

Neither is it “how much do you consider yourself a Stoic?” - though that has a higher correlation, of .5

A number of SABS score more highly, namely items

Questions 5,7,8, 14, 22,23, 29, 31, 33, 36, 40, 41, 48 which all have a correlation of around .6 with the SABS as a whole - see appendix D for a list of SABS 5.0 items to see the content of the questions.

But the winner, with a .7 correlation with Stoicism as measured by SABS as a whole, is #38: “When a negative thought enters my mind, I remind myself that it is just an interpretation of the situation.”

- Participants degree of Stoicism (as measured by SABS) at the end of Stoic Week compared to the beginning increased by 11% (10% in 2020)
- Participants’ stated their knowledge of Stoicism as having increased by 16% (25 % in 2020 - though in both years they rated themselves as 2.3 average at the end of Stoic week, indicating that there were less novices in starting in 2021)

- Participants' identifying themselves as a Stoic after Stoic Week increased by 19% (18% in 2020)

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

Sample comments from Participants at end of Stoic Week 2021

1. Absolutely amazing summary of all the most important aspects of Stoicism in simple and digestible manner
2. Great organization of content
3. Supportive community and experts
4. Framework that can be repeated every week after the course to anchor better with practices

The average rating was 8.6 in 2021 compared to 8.3 in 2020.

Conclusions

In conclusion, the innovations of Stoic Week 2021 succeeded in increasing engagement and wellbeing. It is recommended that they are retained for Stoic Week 2022. Wellbeing was shown to increase using the WHO-5 indicator. The finding regarding the item related to zest is of great interest. Further research with regards to the relationship between Stoicism and zest is recommended.

Since Stoic Week is aimed largely at those new to Stoic, it may be a good idea to retain largely the same materials in 2022, firstly so some effort can be spent in minor cosmetic improvements and also to allow participants access to materials earlier. In addition, assuming that the world is no longer in lockdown in 2022, it will be possible to see how much of the improvements noticed are maintained in more normal circumstances.

Appendix A Course Content

Stoic Week is an e-learning programme developed by the Modern Stoicism team. In 2021 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 and Eve Riches.

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 and 3 standard well-being questionnaires we have used in previous Stoic Weeks . One questionnaire was used for the first time by us in Stoic Week 2021 – the WHO-5 scale.

We were also interested in looking at ways to further increase engagement and retention.

A number of innovations from 2020 were retained

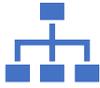
- Unless participants, opted out of email communication, they were emailed the contents of the day at the beginning of the day.

In addition

- The short videos provided each day were expanded in 2021 to include a guest video for each day
- Audio version of each days material were provided
- Editable pdf was provided
- There was a significant effort to make the material more accessible – (*Add reading age figures*) – *also use of graphics*
- Reorganised so there were comments for each section (as opposed to just one comments for whole course)
- Printable cards were provided in each day containing a daily quote
- Stoic Week for (school-age) students was also provided as a separate course running at the same time
- The lunchtime material was made more manageable after feedback that they did not have time to do a lengthy lesson at lunchtime

- Attempts were made to clarify exactly what participants were meant to do each day

The introductory section was made significantly shorter and easier to read, using these graphics.



Monday: Control



Tuesday: Emotions



Wednesday:
Character and
Virtues



Thursday: Caring
for Ourselves and
Others



Friday: Seeing the
Big Picture



Saturday: Stoic it
Up!



Sunday: Creating
Your Stoic Toolkit

Canada	163	10%	9.6%
Germany	74	5%	2.4%
Australia	52	4%	3.4%
Spain	31	2%	2.6%
Mexico	29	2%	1.4%
Netherlands	24	2%	2.9%
France	22	2%	1.2%
Ireland {Republic}	17	1%	1.5%
Italy	17	1%	0.4%
Poland	12	1%	1.3%

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 2 (between Novice and “I know a bit”) (similar to 2020)

How would you describe your prior knowledge of Stoicism?

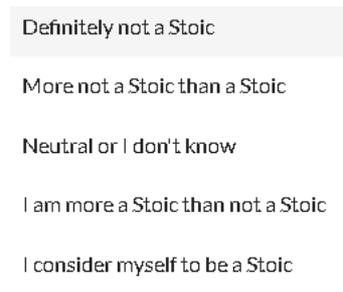
1370 Responses

Answer	Count	Percent
None	68	4.97%
Novice	266	19.44%
I know a bit	621	45.39%
I know quite a lot but I'm not an expert	403	29.46%
Expert	10	0.73%

At the end of Stoic Week they rated themselves *add* with an average score of 2.3, the same as in 2.3 in 2020 (between “I know a bit” and “I know quite a lot but am not an expert”) an increase of 16%

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



At the start of Stoic Week the scores were

To what extent do you consider yourself to be a Stoic?
1370 Responses

Answer	Count	Percent
Definitely not a Stoic	87	6.36%
More not a Stoic than a Stoic	148	10.82%
Neutral or I don't know	423	30.92%
I am more a Stoic than not a Stoic	578	42.25%
I consider myself to be a Stoic	132	9.65%

The average score at the start of Stoic Week was 2.4 and 2.8 at the end, the same as in Stoic Week 2020 (moving nearer “Neutral” to “I am more a Stoic than not a Stoic” an increase of 16%

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 42 minutes in 2021 compared to just under 30 minutes a day in 2020.

On average, the people who completed questionnaires at the end of Stoic Week completed 6.5 days out of 7

How highly did participants rate Stoic Week 2021?

People were asked to rate Stoic Week on a rating 0-10. The average rating was 8.6 in 2021 compared to 8.3 in 2020.

Appendix C The WHO-5 Scale

The World Health Organisation- Five Well-Being Index (WHO-5) is a short self-reported measure of current mental wellbeing.

The measure was first introduced in its present form in 1998 by the WHO Regional Office in Europe as part of the DEPCARE project on well-being measures in primary health care.

The minimum score (least well-being) is 0 and the highest score (most well-being) is 25.

#	Question	Average item score	SABS correlation
1	I have felt cheerful in good spirits	2.7	0.5
2	I have felt calm and relaxed	2.6	0.5
3	I have felt active and vigorous	2.5	0.4
4	I woke up feeling fresh and rested	2.2	0.4
5	My daily life has been filled with things that interest me	2.9	0.5
TOTAL		13	0.6

The table above lists the 5 items in the WHO-5 and the average score for each item

The average total score at the start of Stoic Week was 13. The table also shows that each item was positively correlated with SABS, meaning that those who are Stoic at the start of Stoic Week also have higher wellbeing – and vice-versa. The correlation for SABS and WHO-5 as a whole was 0.6.

From our Stoic Week data at the start of Stoic week

A score of 6 or lower places someone in the bottom 10% of respondents.

A score of between 6 and 10 places someone in the 10-25% range of respondents

A score between 10 and 13 places someone in the 25-50% range of respondents

A score of between 13 and 17 places someone in the 50-75% range of respondents.

A score of 19 or above places someone in the top 10% of respondents

Appendix D: Stoic Attitudes and Behaviour Scale 5.0 (SABS 5.0)

#	Item	Reversed?	Average score start of Stoic Week 2021 7=totally Stoic)	% Increase by end of Stoic Week 2021	% 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	6%	4%
2	It can sometimes be a good thing to become angry at people.	Yes	4.4	10%	11%
3	If bad things happen to you, you are bound to feel distressed.	Yes	3.7	21%	21%
4	Having good understanding and good character is all that is required in order to be happy.	No	4.7	19%	17%
5	Viewing other people as fellow-members of the brother/sisterhood of humankind helps me to avoid feeling angry and resentful.	No	5.5	14%	9%
6	The universe is benevolent in its overall plan.	No	4.0	15%	13%
7	I regularly spend time reflecting on what is most important to enable me to live a good and happy life.	No	5.3	13%	12%
8	Bad luck could stop me being happy.	Yes	4.4	19%	17%
9	I do the right thing even when I feel afraid.	No	5.1	13%	10%
10	It is my duty to help others.	No	5.8	6%	6%
11	Sometimes a controlled experience of anger can be helpful in resolving conflicts with others	Yes	3.6	14%	10%
12	I usually do the right thing.	No	5.6	7%	7%
13	I do not act on urges when it would be unwise to act on them	No	5.0	15%	11%

14	I am committed to helping humanity in general.	No	5.6	8%	7%
15	I treat everyone fairly.	No	5.5	10%	8%
16	To flourish as a human being all you need is good character and understanding of what really matters in life	No	5.3	14%	11%
17	If things don't go well for my friends, I can't lead a good life.	Yes	5.2	3%	2%
18	I take active steps to reduce the suffering of others.	No	5.1	10%	10%
19	I spend quite a lot of time dwelling on what has gone wrong in the past.	Yes	4.0	24%	20%
20	It is possible to lead a happy life even after the death of someone we love.	No	5.9	3%	5%
21	The universe embodies wisdom.	No	4.6	11%	8%
22	When making an important decision I ask myself "What really matters here?"	No	5.6	10%	9%
23	I cannot really be harmed by what other people say.	No	4.8	23%	19%
24	The universe is a living thing.	No	5.0	6%	5%
25	I need quite a lot of money in order to be happy.	Yes	5.2	7%	8%
26	When I have a problem, I am good at taking constructive action in a timely manner.	No	5.1	12%	10%
27	We can't really control other people.	No	6.3	4%	4%
28	There is a rational and orderly plan in the universe and in the causes of events.	No	3.7	17%	16%
29	When making a significant decision I reflect on what a good role model would do.	No	4.7	17%	12%
30	Nothing except our judgements and voluntary actions are truly under our control in life.	No	6.2	6%	6%

31	I pay attention to my judgements about good or bad things or people as I am making them.	No	5.2	13%	11%
32	I need to be well thought of by others in order to be happy.	Yes	4.5	15%	16%
33	I spend quite a lot of time worrying about the future.	Yes	3.8	22%	23%
34	It is good to think about life as an ongoing journey towards becoming a better person.	No	6.3	5%	3%
35	I am committed to helping my friends.	No	5.8	5%	5%
36	I pay attention to my thoughts about what I intend to do before I act on them.	No	5.3	13%	10%
37	I want to become a better person ethically.	No	6.5	3%	2%
38	When a negative thought enters my mind, I remind myself that it is just an interpretation of the situation.	No	4.8	22%	17%
39	It is right to feel intense and overwhelming grief after a significant loss	No	2.7	17%	17%
40	I view other people as fellow-members of the brother/sisterhood of humankind.	No	5.6	8%	6%
41	If things don't go well for me, I can't lead a good life.	Yes	5.0	12%	8%
42	I can't control how I feel.	Yes	5.0	14%	10%
43	I need to be in good health in order to be happy.	Yes	4.1	20%	14%
44	I am committed to helping my family.	No	6.2	3%	3%
45	Every day I spend some time thinking about how I can best face challenges in the day ahead.	No	4.8	22%	18%
46	Our voluntary actions are among the only things truly under our control in life.	No	6.0	6%	6%

47	As long as you have the right attitude, you can lead a good life even in the most difficult circumstances.	No	5.9	8%	7%
48	Even when I can't do anything more about a problem, I still worry about it a lot.	Yes	3.6	28%	28%
49	I care about the suffering of others	No	5.9	4%	4%
50	I often do what I feel like doing rather than doing what I believe to be the right thing.	Yes	4.8	10%	13%
51	Our judgements are amongst the only things truly under our control in life.	No	5.9	8%	7%
52	I see my happiness as fully compatible with caring for other people.	No	5.7	8%	7%
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	5%	3%
54	There is no overall plan to the universe.	Yes	3.5	12%	14%
55	I think about what the ideal wise and good person would do when faced with misfortunes in life.	No	4.8	15%	12%
56	If things don't go well for my family, I can't lead a good life.	Yes	4.5	11%	13%
57	I am committed to helping in my local community.	No	5.0	12%	11%
58	It does not help me to get angry	No	5.9	5%	5%
59	It is possible to lead a happy life even when we have lost success or wealth.	No	5.7	6%	7%
60	We can sometimes influence how others behave, but we can't completely control other people.	No	6.3	3%	2%
	Total Score		301.5- >334	11%	9%

Table D1 - Stoic Week participant scores for SABS 5.0

Instructions to Stoic Week participants

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.

SCORING

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 Average SABS score for participants at the start of Stoic Week was 293.

From the data at the start of Stoic Week, a score of:

347 or above would place someone in the top 10%

321 or above would place someone in the top 25%

294 or above would place someone in the top 50%

266 or below would place someone in the bottom 25%

242 or below would place someone in the bottom 10% in terms of your degree of Stoicism

Appendix E: The Satisfaction with Life scale

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 2021	% change at end of Stoic Week 2021	% change at end of Stoic Week 2020
1	In most ways my life is close to my ideal.	4.5	16	14
2	The conditions of my life are excellent	5.0	12	11
3	So far, I have got the important things I want in life	5.0	13	11
4	I am satisfied with my life	4.8	15	12
5	If I could live my life over, I would change almost nothing	3.8	17	21
	All Items	23	14.5	13

Table E1 - Stoic Week 2021 participant scores for Satisfaction with Life

The average score at the start of Stoic Week 2021 was 23

From data at the start of Stoic week 2021 :-

A score of 13 or lower places someone in the bottom 10% of respondents.

A score of between 13 and 19 places someone in the 10-25% range of respondents

A score between 19 and 24 places someone in the 25-50% range of respondents

A score of between 24 and 28 places someone in the 50-75% range of respondents.
A score of 31 or above places someone in the top 10% of respondents

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>

Appendix F: The Flourishing Scale

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 2021	% change at end of Stoic Week 2021	% change at end of Stoic Week 2020
1	I lead a purposeful and meaningful life.	4.8	15	14
2	My social relationships are supportive and rewarding.	5.0	12	11
3	I am engaged and interested in my daily activities.	5.0	11	12
4	I actively contribute to the happiness and well-being of others.	5.1	11	10
5	I am competent and capable in the activities that are important to me	5.4	11	9
6	I am a good person and live a good life.	5.3	10	10
7	I am optimistic about my future.	5.1	14	15
8	People respect me.	5.2	7	8
	All Items	40.9	11.5	11

Table F1 - Stoic Week 2021 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>

The average score at the start of Stoic Week was 41.

From our Stoic Week data at the start of Stoic week

A score of 29 or lower places someone in the bottom 10% of respondents.

A score of between 29 and 36 places someone in the 10-25% range of respondents

A score between 36 and 42 places someone in the 25-50% range of respondents

A score of between 42 and 47 places someone in the 50-75% range of respondents.

A score of 50 or above places someone in the top 10% of respondents.

Appendix G: 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 2021	% change at end of Stoic Week 2021	% change at end of Stoic Week 2020
1	Positive	3.5	12	12
2	Negative	-3.1	-22	-21
3	Good	3.6	11	9
4	Bad	-2.7	-23	-21
5	Pleasant	3.6	11	9
6	Unpleasant	-2.6	-19.5	-21
7	Happy	3.4	12	11
8	Sad	-2.7	-20	-18
9	Afraid	-2.5	-20	-18
10	Joyful	3.1	17	11
11	Angry	-2.6	-21	-21
12	Contented	3.3	16	14
	SPANE POSITIVE ITEMS	4.1	13	11
	SPANE NEGATIVE ITEMS	-3.1	-21	-20
	All Items	-15		

Table G1 - 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>

The average score at the start of Stoic Week was 4.3

From data at the start of Stoic week 2021:-

A score of -6 or lower places someone in the bottom 10% of respondents.

A score of between -6 and -1 places someone in the 10-25% range of respondents

A score between -1 and 4 places someone in the 25-50% range of respondents

A score of between 4 and 10 places someone in the 50-75% range of respondents.

A score of 15 or above places someone in the top 10% of respondents.

Appendix H: Correlations between items and scales at the start of Stoic Week 2021

	SWL	SPANE	SPANE-Positive	SPANE-negative	Flourishing	WHO-5	SABS
Spane-	0.5	0.9	0.5	1.0	0.5	0.6	0.4
Spane+	0.6	0.9	1.0	0.5	0.7	0.8	0.6
WHO-5 correlation	0.62	0.77	0.76	0.62	0.72	1.00	0.57
Flourish correlation	0.72	0.69	0.70	0.54	1.00	0.72	0.64
SPANE correlation	0.63	1.00	0.89	0.90	0.69	0.77	0.59
SWL correlation	1.00	0.63	0.63	0.50	0.72	0.62	0.51
SABS correlation	0.51	0.59	0.58	0.48	0.64	0.57	1.00

Table H1 - Correlations between items and scales at the start of Stoic Week 2021

ⁱ The correlation measure used is Pearson Product-Moment Correlation Coefficient

ⁱⁱ This finding is only tentative since the small difference in percentages between 2020 and 2021 could be explained by other factors, such as other changes made for Stoic Week 2021 or random fluctuations. It should also be noted that earlier Stoic Weeks (such as 2015) saw still higher increase in life satisfaction, though not necessarily in overall wellbeing.

ⁱⁱⁱ see <https://www.learningrevolution.net/online-course-retention-rate/>