

How the COVID-19 epidemic affected life-satisfaction in the Netherland

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ABSTRACT

In the media we read mainly about negative effects of the COVID-19 pandemic on our subjective wellbeing, such as increased depression, anxiety and loneliness during lock-downs and continued ill-being after the pandemic as a result of scarring, among the young in particular. There is less attention for possible positive effects of this disaster, such as increased solidarity and working from home. The net effect of the epidemic will reflect in overall life satisfaction and for that reason we examined how life-satisfaction has developed in the Netherlands over the pandemic using three datasets based on different research methodologies. In all datasets we found a slight decline of life-satisfaction that deepened gradually to about half a point on scale 0-10. Average life-satisfaction bounced back when the epidemic was over. Recovery was faster than from earlier dips in life-satisfaction following economic recessions. The epidemic did hurt but does not seem to have left lasting scars.

INTRODUCTION

The COVID-19 pandemic developed over the years 2018- 2021. In the Netherlands it gave rise to drastic security measures over the years 2020-2021, such as lockdowns and mass vaccinations. To date (2024) we can see that the loss of lives has been limited (CBS 2023) and in that respect the government policy has been effective. Mass death such as caused by the Spanish Flue pandemic in 1918-1920 has been avoided. But how about the effect on satisfaction with life in the Netherlands? Was that effect also limited or was the success in preventing that a few people die prematurely bought at the cost of lower life-satisfaction of many? Life-satisfaction is a good indicator because it reflects the balance of effects of the epidemic and the attendant security measures, not only the evident negative effects such as social isolation and business bankruptcy but also less visible positive effects,

such as the strengthening of family ties and less painful ending of enterprises that were bound to disappear anyway.

We analyzed four datasets that involve information about changes in life-satisfaction during the epidemic in the Netherlands, each of which used another research technique. All cover the first phase of the epidemic but only one assessed life-satisfaction also when the epidemic was over.

Study 1

Change in life-satisfaction in the general public over the pandemic

The Eurobarometer survey is held bi-annually in representative samples of the general population in all EU member states. The core questionnaire contains the following question on life-satisfaction: "Taking all together, how satisfied are you with the life you lead? Would you say you are: very satisfied, fairly satisfied, not very satisfied or not satisfied at all". Average responses to this question are transformed to a numerical scale ranging from range 0-10, using the so-called Thurstone technique (Kalmijn 2015). On Figure 1 we present these averages over the years 1972-2022. The following patterns stand out:

Late dip in average life-satisfaction followed by a complete recovery

Average life-satisfaction changed hardly in the first year of the epidemic, that is in 2020. However, it dipped by about half a point in 2021 which was the last year of the epidemic. In the year after (2022) average life-satisfaction had bounced back to the pre-Corona level with an average of 7,9 fitting the long-term trend of rising happiness in the Netherlands.

Similar to effects of earlier economic recessions on happiness

On Figure 1 we can see similar passing dips in average life-satisfaction following the economic recessions in the early 1980s and 2001, be it that these recoveries were more gradual. The fact that life-satisfaction recovered to the pre-recession levels defies the claim by Brenner (1989) that economic downturns have a lasting negative effect on subjective wellbeing.

Temporary rise of inequality in life satisfaction

As we will see below, not everybody was equally affected by the epidemic. This resulted in a slight rise of inequality of life-satisfaction in the general population as measured with the standard deviation. The standard deviation was 1,56 in 2018 and rose to 1,69 in 2021 to fall back 1,56 2022. See

<https://worlddatabaseofhappiness.eur.nl/nations/netherlands-24/distributional-findings/> This is another indication that no lasting harm was involved

Why only a short term effect?

One possible answer to this question is that we can live with some mischief, especially when externally caused and collectively afflicted. The human species did not evolve in Paradise. Another answer is that the long-term negative effects are balanced by positive effects, such as greater solidarity and enhanced self-confidence following successful coping with the crisis situation. The available data do not allow a check of these explanations.

Study 2

Follow-up during the first phase of the epidemic: 2019-220

The LISS panel (<https://www.website.lisspanel.nl/>) is a longitudinal study in which the same respondents are followed over time. The core questionnaire involves the following measures of life-satisfaction:

- How satisfied are with the life you lead these days?
Answer rated on a numerical scale 1-10
- Taking all together, how happy would you say you are?
Answer rated on a numerical scale 1-10
- Affect Balance as assessed using the Positive and Negative Affect Schedule (PANAS) which consists of 20 statements about recent affective experiences of which applicability is rated on a 7 step scale.

Most unaffected in the first year of the epidemic

Responses to the above measures did not change from 2019 to 2020, 47% for life satisfaction, 53% for happiness and 68% for affect balance.

Greater loss in life-satisfaction

Life satisfaction declined in some 30% of the respondents during the first year of the

epidemic. The decline in responses to the happiness question was 24% and for Affect balance only 18%.

Not only negative change

Responses to the life-satisfaction question increased for 24% of the respondents and likewise for responses to the happiness question. Affect balance rose in 18% of the respondents. This rise of subjective wellbeing illustrates our earlier point that the epidemic will also have positive effects.

Little difference across subgroups

On Table 1 we present differences across subgroups. Significant changes appear only for respondents living in semi-urban areas and in the highest income bracket.

Study 3

Effect on mood in a diary study

The 'Happiness Indicator' (Bakker et al) is a web-based toolkit to "work on one's happiness". One of the tools is a 'happiness diary' on which the user rates the activities of the previous day together with remembered mood during these activities; an application of the Day Reconstruction Method (Kahneman et al 2004). Another tool is the 'happiness comparer' which involves regular ratings of how happy one feels today by means of which the user can see whether he/she is getting any happier or not. A methodological advantage of these techniques is that responses reflect direct experience and are less vulnerable for measurement bias than global appraisals of life-satisfaction and happiness.

Between March 2019 and February 2020; 2.689 users rated their mood of the day on the Happiness Comparer and 1.597 users completed the Happiness Diary and during the epidemic from March 2020 to February 2021 the happiness diary was used by 1.278 participants and the happiness comparer by 8189 individuals.

On Figure 2 we present the trend in average scores on mood of the day and mood during activities. A negative trend appears, after a slight loss in the first year of the epidemic mood plummets in the second year. As such, this study 3 confirms the negative trend observed in the above-mentioned studies 1 and 2.

Unfortunately, this dataset does not involve findings on mood in the years after.

CONCLUSION

The COVID-19 epidemic and resulting policy did reduce average life-satisfaction in the Netherlands, in particular in the second year of the epidemic. The loss in life-satisfaction was limited and short-lived. As such, it may have been a sacrifice worth the preventing of a higher death toll.

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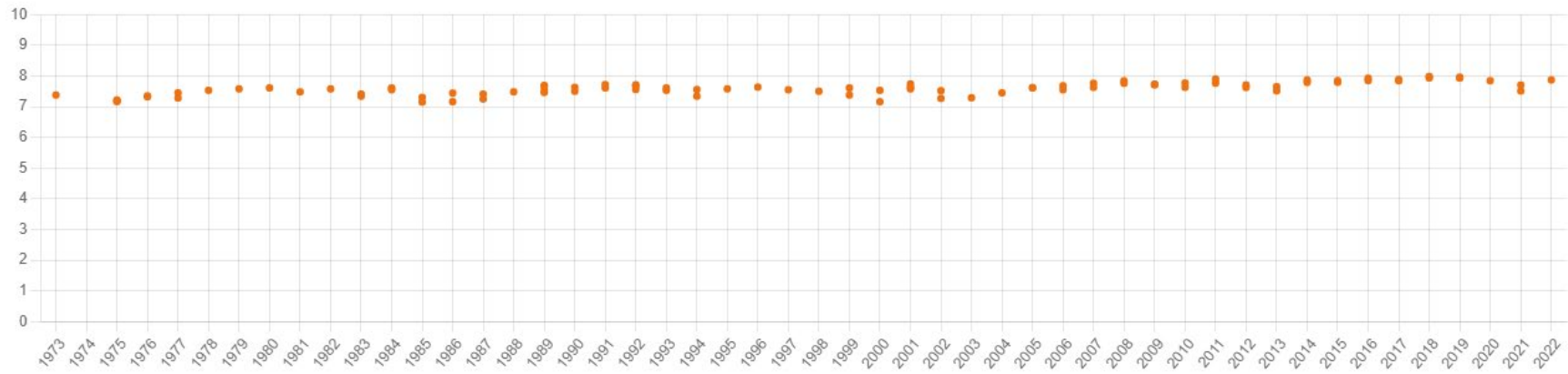
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Figure 1

Average life-satisfaction in The Netherlands 1972-2022



Source: <https://worlddatabaseofhappiness.eur.nl/nations/netherlands-24/>

Figure 2
Change in daily mood today and during activities yesterday: 2019-2020

Source: Veenhoven et al. 2021

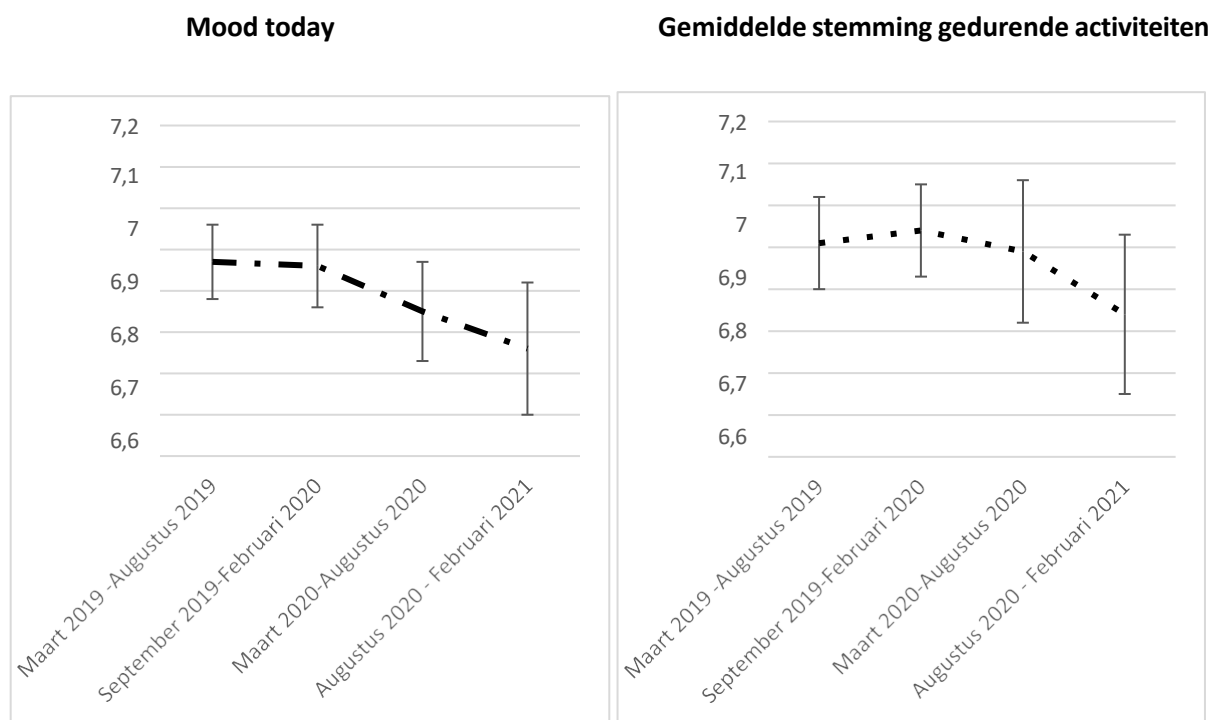


Table 1

Change in life-satisfaction from 2019 to 2020 in the Netherlands by subgroups

N = 3783.

	Average 2019	Decreased	No change	Increased
<i>Gender</i>	7,43	28%	50%	26%
Female	7,35	31%	45%	24%
Male				
<i>Age</i>				
15-24	7,19	38%	43%	20%
25-34	7,19	33%	41%	27%
35-44	7,15	29%	47%	24%
45-54	7,30	26%	49%	25%
55-64	7,28	27%	48%	25%
>65	7,63	31%	48%	21%
<i>Living situation</i>				
Single	7,08	31%	46%	23%
Couple, no child	7,69	31%	49%	20%
Couple with child	7,32	27%	48%	25%
Single with child	6,95	30%	37%	33%
Else	7,02	33%	33%	33%
<i>Urbanity</i>				
Strong	7,33	31%	46%	24%
Medium	7,38	26%	49%	26%
Low	7,44	30%	48%	22%
<i>Work</i>				
Employed	7,41	27%	49%	24%
Freelance	7,59	29%	45%	26%
Unemployed	6,40	28%	42%	30%
Pensioner	7,65	31%	49%	20%
Else	7,38	34%	43%	23%
<i>Income</i>				
<€2000	7,00	30%	43%	27%
€2001-€4000	7,46	30%	48%	23%
€4001-€6000	7,63	28%	50%	22%
>€6000	7,73	29%	50%	21%

Life satisfaction changed significantly in **thick** printed categories