# LOCKDOWN LEARNING: USING DIGITAL RESOURCES FOR LEARNING UNDER LOCKDOWN TO IMPROVE WELLBEING

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#### Abstract

In March 2020, lockdown became a reality in many countries globally with over a billion students being forced out of their classrooms. This issue was far worse in developing and underdeveloped countries with some instances even being unreported. This meant that society at large had to adapt to a new way of living, including learning. With many schools closed, even till today in countries such as Lebanon and India, we decided to develop digital resources for learning under lockdown so-called 'Lessons for Humanity'. The focus of these digital resources was two-fold: to encourage lifelong learning and to increase wellbeing. Wellbeing and mental health are lowly prioritised matters in most of India and this has traditionally been similar in all other developing countries in South Asia. COVID-19 created a visible spark and made people think about this consciously. This paper comprises of first-hand reactions on wellbeing and mental health from people during the early days of the lockdown in India using an online questionnaire. This paper also aimed to find out if online learning was a good solution to improve wellbeing in India, especially during a period of forced and sudden incarceration. Results showed that online learning had a positive effect on wellbeing and mental health and that it supported people during this difficult and uncertain time. This paper will discuss the development of 'Lessons for Humanity', the study design and its findings.

Keywords: Learning, wellbeing, online learning, online resources, learning in the pandemic.

#### 1 INTRODUCTION

The current COVID-19 pandemic hit the world globally from March 2020. The lockdown paused a lot of our daily work and activities (that sometimes we take for granted). People are stranded from their families, their friends, their loved ones, their work, their training routines, their daily activities, etc., which can also affect their mental wellbeing [1]. Up until today, schools in some countries such as India remain closed. In India, most students have been out of school for over a year and not all schools and educational institutions have transferred to digital learning due to a variety of reasons (e.g. resources, internet connectivity, shortage of devices, teachers lacking digital skills).

Our vision at Otermans Institute is to upskill a generation using transferable skills and employability skills training. As part of this, lifelong training and learning is key. In March 2020, we at Otermans Institute decided to give some of our training out for free to people around the world, so that they can make most of their time under lockdown, become better trained and more informed, so that they can come out of this time upskilling themselves collectively. As stated by the Managing Director Dev Aditya, "Everyone has something to share with the world and everyone deserves to learn no matter what the circumstances. Here is our attempt to provide free learning to the world on topics we specialise in, to encourage positive development among society and support mental wellbeing." [1]. The training we specifically designed for this lockdown learning was called "Lessons for Humanity" and collaborators from across the globe contributed to the development. This training consisted of 22 individual short bitesized lessons that anyone can access anywhere, at any time they prefer. Lessons follow a similar structure to provide consistency, whereby theory is described in a concise manner, often using bullet points and real-life examples. Every lesson provides tips and insights to improve skills on that specific topic. Finally, each lesson finishes with two sets of "Tips & Exercises for the 'lock down'". Firstly, activities that each individual can do on their own to improve their own skills set. Secondly, activities and tasks that they can do with the people they spend the lockdown with (e.g. family, friends, housemates) to share the knowledge and together apply and improve the skills set learned. This second element also supports people in improving wellbeing, self-esteem, positive thinking and morale in these difficult and uncertain times by encouraging interaction with others.

Wellbeing plays a significant role in everyone's life. Wellbeing can be defined as "a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity" [2]. When looking deeper into the concept of wellbeing, there are a few other concepts that describe wellbeing that arise. One of them is a recently developed construct called "inner wellbeing" and is defined as "what people feel and think they are able to be and do" [3,4,5,6]. Within the concept of inner wellbeing, the

researchers distinguished among seven domains on the basis of confirmatory factor analysis: 1) Economic confidence, 2) agency and participation, 3) social connections, 4) close relationships, 5) physical and mental health, 6) competence and self-worth, and 7) values and meaning. Another measure of wellbeing, subjective wellbeing, describes how people experience the quality of their lives and includes both emotional reactions and cognitive judgments [7] and is often also called 'satisfaction with life'. The concepts of wellbeing and how one is feeling are closely related to self-esteem. According to Rosenberg, self-esteem is one's positive or negative attitude toward oneself and one's evaluation of one's own thoughts and feelings overall in relation to oneself [8]. As the world and our lives have drastically changed since March 2020, it is of interest to study the effect of lockdown learning on wellbeing.

### 2 METHODOLOGY

#### 2.1 Participants

A total of 226 individuals took part in the online study via opportunity sampling. For the purpose of this paper, the focus is on those participants who completed the inner wellbeing scale and the questions around online learning. A total of 200 participants completed those sections (104 men, 96 women). The mean age of participants was 25.96 years (SD = 9.22 years). In terms of religion, the majority of participants (79.0%, N = 158) was Hindu and no other religion consisted of more than 3% of the participants. In relation to the participants' career status, the majority were students (52.5%, N = 105), followed by employed (34.5%, N = 69), a recent graduate within the past three years (10.0%, N = 20), and unemployed (3.0%, N = 6). Finally, most participants resided in a state in the Northern parts of India (e.g. West Bengal, Punjab, Uttar Pradesh, Delhi) during the COVID-19 pandemic (72.5%, N = 145), followed by the South of India (e.g. Karnataka, Telangana, Tamil Nadu) (11.5%, N = 23), the Center (e.g. Maharashtra) (9.0%, N = 18), and other regions outside India (6.5%, N = 13).

### 2.2 Materials

The online survey consisted of five sections: 1) Demographic questions; 2) Inner wellbeing (IWB) [4,6]; 3) Self-Esteem [8]; 4) Life Satisfaction [7] and 5) Online learning.

*Demographics.* In this section, participants were asked general demographic questions (e.g. gender, career status, age, religion, cultural identity) as well as which state in India they were residing during COVID-19.

IWB. Participants were asked to complete a 28-item inner wellbeing inventory [4,6] consisting of 1) economic confidence, 2) agency/participation, 3) social connections, 4) closer relationships, 5) physical and mental health, 6) self-worth and competence, and 7) values and meaning scales (four items per scale). Each item was scored on a 5-point, Likert-type scale (1 = strongly disagree, 5 = strongly agree), with reverse-worded items in the opposite direction, and higher scores reflected higher levels of inner wellbeing. Factors analysis was conducted to establish the factors of IWB. Factor analysis, using principal axis factoring and varimax rotation was performed. The Kaiser-Meyer-Olkin measure was .80, above the recommended value of .60 [9], Bartlett's test of sphericity was significant ( $\chi^2$  (378) = 1642.53, p < .001). Results showed that IWB co be best described with two factors. Items that loaded less than .30 on a factor of if an item loaded higher than .30 on multiple factors, were removed from the analysis [9]. The items that loaded high on factor one included all the positively worded items of the IWB scale (items 1.1, 1.2, 2.1, 2.2, 3.2, 3.3, 4.1, 4.4, 5.4, 6.2, 6.4, 7.1, 7.2, and 7.4), had an eigenvalue of 5.48, explained 19.6% of the variance, showed very good internal consistency (Cronbach's  $\alpha$  = .80), and this factor was called "IWBpositive". The items that loaded high on factor two included all the negatively worded items of the IWB scale (items 1.3, 1.4, 2.3, 2.4, 3.1, 3.4, 4.2, 4.3, 5.1, 5.2, 6.1, 6.3, 7.3), had an eigenvalue of 3.43, explained 12.3% of the variance, showed very good internal consistency (*Cronbach's*  $\alpha$  = .78), and was called "IWBnegative".

*Self-Esteem.* Participants were asked to complete the 10-item Self-Esteem Scale (RSES) [8]. Each of the self-esteem item was scored on a 5-point, Likert-type scale (1 = strongly disagree, 5 = strongly agree), with negatively worded items (items 2, 5, 6, 8 and 9) reverse-scored so that higher scores for all items reflected higher levels of self-esteem. Results of a reliability analysis indicated that the self-esteem scale was internally consistent (*Cronbach's*  $\alpha$  = .84).

*Life satisfaction.* Participants were asked to complete the Satisfaction with Life Scale (SWLS) [7]. Each of the satisfaction with life items was scored on a 7-point, Likert-type scale (1 = strongly disagree, 7 = strongly agree), with higher scores reflecting higher levels of life satisfaction. Results of a reliability analysis indicated that the life satisfaction scale was internally consistent (*Cronbach's*  $\alpha$  = .80).

Online learning. Finally, participants were asked about online learning and more specifically online learning during the COVID-19 pandemic and in the lockdown. Participants were also asked to describe what sort of training they would find useful as well as what sort of skills they would like to improve on to enhance their employability. This section only contained qualitative questions.

## 2.3 Procedure

The survey was created in Qualtrics and was distributed via a variety of online channels in India (e.g. LinkedIn, Facebook, Instagram, WhatsApp). The inclusion criteria were as follows: Participants had to be Indian and can provide consent. The survey took about 10 minutes to complete. First participants, read and signed an informed consent sheet that explained the purpose of the study in general terms. Second, participants completed the online survey consisting of demographic items; the aforementioned measures of inner wellbeing, self-esteem, satisfaction with life, and the questions about online learning. Finally, participants read a debriefing statement thanking participants for their participation and included contact information. Participation was strictly voluntary; no financial or other inducements were offered to participants.

# 3 RESULTS

Results were analysed using IBM SPSS Statistics (quantitative aspects) and NVivo (qualitative aspects). For the purpose of this paper, results focus on the measures of inner wellbeing and online learning. Results are limited to those participants who completed both the inner wellbeing items and the items regarding their views on online learning (N = 200). The items of the positive and negative IWB were scored by summing the score of each variable. IWBpositive had a high score (M = 52.59, SD = 9.04) and IWBnegative had a lower score (M = 36.5, SD = 8.49) indicating that participants' inner wellbeing was overall positive. This means that participants overall had a high level of their feelings and thoughts about what they can do and be. There was no missing data and each of the variables was normally distributed (all skewness <  $\pm 1.23$  and all kurtosis <  $\pm 3.00$ ) [10] (i.e., for large samples, cut-off points for skewness and kurtosis is 3.29) (Table 1). Independent-samples t-test indicated that there was no significant difference in positive and negative IWB for men and women (all t < 1.93, p > .055); indicating there is no gender difference in IWB scores.

Variable	М	SD	Min	Max	Skewness		Kurtosis	
					Statistic	Statistic	Statistic	SE
IWBpositive	52.59	9.04	14	69	90	.17	1.52	.34
IWBnegative	36.5	8.49	13	65	<.01	.17	.11	.34

Table 1. Descriptive statistics of variables of interest (IWBpositive, IWBnegative).

For online learning, 76.5% (N = 153) of the participants thought that online learning lessons would improve their wellbeing and self-esteem during the current COVID-19 pandemic whilst 23.5% (N = 47) thought this would not be the case. However, if the online learning lessons would be provided for free, 80.5% (N = 161) of the participants thought these lessons would improve their wellbeing and self-esteem during the current COVID-19 pandemic and only 19.5% (N = 39) did not think this would be the case.

# 3.1 IWB and online learning

An independent-samples t-test was conducted to see whether there was a difference between IWB for participants who were interested in (free) online learning and those who were not. Results showed that there was no significant difference in positive and negative IWB for participants interested in (free) online learning lessons to further improve their wellbeing and self-esteem during the current COVID-19 pandemic (for online learning lessons, all t < 1.55, all p > .12; for free, online learning lessons, all t < 1.93, all p > .056). The mean scores for IWB were always higher for the participants who were interested in (free) online learning lessons to improve wellbeing, but these failed to reach significance. In addition, it is shown that the mean scores for IWBpositive were always higher than the mean scores for IWBnegative (Table 2; Figure 1).

 Table 2. Descriptive statistics of variables of interest (IWBpositive, IWBnegative) split by interest in (free) online learning lesson to improve wellbeing.

Variable		IWBpc	ositive	IWBnegative	
		М	SD	М	SD
Interest in online	Yes	53.13	8.61	41.79	8.39
learning lessons to improve wellbeing	No	50.81	10.20	40.57	8.85
Interest in free, online	Yes	53.19	8.82	41.60	8.58
learning lessons to improve wellbeing	No	50.10	9.61	41.08	8.24

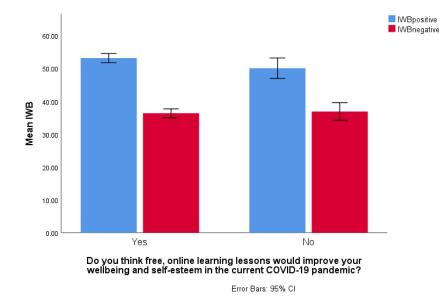


Figure 1. Mean scores for IWBpositive and IWBnegative split by whether participants thought free, online learning lessons would improve their wellbeing in the current COVID-19 pandemic.

A Spearman's rho correlation was conducted to find out whether there was a relationship between interest in online learning lessons and IWB (both positive and negative). Results showed that there was only a significant, negative correlation between free online learning lessons and IWBpositive (N = 200, rho = -.15, p = .032). The other correlations were not significant (all N = 200, all rho < .11, all p > .12). Results showed that the correlation between IWBpositive and IWBnegative was very small (N = 200, r = .21, p = .003) suggesting participants clearly distinguished between the positive and negative items of the IWB scale.

Finally, participants were asked the type of skills they would like to improve on to increase their employability. The majority (>90%) answered this question and described the skills they wanted to develop or improve on. Participants reported that they wanted to develop many skills, most of which can be labelled under the umbrella of soft skills and transferable skills (Fig. 2). Skills that were highlighted by many participants were communication skills, speaking, presenting, becoming more confident, interpersonal skills, and time management.



Figure 2. Word cloud indicating what skills participants would like to improve to increase their employability.

Most of these skills were skills that were covered in the 'Lessons for Humanity'. After completion of the survey, participants were directed to the site to start learning.

## 4 CONCLUSIONS

Results show that online learning lessons can improve people's wellbeing. More specifically during lockdown people were interested to improve their soft skills and transferable skills sets with topics such as 'Communication', 'Interpersonal skills', 'Growing confidence', and 'Speaking/Presenting'. Lifelong learning is central to our vision at Otermans Institute. Even though the world came to a sudden halt in March 2020, this lifelong learning remained at the core of our work. For a lot of people lockdown meant dealing with struggles and challenges that we not had to face before as their daily routines were heavily disrupted. This paper outlined the lessons we developed during lockdown to improve people's transferable skills set, encourage lifelong learning, and enhance people's wellbeing during lockdown with a particular focus on India as many schools remain closed till today with the second wave having hit the country. Future research will explore the longitudinal effects of this lesson series and people's wellbeing as COVID-19 remains to interrupt our lives on a daily basis.

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