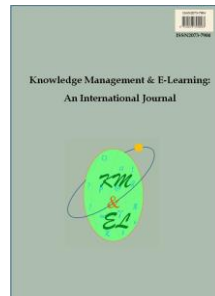

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Zrinka Fišer
Luka Pongračić

University of Slavonski Brod, Croatia



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The effect of online learning setting on motivation to learn EFL among students of child education profession

Zrinka Fišer* 

Department of Social Sciences and Humanities EDUDpt
University of Slavonski Brod, Croatia
E-mail: zfisher@unisb.hr

Luka Pongračić 

Department of Social Sciences and Humanities EDUDpt
University of Slavonski Brod, Croatia
E-mail: lpong racic@unisb.hr

*Corresponding author

Abstract: Motivation to learn a second and foreign language has been researched for several decades, initially employing the socio-educational model, and later the multi-dimensional model of motivational factors. The authors investigated the motivation of 279 non-English major students at University of Slavonski Brod (UNISB) in Croatia in learning English as a foreign language, with an aim to distinguish how an online learning experience caused by the COVID-19 pandemic shaped their extrinsic and intrinsic motives. They applied the five-component motivational system, consisting of motives related to future self-guides, instrumentality driven motives and previous learning experience. The analysis of the collected data showed that the intended effort to learn a target language, which gained more relevance as a motivational component than before COVID-19, varied between pre-pandemic and post-pandemic research findings. The motivational dimension of online learning showed no change in the importance of motivation connected to participants' feeling of duties, obligations, and responsibilities, but it did show a stronger correlation with motives that support learning. Further analysis also revealed a significant positive effect of online learning during secondary schooling with both instrumentality driven motives, and online learning during tertiary education with all the motivational dimensions except intended effort.

Keywords: Motivation; Foreign language; Students; Post-pandemic

Biographical notes: Zrinka Fišer is an Assistant professor at University of Slavonski Brod, where she teaches EFL courses. Her research involves teaching EFL to students with dyslexia, neurolinguistics, as well as motivation and language learning strategies in teaching English for generic and English for specific purposes. She is the author of the university ESP coursebook, the co-author of a teacher handbook *'Dyslexia in teaching EFL'*, and the author of several EFL coursebooks adjusted to students with reading difficulties. In corporation with the Croatian Education and Training Agency, Zrinka held numerous lectures and workshops to EFL teachers as part of their professional development. Her original scientific papers have been published in journals such as *Lenguas Modernas*, *In Esse*, and *Journal of Language and Education*. She is also an Editorial board member of *Education Journal*.

Luka Pongračić is a teaching assistant at University of Slavonski Brod and a PhD candidate. He attended many international scientific conferences and published many review and original scientific articles in domestic and international journals and proceedings. Luka is also a co-author of a scientific monograph *Pedagogical prevention of violence in hyperactive children* and was awarded the Best Teacher Award three times by Croatian Ministry of Science and Education.

1. Introduction

Both external and internal factors influence how much students participate in their education: external factors include behaviour, while interior factors include cognitive and emotional activity. Motivation reveals a student's capacity for active learning, but it does not reveal how they will actualize this capacity. Educational psychologists have been using a multimodal motivational system for learning a foreign language (FL) or a second language (L2) for the past 15 years to assess students' internal motivation for learning based on their future self-guides and the results of their learning experience (e.g., Aubrey, 2014; Dörnyei, 2009, 2019; Dörnyei et al., 2006; Fišer, 2023a, 2023b; Kormos et al., 2011; Martinović & Burić, 2021; Martinović & Sorić, 2018; Stamenkovska et al., 2022; Taguchi et al., 2009; Yilmaz, 2017). The face-to-face learning environment, where such instruments were first developed and used to gain insight into the complex motivational system, was shifted due to COVID-19 and the compulsory online/distant/e-learning setting, bringing new variables that now need to be tested and compared with previous findings to gain a more detailed insight into learners' motivation.

Unlike in a face-to-face learning context, online or distant teaching is implemented by individual work, meaning the physical alienation of learners from their peers and their teacher and exemption of feedback and collaborate learning. Such a setting forces learners to adapt their self-regulatory learning pace to desired learning outcomes which may, then, cause anxiety due to inadequate organisation skills and lack of motivational drive (Gardner, 2001; Jiang & Papi, 2021; Lemay et al., 2019). Research suggests that engaging in positive learning experiences and interacting with peers and instructors via chat may reduce FL anxiety (Fišer, 2024; Papi, 2010; Ucar & Göksel, 2020). The sense of duty and obligation has been proven to positively correlate with L2 anxiety, but positive attitudes towards achieving the ideal TL speaker's proficiency help to reduce anxiety levels (Jiang & Papi, 2021; Papi, 2010; Teimouri, 2017). Sense of duties and obligations has a prevention regulatory focus, which predicts motivated behaviour but only among prevention-oriented learners (Higgins, 1987; Papi & Teimouri, 2012; Teimouri, 2017). The use of ICT in language teaching may have a positive impact on learners' motivation and intended effort if it provided them with more input and interaction in the target language (Golonka et al., 2014).

A new setting altered the learner-instruction-content interaction, casting doubt on the comprehensiveness of the L2MSS model because it may have influenced how the learning experience changed both the extrinsic and intrinsic motivation of L2 and FL learners. The alienation from classroom peers and the instructor, the manner in which instructors shaped their teaching, the adaptation of learning materials and feedback, the use of ICT as a medium for conducting the teaching/learning process, and English becoming a necessity in using many of the applications for conducting online lectures as well as a medium for searching for the appropriate literature in the tertiary level of education could

all have an impact on learners' self-regulation, self-discrepancy, standpoint, anxiety and focus (Al Rawashdeh et al., 2021; Dörnyei, 2019; Fišer, 2024; Henry & Liu, 2023; Jiang & Papi, 2021; Ucar & Göksel, 2020).

We were interested in examining if and how an online EFL learning experience caused differences among EFL learners in contrast to pre-pandemic era and in the causal relationship between different dimensions of motivational self-system. The interaction of cognitive, affective, and social elements in creating the motivating behaviour in the post-COVID-19 pandemic era, characterized by an online EFL learning environment, is a topic growing in popularity and it has not yet been explored in the context of Croatian EFL students. Findings of this research may help in shaping the way of redesigning the existing curriculum in tertiary level of education to better meet the current needs and learning preferences of students to learn and, consequently, use English as global language.

2. Motivation

Motivation is one of the component parts of efficient learning but how it shapes the learning process has been much debated upon during past decades. Identification with a positive attitude towards the target language group, as well as the desire to interact for potential integration, were classified as instrumental motivation to learn a target language or integrative motivation (Gardner, 1985; Gardner & Lambert, 1972). As a result, this dichotomy of incentive orientation explains the desire to learn a language for personal, social, and professional advancement as well as the urge to identify with a TL group. Those theories developed into a socio-educational model which looks at language learning as different from learning other subjects because the process and the outcomes are influenced by the learner's attitude towards the target language community as well as behavioural and cognitive factors. According to this model, the motivation to learn SL or FL includes goal orientation, the desire to learn a language, learner's attitudes towards the language and the effort exerted to achieve such goals (Crookes & Schmidt, 1991). However, unlike SL acquiring, FL learners' desire to integrate into the TL community and culture has a minor impact on their motivation. To better suit the motivational model to FL learning, the formal setting component was added to the set of motivational factors influencing FL learning (Dörnyei, 1990, 1994; Dörnyei et al., 2006), resulting in the formation of the “*L2 Motivational Self System*” (L2MSS). The future-self guides, the Ideal L2 self (IL2S) and the Ought-to L2 Self (OL2S), derive from the theory of self-discrepancy (Higgins, 1987) and the theory of possible selves (Markus & Nurius, 1986). The IL2S component would correspond to Gardner's notion of integrativeness as particles of this subscale refer to the qualities that a learner aspires to have or achieve as an ideal L2 user (Gardner, 1985). The OL2S is associated to external instrumental factors as particles of this subscale refer to learners' beliefs about their duties, obligations, and responsibilities. Resulting from the future self-guide of the IL2S notion stems the motivation with the promotion focus, and from the OL2S the motivation with the prevention focus, therefore expanding the model with another two motivational dimensions: Instrumentality Promotion (hopes, aspirations, advancements, and accomplishments leading to future career success) and Instrumentality Prevention (absence or presence of negative outcomes resulting from failing to accomplish responsibilities and obligations) motives (Dörnyei, 2009; Jiang & Papi, 2021; Papi et al., 2018). The previous L2 learning experience, the fifth component of the multidimensional motivational system, was the component Dörnyei (2019) stated as one of the most neglected motivational factors and the one which should be investigated as possibly one of the most influential one.

Since a shift to online learning setting shaped prior learning experience of TL learners, research using the same L2MSS questionnaire should reveal if it caused any changes to the relationship of all the five motivational components in the post-pandemic context.

3. Method

3.1. Aim of the research

The aim of the research was to explore the effect of online learning setting, caused by COVID-19 pandemic, on motivation of non-English major students at UNISB to learn English as a foreign language (EFL). In order to do so, two research objectives and questions were formed.

RQ1: Do post-pandemic motivational dimensions among non-English major students in Croatia learning EFL differ than those from the pre-pandemic period?

RQ2: Did online learning experience affect motivation to learn EFL among non-English major students in Croatia?

3.2. Participants

A total of 279 non-English major students at UNISB participated in the study (see Table 1): 104 students of Integrated Undergraduate and Graduate University Teacher Education program (TE), 99 students of Undergraduate University Study of Early and Preschool Education program (ECEug), and 76 students of Graduate University Study of Early and Preschool Education program (ECEg). They learned EFL during secondary schooling, during their first and second year of the undergraduate studies, and during their first year of the graduate studies. 73 students had an online experience of learning EFL during their secondary schooling, 116 had such an experience during their studies at UNISB in the 2020/2021 academic year and 103 during 2021/2022 academic year (see Table 2). The age of participants ranged from 18 to 52, most of them (38.4%) being of 21-23 years old. 85 participants finished secondary school of trade and economics, 101 gymnasium and 93 of them other high schools. Almost all the participants were female. 45.2% of participants finished high school during 2019/2020 and 2020/2021 academic year while online learning and teaching was introduced during COVID-19 pandemic.

Table 1

The number and percentage of participants based on the study programme and the year of study

	TE program (%)	ECEug program (%)	ECEg program (%)
1 st year	27 (9.7%)	38 (13.6%)	32 (11.5%)
2 nd year	17 (6.1%)	26 (9.3%)	44 (15.8%)
3 rd year	18 (6.5%)	35 (12%)	
4 th year	16 (5.7%)		
5 th year	26 (9.3%)		
Total	104 (37.3%)	99 (35.5%)	76 (27.2%)

Table 2

Participants' experience of online EFL during secondary and tertiary education

	Online EFL during highschool (%)	Online EFL at university 2020/2021 (%)	Online EFL at university 2021/2022 (%)
Yes	73 (26.2%)	116 (41.7%)	103 (37.1%)
No	206 (73.8%)	162 (58.3%)	175 (62.9%)

3.3. Instrument

The instrument used in this research was adopted from previous motivation-oriented studies of Taguchi, Martinović and their colleagues (Martinović, 2013; Martinović & Sorić, 2018; Taguchi et al., 2009). Martinović (2013) tested the L2MSS questionnaire among 110 non-English major students at University of Zadar and on the basis of the factor analysis concluded that the questionnaire had good psychometric properties and thus could be used as an instrument in research of motivation for learning L2. The L2MSS questionnaire was also tested by Fišer in 2023 in a pilot study conducted at UNISB (Fišer, 2023a). First part of the instrument consisted of questions related to socio-demographic data of participants, and the second one of L2MSS questionnaire. The data obtained and displayed in this paper is part of an ongoing larger research being conducted by the authors, and which aims to investigate the relationship between motivation, the use of language learning strategies and emotional engagement of non-English major students at UNISB in the post-pandemic times. The L2MSS scale used to measure the multi-dimensional motivational factors consisted of 52 particles arranged into 6-point Likert rating subscales: the ideal L2-self (IL2S) subscale with 10 particles, the ought-to L2 self (OL2S) subscale with 12 particles, the instrumentality promotion (IPro) subscale with 13 particles, the instrumentality prevention (IPre) subscale with 8 particles, and the intended effort (IE) subscale with 9 particles. The subscales were followed by a 6-point Likert scale. All the subscales and the L2MSS scale had a very high reliability, Cronbach's alpha ranging from .800 to .947 (see Table 3).

Table 3

Reliability of L2MSS scale and its subscales

Scale/subscale	Cronbach's alpha	N of items
L2MSS	.947	52
IL2S	.934	10
OL2S	.885	12
IPro	.853	13
IPre	.800	8
IE	.836	9

3.4. Means of gathering and analyzing data

Data were collected from four online educational psychology classes at a southeast comprehensive university. A total of 93 students chose to participate in the study to receive course credit as part of a class project. Students who did not wish to participate in the study were given alternatives to receive their course credit. The sample was predominantly White (72%), female (75%), upper-level undergraduates (54%), living off-campus (94%), and employed (94%).

4. Results

Data analysis (see Table 4) showed the highest mean value for the IL2S subscale ($M = 3.89$), followed by IE ($M = 3.73$), IPro ($M = 3.57$), IPre ($M = 3.48$), and lastly the OL2S subscale ($M = 2.47$) (ranging from 1-6). The main value of participants' answers to all the particles of the L2MSS scale (ranging 1-6) was 3.41 and showing moderately positive attitudes to motivation in learning EFL.

Table 4

Mean, median and standard deviation values for participants' answers to particles of the L2MSS scale and its subscales

Scale	Valid <i>N</i>	Missing <i>N</i>	Mean	Median	Std. Dev.	Min.	Max.
L2MSS	249	30	3.410	3.346	.744	1.17	5.35
IE	273	6	3.733	3.778	.952	1.00	6.00
IL2S	267	12	3.885	3.900	1.210	1.00	6.00
OL2S	272	7	2.465	2.417	.869	1.00	5.25
IPro	274	5	3.572	3.539	.875	1.31	5.62
IPre	276	3	3.482	3.500	.963	1.00	5.63

According to Kendall's tau-b coefficient (τ_b), participants' perspectives regarding the L2MSS scale particles were only very slightly connected with their experience taking online EFL lessons in high school. However, the t-test analysis revealed a statistically significant difference between participants regarding their exposure to online EFL learning while in secondary school (see Table 5). Participants who had this experience exhibited significantly more positive attitudes toward the IPro subscale particles than those who did not ($t = 2.17, p < 0.05$). The same was observed for particles of the IPre subscale (see Table 5); participants who had experience learning EFL online while in high school exhibited significantly more favourable attitudes toward particles of the IPre subscale than those who did not ($t = 1.99, p < 0.05$).

Table 5

The relationship between the high school online EFL experience and particles of the IPro and IPre subscales

Subscale		<i>N</i>	Mean	Std. Dev.	<i>F</i>	<i>t</i>	Sig. (2-tailed)
IPro	Yes	71	3.764	.880	.216	2.17	.031*
	No	203	3.504	.865			
IPre	Yes	72	3.675	.954	.031	1.99	.047*
	No	204	3.414	.959			

Note. * Significant at the 0.05 level

The Kendall's tau-b coefficient (τ_b) analysis (see Table 6) revealed a negative moderate correlation (-0.21) with the L2MSS scale which was statistically significant ($p = 0$): participants who attended EFL courses online during their studying at UNISB expressed more positive attitudes towards particles of the L2MSS scale (the number 1 was used for "yes", and the number 2 is for a "no" variable; therefore, a higher scale attitude was in a negative relationship with the answer "yes").

Table 6

Kendall's tau-b coefficient (τ_b) of the experience of online EFL courses during studying at UNISB and the L2MSS scale

Online high school <i>N</i>	L2MSS <i>N</i>	Correlation coefficient	Sig. (2-tailed)
277	247	– .213**	.000

Note. ** Significant at the 0.01 level

The *t*-test also revealed a statistically significant difference in relation to the experience of online EFL classes during participants' studying at UNISB (see Table 7): those who had such an experience showed significantly more positive attitudes towards particles of the L2MSS scale ($t = 4.26, p < 0$), IL2S subscale ($t = 2.57, p < 0.05$), OL2S subscale ($t = 2.6, p < 0.05$), IPro subscale ($t = 3.86, p < 0$), and IPre subscale ($t = 2.07, p < 0.05$).

Table 7

The relationship between the online EFL experience at university and particles of the L2MSS sale and its subscales

Subscale		<i>N</i>	Mean	Std. Dev.	<i>F</i>	<i>t</i>	Sig. (2-tailed)
L2MSS	Yes	196	3.510	.719	.041	4.26	.000**
	No	51	3.026	.735			
IL2S	Yes	209	3.981	1.181	.206	2.57	.011**
	No	56	3.516	1.272			
OL2S	Yes	210	2.542	.885	1.902	2.59	.010**
	No	60	2.215	.771			
IPro	Yes	212	3.679	.860	.043	3.86	.000**
	No	60	3.195	.842			
IPre	Yes	214	3.545	.992	1.520	2.07	.039*
	No	60	3.254	.836			

Note. ** Significant at the 0.01 level; *Significant at the 0.01 level

Table 8

Correlation of subscales

	IE	IL2S	OL2S	IPro	IPre
IE		.654** (.000)	.357** (.000)	.681** (.000)	.306** (.000)
IL2S			.188** (.002)	.545** (.000)	.057 (.358)
OL2S				.639** (.000)	.692** (.000)
IPro					.574** (.000)

Note. ** Significant at the 0.01 level; *N* (IE) = 273; *N* (IL2S) = 262; *N* (OL2S) = 267; *N* (IPro) = 268; *N* (IPre) = 270

All the correlations between the subscales shown in Table 8 were positive. The IE subscale correlated the highest with IPro ($r = .681, p < 0.01$), closely followed by IL2S ($r = .654, p < 0.01$), and then OL2S ($r = .357, p < 0.01$), and IPre ($r = .306, p < 0.01$) subscales. The IL2S subscale correlated the highest with IE, followed by IPro ($r = .545, p < 0.01$), and lastly with OL2S ($r = .188, p < 0.05$) subscales, while it did not significantly correlate with the IPre subscale. The OL2S subscale correlated the highest with IPre ($r = .692, p < 0.01$).

0.01) and IPro ($r = .639, p < 0.01$), followed by IE and lastly with IL2S subscales. The IPro subscale correlated the highest with IE and OL2S, followed closely with IPre ($r = .57, p < 0.01$) and IL2S subscales. The IPre subscale correlated the highest with OL2S, followed by IPro and lastly with IE subscales.

5. Discussions

5.1. Research objective one

Csizér et al. (2010) and Kormos et al. (2011) found a statistically significant relationship between learning attitudes that influenced motivation for learning and the instructional setting, goals, and self-related beliefs. Future self-guides were demonstrated to strongly correlate with motivated behaviour, as was shown in the pre-pandemic research studies where the IL2S was suggested as the strongest predictor of the motivational drive for EFL learning (Dörnyei, 2009; Kormos et al., 2011; Martinović & Sorić, 2018). The ought-to L2 self-guide had a less motivational impact except in countries such as China and Japan where socio-educational factors play an important role in motivation: findings of research conducted in countries where studying is exam-oriented and English language proficiency is considered important for future professional development suggest that OL2S significantly correlated with learning effort (Taguchi et al., 2009).

The results of this study, which focused on post-pandemic EFL learning among UNISB non-English major students, showed that the mean value of participants' responses to the IL2S subscale was higher than the mean value of their responses to the OL2S subscale, indicating that motivation related to ideal TL speaker was more significant than motivation related to the duties and obligations placed on them as TL learners (see Table 4). Additionally, results indicated that Croatian students who did not major in English were the least driven by a sense of obligation and duties (the OL2S subscale), while the mean values of all other subscales were higher (see Table 4). The findings are mainly in accordance with those of pre-pandemic research. The discrepancy between the two future self-guides (IL2S and OL2S) was also reported in the pre-pandemic research among participants of different major studies, nationalities, and gender. Yilmaz (2017) reported that pre-service EFL teachers in Turkey stated the most positive attitude towards particles of the IL2S subscale and the least positive towards particles of the OL2S subscale, regardless of their age, year of study, or language proficiency. Aubrey (2014) also discovered a higher mean value for IL2S particles than those of OL2S among second-year students from the Departments of Humanities, Business, Economics, and Sociology in Japan. Stamenkovska et al. (2022) reported similar findings of the research conducted among international students in Hungary who were studying English or Hungarian as a foreign language.

Findings of this post-pandemic research are also partly in accordance with findings from the pre-pandemic research of motivation among non-English major students in Croatia. Martinović and Sorić (2018) also concluded that the ideal L2 self was the highest motivational factor ($M = 4.52$ among male and $M = 4.42$ among female students), and the ought-to L2 self the lowest one ($M = 2.92$ among male and $M = 2.86$ among female students). Instrumentality-promotion, instrumentality-prevention, and the intended effort motivational dimensions were evenly distributed between those two future guides. The differences can be observed in participants' attitudes towards particles of IE subscale: this motivational dimension seems to have become the second most significant motivational

drive in the post-pandemic EFL learning, preceding both IPro and IPre dimension. Also, the mean values of IL2S, IPro and IPre subscales in this post-pandemic research are lower than in pre-pandemic one (ibid.). These findings lead to the conclusion that the experience of online EFL learning led to the ideal L2 self-guide, instrumentality promotion, and instrumentality prevention related motives losing some of their effect on fostering the motivation to learn EFL at the tertiary level of education; the ought-to self-guide did not change its effect on the motivation; and the intended effort gained more value in the motivational dimension, but due to other motivational factors losing theirs.

The L2MSS multimodal motivational system is based on the social context, including aspirations for the ideal TL speaker as well as a sense of duty and obligation to others. If the motivational future-self guides dimensions lost some of their influence on motivation to learn TL, it could indicate that the shift from a more social face-to-face learning setting to a more individualised self-driven and self-paced online learning context influenced non-English students' perceptions of English as a global language. Instrumentality promotion (factors fostering learning in a positive context and related to future career goals) and instrumentality prevention (factors obstructing learning a TG and related to sense of obligation and duties) were found to be the moderately high influential factors (see Table 4). When closely examining mean values of certain particles of those subscales, one could see that the expectations of their peers, families, and teachers did not appear to be as significant to Croatian students as how they saw themselves as TL users and how a TL could enhance their future standing in the workplace and in social interactions (IL2S, IPro, and IPre). Examples of particles with the highest mean value which seem to support such a conclusion are:

"I can imagine myself speaking English with friends and colleagues from abroad."
[IL2S]

"Learning English is important for me because an educated person is assumed to speak English." [OL2S]

"Learning English can be important for me because I think I'll need it for further studies." [IPro]

Particles with the lowest mean value which also seem to confirm the stated conclusion are:

"I can imagine myself studying at a university where all courses are taught in English." [IL2S]

"I have to learn English because if I don't study it, my parents will be disappointed with me." [OL2S]

"Learning English is important for me because I plan to study abroad." [IPro]

"Learning English is important to me because I will be considered a weaker student if I don't know English." [IPre]

When further examining how motivational dimensions were related to participants' intended effort to learn and use the TL (see Table 8) among students at UNISB and in the post-pandemic times, it was discovered that intended effort correlates with all the L2MSS subscales, but most highly with IPro and IL2S. IE particles explore participants' motivation stemming from their learning experience related to the learning environment, teacher/instructor, learning material, means of evaluation etc. Therefore, it could be said

that learners do put some effort in learning a TL in order to meet the expectations of others from their surroundings but are more motivated to learn the TL in relation to how they perceive it would help them in their future life goals (education, profession, or social connections). The analysis revealed the lowest significant correlation between mean values of the IL2S and OL2S, IL2S and IPre, and IE and OL2S subscales which leads to a conclusion that the effort participants' were willing to exert in learning the TL (and which is based on their previous learning experience) was most closely connected with their future self-guide of trying to become an ideal L2 speaker by applying actions which would promote learning. Intended effort to learn the TL was more loosely connected to motivation stemming from what they believed was their obligation, responsibility, or duties, and with actions which prevent learning. The ought-to L2 self was found to positively correlate very highly with both instrumentality promotion and prevention, while the ideal L2 self-correlated somewhat less strongly with instrumentality promotion and did not significantly correlate with instrumentality prevention.

In their pre-pandemic research among non-English major students in Croatia, Martinović and Burić (2021) concluded that the L2MSS was an important predictor of intended effort, and that students' L2 motivation was based on future selves and/or future goals, but not on past learning experiences related to previous high school EFL grades. Findings of their research implied a higher direct positive effect of the ideal L2 self and a bit lower direct positive effect of ought-to L2 self on the intended effort. They also concluded that instrumentality prevention had a more positive effect on the ought-to L2 self than on the ideal L2 self, and instrumentality promotion had a more positive effect on the ideal L2 self than on the ought-to L2 self. Similar findings were also obtained from the research among Chinese, Japanese, and Iranian students (Taguchi et al., 2009).

Findings of this post-pandemic research somewhat confirm such a relationship between intended effort and both future-self guides (having a higher positive effect on the ideal L2 self and a lower effect on the ought-to L2 self), between instrumentality promotion and the ideal L2 self, and between instrumentality prevention and the ought-to L2 self (see Table 8). Nonetheless, the difference can be observed in the correlation between the ought-to L2 self and both instrumentalities since this future-self guide correlated with an almost equal positive effect on both, unlike in the pre-pandemic research.

It could be concluded that the relationship between intended effort and both future-self guides did not significantly change in the pre- and post-pandemic times, but COVID-19 pandemic did influence the relationship between motivation related to sense of obligation/responsibilities/duties and motivation related to what promotes learning, causing this correlation to now be stronger. Dörnyei, (2009) conceptualised the ought-to self-guide as a set of attributes learners believe they should possess to meet expectations of others. More recent studies contributed to a debate of how well the standpoints in the OL2S motivational dimensions are explained and differentiated (Al-Hoorie, 2018; Henry & Liu, 2023; MacIntyre, 2022; Papi et al., 2018). A number of "others" may influence the learner's ought-to motivational perspective: parents, family members, instructors/teachers, political and religious role models or authorities, co-workers, fictional characters, etc. Given the medium via which online learning was delivered (applications, programmes, platforms, the Internet, social media) and the changes created by the COVID-19 pandemic in several sectors of daily life, the role of "others" may have changed. Not only has the function of "others" in influencing the ought-to future guide changed, but viewpoints in L2MSS ought-to guide do not distinguish "own" ought-to self-guide from "others" self-guide (Henry & Liu, 2023). To continue using the multimodal motivational system in

FL/SL learning research, future research should first address the issue of duality in ought-to self-guides, as there are indications (such as the findings of this study) that the online learning setting has emphasised changes in this modality.

5.2. Research objective two

Further analysis was conducted to study the impact of online learning experience amongst the same set of participants in order to provide answers to the second research objective. Results shown in Table 5 indicate a positive correlation between prior online learning experiences during secondary education and both instrumentality promotion and instrumentality prevention. These findings suggest that prior online learning experiences during secondary education increased participants' motivation for future career related EFL learning and motivation for avoiding being an unsuccessful learner or speaker of TL. On the other hand, the experience of online learning during studying at UNISB seemed to have affected almost all the motivational dimensions. Participants with such an experience reported significantly more positive attitudes towards statements of the L2MSS scale (motivation in general), the ideal L2 self, the ought-to L2 self, and both types of instrumentality motives (see Table 7). Such an experience seemed not to have affected only the participants' intended effort to learn EFL. It could be concluded that online learning experience during high school has a different effect than online learning experience during tertiary education: online learning experience during secondary schooling raised instrumentality driven motivation while such an experience during tertiary schooling positively affected both extrinsic and intrinsic motivation. Intended effort seem to be the only motivational dimension not affected by online learning experience. Since IE subscale measures the effort learners would exert in learning a TG, based on their previous learning experience (the experience with the learning environment, instructors, materials, evaluation of knowledge etc.) which have undergone some changes during the online learning and teaching setting, it is quite interesting that a shift from face-to-face to online learning seemed not to significantly affect their intended effort in EFL learning. The same was observed when comparing the pre and post pandemic research: the motivation related to intended effort was (along with the ought-to L2 self) the motivational dimension not affected by the new setting. Online EFL learning did affect the motivation for EFL in such a way that those who had such an experience during secondary and/or tertiary education were more motivated to become closer to the perceived ideal L2 speaker, were more motivated to meet the expectations from their family/friends/instructors, were more motivated to use the TL to avoid being an unsuccessful learner of TL, and were more motivated to learn the TL to help them in their future career. Although Huang and his colleagues (Huang et al., 2020) did not use the L2MSS questionnaire in their study of motivation in an online EFL learning environment among Chinese EFL students, they reached the same conclusion – that students were extrinsically or instrumentally motivated to learn a target grammar (TG) during online learning (passing exams and receiving a reward). Since the participants in the study did not report any appreciable differences between the pre-pandemic on-site and pandemic online learning experiences, stating that learning content and activities did not differ, the authors perceived it as possibly inadequate preparation of lecturers for implementation of the teaching pedagogy most suitable to new learning setting.

To fully understand the impact of a shift from face-to-face to online learning settings during the COVID-19 outbreak, researchers should first re-evaluate the existing L2MSS questionnaire to better suit the differentiation between “own” and “others”

perspectives, and then test it in relation to previous learning experience. Some novel motivational models have already been developed, such as Teimouri's (2017) three-partite model and Papi et al. (2018) 2×2 model, which may be more suited to post-pandemic online-based motivation for TL learning.

6. Conclusion

Over the last two decades, a shift from a socioeducational model of integrative motivation (Gardner, 1985) to a more dynamic contextual model of motivation in second language (L2) learning has resulted in viewing the relationship between the individual and the context as complex and dynamic, implying that L2 motivation is viewed in the context of a person's self and identity (Dörnyei, 2009). Dörnyei (2019) defined the L2 Learning Experience as "*the perceived quality of the learner's engagement with various aspects of the learning process*", which may refer to school context, syllabus and teaching materials, learning tasks, learner's peers, or the teacher/instructor. Unlike the two future self-guides, thoroughly explained and validated motivational components of the ideal L2 self and the ought-to L2 self, the third component of previous learning experience is a factor which still needs to be more minutely included in the studies about motivation for learning FL and SL, especially in the COVID-19 pandemic era which brought forth new phenomena of online learning and setting. Learning experience has been called different names, e.g., "*Attitudes to learning English*" (Taguchi, 2013; Taguchi et al., 2009), "*L2 learning attitude*" (Kormos et al., 2011), "*L2 learning experience*" (Csizér & Kormos, 2009) or "*English learning experience*" (Papi, 2010), due to the phenomena still not being addressed in detailed manner. Although all the named researchers used similar questionnaire particles to explore the learner's attitudes to the learning process, whether it relates to the idea of their future selves or the effect of the immediate/current learning experience on their motivation, Dörnyei (2019) has stressed the need to conceptualise a more specific and elaborate measurement procedures for studying the motivational system. The authors used the L2MSS questionnaire (Dörnyei, 2009, 2019), which is based on the psychological theory of "*possible selves*" and focuses on learners' future visions of themselves: Ideal self, Ought-to self, Instrumentality-promotion, Instrumentality-prevention, and L2 learning experience. The core notion is the Ideal self, which reflects what the students would ideally like to have (personal hopes or wishes). The second idea is the Ought-to self, which depicts what learners believe they should have (a sense of responsibility, obligations, or responsibilities). The instrumentality idea is dual in nature, with instrumentality-promotion associated with the Ideal-self and instrumentality-prevention associated with the Ought-to self. The first implies goals cantered on what promotes learning (e.g., boosting prospects for better future work), whereas the second denotes motives cantered on what prevents learning (e.g., avoiding family and friends rejecting learner's poor grades). The final component is the L2 learning experience, which is concerned with how those two internal processes influence learners' participation in learning.

As was outlined in this paper, the motivation for L2 learning among non-English students in Croatia has changed during the COVID-19 breakout. The experience of online, distant or e-learning affected almost all the motivational dimensions: both future L2 self-guides and both instrumentality promotion and prevention. By applying the L2MSS multidimensional motivational model, it was concluded that the ideal L2 self-guide, instrumentality promotion and instrumentality prevention factors now play a less significant role in learning EFL than in the pre-pandemic times, while the ought-to self-guide remained the least significant one. The intended effort, although retaining its

significance in the post-pandemic times now gained a higher position due to other motivational factors using theirs. Online learning experiences during secondary schooling were found to significantly correlate with both instrumentality-driven motivation to learn the TL, whereas the same experience during tertiary education was found to significantly correlate with all motivational dimensions except the intended effort.

It is clear that prior learning experience in an online learning context had a significant effect on how non-linguistic students perceived the value of the English language in their future education and profession. Such changes should also be reflected in the instrument used to assess their motivation to learn a TL, suggesting a re-evaluation of the current L2MSS instrument.

Author Statement

The authors declare that there is no conflict of interest.

ORCID

Zrinka Fišer  <https://orcid.org/0000-0001-5425-6659>

Luka Pongračić  <https://orcid.org/0000-0002-2378-822X>

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