

Received: July 2022  
Accepted: March 2023  
DOI: 10.7862/rz.2023.hss.08

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## **FOSTERING STUDENTS' ADAPTABILITY THROUGH SELF-EFFICACY: A CASE STUDY OF UNDERGRADUATE UNIVERSITY STUDENTS**

The present study was initiated to verify whether a curriculum enhanced with efficacy-building techniques might foster students' adaptation to an online study environment during the COVID-19 pandemic. Inductive thematic analysis was applied to analyze interview data obtained from 32 sophomores pursuing a degree in English as a Foreign Language. Three main themes were identified: students voiced their concerns regarding the lack of online literacy, symptoms of cognitive overload, and the absence of meaningful relationships. The planned intervention partially facilitated the students' transition process: growing efficacy among the sample was linked to more proper attribution, less negative affect, and the development of individual and shared regulation mechanisms.

**Keywords:** self-efficacy, adaptability, regulation mechanisms, affect.

### **1. INTRODUCTION**

The outbreak of the global pandemic has triggered unprecedented changes in the daily lives of individuals around the globe, including members of academia. Although remote education offers many benefits, teachers and students alike struggled not only with limited social contact and the fear of the unknown but also with adjusting their efforts to a novel delivery mode. Although, at that point, students had some prior experience with online education, it soon became apparent that many obstacles they faced were not appropriately addressed. Aware of the challenges evoked by the novel study environment, the present intervention study was initiated at the onset of the winter semester of 2020/21 to facilitate students' adaptation to a remote learning environment.

### **2. THEORETICAL FRAMEWORK**

#### **2.1. Adaptability**

Adaptability is defined as an individual's capacity to adjust behaviours, thoughts, and feelings in response to variable, uncertain, and unexpected circumstances (Martin, Nejad,

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Colmar, Liem, 2013). Adaptability is most typically conceptualised as a composite of three dimensions: (i) *behavioural*, referring to adjustment of one's actions; (ii) *cognitive*, which concerns adapting one's thoughts to given circumstances; (iii) and *emotional*, explained as adopting a suitable frame of mind and altering one's affective responses (Holliman, Waldeck, Jay, Murphy, Atkinson, Collie, Martin, 2021). In educational contexts, the concept is defined as students' prowess in monitoring and directing their cognitive, behavioural, and emotional responses to facilitate future performance and meet academic objectives. Thus, adaptability is frequently conceptualised as a crucial facet of self-regulated learning (Winnie, Hadwin, 2008). The concept has also been linked to higher overall levels of motivation (Martin et al., 2013), engagement (Zhang, Wu, Xu, Cao, Goetz, Parks-Stamm, 2021), and emotional well-being (Holliman et al., 2021).

Whereas students' adaptability while transitioning to new educational settings seems to be relatively well-investigated (Collie, Holliman, Martin, 2017; Martin et al., 2013), the research on how students cope with exchanging face-to-face learning for a remote study environment due to the outbreak of COVID-19 is currently scarce. However, it is possible to observe some investigative efforts in this regard. In the pandemic context, satisfactory adaptability was associated with lower levels of negative affect (Zhang et al., 2021) and higher study satisfaction and emotional well-being (Ishimaru, Adachi, Nagahara, Shirai, Takemura, Mehra, Higashino, Yagi, Ikeda, 2021). Additionally, the study by Besser, Flett, and Zeigler-Hill (2020) indicated that individual difference factors such as self-esteem, self-criticism, and sense of mattering might help predict students' adaptability, as students with higher self-reported adaptability were more inclined to display healthy self-perceptions.

## 2.2. Self-efficacy

In its essence, self-efficacy refers to whether or not individuals judge their own skills and abilities as sufficient to produce satisfactory outcomes, especially in circumstances which they consider challenging and requiring much effort. Usher and Pajares (2008) identified four primary sources of efficacy beliefs and proposed the following taxonomy: (i) *mastery experiences*, which pertains to the analysis of one's past performances; (ii) *vicarious learning*, with efficacy information being accrued through the observation of other people pursuing goals an observer finds personally relevant; (iii) *verbal persuasion*, referring to the reinforcing role of feedback provided by one's significant others; and (iv) *emotional cues*, explained as both positive and negative affect experienced during one's pursuits. As self-efficacy leverages such aspects of an individual's performance as decision-making, appropriate goal-selection, effort expenditure, success-failure attribution, and perseverance in challenging circumstances, it is considered one of the most important non-intellective predictors of achievement, also in the academic setting (Talsma, Robertson, Thomas, Norris, 2021).

As the outbreak of the worldwide pandemic has caused unprecedented disruption in virtually all domains of human existence, it comes as no real surprise that the construct of self-efficacy has been at the centre of researchers' attention. In educational contexts, the recent study by Aguilera-Hermida (2020) suggested that less agentic students reported lower expectations regarding their academic performance due to the pandemic outbreak. Also, self-efficacy was linked to less negative affect throughout periods of prolonged confinement (Alemany-Arrebola, Rojas-Ruiz, Granda-Vera, Mingorance-Estrada, 2020).

### **3. RESEARCH RATIONALE**

Considering both self-efficacy and adaptability represent personal resources which support individuals in cognitive, behavioural, and emotional adjustments in response to novel, challenging circumstances, it seems warranted to assume that these factors may also aid members of academia in tackling the adverse consequences of the global pandemic. Surprisingly, the constructs have been rarely investigated in combination, although it is possible to observe some investigative efforts linking adaptability and domain-specific efficacy beliefs (Martin, Collie, Nagy, 2021; Zhang et al., 2021). As no study to date has attempted to induce more favourable efficacy beliefs in efforts to foster students' adaptation to a remote mode of teaching, the present project was initiated to verify whether an efficacy-imbued curriculum may contribute toward a less-cumbersome transition to a novel study environment.

### **4. METHODS**

#### **4.1. Participants**

In the present project, convenience sampling was used, and the research sample was composed of students who participated in the translation classes held by the author. More specifically, the participants were 32 sophomores (Female: 18, 56,25%; Male: 14, 43,75%) pursuing a degree in English at one of the public universities in Poland. The group was homogenous in terms of age and language proficiency.

#### **4.2. Interviews**

The data were collected through a semi-structured interview protocol designed specifically for the research. Two online interviews (pre/post-intervention) were conducted with each respondent, and a typical interview would last 40 minutes on average. In Phase 1, the respondents were familiarised with the methodology of the study and were requested to sign a written consent form. Then, the respondents were requested to comment on their remote learning experience, including aspects such as observed advantages and disadvantages of online education and self-evaluation of one's coping efforts. In Phase 2, the participants were to reflect on their prior accounts (short summaries were provided) and the effectiveness of the course. A typical interview would also incorporate several probing and follow-up questions.

#### **4.3. The intervention**

Considering self-efficacy is a personal resource that aids individuals in adjusting their coping efforts to challenging circumstances, it was hypothesised that higher agency might support learners in regulating their cognitive, behavioural, and emotional responses while functioning in the new reality. The intervention consisted of several stages; in Phase 1, a pre-intervention interview was conducted to identify and reframe the obstacles students perceived as deteriorating their learning experience. Consequently, as many students struggled with the lack of online literacy, a training session in MS Teams was held. Additionally, each student was provided with a personalised strategy that targeted respondents' perceived deficiencies in workload management. As self-efficacy begins with autonomy, the strategies were not imposed on learners and were meant to serve guiding purposes.

At the beginning of Phase 2, a discussion was held with the participants with the aim of identifying an end goal the students would find both relevant and educational. It was agreed that instead of individual translation projects, the whole group would prepare three assignments and present them in front of their fellow freshmen. To allow for continuous efficacy-building, several progress checks were incorporated. The tasks conducive to the end goal were not pre-defined; the author hoped that the feeling of collective responsibility for the outcomes would positively influence learners' agency and participation. Upon completion of each minor assignment, a discussion would be held so that learners could exchange ideas and reach a consensus on whether the outcomes were satisfactory. Students had 90 minutes to complete each of the minor assignments, and, in case it was not completed on time, participants would hold an additional meeting on Teams to finish the task at hand. On top of achieving course-related objectives, such meetings were believed to grant students additional opportunities to socialise. Three immediate feedback strategies were chosen for the present research: (i) peer assessment, (ii) the teacher's feedback, and (iii) self-assessment.

#### 4.4. Procedure and validity measures

Given the formerly mentioned scarcity of studies linking adaptability with general self-efficacy beliefs and the corresponding need for more elaborate interpretations, inductive thematic analysis as outlined by Braun and Clarke (2007) was used. In this approach, instead of approaching the data with some preconceived themes, the themes are determined by the dataset (Nowell, Norris, White, Moules, 2017). In the first stage of the analysis, the interview data were transcribed and read repeatedly to develop a more satisfactory understanding of individual accounts. In the next step, a description of each account was produced. The crucial sections of the text were then highlighted using different colours, with each colour corresponding to a different label. The following extract illustrates the procedure:

Table 1. Codes-sample

INTERVIEW EXTRACT:	CODES:
<p>Many of my friends stay with their families, but I am stuck in the dormitory room. I could go back home, but I don't want to put my parents at risk. I have to do everything on my own, and I have never felt so alone. I was excited about meeting new people, partying, and studying together. I haven't had a chance to experience any of this.</p>	<ul style="list-style-type: none"> <li>• Exclusion and loneliness</li> <li>• Security of family members</li> <li>• Need for peer relationships</li> <li>• Sense of loss</li> </ul>

Source: Research data gathered by the author.

The codes were then reviewed to verify whether any prevalent patterns may be identified in the dataset. The labels which were overlapping or were deemed too vague were discarded. The table below illustrates how the codes were merged into themes.

The final themes were then once again reviewed to ensure that they represented what was dominant in the data (Nowell et al., 2017). Several measures were adopted to ensure the validity of the present investigation. The respondents were provided with written summaries of their accounts to verify whether the description elaborated by the researcher was concise and factual. As an additional validity measure, an external audit was performed,

and an external researcher was requested to verify the veracity of the procedure and the corresponding interpretations. The results of the coding procedures were primarily coincidental (with an inter-rater agreement of 90%). The minor disagreements that emerged in due course were first discussed and then, the author implemented some name alternations proposed by the auditor.

Table 2. Merging codes into themes

THEMES:	CODES:
<ul style="list-style-type: none"> <li>• Lack of meaningful relationships</li> </ul>	<ul style="list-style-type: none"> <li>• Need for peer relationships</li> <li>• Exclusion and loneliness</li> <li>• Sense of loss</li> </ul>

Source: Research data gathered by the author.

## 5. FINDINGS

### 5.1. Lack of online literacy

Several participants complained about teachers' lack of online literacy, which comes as no real surprise considering the abrupt nature of the transition to the online study environment. Interestingly though, while reoccurring technical issues would indeed pose a threat to an effective educational process, it transpires that teachers' lack of literacy also had a bearing on students' efficacy in this domain, as some respondents reported feeling uncertain as to whether they have the required skills to fully participate in online classes:

Initially, I felt sorry for our teacher as I could tell she was having problems. I am having a hard time adjusting, too. I've never been into new technologies and computers. Actually, I wonder if my skills are enough to participate in the classes. For a moment, I even thought it was her fault and that she didn't care. I am thinking about taking a break from my studies.

Following the intervention, the same participant commented:

I was just searching for an excuse not to continue my studies. All it took was to watch a few tutorials on YouTube, it made my life so much easier. I even recommended them to our lecturer! I think at that time, I just had enough of sudden changes, and I had to find something or someone to blame.

### 5.2. Cognitive overload

In the initial months of the pandemic, students experienced severe difficulties adjusting their coping efforts to the novel reality. Whereas the vast majority of students struggled with workload management and maintaining study-life balance, leading to emotional weariness, there were some seemingly successful individuals who claimed that they were not satisfied with their coping efforts, giving rise to negative affect:

People from my group often ask how I cope with all the assignments we get. They only see my good grades, though. I don't think I do enough. Before COVID, we all had equal chances, but now? I have to work twice as hard to receive identical

education. Otherwise, I don't think I stand a chance of competing for a job with someone who studied before the pandemic. I can't stop thinking about it.

Considering both self-efficacy and adaptability are personal resources that aid people in navigating through periods of the unknown, the hope was that the growth in the individual resources might mediate the detrimental impact of the pandemic. As one of the students commented:

My study-life balance is much better now. I mean, I didn't know what to expect at first, and that scared me. With all the COVID news I listened to daily, it was difficult to organise myself, I considered it pointless. I have learnt my lesson now and stopped complaining about everything. I even started working out in my free time!

We also asked the respondent who mentioned unequal job opportunities to comment on his thoughts:

I think I was overwhelmed with all the adjustments and sacrifices we had to make back then. I don't think so now. It will take time for the job market to get back to normal and for work to get back to normal. But I am great at what I do, and I love teaching people. I will surely find a job where it will be appreciated.

### **5.3. Lack of meaningful relationships**

Although the detrimental impact of the pandemic could be observed in all domains of life, it is not at all surprising that most people, including students, found isolation and social distancing emotionally straining. Not only have the students suffered from the lack of meaningful relationships with peers, but they also experienced severe difficulties seeking support. As one of the participants commented:

Many of my friends stay with their families, but I am stuck in the dormitory room. I could go back home, but I don't want to put my parents at risk. I have to do everything on my own, and I have never felt so alone. I was excited about meeting new people, partying, and studying together. I haven't had a chance to experience any of this.

Conversely, some respondents mentioned being overwhelmed by the amount of time spent with their families:

I know it sounds horrible, but being separated from other students isn't the worst part. It is staying with my family 24/7. I find it difficult to focus with all my family members being around. I have no one to talk to and share my problems with. They have no idea what I am going through.

Although the intervention was successful in creating a sense of shared responsibility amongst the sample and provided students with an abundance of opportunities for interaction during regular meetings on the Microsoft Teams platform, it transpires that the implementation of the curriculum has not been successful in remedying the sense of solitude experienced by all participants:

It was fun at first, but all in all, we just spent more time talking about class assignments. I would rather spend some time socialising than talk about another project. I was stuck with my family all the time, so it was quite difficult not to be mad about it.

## 6. DISCUSSION

As far as the lack of online literacy is concerned, two main trends were identified, with the majority of students voicing their concerns as to teachers' skills in manoeuvring through the online environment. Significantly, this lack of technical prowess gradually extended to students, leading to a distorted perception of their own skills. Although it was not anticipated, some students interpreted teachers' online illiteracy as a lack of appreciation. Korthagen, Attema-Noordewier, and Zwart (2014) identified positive contact with a teacher as a factor that may lead to increased engagement and more favourable educational outcomes. Although much more research work is definitely required to fully comprehend what factors influence positive teacher-student rapport in online environments, the analysis suggests it may be somewhat difficult to form such a liaison in the context in question. Similar conclusions were reached in the recent study by Tannert and Gröschner (2021). Another issue to be considered is that while carefully planned online curricula possess many advantages, the transition to remote learning in Poland was characterised primarily by the adoption of the same educational measures as those used in traditional classes (Biedroń, Mitreęga, Wawrzak-Chodaczek, 2021). Having said that, online programmes should take into account the specific requirements typical for a virtual environment. Even more importantly, though, a successful curriculum should provide space for teacher-student dialogue, which creates a sense of meaningfulness and provides learners with opportunities to build their agency in the virtual domain.

Moving on to cognitive overload, the analysis of the dataset indicated that the respondents' weariness was provoked not only by the uncertainty caused by the pandemic but also by the formerly mentioned lack of curricula adjustment. Some participants experienced issues adjusting to the novel study mode, which required significantly more individual work, leading to poorer life-study balance and, consequently, negative self-perceptions. This coincides with the findings of Martin et al. (2013), who indicated that students low in adaptability might anticipate poorer performance and be more inclined towards self-sabotaging and disengagement. The growth of learners' agency triggered by the revised curriculum contributed to adequate attribution of their accomplishments; the respondents were more likely to assess their prior efforts as inadequate and, instead of dwelling on the unfortunate circumstances, the growing efficacy acted as a catalyst for higher effort expenditure. Although prior to the intervention, the vast majority of respondents were more likely to seek external attribution for their poor performance, there were some students who expected similar outcomes as in the traditional delivery mode and experienced negative affect due to what may be perceived as overt perfectionism. While the need to exert more effort may be beneficial and some may find it immensely motivating, such over-adaptation may also lead to a biased assessment of one's coping efforts, increased emotional weariness, and, finally, lower academic outcomes. On top of building students' knowledge, a successful online curriculum should also teach students how to tailor their expectations and interpret their coping efforts.

The incorporation of efficacy-building techniques may aid an educator in accomplishing that very objective.

Although the pandemic has wreaked havoc on our functioning and many activities had to be harshly limited, it comes as no real surprise that what most people found highly distressing was social distancing. This is also applicable to the members of academia, as socialising is an essential part of a student's life. In fact, Bateman (2002) found that the sense of community among students impacts not only psychological well-being but also motivation and attitudes towards the educational setting. The data analysis indicated that the inability to interact with peers might lead to lower satisfaction with family relationships, including a perceived lack of relatability and difficulties in arranging sufficient conditions for learning. In the present project, the sense of shared responsibility for the end goal of the course partially counteracted the negative affect triggered by isolation. Being aware that one's engagement may impact the outcomes of others encouraged the majority of students to exert more significant effort and overcome periods of amotivation. This observation coincides with the findings of Besser, Flett, Nepon, and Ziegler-Hill (2022), who indicated that having a sense of mattering constitutes a source of reassurance for individuals coping with less social contact. Additionally, the collaborative nature of the project, which assumed negotiation of course components, granted students an abundance of opportunities to tackle social challenges and develop both individual and shared regulation mechanisms.

## 7. CONCLUDING REMARKS AND LIMITATIONS

The outcomes of the present research indicate that self-efficacy may be particularly helpful in mediating issues stemming from poor adaptability in remote academic environments. More specifically, it was found that a growing sense of efficacy contributes to experiencing less negative affect, showing adequate success-failure attribution, and developing successful regulation mechanisms on both individual and group levels. Although the respondents voiced many concerns related to the sudden shift to the novel mode of studying, including lack of online literacy, cognitive overload, and the absence of meaningful relationships, the most imperative conclusion to be drawn here is that successful online programmes should take into account the requirements of a virtual environment, provide space for dialogue and communication, and encourage students to be co-creators of their educational success rather than passive receivers of knowledge.

The present intervention study was not without its limitations. Firstly, convenience sampling was used, and the research participants were recruited from the author's students, which might have had an impact on the respondents' motivation. Additionally, the present project was a small-scale study; bearing in mind the novel nature of the research, it was argued that a small sample would allow for higher controllability. Nevertheless, it would be recommendable to verify whether the findings could be extrapolated to a more significant population.

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