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# **The role of team psychological safety and self-regulated learning behaviours of students' in a largely remote onboarding**

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## **Abstract**

Some studies are beginning to explore the possible effects of remote onboarding on the organizational socialization of newcomers to professional institutions (Saks & Gruman, 2021; Rodeghero et al., 2020), but not yet to academic institutions. This study aims to better identify the effects of remote onboarding on students of a hotel management school in Switzerland, and the resources available to students to help them cope. By comparing two cohorts each of 200 new entrants, one enrolled before the Covid-19 pandemic and the second starting in a largely distance learning environment, the present study highlights the negative impact of remote onboarding on students' intention to stay in school and emotional exhaustion but not on affective commitment. The relationships between individual resources, such as self-regulated learning behaviours, and situational resources, such as team psychological safety, on students' adjustments are analysed (Kaplan, 2019). The study provides some answers for institutions that wish to improve the distance socialization process of their new learners.

## **Keywords**

Remote onboarding, self-regulated learning behaviours, team psychological safety, student adjustment

## 1 Introduction

Students face many challenges when they join a university or another kind of higher education institution. The university environment indeed entails not only an increase in the volume and difficulty of academic work, but also less structure for how the work is organised and a greater level of personal responsibility required to meet academic challenges (Vanthournout et al., 2012). The students' ability to self-regulate learning and the need to find a safe place seem essential for the adjustment process of students (Trautwein & Bosse, 2017; Heublein 2014; Chemers et al., 2001; Wilcox et al., 2005; Tao et al., 2000). In this transitional phase, students also seek a sense of belonging, and a safe place to express themselves (Wilcox et al., 2005). For this reason, several studies have looked at the socialization process of students in higher-education institutions and its impact on their affective commitment, intention to stay in the institution, and emotional exhaustion (Pennaforte et al., 2016; Wilkins et al., 2016; Weidman, 2006; Rosch & Reich, 1996; Tierney, 1997; Baker & Siryk, 1999).

The Covid-19 pandemic has forced higher education institutions to switch from in-person to remote functioning, raising new challenges in terms of adjustment and socialization of students entering the first year of higher education. Distance, and the consequent reduction in informal social interactions, can indeed greatly impair the newcomers' onboarding, which is defined as the process of helping new entrants regarding their social and performance adjustment to their new role (Bauer, 2010). In the world of work, a very small number of studies are beginning to explore the possible effects of remote onboarding on the organizational socialization of newcomers (Saks & Gruman, 2021; Rodeghero et al., 2020). But to the best of our knowledge, no study has attempted to investigate students' experience of remote onboarding. The goal of this article is therefore to explore how remote onboarding has affected student's affective commitment to the institution, their intention to stay in the institution and their level of emotional exhaustion, and to understand whether self-regulated learning behaviours and team psychological safety contribute to a better experience of remote onboarding.

These questions will be analysed within the framework of a study conducted on two cohorts of students beginning their first year at a hotel management school in Switzerland. The first cohort were questioned in May 2019 in normal onboarding conditions, while the second were questioned in December 2020, when teaching and extra-curricular activities had largely shifted to remote functioning. We first present the results of analyses comparing the 2019 and 2020 cohorts to assess the effects of remote onboarding on students on their affective commitment, intention to stay in school and emotional exhaustion. We then focus on the 2020 cohort to examine whether self-regulated learning behaviours and team psychological safety moderate the potentially harmful consequences of remote onboarding. This study provides some answers for institutions that wish to improve the distance socialization process of their new learners.

## 2 Conceptual framework

### 2.1 *Organizational socialisation and student adjustment to institution*

Sozialisation is classically defined as “the process by which persons acquire the knowledge, skills, and dispositions that make them more or less effective members of their society” (Brim, 1966, p. 3), while organizational socialization refers specifically to the process by which newcomers acquire the ropes to function in a new social and organizational environment (Allen et al., 2017), such as an institution of higher education. Socialization in higher education has been conceptualized as a complex and non-unitary process, in which individual and organizational dimensions intertwine to explain students' adaptation to their environment (Weidman, 2006). Baker and Siryk (1999) distinguish four facets of adjustment to university: Academic Adjustment, Social Adjustment, Personal-Emotional Adjustment, and Institutional Attachment. Academic Adjustment reflects the degree to which students meet academic requirements, and manifests in motivation, application, academic performance and satisfaction with the institutional environment. Social Adjustment reflects to the extent to which students are integrated in the social structures of university halls of residence and the university in general, participate in campus activities, and meet new people. Personal-Emotional Adjustment refers to the degree of stress, anxiety, and/or somatic symptoms that students experience faced with the demands of the university environment. Students may experience academic burnout because of a learning environment that demands an excessively high level of effort and does not provide support mechanisms to help students adjust effectively (Neumann, 1990). Finally, Institutional Attachment refers to the extent to which students identify with and are emotional attached to the university community such as affective commitment.

These four university adjustment indicators are thought to be positively linked to the continuation of studies (Credé & Niehorster, 2012) and interact with each other. Students who become more emotionally attached and identify with their institution are also more engaged in their studies and more successful (Wilkins et al., 2016). As socialization to the organizational norms takes place primarily in informal social interactions with peers and members of the school, this process can be expected to be impaired when onboarding has to take place at distance (i.e. remote onboarding), resulting in a reduced affective commitment with the institution.

To the best of our knowledge, no study has attempted to investigate students' experience of remote onboarding, although the mixed effects of distance learning on students have been widely investigated. Authors highlight some advantages of distance learning and conclude that e-learning increase problem-solving ability, transfer of learning or self-learning competence and teamwork skills (Getto & Kerres, 2018). However, other studies tend to show that the drop-out rate for e-learning is higher than that of face-to-face learning (Dussarps, 2015; Murphy & Stewart, 2017) and that distance learning courses are a source of stress, depression and exhaustion (Pavlakis & Kaitelidou, 2012). Students questioned in the first available studies on distance learning implemented during the Covid-19 pandemic mention similar risks (Yaprak, 2021; Mheidly et al., 2020). The increase in exposure to screens has been reported to increase emotional exhaustion (Mheidly et al., 2020), one of the three dimensions of burnout (Maslach, 1997), which refers to feelings of being depleted of one's emotional and physical resources (Aronsson et al., 2017). It therefore also seems relevant to explore the adverse effects of remote onboarding on student affective commitment, intention to stay in school and emotional exhaustion.

**H1:** Remote onboarding is associated with a) less affective commitment; b) less intention to stay in school; c) more emotional exhaustion

## 2.2 *The role of team psychological safety*

Most students are likely to experience some difficulty in adapting to the new varied demands of higher education, but the presence of social support structures can facilitate this adjustment (Wilcox et al., 2005; Tao et al., 2000). The perceived level of social support may indeed be positively and significantly linked to students' commitment to the institution (Tao et al., 2000; Sanders & Higham, 2012) and retention (Brooman & Darwent, 2014; Zepke & Leach, 2010), and may mitigate the effects of emotional exhaustion (Halbesleben, 2006; Teoh & Kee, 2020).

Wilcox and her colleagues (2005) suggest that the establishment and maintenance of social support among peers is essential to the socialization process of students. In this transitional phase of students' life, classmates have a key role to play in providing academic support networks and, in some cases, helping other students when they encounter problems in their work. These positive effects of social support among peers seem to be enhanced by physical distance. Relationships with peers may limit dropout because of the socio-emotional support provided (Dussarps, 2015). Feeling of isolation is one of the most common reasons given by students for dropping out of distance programmes (Rovai, 2000a).

Belonging to a team, in particular, is thought to be a factor that can limit the risks of distance learning (Liu et al., 2007). The feeling of belonging to an online classroom community will create a feeling of mutual trust, support and consideration for each member of the group (Rovai, 2001, 2002a, 2002b) and is positively and significantly related to students' behavioural engagement, perceived learning level, and retention and success rates in online courses (Hu & Hui, 2012; Liu et al., 2007; Rovai & Barnum, 2007; Rovai, 2001, 2002a, 2002b). In a similar vein, the community of inquiry (CoI) framework highlighted the key role of social presence, i.e. the ability of participants to communicate purposefully in a trusting environment, in online and blended learning contexts (Garrison et al., 2010). We can thus assume that establishing as early as possible a climate of team psychological safety, the belief that the team is safe to take interpersonal risks (Edmondson, 1999), helps students to adjust to an institution when being onboarded remotely. We more precisely can make the following hypothesis:

**H2:** In remote onboarding team psychological safety is associated with a) more affective commitment; b) more intention to stay in school; c) less emotional exhaustion

## 2.3 *The role of self-regulated learning behaviours*

The ability to self-regulate one's learning, i.e. the ability to set goals for oneself and to regulate one's behaviours, emotions and cognitions to achieve these goals, seems essential for trying to ensure a successful transition (Cosnefroy, 2010; de Bilde et al., 2011; Schneider & Preckel, 2017). Self-regulated learning behaviours have been shown to be crucial for academic perseverance in the first year of study (Vanthournout

et al., 2012; Mäkinen et al., 2004; Robbins et al., 2006) and for commitment to remain in school (Chemers et al., 2001). Another study shows that students who apply a shallow approach to learning in their studies, which involves less self-regulated learning behaviours, are more likely to suffer from burnout than those who apply a deep approach to learning, which involves more self-regulated learning behaviours (Asikainen et al., 2020).

The ability to self-regulate one's studies seems to be an even more decisive factor in distance learning, since there is less external control over learners, and they have greater freedom to structure their time and activities (Cho & Shen, 2013; Cosnefroy, 2019; Poellhuber et al., 2019; Santhanam et al., 2008). Significant links have been demonstrated between the ability to self-regulate and dropout (Murphy & Stewart, 2017). Self-regulation also had a buffering effect on the increase in student stress after the COVID-19 outbreak (von Keyserlingk et al., 2022). It is therefore reasonable to assume that:

**H3:** In remote onboarding self-regulated learning behaviours are associated with a) more affective commitment; b) more intention to stay in school; c) less emotional exhaustion

According to the community of inquiry (CoI) framework, authors particularly found out that social presence is a condition for creating cognitive presence, i.e. the ability of participants to reflect the learning and inquiry process, in online and blended learning programs. Through social presence participants are able to engage in reflection and dialogue that provides opportunities to extend current understandings (Shea & Bidjerano, 2009; Swan et al., 2008). In the same vein, psychological safety seems to facilitate individual learning behaviours (Li & Tan, 2013; Mornata & Cassar, 2018). Kaplan (2019) confirmed these different studies and noted that the development of trusting relationships encourages strategies for self-regulating learning. Self-regulated learning behaviours would therefore constitute one of the mechanisms by which team psychological safety would influence the indicators of adjustment.

**H4:** In remote onboarding team psychological safety is positively correlated with self-regulated learning behaviours and, through this, indirectly with a) affective commitment, b) intention to stay in school and c) emotional exhaustion

### 3 Methodology

#### 3.1 Research context and design

Two cross-sectional questionnaire surveys were conducted with students enrolled in the first preparatory year at a hotel management school in Switzerland, 4 months after they had begun the programme. It should be noted that first year students are divided into teams of approximately 25 students that remain the same for the whole semester. The first cohort were questioned in May 2019 in normal onboarding conditions, while the second were questioned in December 2020, when teaching and extra-curricular activities had largely shifted to remote functioning. Following a face-to-face start to the academic year in September 2020, distance-teaching of theory classes was made compulsory at the beginning of November 2020. The usual extra-curricular activities organised by the student committees that create the student experience (sports committees, events committees, cultural committees, sustainable development committees, etc.) were halted. The presence of staff members on campus was also greatly reduced, thus diminishing opportunities for social interaction.

For the first survey, printed questionnaires were distributed and collected in class by the researchers. For the second survey, the questionnaires were sent in the form of a LimeSurvey online survey managed by the university. In both cases, students were given approximately 15 minutes to complete the questionnaire. The data collected guarantee respondent anonymity, and no raw data was released or passed onto school employees or officials.

#### 3.2 Participants

During the first survey, 198 questionnaires were collected out of 199 distributed in class. For the second survey, 195 questionnaires were collected out of 558 sent out. In total, 393 valid questionnaires were used to answer the first question to understand how remote onboarding has affected student's feeling of their affective commitment, intention to stay at school and level of emotional exhaustion, and 195 valid questionnaires were used to answer the second question to understand whether self-regulated learning behaviours and team psychological safety contribute to a better experience of remote onboarding.

For the first survey (N=198), the average age of respondents was 20 years. Over 80% of them were under 22 years old. Forty-two percent of respondents were male and 58% female. Forty-six percent of them were Swiss, 25% French, 86% European, and 14% non-European. Eighty-nine percent of them had professional experience, and 39% worked alongside their studies. For the second survey, the average age of the respondents was 19 years. More than 95% of them were under 22 years old. Thirty-five percent of respondents were male and 65% female. Twenty-eight percent of them were Swiss, 23% French, 79% European, and 21% non-European. Seventy-seven percent of them had professional experience and 23% worked alongside their studies.

### 3.3 Measurement of variables

All variables were measured using scales validated in the scientific literature. Respondents were asked to indicate their level of agreement on a 5-point Likert scale. The source, the number of items, the degree of reliability (Cronbach's alpha) and examples of items from each measurement scale are presented in Table 1.

**Table 1**

#### *Measurement of variables*

Variables	Source	# items	Cronbach's alpha	Example of items
Affective commitment	Meyer et al (1993)	4	.72	« I am proud to belong to this school »
Intent to stay in school	Gruman et al (2006)	2	.55	« If I have the opportunity, I will continue to study at EHL next year »
Emotional exhaustion	Maslach & Jackson (1981)	3	.76	« I feel emotionally drained from my studies »
Self-regulated learning behaviours <sup>1</sup>	Berger & Karabenick (2016)	13	.86	« Before I begin studying I think about what and how I am going to learn »
Team psychological safety	Harvey et al (2019)	4	.68	« In my team, it is easy to speak up about what is on your mind »

Affective commitment, intent to stay in school and emotional exhaustion were measured in both cohorts, in English and French in the 2019 cohort and in English in the 2020 cohort. Self-regulated learning behaviours and team psychological safety were measured in English in the 2020 cohort. The reliability coefficients are satisfactory for all variables, apart from the intent to stay in school scale which has low reliability ( $\alpha = .55$ ), so caution should be exercised when interpreting the results.

Two control variables were taken into account: age and nationality. Age was measured using five categories: 18-19 years, 20-21 years, 22-23 years, 24-25 years, and 26 years and above. Nationality was divided into two categories: European and non-European.

### 3.4 Analyses

Multivariate analysis of variance (MANOVA) was used to compare the averages of each of the two cohorts for the three dependent variables considered to answer our first hypothesis (H1). Statistical analyses were conducted using SPSS Statistics 27 for the correlations between the variables, and structural equation modeling were conducted using AMOS 26 to test the direct and indirect effects (H2, H3, H4).

## 4 Results

### 4.1 Preliminary analysis

The discriminant and convergent validity of the measurement model was tested through confirmatory factor analysis using AMOS (version 26), using the fit thresholds proposed by Hu and Bentler (1999) and Marsh et al (2004) ( $CFI \geq .90$ ;  $TLI \geq .90$ ;  $RMSEA \leq .08$ ;  $SRMR \leq .08$ ).

<sup>1</sup> We didn't find the three dimensions of Berger and Karabenicks' scale, therefore we considered this construct as a one-dimensional variable.

The linguistic equivalence of the English and French versions of the questionnaire was first tested for affective commitment, intention to stay in school and emotional exhaustion, variables measured in French and English in the cohort 2019. The CFA of the configural invariance model was first conducted allowing the same structure to be assessed simultaneously in the two distinct language groups. The results show that this configural invariance model fits the data well ( $\chi^2/df=1.90$ ; CFI=0.91; TLI=0.88; RMSEA=0.07; SRMR=0.09). The CFA of the metric invariance model was then conducted to test the relationships between our variables. The results show that this metric invariance model fits the data well ( $\chi^2/df=1.92$ ; CFI=0.90; TLI=0.87; RMSEA=0.07; SRMR=0.09). Compared to the configurational invariance model, there is no significant change. The results indicate that the difference between the comparative fit index (CFI) of the metric invariance model and the comparative fit index of the configurational invariance model is less than .01 that should not be exceeded to consider that the measurement models are invariant between the two groups (Cheung & Rensvold, 2002).

Due to the large number of parameters to be taken into account, we reduced the number of indicators for the variable of self-regulated learning behaviours following the procedure recommended by Landis et al (2000). We grouped items measuring the same variable in pairs to create indicators (parcels) showing the average of two items. The CFA results of the hypothetical model show a good fit to the data ( $\chi^2/df=2.78$ ; CFI=0.91; TLI=0.90; RMSEA=0.06; SRMR=0.08).

This model was then compared with other, more parsimonious models. The results of these analyses (Table 2) show that our measurement model comprising 5 factors, namely team psychological safety, self-regulated learning behaviours, affective commitment, intent to stay in school, and emotional exhaustion, best fits the data. The existence of common method bias causing artificial inflation of the results was also tested using the unmeasured latent variable technique recommended by Podsakoff and his colleagues (2012). This technique involves adding to the measurement model an additional latent variable capturing the common variance linked to the method, and shared by all the indicators measuring the other 5 latent variables of the model. The fit indices of this model ( $\chi^2/df=1.66$ ; CFI=0.93; TLI=0.91; RMSEA=0.06; SRMR=0.08) and the variance extracted from the common method-related factor (0.23) suggest that common method bias remains sufficiently limited and cannot by itself explain the results.

**Table 2**

*Fit indices of alternative models*

Model	Number of factors	$\chi^2/df$	CFI	TLI	RMSEA	SRMR
1	5 (TEAM/SELFREG/COMMIT/STAY/EXHAUST)	2.78	0.91	0.90	0.06	0.08
2	4 (TEAM/SELFREG/COMMITEXHAUST/STAY)	2.68	0.81	0.78	0.09	0.10
3	4 (TEAM/SELFREG/COMMITSTAY/EXHAUST)	1.95	0.89	0.87	0.07	0.08
4	4 (TEAM/SELFREG/COMMIT/STAYEXHAUST)	2.20	0.86	0.84	0.08	0.10
3	3 (TEAM/SELFREG/COMMITSTAYEXHAUST)	2.75	0.80	0.77	0.10	0.10
5	5 (TEAM/SELFREG/COMMIT/STAY/EXHAUST) + common method bias	1.66	0.93	0.91	0.06	0.08

*Note.*  $\chi^2$  = chi squared; df = degrees of freedom; CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root mean square error of approximation. TEAM = Team psychological safety. SELFREG = Self-regulated learning behaviours. COMMIT = Affective commitment. STAY = Intention to stay in school. EXHAUST = Emotional exhaustion.

#### **4.2 Comparison of face-to-face and remotely onboarded students**

In the next two sections, we first present the results of analyses comparing the 2019 and 2020 cohorts to assess the effects of remote onboarding on students. We then focus on the 2020 cohort to examine whether self-regulated behaviours and team psychological safety moderate the potentially harmful consequences of remote onboarding.

The results (Table 3) show that the 2020 cohort, who were mainly remotely onboarded, had significantly lower scores for intent to stay in school, and higher scores for emotional exhaustion. Contrary to our expectations, no significant differences were found between the two cohorts in terms of affective commitment.

**Table 3***Analysis of differences between the averages of the two groups*

Variable	Face-to-face onboarding N=198		Remote onboarding N=195		F	$\eta_p^2$
	M	SD	M	SD		
Affective commitment	4.23	0.72	4.13	0.74	1.087	0.003
Intent to stay in school	4.78	0.49	4.56	0.75	9.568**	0.025
Emotional exhaustion	2.55	0.93	2.91	1.03	17.085***	0.044

Note.  $p > .05^*$ ,  $p > .01^{**}$ ,  $p > .001^{***}$ . Control variables included: age and nationality.  $\eta_p^2$  = partial eta squared.

#### 4.3 The role of self-regulated learning behaviours and team psychological safety in remote onboarding

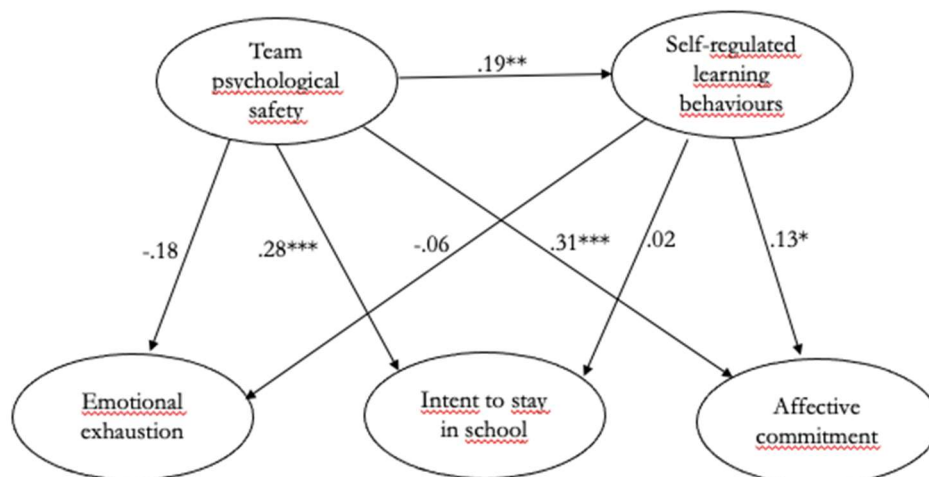
Table 4 presents the correlations between the variables studied. The results give us a first indication of the links between the variables.

**Table 4***Correlations between variables*

	M	SD	1	2	3	4	5	6	7
1. Age	2.09	1.13	-						
2. Nationality	1.21	0.41	-.066	-					
3. Team psychological safety	3.91	0.82	.049	-.161*	.682				
4. Self-regulated behaviours	3.95	0.65	-.172*	-.015	.194**	.857			
5. Affective commitment	4.13	0.75	.027	-.184*	.481**	.298**	.719		
6. Intent to stay in school	4.56	0.75	.095	-.213**	.303**	.096	.555**	.553	
7. Emotional exhaustion	2.91	1.03	-.183*	-.178*	-.204**	.038	-.186**	-.326**	.757

Note. N=195;  $p > .05^*$ ,  $p > .01^{**}$ ,  $p > .001^{***}$ , correlations are from the "remote onboarding" sample

Structural equation modeling (SEM), with a bootstrap approach (5000 resamples) and a 95% confidence interval, was used to test the direct and indirect effects. The CFA results of the hypothetical model show a good fit to the data ( $\chi^2/df=2.78$ ; CFI=0.91; TLI=0.90; RMSEA=0.06; SRMR=0.08). The results of the outcomes of the path analysis are presented below (Figure 1). Self-regulated learning behaviours has a positive direct effect on affective commitment, but do not on intent to stay in school and emotional exhaustion. Team psychological safety has a positive direct effect on self-regulated learning behaviours, affective commitment and intent to stay in school, but do not on emotional exhaustion. Team psychological safety also has an indirect on affective commitment through self-regulated learning behaviours (Table 5).

**Figure 1***Model of Structural Relationships Between Study Variables*



Note. N=195;  $p > .05^*$ ,  $p > .01^{**}$ ,  $p > .001^{***}$ ; Unstandardized Estimates (Amos 7.0 Graphics)

**Table 5**

*Analysis of indirect effects*

	Coefficient	Confidence interval (95%)	
Indirect effects	Effect	Lower	Upper
<b>Team psychological safety -&gt; Self-regulated behaviours -&gt; Affective commitment</b>	<b>0.026</b>	<b>0.004</b>	<b>0.075</b>
Team psychological safety -> Self-regulated behaviours -> Intent to stay in school	0.003	-0.031	0.035
Team psychological safety -> Self-regulated behaviours -> Emotional exhaustion	-0.012	-0.076	0.032

Note. N=195; Significant indirect effect when the confidence interval does not encompass zero

## 5 Discussion

### 5.1 Theoretical contributions

Our first hypothesis suggests that remote onboarding is associated with less affective commitment, less intention to stay in school and more emotional exhaustion. The results show that students who began their studies under largely distance learning conditions were more likely to intent to drop out and were more emotionally exhausted than students who began their studies in a face-to-face setting. These findings are consistent with studies that have highlighted the difficulties of students' emotional adjustment to university (Neumann, 1990) and the adverse effects of distance learning on intent to stay in the institution (Dussarps, 2015; Murphy & Stewart, 2017) and burnout (Pavlakis & Kaitelidou, 2012; Yaprak, 2021; Mheidly et al., 2020). Remote onboarding however, does not seem to affect first-year students' affective commitment to the school, hypothesis 1 is therefore partially confirmed. Since social interactions with peers and members of staff are a key factor in the socialization process of new students (Wilcox et al., 2005; Tao et al., 2000), one would assume that remote onboarding would decrease students' attachment to the school. With reference to Berger and Braxton (1998), this counter-intuitive result could be explained by the fact that the student selection process of this hotel management school places a strong emphasis on matching their personal values with those of the school. It is possible that this early, anticipatory socialization was particularly beneficial in maintaining students' commitment to the school. Another explanation could be related with the fact that the onboarding in the 2020 cohort was not online from the beginning, but only after about two months. This face-to-face start at school in September 2020 probably had a positive impact on students' affective commitment to the institution too.

Our results also provide insight into the personal resources that can be mobilised to counteract the detrimental effects of remote onboarding. It first complements research highlighting the major role of team psychological safety when students are learning remotely (Hu & Hui, 2012; Liu et al., 2007; Rovai & Barnum, 2007; Rovai, 2001, 2002a, 2002b). We assume that in remote onboarding team psychological safety is associated with more affective commitment, more intention to stay in school and less emotional exhaustion. The results indicate that when team psychological safety is strong students are more committed to their school, and more likely to intent to continue studying, which confirms partially hypothesis 2. Concerning the role of self-regulated learning behaviours, hypothesis 3 proposes that in remote onboarding self-regulated learning behaviours are associated with more affective commitment, more intention to stay in school and less emotional exhaustion. The results indicate that in remote socialization students who implement self-regulated learning strategies to achieve their personal goals are also more committed to their school. Their experience thus supports the findings of studies that highlight the beneficial effects of self-regulated behaviours on institutional commitment in the higher education socialization process (Chemers et al., 2001). However, contrary to expectations (Vanthournout et al., 2012; Mäkinen et al., 2004; Robbins et al., 2006; Asikainen et al., 2020; Murphy & Stewart, 2017), in this research the intention to drop out of school and emotional exhaustion do not correlate with self-regulated learning behaviours, which invalids partially hypothesis 3. Since this hotel management school in Switzerland is an elite hotel management school, studying there comes at a price. Students may therefore be under financial and family pressure, which suggests that they feel compelled to continue their studies, regardless of their motivation and ability

to use self-regulated learning behaviours. Regarding the link between self-regulation and emotional exhaustion, it may be that some dimensions of self-regulated learning behaviours are more correlated with emotional exhaustion than others, as suggested by Inan et al (2017). If we had analysed self-regulated learning behaviours in sub-dimensions, the results might have been different.

Our final hypothesis indicates that in remote onboarding team psychological safety is positively correlated with self-regulated learning behaviours and, through this, indirectly with affective commitment, intention to stay in school and emotional exhaustion. The results of this research first reveal that a high level of team psychological safety is associated with the adoption of self-regulated learning behaviours, thus contributing to the relatively scarce literature on the relationship between social interactions and self-regulatory learning strategies (Garrison et al., 2010; Shea & Bidjerano, 2009; Swan et al, 2008; Kaplan, 2019). When students are part of a team in which they feel comfortable expressing their ideas, they use more self-regulatory strategies to conduct and manage their learning. Similarly, Wilcox et al (2005) suggest that being part of a social network can lead to students having higher self-esteem and feeling more in control of their environment. This study also sheds light on the process by which team psychological safety affects the adjustment of new distance learners, and highlights the mediating role of self-regulated learning behaviours. New students who feel comfortable expressing their ideas within their team adopt more self-regulated behaviours and therefore become more engaged with their institution. These results therefore support partially hypothesis 4.

## **5.2 Limitations and directions for future research**

This study has some limitations that need to be taken into account when interpreting the results. These limitations also provide possible directions for future research.

A first limitation refers to the relatively low response rate in the 2020 survey reflecting the existence of a non-response bias in the 2020 cohort. We can hypothesise that the least remotely engaged students did not respond to the survey creating a potentially selective sample. Another limitation concerns the cross-sectional nature of the data collected, which reduces the possibility of establishing causal links between the variables studied. The use of a longitudinal design with several measurement times would undoubtedly make it possible to support with greater certainty the direction of the links between the variables. In the context of this study, the longitudinal follow-up of new students, during the different teaching and work placement phases of their course for example, would allow for a better understanding of the socialization within the school influences their ability to adapt to the various placement contexts. The difference in the time of the two samples' generation possibly also play a role. The students in the 2020 cohort are living in a pandemic context. This special context will influence the indicators, independently of what happens at the institutions. The pandemic context could have wider effects for example on stress and mental health. The degree of reliability of the scale of intention to stay in school is quite poor and has also to be discussed. The fact that this scale has only two items with little variance between them could explain this low reliability.

Moreover, self-regulated learning behaviours represent a general concept consisting of three dimensions (planning, monitoring and regulation) that need further study to explore the dynamic relationships of these three specific dimensions with the other variables of the study. Questions such as the following could be the focus of future studies: "Is planning associated with team psychological safety and, "Is planning associated with affective commitment, intention to stay in school and emotional exhaustion?"

Two control variables were taken into account, age and nationality. However some additional control variables like the feeling of isolation and family obligations could have some impact on our variables (Wilcox et al, 2005; Lawson Jones et al., 2021; Okado et al., 2021). It is possible that students living alone are even more affected of loneliness caused by the pandemic situation than students living with their family, in couples or shared accommodation. Moreover, it has been shown, for example, that teleworkers with significant family and domestic responsibilities would perceive more conflict between the work and private spheres than non-teleworkers (Solís, 2017). It may be the same for students who face a process of distance socialization. Teaching presence, defined as the design, facilitation and direction of cognitive and social processes seems also to be essential in establishing a sense of social presence by engendering an atmosphere of trust, open communication and group cohesion and to reach resolution and achieve student perceptions of a successful learning experience (Garrison et al., 2010). Other additional control variables such as the domestic situation and the teaching presence should be included in future research.

## **5.3 Practical implications**

The results of this research provide some answers for institutions that wish to improve the distance socialization process for their new learners.

As stated above, students who started their study programme under remote onboarding conditions are more likely to intend to drop out and are more emotionally exhausted than students who start their study programme in a classroom setting. These results are concerning, and call for an investigation into how these negative effects could be counteracted. One piece of advice we could give to institutions would be to ensure students' value congruence when entering the institution and to use practical tools to prevent students from dropping out and burning out. A way to improve retention in higher education would be to provide prospective students with accurate information about the curriculum to improve decision-making prior to entry into the institution (Thomas, 2011). Creating spaces for new and old students to meet would allow the latter to provide new students with information about the institution and the learning experience before they begin their studies.

According to Thomas (2011), students beginning their first year of study are not sufficiently prepared to become autonomous learners. This leads us to another recommendation: to help develop an environment in which self-regulated learning behaviours can emerge, for example by organising training sessions for new students that facilitate the implementation of those behaviours. Teachers could recognise the beneficial effects of these self-regulatory strategies, and gain knowledge and tools that improve their teaching by enabling them to promote such learning. A recent study by Molinari and Schneider (2020) proposes a 'toolbox' to help distance learners develop self-regulatory strategies for getting and staying on task when studying alone at home. The toolkit contains five tangible objects: a Reward Tube, a Victory Album, an Emotional Thermometer, a Learning Cap and a Time Guard. The first three pertain to internal strategies and aim to promote the regulation of motivation and emotions, while the last two relate to external strategies and aim to promote the structuring of time and the workspace.

Another course of action is to leverage the benefits of group work by dividing students into small teams. Structuring a course to include work in small groups can encourage students to feel comfortable expressing their ideas, asking for feedback, providing honest feedback, collaborating, taking risks and experimenting. Providing a social and pedagogical online presence also promotes a sense of a learning community. Concretely, this can be achieved through participation in discussion forums, setting guidelines for social interactions, acknowledging students' contributions to the online learning community, and monitoring students' social interaction processes (Artino & Stephens, 2009; Cho & Kim, 2013; Shea et al., 2006). Kaplan (2019) argues that it is desirable to increase the frequency of interactions between peers through the use of communication processes and tools. The author also advocates combining the team dynamic and self-regulated learning behaviours by using teams to enhance self-regulated learning in distance education. To this end, he suggests, for example, the provision of a logbook to be kept collectively by students working together in small groups, as well as co-assessment tools to foster metacognitive awareness and the use of individual and collective regulation strategies.

## 6 References

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