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Does the Familiarity of Online Teachers Matter During Covid Lockdowns?

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Abstract: *This is a retrospective study investigating students' receptivity of familiar and unfamiliar instructors for the online learning solutions implemented during the initial Covid lockdowns in China in early 2020. While there are studies detailing various pedagogical and mental health issues associated with the pandemic, there are scarce information investigating how the choice of familiar teachers might help mitigate the associated negative experiences. Results from this study strongly suggest that students preferred watching teachers they knew as compared to strangers during the online learning sessions. In addition, the preference for familiar teachers correlated strongly with how the students felt online lessons had contributed to alleviating their negative feelings during the lockdown, which further suggests that the role familiar teachers play goes beyond that of an online instructor, especially in times of stress and uncertainties.*

Keywords: familiarity, online interaction, covid lockdown, covid stress, online learning

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1. Introduction

1.1 Lockdown in China and Abrupt Implementation of Online Learning

At the height of the Covid-19 outbreak in Wuhan city, China started locking down all other cities almost simultaneously around the country in a desperate attempt to curb the spread of the virus. This was in late January 2020, just before the 3-week winter holidays. Nevertheless, even as the holidays had ended and the new semester was to start in February, the schools (along with other public and private amenities) remained under closure due to the severity of the pandemic (UNESCO & UNICEF, 2020). In order to minimise disruptions to the students' learning, most, it not all the schools scrambled to move their lessons online amidst the perpetual school closures (OECD, 2020; UNESCO, 2020a).

In Anhui province, most public schools hastily implemented their online lessons using a broadcasting method, where students were given a timetable to watch pre-recorded or live-streamed lessons on TV (Dai, 2020; Guo et al., 2022), or on Chinese social media apps such as Dingtalk (Dingtalk, 2020; UNESCO, 2020b) and the Zhixue platform (Zhixue, 2020). These virtual lessons were conducted similarly to Zoom lessons (Ramadani & Xhaferi, 2020; Adkins & Tu, 2021), with a single instructor lecturing and the rest of the audience watching. Despite utilising such media platforms, only minimal interactions were permitted (Guo et al., 2022) since schedules were tight and the student numbers were large. Initial attempts at allowing interactions proved to be overly chaotic and unmanageable.

The broadcasted lessons were recorded, and together with other pre-recorded video lessons, were uploaded on websites or on the aforementioned social apps to allow learners to revisit them. This was good for students with connectivity issues, as they could replay the lessons at any time, and as many times as they wanted. Regardless of the mode of delivery (i.e., TV or social media app; real-time or pre-recorded), the lessons were sometimes delivered by teachers who were unfamiliar to some of the students (Guo et al, 2022) – in fact, they could be total strangers from other schools or cities. As such, students only got to see their own teachers some of the times.

This distance learning arrangement continued for about 12 weeks, until the gradual school reopenings around the first week of May 2020.

1.2 The Present Study

There is no lack of studies on the efficacy of various online teaching strategies employed during the Covid lockdowns (Hussain et al., 2020; Mohd Basar et al., 2021; Zheng et al., 2021), the negative impact of lockdowns on mental health (Brooks et al., 2020; Mazza et al., 2020; Moccia et al., 2020; Singh et al., 2020; Tang et al., 2020; Wang et al., 2020; Adams-Prassl et al., 2022), on social and family relationships (Global-is-Asian, 2020; Gadermann et al., 2021; Tam et al., 2021), or the widening of social class gap exacerbated by distance learning (Gordeau et al., 2021). Nevertheless, there have not been many studies addressing what psychosocial impact online instructors have on students during the 2020 Covid lockdowns.

Regardless of the platform (e.g., TV), method (synchronous or asynchronous) or style (i.e., one-way, interactive) used, there has to be an instructor – someone to deliver the lessons. In the context of this study in China, these instructors are sometimes complete strangers. Hence, does it actually matter who is delivering the lessons? At present, it is not easy to find studies that delve into the issue of familiarity of online instructors.

This study hence aims to investigate if the familiarity of online instructors made a difference on students' receptivity of the online lessons as well as their mental wellbeing during the Covid lockdowns in China. Such analysis could help to inform developers and decision makers on the choice of online teaching approaches at a level beyond pedagogical considerations, from a psychosocial perspective.

2. Literature Review

2.1 Association between Seeing Familiar Faces and Positive Affect

"Familiarity breeds fondness" - the idea that familiar faces (or things) evoke positive feelings is not new. From a pedagogical perspective, the most common understanding is that positive teacher-student relationships arouse more positive affect in students (Huan et al., 2012; Roeser et al., 1996).

This could also be explained by the mere-exposure effect (or familiarity principle), where repeated exposures to a particular stimulus increases preference for that stimulus (Zajonc, 2001). This concept has been tested in numerous studies, and the results have repeatedly produced evidential support for the hypothesis. For example, studies on emotions and face-identity recognition have repeatedly shown (aside from subjective likability ratings) significant physiological reactions when viewing familiar faces (e.g., family member) as compared to unknown ones, like accelerated heart rate and increased brain activation in the frontal areas

(Vila et al., 2019), increased zygomatic (cheek) muscle region activity (Harmon-Jones & Allen, 2001), and galvanic skin responses (GSR) (Dunphy, 2014).

Regardless of the theoretical model and study conducted, it would suffice to assume that familiarity arouses significant preferential feelings than unknown stimuli, and for this study, seeing familiar persons over strangers.

2.2 Association between Online Communication and Psychological Wellbeing

It is not hard to appreciate that face-to-face, offline interactions would be more effective than online interactions in providing emotional support during the Covid confinements (Qi, et al. 2020; Longest & Kang, 2022), given that prolonged social isolation is detrimental to mental wellbeing. Nevertheless, online interactions are the next best thing under the pandemic situation. Pre-Covid studies have found that online communication might be beneficial in increasing self-esteem in young adults (Subrahmanyam et al., 2020), and reducing loneliness among older adults (Cotton et al., 2013). A more recent study in the context of the Covid lockdown in the UK also produced similar findings, where increased frequency of video or digital social contact was associated with lower depressive symptoms measured by the Patient Health Questionnaire, PHQ-9 (Sommerlad et al., 2021). It could thus be safely inferred from these studies that online interactions do provide some mediative influence on negative experiences attributed to the Covid measures.

2.3 Association between Online Interactions with Familiar People and Psychological Wellbeing

In a study on the psychological impact that the mild lockdown in Japan could have on its population, Sugaya et al. (2020) developed a series of questions to assess the lifestyle and coping behaviours of Japanese residents during this period, and compared these responses with responses from various psychological instruments. It was subsequently found that reduced online interactions with familiar people during the lockdown (i.e., a single item measured by the customised questionnaire) was associated with: (i) slight increases in depressive symptoms (as measured by the PHQ-9); (ii) moderate increases in loneliness (as measured by the UCLA loneliness scale version 3, UCLA-LS3); and (iii) moderate increases in social isolation (as measured by the Lubben Network Scale, LSNS-6). Social isolation in this context is interrelated to loneliness, a subjective perception of unfulfillment of intimate and social needs. There were no significant correlations with psychological distress (as measured by the Kessler Psychological Distress Scale-6, K6). Taken together, this is by no means a trivial matter, as social isolation and loneliness are directly related to physical and mental health (Hawkley & Cacioppo, 2010; Holt-Lunstad et al., 2010; Courtin & Knapp, 2015; UNESCO & UNICEF, 2021), with elevated levels strongly related to suicide ideation (Killgore et al., 2020) and depression (Courtin & Knapp, 2015; Palgi, 2020). Being a student was also identified to be at higher risk for experiencing loneliness during the Covid lockdown (Bu et al., 2020).

These findings are directly relevant to this study, as they show the positive influences of interacting with familiar people during the lockdown. It is also important to note that the mild lockdown in the above research was not as serious as the ones in China, in terms of the number of restrictions, overall duration and strength of enforcement (Sugaya et al., 2021).

3. Methodology

3.1 Background of this Retrospective Study

During the lockdowns in China, some schools in Anhui province broadcasted live lectures and pre-recorded videos as delivered by a mix of familiar or unfamiliar teachers, with minimal interactions between the teachers and students. It bears emphasizing that this was at the peak of the outbreak in China, and the schools could only implement what was immediately feasible and available for them. Hence, the primary consideration was more on solving the issue of the loss of school time, and not on the finer details of implementation. Like in other countries, such hasty operations brought about unanticipated problems, such as inconducive learning environments (Barrot, et al., 2021), not having access to the necessary technology (Su et al., 2021), unfamiliarity with online teaching and learning approaches (Huang et al., 2020), internet connection problems (Li, et al., 2021), or simply resistance to or lethargy from using the internet (Gallani, 2020; de Oliveira Kubrusly Sobra et al., 2022).

To address some of these issues at the school level, a brief survey was conducted in two public high schools as a quick way of assessing the students' reactions to the online learning measures and post-lockdown emotional wellbeing. This was done shortly after schools reopened around the first week of May 2020 to minimise recall bias. These two schools were in different cities, but utilised the same instructional approaches, though on different social media apps. This particular survey was therefore not designed nor intended for use as an in-depth psychological instrument, but more as a pedagogical and operational tool to help refine the online learning strategies, and a quick assessment of emotional health following school reopening.

Nevertheless, some interesting findings were revealed on closer inspections of the responses. This prompted the start of this retrospective study, which could be conducted by analysing the pre-existing data collected through the said survey.

3.2 Background of the Survey Respondents and the Author

The respondents were Year 1 students (belonging to the 2019 cohort) from the international departments of two public high schools (n=303, male=185, females=118, all aged 16 and above) in Anhui province, China. The author was concurrently an academic staff of the international departments at both schools at the time of the study.

3.3 Instrument

The questionnaire was divided into three sections, and consisted of 19 questions that each required a response on a seven-point Likert scale:

Section 1: Five questions to evaluate the ***receptivity of the online instructors***. One of the original intentions of these questions was to obtain feedback regarding the choice of instructors, and to inform future developers on the learners' ***subjective preferences***. This part was thus more of a popularity rating measure.

Section 2: Four questions to briefly assess ***post-lockdown emotional wellbeing***. Question 10 was originally a positively-phrased question that required reverse scoring to assess if the online learning sessions contributed to any negative feelings, like learning fatigue (Gallani, 2020). The unreversed raw data will be used for analyses in this study.

Section 3: 12 questions to evaluate the overall effectiveness (e.g., if the students were satisfied with the lessons; if they found the durations too long) and technical aspects (e.g., internet connectivity, audio quality) of the lessons.

For the purpose of this study, responses from the first and second sections (Table 1) were used. The questions were not assessed for validity or reliability as the main purpose of the original survey was to gather preliminary reactions to the online learning solutions and a quick gauge of emotional health, and not meant to be a research study.

Table 1: Brief Survey on the Online Learning Measures During the Covid Lockdown

	During the COVID19 lockdown period, …
	Section 1:
1	… I preferred seeing familiar teachers conduct the online lessons.
2	… I preferred seeing unfamiliar teachers conduct the online lessons.
5	… I looked forward to seeing familiar teachers conduct the online lessons again.
6	… I looked forward to seeing unfamiliar teachers conduct the online lessons again.
	Section 2:
10	… the online lessons helped alleviate some negative emotions.

4. Analyses and Findings

Statistical analyses were performed on the data using JASP version 0.15.0.0.

4.1 Preference for Familiar Teachers versus Unfamiliar Teachers

A cursory look at the responses for the preferences for familiar and unfamiliar teachers shows that the support lean towards familiar teachers (Figures 1 & 2).

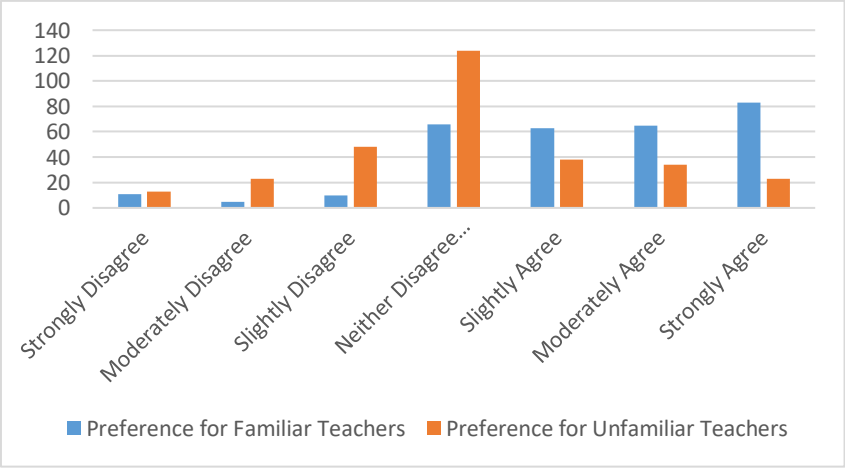

Figure 1: Preference for Familiar vs Unfamiliar Teachers (Questions 1 and 2)

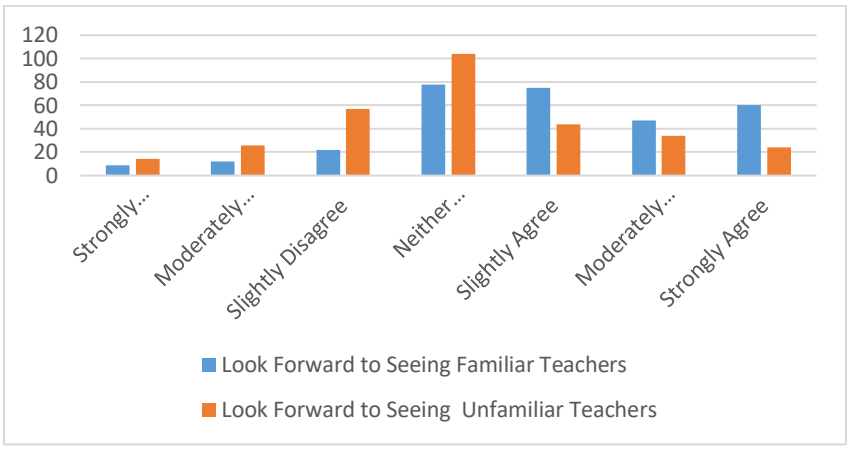

Figure 2: Look Forward to Seeing Familiar vs Unfamiliar Teachers (Questions 5 and 6)

The preferences (i.e., questions 1 and 2) and expectations (i.e., questions 5 and 6) were further added up into composite scores for comparative analyses – questions 1 and 5 for general preference for familiar teachers, and questions 2 and 6 for general preference for unfamiliar teachers. Normality checks showed that the data are not normally distributed ($p < .001$) and thus a Wilcoxon signed-rank test was performed to compare both sets of data (Table 2). The results indicated that the preference of familiar teachers is significantly higher than the preference for unfamiliar teachers, $W = 23170.5$, $p < .001$, with a large effect size (rrb = 0.657).

Table 2: Nonparametric Test Results

Measure 1		Measure 2	Test	Statistic	df	p	Effect Size
Fam-Q1&5	-	Strange-Q2&6	Wilcoxon	23170.500		< .001	0.657

Note. For the Wilcoxon test, effect size is given by the matched rank biserial correlation (rrb).

4.2 Perceived Alleviation of Negative Feelings Through Online Lessons

In general, the responses to question 10 suggest that the participants from both schools tend to agree that the online lessons help alleviate some of the negative feelings they might have experienced during the lockdown period (Figure 3).

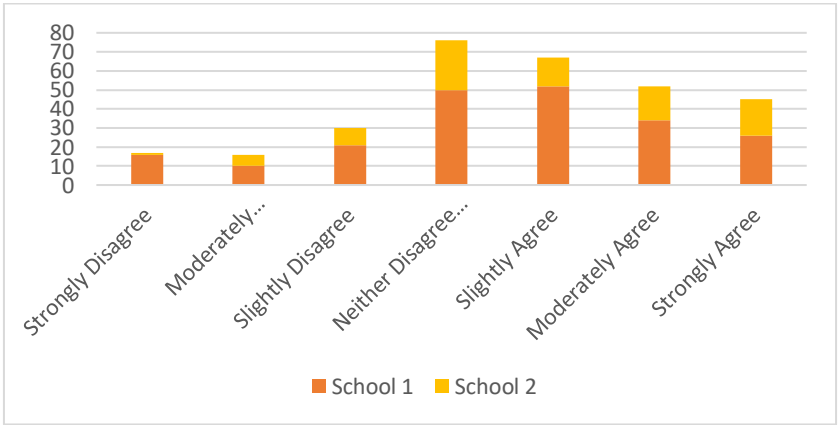

Figure 3: Perceived Alleviation of Negative Feelings Through Online Lessons

4.3 Correlation Between Preference of Teachers versus Perceived Alleviation of Negative Feelings

Responses from the participants in both schools showed that the preference for familiar teachers and the perceived alleviation of negative lockdown feelings were strongly correlated,

r(301) = 0.505, p < .001, while the preference for unfamiliar teachers and the perceived alleviation of negative lockdown feelings is only borderline significant, and slightly correlated, r(301) = 0.162, p = .005.

Table 3: Correlation Between Preference for Familiarity of Teachers vs Alleviation of Negative Feelings

Variable		Fam25	Strange36
EmoQ10	Pearson's r	0.505***	0.162**
	p-value	< .001	0.005
* p < .05, ** p < .01, *** p < .001			

5. Discussions and Conclusion

As can be surmised from the findings, the students from both schools do overwhelmingly prefer seeing familiar teachers over unfamiliar teachers during the online lessons. In addition to this, the results indicated that this particular preference is highly correlated to the perceived alleviation of negative feelings caused by the pandemic lockdown. It could therefore be inferred that in times of stress and uncertainties, the role teachers play may be more than that of mere instructors, and could be providing some kind of social support (Sommerlad et al., 2021; Longest & Kang, 2022). In this case, they might also be contributing to the reduction of social isolation, and by association the feelings of loneliness experienced by their students. This postulation is close to the findings by Sugaya et al. (2020), where the frequency of online interactions with familiar people correlates with feelings of social isolation and optimism. As such, students, especially those with additional emotional needs, might just be looking forward to seeing familiar faces when under duress.

In the Japan study, this effect was evident only after a mild lockdown of about five weeks. The actual situation in China could be much worse, given that the lockdown measures were harsh and punitive, at around 12 weeks.

In conclusion, the virtual sessions, even as they do not provide much opportunities for interactions (with either the teachers or fellow classmates) due to the tight time constraints, might still simulate the feelings of togetherness and help contribute to the alleviation of some feelings of loneliness. It thus makes a moderately strong case for the choice of familiar teachers for online instruction during exceptional times of duress like the pandemic, or other larger scale natural disasters, where the immediate needs are not only limited to the compensation of lost school time. Suffice to say, these findings will not only inform developers and administrators on the choice of online instructors from the pedagogical point of view, but also take into account the emotional needs of the learners, from the psychosocial perspective. Otherwise, it would be too easy to simply implement off-the-shelf online learning solutions, and call it a day.

6. Limitations

This is a retrospective study utilising existing data that were collected for other purposes, and is hence not a comprehensive investigation into the psychosocial condition of the participants. The instruments (i.e., questions) were also not assessed for validity nor reliability. Nevertheless, the findings do provide some rudimentary indications of the state of mind of the students immediately after the lockdown.

7. Future Researches

Since this phenomenon mostly pertains to precarious situations where people are socially isolated while experiencing certain degrees of psychological distress, it would be difficult to conduct experiments to test the assumptions. Nevertheless, post-confinement surveys could still be administered on wider populations to see if the findings are similar.

8. Data Availability

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy restrictions.

9. Disclosure Statement

No potential competing interest was reported by the author.

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