PERCEPTIONS AND ATTITUDES OF UPPER MYANMAR STUDENTS AND PARENTS TOWARDS ONLINE LEARNING: A CASE STUDY OF AN INTERNATIONAL SCHOOL IN MANDALAY DURING THE COVID-19 PANDEMIC

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Abstract: The aim of this study was to analyse and compare students' and parents' perceptions and attitudes towards online learning. The research took place at an international school in Mandalay, currently undergoing a period of online learning due to the Covid-19 pandemic. A seeming widespread disinclination towards this form of instruction lead to a focus on perceptions and attitudes and use of the Technology Acceptance Model. The reason for comparing the generations was to determine whether students, 'digital natives', would take more readily to online learning than their 'digital immigrant' parents, often deemed members of a 'missing generation' in Myanmar. Data and opinions were collected via electronic questionnaires from a total of 305 participants and examined using statistical analysis software. Multiple Linear Regression analyses were carried out to determine the influence of the independent variables, perceived ease of use and perceived usefulness, on attitude in both generations. A t-test was also conducted to compare values between generations. Perceived ease of use and perceived usefulness were shown to be good predictors for attitude in both generations, confirming results of earlier studies. No significant variances could be found in students' and parents' attitudes. However, there was a statistically significant difference for perceived usefulness, which contradicted the assumption that students would see more value in online learning than their parents. Opinions provided additional contextual data and highlighted several overriding concerns. Future research should widen the scope and examine actual use and effectiveness of online learning tools.

Keywords: Attitudes, Covid-19, International school, Online learning, Perceptions, Parents, Students, Technology Acceptance Model

1. INTRODUCTION

With the onset of the Covid-19 pandemic, schools around the world have been forced into an online learning format. The same is true of Mandalay International Science Academy (MISA), a K-12 international school in Upper Myanmar with around 450 students. Questions remain however, in students' and parents' eyes, as to the efficacy and usefulness of this form of course delivery. Also, since they have had such divergent upbringings, it could be surmised that parents and students have very different views on online learning.

Due to the economic circumstances of the families of students enrolled at MISA, there is ample access to, and widespread use of the Internet and portable electronic devices. Even here though, that prevalence was simply not possible as recently as 5 years ago, and there is a world of difference between the way parents and their children grew up and were educated. It could

therefore be assumed that young people would more readily accept teaching technologies, and learning online, but this is yet to be verified.

1.1 Purpose of the study

The aims of this study were to analyse perceptions and attitudes in students and parents towards online learning and discover any differences between the two generations. It was hoped findings would highlight reasons for perceptions and attitudes and assist administrators of international schools in formulating strategies for the successful implementation of online, or blended, learning programmes.

1.2 Scope of the research

The research was limited to a very particular Myanmar context and demographic. Participants were predominantly Burmese nationals from the middle and upper classes. Parents are overwhelmingly educated and self-employed - predominantly in their 30s and 40s - and students are largely from the lower secondary sections of the school, with most aged 12 to 14.

2. LITERATURE REVIEW

Extensive research has been carried out in the field of education using the Technology Acceptance Model (TAM), first developed by Davis in 1989 to explain or predict people's acceptance behavior when it comes to technology. Past studies have shown strong correlations between two main predictor variables - Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) – and Attitude (A) and Intention to Use (IU) (Park 2009; Masrom 2012). PEOU is the degree to which a person thinks using the tool will be effortless, while PU is the degree to which a user thinks the tool in question will improve his or her performance (Davis 1986). Attitude can be described as the user's general opinion of a particular technology and its desirability.

Due to the very recent spread of the Internet and digital technologies in Myanmar, studies to determine acceptance and usage had not been possible until recently. Previous research of e-learning has focused on ICT readiness (The and Usuagawa 2018) or E-readiness (Aung and Kham 2019) in higher education. These studies have pinpointed factors such as inadequate infrastructure and facilities as major stumbling blocks. The E-readiness approach has been employed widely in places where it is thought that infrastructural issues exist, such as developing countries, or where students or staff might require training in systems usage (Wong et al. 2014).

While several previous studies have looked at teachers' perspectives or acceptance of online learning tools (Yuen and Ma 2008), the focus in this research is the views of students and parents. A qualitative study by Sorensen (2012) analysed the perspectives of parents and guardians at a K-12 online school in the southeast of the USA to determine overriding perceptions. Here, the most demanding aspect for parents/ guardians was found to be the need to keep children on track with course content and assignments, and to provide more regular supervision. Technical issues also came to the fore, while the ability for increased communication and interaction with teachers was listed as a main benefit. Overall, they were seen to have a positive view of online learning, with many answering 'none/ nothing' when asked to list what they liked least (p.306).

Interaction between teacher and student in the online setting is a contentious issue, as some note improved communication (Sorensen 2012), while others have highlighted the fact that

immediate feedback suffers for various reasons, not least because body language is hindered, and that overall communication decreases, as evidenced by Alawamleh, Al-Twait and Al-Saht's study during the Covid-19 pandemic (2020). They also make mention of learner isolation and decreased motivation, advising that those offering online learning create more opportunities for interaction between instructors and students.

Another issue is whether students, as digital natives, will have different ideas about online education from their parents. Because of the way young people have grown up surrounded by technology it has been theorised, too much debate, that their very brains are wired differently (Prensky 2001), resulting in traits, and corresponding learning styles, particular to their generation. Digital natives are said to possess peculiar characteristics, to which belong the ability to collaborate, a fast response to a variety of stimuli, being in control of the flow of information and wanting to discover information by themselves (Autry and Berge 2011, Gaston 2006). A preference for graphics over text, an increased ability to multi-task and a need for instant gratification were also included (Prensky 2001). Prensky thus urged us to 'listen to the natives' (2005) by radically altering educational paradigms, or to risk disaffecting them.

Oblinger and Oblinger added to the discussion, and the list of supposed peculiar characteristics, using the alternative term 'net generation' (2005), which has entered public usage in its abbreviated form – net gen. They concurred that the young generations were able to collect info speedily from a variety of sources, and went further by claiming they had increased visual-spatial and communication skills, were open to diversity and to expressing emotions, and were goal-focused collaborators, amongst other traits (2005).

It would follow that more interactive learning technologies, with visual facets and where the user has control, would prove more popular and effective with them than with their parents (Tapscott 1998, Autry and Berge 2011). Online learning provides ample opportunities for the incorporation of various forms of media, be they text, image, sound or video, and for interaction via chat rooms, forums, and videoconferencing. In fact, LMSs are often comparable to social media platforms, and can thus be said to speak to the language of young people for whom the 'internet is like oxygen' (Savage quoted in Oblinger and Oblinger 2005).

This is a debatable issue, with studies on the one side finding no evidence of distinctive learning styles that have been associated with digital natives (Bennet et al. 2008) and calling the idea of digital natives a 'myth' (Selwyn 2009). Others, adhering to this model, find that 'the use of computers and computer aided technologies in teaching aligns well with the behaviors, thinking and learning processes of digital natives (Kivunja 2014:106).

If the latter were true, the difference between generations would be more noticeable in Myanmar, a country emerging from decades of political and economic isolation, and suffering the effects of a decimated educational system which had previously been regarded as one of the best in Asia (Fink 2009: p.189). In addition, the country's populace was largely cut off from global developments in information technology up until the early stages of the 2010s.

The gradual opening of the country to the international marketplace, and the partial welcoming back of foreign teachers, has created a curious divide between parents of the middle and upper classes, many of whom were denied access to decent schooling and higher education and have consequently been labelled as the 'missing generation' (Promchertchoo 2015), and their children, who enjoy the privileged opportunities of an international education. For this reason,

it is possible that the above-mentioned generational divide that has been observed in other countries is even starker in Myanmar. Whether this is true or not remains to be seen, and this study hopes to shed some light on the situation in Myanmar, while also adding to the overall debate that was triggered by Prensky's work.

3. METHODOLOGY

The research was conducted at MISA, a K-12 international school with roughly 450 students and around two decades' presence in the city of Mandalay. The school follows the Cambridge International Curriculum and is undergoing a period of pure online instruction, with face-to-face classes prohibited by the government since the beginning of the 2020-2021 academic year. The study focused only on secondary students, from years 7 to 11 (or ages 11 to 16) and their parents. The sample group consisted of 145 students and 160 parents. A minimum sample size of 128 was calculated using the formula defined by Krejcie and Morgan (1970), for a margin of error below 5%.

The following research questions were posed:

1. How do students' perceptions of online learning tools influence their attitude towards online learning?
2. How do parents' perceptions of online learning tools influence their attitudes towards online learning?
3. How do students' perceptions and attitudes towards online learning compare to those of their parents?

Two research questionnaires were created to collect data, one for parents and one for students. These were closely based on the work of Park (2009). The two sets of questionnaires were distributed by email to potential respondents, chosen by convenience sampling technique. One set was in English and included 9 statements with a 7-point Likert scale for respondents' level of agreement with said statements. The 9 statements corresponded to 3 constructs - PEOU, PU and A - which formed the variables making up the conceptual framework. Demographic information was also requested, and a space was left for respondents to give their views in an open-ended format. Likewise, a questionnaire was sent to parents, similar in nature to the student questionnaire, but adapted for their context. This was translated into Burmese and distributed in both languages.

The research hypotheses were as follows:

$H0_1$: Students' perceived ease of use and perceived usefulness of online learning tools has no influence on their attitude towards online learning.
HA_1: Students' perceived ease of use and perceived usefulness of online learning tools influences their attitude towards online learning.
$H0_2$: Parents' perceived ease of use and perceived usefulness of online learning tools has no influence on their attitude towards online learning.
HA_2: Parents' perceived ease of use and perceived usefulness of online learning tools influences their attitude towards said tools.
$H0_3$: There is no difference between parents' and students' attitudes towards online learning tools.
HA_3: There is a significant difference between parents' and students' attitudes towards online learning tools.

Hypothesis testing was done using PSPP software after all data had been screened for missing values and possible duplicates. The questionnaire results were coded into construct means for PEOU, PU and A. Multiple Linear Regression analyses were then conducted for both data sets. Mean values for both sets were compared using a t-test. Answers to the open-ended question were analyzed for overriding themes or issues.

4. RESULTS AND DISCUSSION

For the student questionnaire, it was found that 64% (r2) of the variances in A can be associated with the dependent variables, PEOU and PU. The F-test (ANOVA) revealed statistical significance ($p<.05$), thus the null hypothesis ($H0_1$) was rejected and PEOU and PU can be used to predict A.

Table 1: Multiple Linear Regression Analysis Summary (Students)

	Mean	SD	B	R
PEOU	4.75	1.46	.15	.53***
PU	3.56	1.60	.71	.79***

Note: R2 = .64 (N = 145, $p < .05$)
*** $p < .01$
The formula for predicting attitude in students is as follows:
Attitude = $.15\ X_1 + .71\ X_2$

In terms of relative correlations, the Pearson Product-moment Correlation Coefficient shows us that there are strong positive correlations between all three variables (Green and Salkind 2014). The strongest predictor for A is PU (.789), while for PEOU the value is .530. Both relationships are statistically significant, as is the relationship between PEOU and PU (.535).

For the parent questionnaire, A value of .70 was found for r2, meaning that 70% of the variances in A can be associated with the dependent variables, PEOU and PU. Results for the F-test (ANOVA) show statistical significance was established ($p<.05$), allowing the researcher to reject the null hypothesis ($H0_2$). This means PEOU and PU can be used to predict A in the parents' case as well.

Table 2: Multiple Linear Regression Analysis Summary (Parents)

	Mean	SD	B	R
PEOU	4.71	1.58	.28	.70***
PU	3.99	1.55	.62	.81***

Note: R2 = .70 (N = 160, $p < .05$)
*** $p < .01$
The formula for predicting attitude in parents is as follows:
Attitude = $.28\ X_1 + .62\ X_2$

Analysis of the Pearson Product-moment Correlation Coefficient reveals strong positive, statistically significant correlations between all three variables (Green and Salkind 2014). As with students, the strongest correlation was found to be between A and PU (.809), while the relationship between PEOU and A (.697) and PEOU and PU (.675) were very similar. The strongest predictor for A is therefore PU.

Overall, values for students and parents are similar. In both cases, PEOU and PU can be used as predictors for A, and in both there are strong, positive relationships between variables. The r2 value is higher for parents (.70) than for students (.64). Table 3 shows a summary of mean values for two samples of equal size.

Table 3: Means Summary in Parents and Students

	Mean	SD	N
PEOU in Students	4.75	1.46	145
PEOU in Parents	4.73	1.54	145
PU in Students	3.57	1.60	145
PU in Parents	4.05	1.56	145
A in Students	3.71	1.63	145
A in Parents	3.91	1.69	145

A paired samples t-test was carried out to evaluate whether any of the three constructs are different in students and parents. Results indicated no significant differences in the mean values for PEOU {t (144) = .12, p = .907} and A {t (144) = -1.04, p = .298}. For PU, parents had a higher mean value, and a statistically significant difference was discovered {t (144) = -2.66, p = .009}. Based on the above data, the null hypothesis ($H0_3$) had to be retained.

Table 4: T-Test for Mean Difference between Variables

	Mean Difference	SD	Sig.	N
PEOU in Students and PEOU in Parents	.02	2.13	.907	145
PU in Students and PU in Parents	.48	2.19	.009	145
A in Students and A in Parents	.20	2.28	.289	145

Where opinions are concerned, it is clear that an overriding issue for students and parents is screen time and the effect it may have on students' eyes, as well as the difficulty of concentrating for prolonged periods. For parents, the need for increased supervision of their children was also a common concern, which reflects results in Sorensen's study (2012). Network or connectivity issues were also mentioned frequently by both sets of respondents. Parents more frequently mentioned the inadequacy or ineffectiveness of online learning, the fee structure, and the inevitability of this mode of instruction in the current reality of a pandemic. Both expressed the need, or desire, for social interaction and a clear preference for face-to-face teaching could be determined from both students and parents.

5. CONCLUSION

Findings showed that PEOU and PU are good predictors for A in both students' and parents' cases. It also revealed a statistically significant difference in PU between students and parents, but not in PEOU or A.

Contrary to assumptions, younger generations do not appear to be more accepting of learning technology than parents. The researcher would thus recommend that international schools in Myanmar focus their efforts on convincing students and parents as to the usefulness, and of

course user-friendliness, of online learning tools. This could be done via informational workshops or by presentations of evidence of learning outcomes being met and should include both parents and students. Here, the most common misconceptions could be directly addressed and, where possible, debunked. For students in particular, the usefulness of this form of instruction should be underlined.

When it comes to the open-ended section of the research questionnaire, the results were nuanced, with many comments noting the reality, or inevitability, of the current situation. Therefore, school admin should not necessarily take vocal complaints as representative opinions of the majority, because it could be that they are merely the loudest, while the silent majority is content and in agreement, or at least of a more reasonable disposition. Surveys are a more effective way of gauging overall opinions and concerns and should be used regularly as a school improvement tool. The results can also throw up overriding areas of concerns, which can then be addressed, such as screen time in this study.

For further studies, the researcher would suggest a larger population and wider demographic, which includes members of different age groups and social classes, thus allowing for comparisons between different demographic groups and more generalizable conclusions. Furthermore, the researcher would suggest further studies on actual usage of online learning tools, as well as their effectiveness when compared to face-to-face instruction.

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