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The Impact of Online Use of English on Motivation to Learn

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Abstract

Profound changes in the literacy practices of young people in the early part of this century mean that many are encountering and using English in their personal lives while studying the language formally in school or university, potentially shaping their language development and attitudes. This paper reports a research project which investigated how metropolitan youth in Indonesia were using English online, how this related to their global motivation to learn English, and in particular how it related to their attitudes to classroom English lessons. A mixed method design included a 56-item survey of students at a leading university (n = 308) and follow up interviews with four participants who showed different profiles of activity and motivation. Levels and type of online activity were broadly in line with findings in other contexts, with students favouring entertainment and self-instruction rather than socially-oriented activity; this correlated broadly with a positive attitude to classroom learning, but cluster analysis showed that some individuals exhibited a different pattern of response which was explored in interview. The paper discusses ways in which teachers of learners at lower levels of proficiency, operating under major curriculum constraints, may integrate learners' online informal learning of English into their classroom practice, and how teacher educators might help them do this.

Keywords: OILE, CALL, learning beyond the classroom, language development, motivation, attitudes to formal learning

Introduction

The rapid spread of digital technology and the internet potentially provides global youth with multiple opportunities for self-initiated, intrinsically motivating use of English, from general search-engine information-seeking, through digital gaming, watching films and YouTube pop videos, international communication via social media or participation in online forums, to the use of language study apps. As is now well-recognized, it provides

both a major incentive to learn English, and the means to do so (Sockett, 2014). Yet there is also increasing evidence that digital technology can have a demotivating effect in formal learning settings. Scholars have drawn attention to a widening 'authenticity gap' between what learners of English do in institutional classrooms and what they do with English online (Henry, 2013). Compared with their own independent online activities, English classes can seem dull, filled with dry knowledge-building exercises and oriented towards exam-based qualifications. This effect is not limited to the field of ELT either; the Times newspaper headlined a report on poor quality teaching in UK universities recently with the tag line 'Analogue academics are failing to inspire students of the digital age' (Times, 2016).

In this paper we address this pedagogic issue in the context of Indonesia, a fast developing South East Asian country which, thanks largely to the rapid expansion of mobile phone networks and availability of relatively cheap smartphones, has one of the highest usages of social media in the world (e.g. fastest growing number of internet users, 4th largest number of Facebook subscribers worldwide, Balea, 2016). It also has a state English language education system which has struggled to introduce innovations at the classroom level, and whose school graduates' English proficiency compares poorly to regional rivals, especially in communicative skills (Sukyadi, 2015).

Motivation for CALL in the classroom

Motivation is widely acknowledged to be an important factor in long-term L2 achievement, and research in this area has expanded massively in recent years (Boo, Dornyei & Ryan, 2015). Much of this has been directed towards validating and exploiting competing models of learner motivation, notably Dörnyei's (2009) L2 motivational self-system and its now slightly diminished rival, Gardner's (2010) socio-educational model of

L2 motivation – to which we return later. Another expanding line of research however has been directed at understanding situated motivation, that is, exploring the various aspects of context which influence learners' motivation, including the immediate and longer-term motivational impact of different forms of pedagogy; a sub-branch of this has examined how CALL systems can affect learner motivation, inside and outside the classroom. Two recent authoritative reviews of the educational benefits of CALL argued that there is probably more evidence for its positive effect on learner motivation than for how it accelerates language acquisition (Macaro, Handley and Walter, 2012; Golonka et al. 2014). Author 1 (2017) identifies four (overlapping) motivational benefits of using CALL systems in the classroom:

- it can increase pupils' interest in classroom learning tasks, while also validating young people's homegrown facility with digital technology. Kukulska-Hulme and Viberg (2018) claim that the use of mobile devices like smartphones and iPads in language classrooms produce 'positive effects in terms of learner attitudes, enthusiasm, engagement and mutual encouragement' (p. 214).
- it can enhance learners' long-term motivation for L2 learning through promoting learner autonomy and individualization. Ilic (2015) for instance shows how collaborative activities using their mobile phones can motivate learners to do homework.
- it can increase learners' L2 motivation indirectly by providing more opportunities for oral communication practice, as through video-conferencing or online game playing when learners may not feel as nervous or embarrassed speaking in the L2 (Ilic, ibid.).
- it can help learners construct identities as L2 users, partly through the self-confidence that accrues from successful L2 communication (see previous point), partly through the opportunities that online platforms provide 'to [try] out new and alternative

> identities and modes of self-presentation [without posing] a threat to students' real-world identities and private selves' (Ushioda, 2011, p. 207).

For reasons of space, we will not elaborate on these points here but refer readers to the comprehensive recent review by Bodnar, Cucchiarini, Strik and van Hout (2016). They concur that the weight of research evidence is that CALL systems do tend to have a positive motivational impact on learners, even when initial novelty effects wear off. However they also argue that much of the research still lacks theoretical and methodological sophistication, being often just an 'add on' (e.g. in the form of a survey of attitudes or retrospective interviews with learners) to investigations of impact on language development. One way it could be improved, they argue, is for CALL researchers to make more use of Dörnyei's (2009) L2 motivational self-system for understanding and measuring language learners' global motivation, through their future self-guides, and relating it to their situated motives for studying with technology.

Motivation for CALL outside the classroom

Important as developments in classroom CALL are, there have been equally exciting developments occurring outside class (Richards, 2015; Reinders & Benson, 2017). As Godwin-Jones (2018) writes

> Evidence is accumulating that a major shift is underway in the ways that second language (L2) development is taking place. Increasingly, especially among young people, that process is occurring outside of institutional settings, predominately through the use of online networks and media (p. 8).

In the advanced economies of the west, young people's personal lives are replete with technology, but in urban centres everywhere, and even in many rural districts of the developing world, a great many have access to a smartphone connected to the web. Millennial learners of language (especially of English) have hugely expanded resources at their disposal compared to any previous generation, and many are making use of them.

Sockett (2014) has termed this phenomenon the 'online informal learning of English' (OILE), though it should be pointed out that not all activities are strictly speaking 'online', and it is also true that 'informality' is, as Reinders and Benson (2017) make clear, a relative term, since language learning beyond the classroom could be initiated or structured by teachers (e.g. as homework) or institutions (e.g. preparation for an exam), or by contrast undertaken purely on the learner's initiative, or somewhere in-between, as when a learner chooses to take an online language course (e.g. using the duolingo app). Toffoli and Sockett (2015) define OILE as 'a process driven by the intention to communicate, with language learning being only a by-product of this communication' (p. 7), but again intentionality is not clear cut; a young person might choose to watch an English language TV series on Netflix mainly for entertainment but also knowing they make pick up some new language along the way, and use L1 subtitles (or not) to promote that process. Nevertheless, the term OILE has gained favour because Sockett and colleagues at the University of Strasbourg have pioneered research into the phenomenon of English language learners utilizing technology to use and learn English, and we will adopt it in this paper to include all activity involving use of technology and the English language outside of a classroom.

To date, there has been far less research on OILE than on classroom CALL. Steel and Levy (2012) compared Australian foreign language students' use of technology in 2011 with those of UK and Canadian students in 2006, and found that some technologies had become 'normalized', in Bax's (2003) sense of becoming a routine part of their lives, over that period e.g. 'typing your homework', 'reading texts on the computer', 'searching the web for information', 'listening to media broadcasts on the web', 'doing a PowerPoint presentation' and text messaging (p. 317). Students had become much more deliberate and autonomous in using technology to support their language study. Another major development was the growing ubiquity and usefulness of smartphones, a trend also noted among secondary school students in provincial Indonesia between the early and late 2000s (Author 1, 2004; 2013).

Regarding the actual activities in OILE, Sockett's (2014) own research with French undergraduates suggests that the most popular by far are watching English language films, TV series of Youtube videos (sometimes with English or L1 subtitles), and listening to English language songs with their lyrics. Trinder (2017) replicated these findings in a sample of Austrian university language students, though online dictionaries and web browsing were very common, as was emailing and social networking in English. As in Sockett (2014), specialist language learning tools such as online grammar tutorials were rarely used, and students also did not engage regularly in voice chatting in English (e.g. through Skype) nor perceived it as particularly useful for learning. Among Hong Kong university language students Lai, Hu and Lyu (2018) identified three distinct types of out-of-class L2-related technology use: instruction-oriented technological experiences, entertainment and information-oriented technological experiences, and social-oriented technological experiences. The first category, which included specialist grammar and

vocabulary learning websites, appeared to be more popular than in the European studies cited above. The social-oriented experiences however were again the least popular, and many of their participants actually express considerable discomfort in online chatting – using it for learning purposes was actually perceived as 'inauthentic' and often led to socially awkward interactions.

Sockett (2014) claims the reason for the popularity of watching and listening activities is simply that these are activities that the young people want to do anyway – the language learning is a bonus. It is also relatively risk-free, unlike direct communication through voice chat or in written online forums. As Trinder (2017: 401) writes, '[t]hrough the internet, language learners are morphing into matter-of-course language users, with language development a welcome by-product of online practices such as social networking, emailing, and downloading.' In her study the students were using English in some way or other on a daily basis. A few years earlier, Sockett and Toffoli (2010) analysed learner logbooks and found the median online activity in English was about 5 hours per week. The fact that so many English language learners these days use smartphones as their primary device for accessing the language online, and so can do it 'on the move', means that average weekly contact time has probably increased significantly. Recent studies (e.g. Ma, 2017, Ilic, 2015) of mobile assisted language learning (MALL) suggest that smartphones are used in such a diverse range of contexts, and for such a diverse range of L2-related functions, that they are blurring the boundaries between 'in-class' and 'out-of-class' learning activity.

Not surprisingly, patterns of use have been found to vary according to individual learner characteristics. Lai and Gu (2011), for example, identified learners with high levels of self-

regulation in language learning generally tended to use more technology outside class, as did those with higher self-efficacy for technology use. Later studies by the same Hong Kong based researchers (Lai, Zhou & Gong, 2015; Lai et al., 2018) brought to light other important learner differences: learners' use of the same technology would be affected by their personal L2 learning goals, for instance, while proficiency level did not seem to affect learners' likelihood of participating in L2-related technology use, whether for self-instruction, for entertainment, for information or for social communication purposes. Chik and Ho (2017) suggest life-stage is another likely influence on patterns of OILE as they found that the same learners had different out-of-class study habits while they were students and then five years later when they were already working professionally – having less time, they actually did less casual browsing or social networking in the L2 and instead looked for more structured learning experience (e.g. using Duolingo or other online courses).

An authenticity gap?

We have seen then that OILE is rapidly expanding along with the availability and sophistication of digital technology, and that it does seem to have beneficial effects for language acquisition. But is there a downside to this phenomenon? Apart from a widespread concern among parents and educational authorities about over-use of smartphones and other digital devices by the young, concerns have also been raised by language educationalists about the impact on motivation for classroom learning.

On the one hand, there is reason to believe the additional exposure and opportunities for meaningful practice that digital technology brings, would enhance learners' global motivation to learn English. Toffoli & Sockett (2015) say this has happened among French

undergraduates: ‘teachers cite increased curiosity about English, increased motivation to learn the language (often promoted by the students’ impression of being able to understand), more confidence and a general feeling of being at ease with the spoken language’ (p. 13). Trinder (2017) describes how Austrian undergraduates recognise the value of OILE and have begun to change their habits to support their formal studies (e.g. by choosing to read the daily news in English rather than German), and Lai et al. (2015) show that Chinese middle school pupils’ who indulge in a variety of OILE (rather than just mimicking school work) enjoy English lessons more and have better learning outcomes.

On the other hand, there is also some evidence that young people who use technology to access English at home, for entertainment, information or social purposes, find school English lessons dull by comparison. Even in the early 2000s, Author 1 (2004) described Indonesian junior high school pupils complaining that their school English lessons lacked the excitement that could be had from (e.g.) watching American films on DVD or listening to English pop music. What is more, state school systems can be slow to adopt new technology, and teachers may lack the skills and confidence to exploit new technology if it is available (Stevens, 2009). Researching Finnish teenagers’ OILE, Kalaja et al. (2011) warn ‘when students realize the benefits of informal contexts (as in the case of English) they may turn against institutional language teaching’ (p. 57). Henry’s (2013) study in neighbouring Sweden suggested that this threat had already come to pass: ‘a new type of student seems to have turned up in the English classroom in recent years. Surprisingly proficient in many aspects of English… these students do not feel the need to overexert themselves in class’ (p. 138).

Henry attributes the problem to an ‘authenticity gap’ between the school classroom and learners’ private lives: so many Swedish teenagers use English naturalistically while indulging their interests at home, both passively through watching TV, listening to music, and reading webpages and more actively through playing digital games, joining fandoms and social networking. These are intrinsically motivating activities, and ’self-congruent’ in that they satisfy personal interests and aspirations. By contrast, traditional classroom activities are often knowledge-based, oriented towards institutional or public assessment, and use paper materials that can seem quickly outdated. Further, the language presented in school curricula may seem very different, in substance and style, from the varied Englishes learners use online, so it can seem both linguistically irrelevant and also, in positing RP-using native speakers as the ideal, difficult for learners to identify with (Hafner, Chik & Jones, 2015).

Research Methodology

The research reported here aimed at directly exploring the relationship between OILE and the motivation to learn English in class, in the context of contemporary Jakarta, capital of Indonesia. The specific questions posed were:

- How much and what kind of OILE do young metropolitan Indonesians engage in?
- How does it relate to their motivation for learning English, and in particular attitudes to classroom study?

Following a prior study at a prestigious state university in Jakarta (Author 2, 2016), which discovered that 75% of classes do not include any kind of Blended Learning activity, we developed and distributed a questionnaire to discover how much OILE English language students at the university engage in, to see if this reflected their global motivation for learning English, and to see if it influenced their attitude to formal classes where minimal

technology was being used. Follow-up interviews were conducted with four participants selected on the basis of their survey results, in order to find explanations at an individual level for the different patterns of relations between OILE and motivation found in the quantitative data. The research could therefore be described as a 'mixed methods sequential explanatory' design (Ivankova, Cresswell & Stick, 2006), with priority given to the first quantitative phase.

In the first phase, a 56-item questionnaire was administered to 308 students of a prestigious state university in Jakarta, instrument, of whom 200 were attending compulsory first or second year academic English courses designed to help them with their studies, the other 108 being voluntary language students in evening English classes offered by the university at its city centre language school. The students were all in the age range 18-22, while the voluntary students ranged from 14 to 52. The two distinct populations were chosen so that we could investigate whether there were any differences in results for compulsory versus voluntary English learners, and younger vs older participants.

Questionnaire

The survey had two parts, the first (Part A) on OILE, the second on motivation to learn English. A total of 27 activities involving English and the use of technology were identified on the basis of the second author's personal knowledge of the students. Following Lai et al. (2018), these could be divided into 'L2 self-instruction-oriented' (e.g. I study English grammar and vocabulary online; I read articles related to my subject area or my work in English), entertainment-oriented (e.g. I read English song lyrics online; I have written blogs or fan fiction in English), and socially-oriented (e.g. I use English for my social media's language settings; I contribute to online English language forums related to my hobbies). A six-point Likert Scale asked respondents to say 'how true of me'

each statement was, from 'Not at all true of me' (1) to 'Very true of me' (6) – this was deliberately chosen instead of a frequency scale since, as Briggs (2015) has remarked, 'it is more difficult to accurately gauge how often something happens than to state how representative it is of one's behaviour' (p. 299). A final open item asked respondents to list any OILE activities not covered by the previous 27 items.

The motivation section (Part B) of the survey also consisted of 27 items, divided into five pre-ordained scales. These were (Cronbach Alpha reliability indexes included):

- Criterion measure (motivated learning behaviour) ($\alpha = .77$) – five items measuring participants' intended effort to learn English (e.g. 'I really try hard to learn English')
- Ideal L2 self ($\alpha = .81$) – six items measuring how far participants could imagine themselves using English in their future lives (e.g. 'In my future career, I see myself as fluent in English').
- Ought-to L2 self ($\alpha = .81$) – five items measuring how far participants believed significant others in their lives believed they should learn English (e.g. 'My parents/family believe that I must study English to be an educated person').
- Attitudes to classroom learning ($\alpha = .83$) – six items measuring participants' views of their formal English classes at the university or language centre (e.g. 'I usually find my formal English classes really useful').
- Self-assessment of proficiency ($\alpha = .65$) – three items measuring participants' self-assessment of their own English language proficiency (e.g. 'I can usually understand what I read in English').

A six-point Likert Scale asked participants whether they strongly disagreed (1) or strongly agreed (6) with each statement. A final open item asked participants 'Do you have any suggestions for how your English classes could be improved?' Dörnyei's (2009) L2

motivational self-system (L2MSS) was chosen as the main theoretical framework for this part of the study because in its three main elements (ideal L2 self, ought-to L2 self, and L2 learning experience, here slightly narrowed in scope to 'attitudes to classroom learning') it answers Bodnar et al.'s (2016) call for a measure of learners' global motivation to be included in studies of CALL system effectiveness, alongside situated motivation. As their review shows, it is also very under-represented in recent CALL research, considering its predominant position in studies of L2 motivation (Boo, Dörnyei & Ryan, 2015). Individual survey items were formulated using previous research instruments, including those used in this national context (Author 1, 2012); the scales were translated into Bahasa Indonesia by the second author and then back translated to English by the first author, with problematic wording referred to a third colleague. See the Appendix for a full list of the survey items (in English).

Interviews

Four interviews were carried out, with participants selected through 'extreme case sampling' (Dörnyei, 2007). That is, we invited people who firstly had volunteered to take part in the interview phase by ticking the relevant box in the survey, and then chose one each to represent the following patterns:

- high level of OILE and negative attitudes to their formal English classes (Participant 1, 23 mins)
- low level of OILE and negative attitudes to their formal English classes (Participant 2, 17 mins)
- low level of OILE and positive attitudes to their formal English classes (Participant 3, 46 mins)

- high level of OILE and positive attitudes to their formal English classes (Participant 4, 41 mins)

The level of OILE was based on the overall aggregate score for Part A of the survey. Their attitude to formal English classes was based on their score on the 'Attitudes' scale. Interviews had an explanatory purpose so, after confirming the type of OILE activities revealed by the survey, as well as their frequency (not revealed by the survey), our questions probed the reasons underyling their positive/negative attitude towards class. Interviews were carried out in Bahasa Indonesia by the second author, then transcribed in note form.

Results

In this section we will first report our findings on participants' OILE, then on their motivation for learning English, before we look at the relationship between these two characteristics.

OILE activities

In general, these Jakartans report a high level of out-of-class activity involving English. Mirroring results from previous studies (e.g. Trinder, 2017; Lai et al., 2018), entertainment-oriented (M = 4.34, SD = 0.68) and L2 self-instruction-oriented (M = 4.32, SD = 0.64) are more popular than socially-oriented activities (M = 3.82, SD = 0.96). The most and least popular activities are displayed in Table 1, and demonstrate the almost universal enjoyment of English language pop music and videos, as well as games that use English. The interviews suggest a reason for the lesser popularity of English for social communication online: all four interviewees mention the risk of losing face while posting messages or captions in English, either because of people noticing errors in the language, or the opposite: 'I'm afraid that if I speak in English too often I'll be considered arrogant,

"show off" like that', as Participant 4 commented; she did try using English captions in her daily Snapgram use, but then some online friends asked her to use Indonesian. The two interviewees with a high level of OILE said they only used English in speech or writing with particular trustworthy friends, either other cosmopolitan Indonesians or international users (neither had regular native-speaker interactants).

Table 1. Most popular and least popular OILE activities

Most popular	M	SD	Least popular	M	SD
I listen to English language songs	5.26	0.96	I communicate with foreign friends in English online	3.92	1.55
I read English song lyrics online	5.15	0.97	I book accommodation or travel tickets in English	3.89	1.32
I play digital games in English	5.01	1.27	I write Facebook or Twitter posts in English	3.79	1.24
I watch YouTube videos in English	4.96	1.05	I contribute to online English lang. forums related to my hobbies.	3.66	1.18
I watch foreign films with English subtitles.	4.86	1.15	I talk with foreigners in English on Skype	3.45	1.75
I use the internet to learn about the English language	4.85	1.04	I read Manga/other comic strips in English	3.45	1.61
I use English for my social media's language settings	4.83	1.34	I write blogs or fan fiction in English	2.61	1.56
I read websites in English	4.55	0.99	I make videos in English (e.g. on Snapchat, FB)	2.57	1.28

An independent samples Mann-Whitney U test revealed that age is a mediating factor in participants' level and type of OILE. Those under 25 do significantly more socially-oriented OILE (mean difference = 0.20, $p = 0.027$, $r = 0.13$) and entertainment-oriented OILE (mean difference = 0.57, $p = 0.000$, $r = 0.24$), while self-instruction-oriented activity was the same for both age groups.

Only 69 of the 308 respondents added comments in the open item at the end of Section A, and many of these were references to items already in the questionnaire, such as playing games or watching videos and films. The one more frequently mentioned original activity (listed by 17 respondents) was reading novels or magazines in English. Seven respondents mentioned using English in their workplace. It is worth noting that none of the four venues for out-of-class English learning highlighted by Richards (2015) – chat rooms, self-access centres, language villages, and tandem-style interviews – are mentioned by respondents; perhaps an indication of the speed of change in digital technology, and accordingly learners' practices.

Motivation

Respondents generally showed a high level of motivation for learning English, with particularly high scores for the ideal L2 self, suggesting that these mainly young Jakartans had strong visions of themselves as future users of English. Mann-Whitney U tests showed that there were significant differences among sub-groups, as shown in Table 2. The slight tendency for females to show more motivation than males reflects well-established trends in this academic area (Carr & Pauwels, 2006), while it is not surprising that those who are taking the voluntary supplementary English evening classes (Vol) report more motivated learning behaviour than those in the compulsory courses (Comp), and a higher level of proficiency.

Table 2. Motivation variables: comparison of groups

	Overall Mean	SD	Gender	Course type
Motivated learning behaviour	4.55	.78	F > M*	Vol>Comp**
Ideal L2 Self	5.32	.61	F > M	No diff
Ought-to L2 Self	4.53	.86	No diff	No diff
Attitudes to classroom learning	4.75	.77	No diff	No diff
Self-assessed proficiency	4.40	.75	F > M*	Vol> Comp**

* significant at $p < .05$

** significant at $p < .01$

Relationship between motivation and OILE

Table 3 presents the Pearson correlation indexes for all the measured variables. In line with previous research using the L2 motivational self-system (Al-Hoorie, 2018), both the 'ideal L2 self' and 'attitudes to class learning' correlate very highly with the criterion measure of motivated learning behaviour, the 'ought-to L2 self' less so. There is also a high correlation between the 'ideal L2 self' and 'attitudes to class learning', as has been found previously in Indonesia (Author 1, 2012). This suggests that learners who do have visions of themselves successfully using English in their future lives may get more satisfaction out of the learning experience, even if it is not intrinsically enjoyable. It is also noticeable that there are positive correlations between all forms of OILE and the 'ideal L2 self', but not the 'ought-to L2 self' – though we obviously cannot attribute causality, it is possible that regular use of English outside class may help to foster images of a future English-proficient self or that those who already have such images are drawn to OILE as a way of reducing the discrepancy with their actual selves. Likewise, there is a strong association between high levels of OILE and higher self-assessed proficiency, but we cannot say whether this is because higher proficiency learners are able to indulge in more OILE, or because OILE helps to develop higher proficiency.

Table 3. Correlations between the variables

Variables	1	2	3	4	5	6	7	8
1. Entertainment-oriented OILE	1							
2. Socially-oriented OILE	.642**	1						
3. Self-instruction OILE	.588**	.546**	1					
4. Motivated learning behaviour	.212**	.283**	.373**	1				
5. Ideal L2 self	.273**	.285**	.390**	.506**	1			
6. Ought-to L2 self	.006	.032	.065	.282**	.391**	1		
7. Attitudes to class learning	.078	.152**	.214**	.655**	.414**	.158**	1	
8. Self-assessment proficiency	.570**	.498**	.399**	.373**	.341**	.146**	.263**	1

**. Correlation is significant at the 0.01 level (2-tailed).

However the key relationship for our purposes is that between OILE and attitudes to classroom learning. The Pearson correlation coefficient between average overall OILE and the variable 'attitudes to classroom learning' is moderately positive at $r = .192$ (significant at $p < 0.001$) but Table 3 shows that there are differences between the

three OILE scales: there is almost no correlation between entertainment-oriented OILE, while self-instruction-oriented OILE has the highest correlation at $r = .214$ (significant at $p < 0.01$). This accords with Henry and Cliffordson's (2017) suggestion that different kinds of OILE may have differential effects on learners' perceptions of school work.

Correlations may obscure the complexity of relationships between variables since they only present overall averages. The statistical technique of Cluster Analysis, by contrast, has the capacity to reveal more nuanced patterns of relationships. It has only occasionally been used in L2 motivation research, mainly to identify 'types' of individuals who share particular configurations of motives (see Csizér & Dörnyei, 2005; Papi & Teimouri, 2014). It is useful here because it can reveal distinct patterns of responses to the two key scales of OILE and attitudes to classroom learning.

K-means Cluster Analysis was employed using SPSS v22, using the two parameters of OILE and attitudes to classroom learning, with a set target of identifying four clusters: low OILE negative attitudes, low OILE positive attitudes, high OILE negative attitudes and high OILE positive attitudes. Table 4 presents the clusters identified.

Table 4. Descriptive analysis of each cluster (n in brackets), with means for self-assessed proficiency.

	Cluster			
	1 (28)	2 (70)	3 (95)	4 (115)
OILE	4.57	3.72	3.70	4.77
Attitudes	3.47	4.04	5.16	5.14
Self-assessment of proficiency	4.39	4.01	4.18	4.83

It can be seen that the largest group are actually those with both positive attitudes to classroom learning and a high level of OILE, while only 28 participants fall into the category of having a high level of OILE but negative attitudes to classroom learning. Combining this with the positive overall correlation between the scales noted above, we can say with some confidence that, if there is a perceived 'authenticity gap'

between their English classes and their use of English outside of class, it afflicts only a small proportion of this group of learners. Nevertheless, it is worth noting that this group (Cluster 1) it consists almost exclusively of females who are studying compulsory classes at the university (only 6 are male, and only 2 are taking voluntary classes). Unsurprisingly perhaps, a one-way between-groups ANOVA showed that Cluster 4 had significantly higher mean scores on the self-assessment of proficiency measure than the other three Clusters ($p < 0.001$)., suggesting that positive attitudes in class combined with a high level of activity out of class is the most effective combination; though it is worth noting that Cluster 1, who did have a high level of OILE assessed themselves more highly on proficiency than those with participants in Clusters 2 & 3 with low levels of OILE

Only one person in Cluster 1 (high OILE, negative attitudes) volunteered to take part in the interview phase of the study, compared to 5, 25 and 22 for the other Clusters – in itself perhaps a sign of disaffection with formal education. Participant 1 was an 18-year-old female freshman student of Mechanical Engineering, with a strong underlying motivation for learning English; she has a strong 'ideal L2 self' and envisages living abroad one day, she is not sure where but 'you can go anywhere if you're fluent in English' [Participant 1 interview]. Her attitudes to classroom learning ($M = 4.0$) were not far below the overall mean ($M = 4.75$). She admitted though that she found her English classes 'monotonous', the material difficult, and that being at the end of the day she was often tired. She felt that self-instruction was more effective as well as more enjoyable; during the school years, she said, ''I learned from reading books, from watching films or listening to songs by myself, yeah grammar is grammar, that's it' [participant 1 interview]. Earlier in the interview she claimed her grammar was based on her intuition, rather than teachers' explanations which were often hard to follow. Her intuition had no doubt benefitted from her considerable exposure to English, both for entertainment (e.g. playing SIMS, reading and writing fan fiction) and for self-instruction (e.g. online TOEFL practice, reading Engineering textbooks in English).

Participant 1 was not alone in her critique of university English classes. Participant 2's complaints centered around the fact that in his view the teacher focussed only on the more competent students, leaving lower proficiency students like himself to struggle.

Meanwhile, just over 60% of the survey respondents chose to answer the final open item with suggestions about how their English classes could be improved. Table 5 below presents the top six ideas. Technology is only implicated directly in point 4. The dominant theme here is clearly a desire for teachers to make the classes more intellectually and emotionally engaging.

Table 5. Six most common suggestions for improving English classes (n = 176)

Suggestion	No.
Make the lessons 'fun'	26
Introduce games	26
More innovative teaching methodology	22
Watch films or videos	14
More speaking practice	13
Make lessons more interesting	10

Discussion

We will begin this section by offering tentative answers to our research questions, before moving on to discuss the contribution to current debates about OILE and classroom learning.

How much and what kind of OILE do young metropolitan Indonesians engage in?

The survey instrument appeared to capture most of the OILE that these respondents engaged in (or at least that they were prepared to report publically). Their level and type of activity roughly matches that reported in previous studies of OILE (e.g. Sockett, 2014; Trinder, 2017; Lai et al., 2015; Lai et al., 2018), in that they favoured entertainment-oriented and self-instruction-oriented activity over social activity using English. Entertainment-oriented activities tended to be of a receptive nature in that they involve responding to English language texts (as heard/read in songs, digital games, videos and

websites) while the students exploit the web for self-instruction both incidentally (e.g. using Google Translate when needed) and more deliberately (e.g. using language learning websites). There was a small effect for age, with those under 25 doing more OILE than those over that age. The interview data corroborated Lai et al.'s (2018) finding in another Asian context that a reason for the relatively low use of social-oriented OILE is that learners find online social communication in English to be awkward and risky, even though they recognise its potential value for learning. Unless use of English is somehow integral to a personal relationship (e.g. a pact with a close friend, or encouragement from an older family relation), it actually feels inauthentic to use the language.

How does it relate to their motivation for learning English, and in particular attitudes to classroom study?

This study did not find evidence of a widespread 'authenticity gap' between learning inside and outside of class, either. This is not to say that some individual learners do not feel a disconnect between the two contexts, as has been posited in some previous research (Henry, 2013; Hafner et al., 2015). While overall the data suggested that those who indulge in more OILE have more positive attitudes to classroom learning, the cluster analysis shows that there were individuals who bucked the trend, perhaps like the individuals from other global contexts who have found online a 'newfound sense of expressivity and solidarity when communicating in English' like the Chinese immigrant to the USA who set up a Japanese pop music fan club online (Lam, 2000: 468) or the Finnish teenager described in Kuure (2011) whose fanatical digital game-playing involved intensive use of English 'as a means for nurturing social relationships and participating in collaborative problem-solving and networking among peers' (p. 45-6). For such learners there is certainly a risk that the formal language classroom, with its Standard English orientation

and knowledge-reproduction focus, may seem alienating.

To repeat, there is no sign that this is happening on a large scale among the digitally connected millennial generation of Jakarta. However, we must note that the population sampled was an educational elite whose personal academic success, alongside a culturally ingrained respect for educators (Maulana, Opdenakker, Den Brok & Bosker, 2011) may have moderated any feelings of dissatisfaction towards their formal English classes. The qualitative data did reveal that many respondents felt their classes needed enlivening, but apart from more use of video, the suggestions did not advocate more use of CALL but a change in the methodology or even 'spirit' of the class.

That young people's home lives are increasingly oriented around smartphones and other IT devices is not in itself a good reason that their school lives should be – in fact it may be an argument for formal classrooms to offer quite different learning experiences. In envisaging the role of classrooms vis-à-vis pupils' online language learning, many recent commentators have used the metaphor of a 'bridge', following Thorne and Reinhardt's (2008) notion of 'bridging activities' that 'combin[e] the best of the analytic traditions of schooling with the life experiences and future needs of today's foreign language students' (p. 562), and involve the teacher in mediating the diverse multimodal online texts that learners engage with outside the classroom, to build learner agency and lingua-cultural awareness. Thorne and Reinhardt's exciting pedagogic model presupposes advanced foreign language proficiency students who already have deep foundational knowledge of standard language and established genres; it also presupposes teachers with a sophisticated awareness of digital technology and online communication practices, as well as the agency to redesign their curriculum; as they acknowledge, it poses 'a number of challenges to the conventional goals and processes of…foreign language education' (p. 567), and that is

doubly true in contexts like the one studied here where university students are far from 'advanced' in proficiency, and where use of classroom CALL is limited by both available technology and teacher know-how.

Nevertheless, as young people's OILE inevitably expands and diversifies, we believe that Indonesian teachers have no choice but to acknowledge it and modify their classroom practice, if they wish to continue to serve their learners' long-term best interests. This does not necessarily mean introducing more CALL, but it does mean building a psychological 'bridge' between what happens in the class and what learners are doing outside. This is necessary for three reasons.

Firstly, it can avoid the 'authenticity gap' that Henry (2013) observes emerging in some western European language classrooms. In the Indonesian context, the motivational issue is not so much that digitally-proficient learners feel they have little to learn from classrooms – clearly our data do not support such a proposition, except in the case of a few individuals – but that they do not always find them engaging places to be. This is partly a matter of mental stimulation – hence the appeals in the qualitative data for more 'games' and 'videos' – but also a matter of identity. Toffoli and Sockett (2015) found that French university English language teachers greatly underestimated the proportion of their students who used English online (actual figure 97%, estimated figure 44%), and we suspect that similar figures would be obtained in Indonesia. Further we suspect that even those who do recognise their learners' OILE do not systematically refer to it in their teaching. By ignoring it, they are failing to acknowledge important elements in their learners' evolving L2-mediated identities (Block 2007). The students in our study exhibited strong ideal L2 selves, and as Ushioda (2011) and others have pointed out, these motivating visions of a future English-proficient self can be stimulated and sustained

through regular use of English online, whether as participants in online communication in forums, games or virtual worlds or more modestly as viewers of English language box sets and YouTube Vloggers.

Secondly, there is no doubt that utilizing learners' experience and expertise at OILE can make classroom methodology more innovative and learner-centred, and make language learning processes more productive. To do this, though, teachers need to adopt a learning mindset, because they may well lag behind their pupils in terms of digital knowledge and skill. Our data suggests that learners already access diverse self-instruction-oriented online resources, and sharing these with peers would itself be beneficial, for example through scheduled Bring Your Own Device lessons (BYOD). Trinder (2017) recommends asking students 'to find and share digital resources (news articles, forum comments, videos, etc.) that relate to content/topics on the curriculum, to post them on learning management systems or in closed Facebook groups, and to comment on the contributions of others' (p. 410). Collaborative project work is another way to build bridges between the formal and informal learning environments; targets and waystages can be set in class but learners are free to use whatever online or actual resources they can find outside of class to achieve the group's goal, whether it be the construction of a group Wiki, a poster exhibition or oral presentation.

A third reason for the class English teacher engaging with learners' OILE is that, even if they cannot instruct learners in language learning beyond the classroom, they can and should offer advice. As Claxton (2008) writes, young people are very adept at learning about IT through their own explorations with peers or older siblings, but 'schools could play a more powerful role, not in co-opting and corralling young people's IT explorations, but in helping them develop the kind of reflective awareness that builds discernment and

transfer' (p. 192). From a motivational point of view, it is important that learners can exercise agency in discovering and exploiting online resources – too much direction from the teacher will likely undermine that autonomous motivation (Ushioda, 2013). But the internet is full of perils, as our own interviewees recognized, and while a certain amount of trial and error is probably healthy (just as it is in outdoor explorations) teachers and parents need to provide a safety net to ensure that learners are not demotivated by disturbing communicative encounters or excessive linguistic difficulties. English language teachers in many global contexts may not be equipped to apply techniques of genre and discourse analysis to online texts in the way that Thorne and Reinhardt (2008) envisage, but they can help learners to see how such texts may differ from the standard Englishes promoted in the curriculum and assessed in institutional/national exams, and at basic levels show how the particular medium of production (e.g. online discussion forum, video chat, digital game moves, TV football commentary, pop song lyrics) affects the forms that communication takes (cf. Kern 2015).

A major task for teacher educators in coming years is to integrate these new responsibilities into initial training courses and develop more experienced teachers' competence and confidence in this area. Space prevents any detailed discussion of this issue here, but given the fact that IT and young people's digital practices are changing so quickly – and that teacher educators may themselves be in the dark about many of them – this seems like an ideal topic for action research (AR), where teachers discover for themselves what OILE learners are engaged in and how it relates to their formal class work. Reinders and Benson (2017) have suggestions for AR research foci. At the same time we need more research about what teachers in different ELT contexts are currently thinking and doing in regard to OILE. Two pioneering studies are Toffoli and Sockett's (2015) survey of French university language teachers, which found worrying levels of

ignorance about their students' OILE, and Tour's (2015) qualitative study of how teachers' own everyday digital practices affect their pedagogy.

Conclusion

A growing research literature now attests to the power of different forms of CALL to motivate language learners. While pedagogical tools continue to be developed and refined, the even more rapid transformation of young people's personal lives by the 'digital revolution' has meant that in many global contexts they are encountering, mentally processing and expressing themselves in English far more and far earlier than any previous generation. This study examined the OILE practices of young language learners in the cosmopolitan capital city of a developing country and found high levels of English use and learning, especially for entertainment and self-instruction. Overall this was associated with high global motivation to become competent in English, and with more positive attitudes towards classroom learning, though there was significant individual variation in this regard – some individuals with high levels of OILE are sceptical about the benefits of classroom instruction. One of the weaknesses of the present study is that we were only able to interview one such person, while the survey did not enable us to quantify or describe in detail the uses of English outside class. An important future research project would consist of case studies of individuals to explore the nature of the relationship between their OILE activities and their beliefs about formal education, in particular to see whether the 'authenticity gap' hypothesized by Henry (2013) exists. Whether it does or not, we believe an urgent task for language educators, in Indonesia and probably elsewhere, is to adapt their classroom practice to accommodate their learners' OILE – to stimulate it when it is low, to validate and exploit it when it is high, and to sustain learners' desire to engage with English outside of class when they experience linguistic or interactional challenges online.

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APPENDIX - QUESTIONNAIRE ITEMS (English version)

USE OF ENGLISH OUTSIDE CLASS (3 categories)

Mainly for entertainment

B1. I play digital games in English

B2. I listen to English language songs

B3. I watch English language TV shows (news, sports, entertainment)

B4. I watch YouTube videos in English

B12. I read websites in English

B14. I read English song lyrics online

B18. I book accommodation or travel tickets in English

B19. I watch films in English without Indonesian subtitles

B21. I read Manga/other comic strips in English

B22. My online shopping is in English

B24. I watch foreign films with English subtitles.

B25. I write blogs or fan fiction in English

Mainly for socializing

B6. I use English for my social media's (Facebook's, Path's, etc.) language settings

B9. I contribute to online English language forums related to my hobbies.

B10. I write photo captions on Instagram in English

B11. I write Facebook or Twitter posts in English

B17. I communicate with foreign friends in English online (through email, WhatsApp etc.)

B23. I follow Twitter posts in English

B26. I talk with foreigners in English on Skype

B27. I make videos in English (e.g. on Snapchat, FB)

Mainly for studying

B5. I study English grammar and vocabulary online

B7. I read articles related to my subject area or my work in English.

B8. I deliberately develop my English language skills online.

B13. I look up English words/phrases on Google Translate

B15. I do online quizzes in English.

B16. I use Wikipedia in English

B20. I use the internet to learn about the English language

+ open item (B28) on 'other activities involving English'.

MOTIVATION (5 constructs)

Criterion measure (intended effort to learn) (Cronbach alpha α = .77)

C1. I really try hard to learn English.

C6. I think that I am doing my best to learn English.

C11. I would like to spend lots of time studying English.

C17. I study English hard

C21. I don't put much effort into learning English in my own time. (R)

Ideal L2 self (α = .81)

C2. I often imagine myself as someone who speaks English

C8. I can imagine myself studying in English at an overseas university.

C14. In my future career, I see myself as fluent in English.

C18. I can imagine myself using English in my future life

C25. The things I want to do in the future involve English

C27. I truly desire to become a person who's competent at English

Ought-to L2 self (α= .81)

C3. I have to learn English so I don't get left behind in my work in future

C7. Studying English is important to me to gain the approval of my teachers or bosses.

C12. Studying English is important to me to gain the approval of my peers.

C15. My parents/family believe that I must study English to be an educated person.

C24. I feel a duty to learn English well

C26. Studying English is important to me to gain the approval of the people around me.

Attitudes to formal English classes (α= .83)

C4. I usually find my formal English classes really useful

C5. It's fascinating to study English in class

C9. To be honest I don't enjoy learning English in the classroom. (R)

C10. In general I look forward to my English classes

C16. I usually find my English lessons enjoyable

C22. I benefit a lot from studying English in class.

Self-assessment of proficiency (α = .65)

C13. I can usually understand what I read in English

C19. When I speak English, the listener usually understands me.

C23. Compared to my friends, my English is considered good.

+ open item (C28) on 'Do you have any suggestions for how your English classes could be improved?'