APTIS GENERAL WRITING TEST TASK 4: AN ANALYSIS OF TEST-TAKERS' PRAGMATIC PERFORMANCE AND COGNITIVE PROCESSING

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ABSTRACT

This project aims to investigate the pragmatic performance and cognitive processes of candidates taking Aptis General Writing Test (AGWT) Task 4. This task requires candidates to write two transactional emails in different registers to carry out a specific social function. Successful performance in this task requires not only a reasonable level of linguistic competence, but also a fair amount of pragmatic knowledge (i.e. ability to express intended meanings contextually appropriately in social interaction). Against this background, the present project seeks to explore how candidates tap on their pragmatic knowledge to complete AGWT Task 4 and how factors such as first language backgrounds and general language proficiency affect their pragmatic performance. Findings of the project will shed lights on factors in task performance and hence will be useful for both test developers in the process of test validation and localisation and teachers in the process of preparing students for the test.

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1. INTRODUCTION

Assessment of second language (L2) pragmatic competence is an under-researched but fast growing area of investigation in L2 assessment (Roever, 2011). Pragmatic competence is the ability to express meaning and intentions contextually appropriately, as well as to understand those of others in social interaction (Taguchi, 2011). Pragmatic competence is an important part of L2 communicative competence (Bachman, 1990). That is to say, a reasonably high level of pragmatic competence is required for successful communication in the target language (TL) (Kasper, 1997). Two major components of pragmatic competence include sociopramatics and pragmalinguistics. The former refers to knowledge of social rules (e.g. cultural norms, politeness and taboos) that govern speakers' (or writers') language use and hearers' (or readers') possible interpretations. The latter refers to knowledge of linguistic resources required for expressing and comprehending meaning and intentions (Leech, 1983). The two components are closely connected as speakers' (or writers') sociopragmatic judgments (e.g. what is appropriate or inappropriate to convey to a specific audience in a specific situation) are reflected in their pragmalinguistic choices (Brown and Levinson, 1987).

Although not a test of L2 pragmatic competence *per se,* Aptis General Writing Test (AGWT) Task 4 requires a fair amount of pragmatic knowledge for candidates to successfully perform. The task requires candidates to produce two transactional emails to communicate a particular intention, such as requesting, complaining, giving advice, expressing (shades of) opinions, persuading, expressing agreement/ disagreement and so on. The first email is intended for an audience known to candidates (a colleague, a fellow student, or fellow member of a club). Although the register required in this context of communication is informal, the specific reader-writer relationship is "defined by their roles as participants in the same activity in the public/occupational/educational domain" (O'Sullivan & Dunlea, 2015:59). The second email is targeted for a specified audience who may not be personally known to candidates, and hence, the email should be written in a formal register.

To perform well in AGWT Task 4, candidates first need to be able to assess relevant contextual factors, including the relative power relationship and social/ psychological distance between the writer and the recipient, and the rights and obligations of each party in the given context. For example, does the writer have the right to make a request in the given situation? Does the recipient have the obligation to grant the request? Then based on this sociopragmatic analysis, candidates need to choose linguistic forms accordingly for expressing their intended meaning. The mapping of linguistic forms onto their correct functional meaning and appropriate context of use in the target language can be a challenging task for many L2 learners. This is because discourse communities may differ in sociopragmatic perceptions regarding politeness, rights, and roles in social relationships, as well as in linguistic conventions for encoding meaning. As L2 learners move between their first (L1) and target languages, communication breakdown may happen due to learners' lack of intercultural sensitivity and inappropriate application of the sociopragmatic rules and pragmalinguistic conventions of their L1 when communicating in the TL.

For a long time, language testing, including the testing of pragmatic competence, has been dominated by native-speaker (NS) models. NS competence has been widely accepted as a point of reference for assessing non-native speakers' (NNS) competence (McKay, 2002). However, in the context of English as a lingua franca (ELF) communication, such practices are considered problematic in several aspects (Roever, 2011). This is particularly true for assessing the construct "appropriateness", which is culturally relative and closely bound with cultural identity. Studies of the pragmatics of ELF suggest that without needing to conform to NS norms, speakers of ELF still manage to communicate effectively with one another through negotiation of differences and accommodation (Jenkins, 2009). In the field of L2 pragmatics assessment, therefore, recommendations have been made that pragmatic choices are assessed "not in terms of how much it approximates native speaker norms but based on learners' intended meanings and the nuances they choose to communicate" (Ishihara, 2009:447). To inform such assessment practices, it is important to examine patterns of pragmatic use of language by test-takers of different linguistic and cultural backgrounds.

Another important issue in L2 assessment in general and L2 pragmatics assessment in particular is concerning key features of language use at different performance levels. Previous research has suggested that language proficiency plays a role in pragmatic performance (Kasper & Rose, 2002). However, since the majority of existing pragmatics studies have focused on the oral performance of a particular speech act, relatively little is known about the role of language proficiency in pragmatic performance in the written mode. Pragmatics of email communication is even less researched (Chen, 2015; Nguyen et al., 2015). As a hybrid form of communication (an interface between oral and written language), email communication affords a wide variation of registers, depending on the specific context of communication, and therefore, poses a great deal of uncertainty to L2 learners (Chen, 2006). Due to the dearth of research on the effect of language proficiency on L2 speakers' email writing, this question deserves empirical investigation.

Finally, despite the central role of individual cognitive characteristics in language learning and assessment, very few studies have examined cognitive processes in L2 pragmatic performance (e.g. Cohen & Olshtain, 1993; Felix-Brasdefer, 2008; Hassall, 2008; Nguyen, 2017; Ren, 2014; Widjaja, 1997; Woodfield, 2008). These studies have also centred on cognitive processing in oral performance rather than in written performance (but see Robinson, 1992; Woodfield, 2008). Particularly, research into how learners with different levels of language proficiency plan, execute, and monitor their pragmatic production is fairly scarce (e.g. Hassall, 2008; Nguyen, 2017; Ren, 2014). Therefore, it is necessary to expand the above line of research to investigate possible variations in thought processes of different proficiency groups of learners when 'doing pragmatics' in the written form. Such studies serve to contribute to the current L2 pragmatics scholarship and to inform the validation of pragmatics tests.

Against this background, the current project seeks to explore how Aptis test-takers tap on their pragmatic knowledge to complete AGWT Task 4 and how factors such as first language backgrounds and general language proficiency affect their pragmatic performance. Findings of the project will shed lights on factors in task performance and, hence, will be useful for both test developers in the process of test validation and localisation and teachers in the process of preparing students for the test.

2. THEORETICAL BACKGROUND

2.1 Pragmatics of email communication

A form of computer-mediated communication (CMC), email discourse represents a hybrid register resembling both speech (i.e. less formal) and writing (i.e. more formal), hence lending itself to a great range of styles (e.g. from those of a casual conversation to those of a conventional business letter), depending on particular communicative contexts and writer-recipient role relationships (Barron, 1998). However, norms concerning the level of formality of emails are less clearly established compared to business letters, and vary across cultures (Bjørge, 2007). People from high power-distance (PD) cultures, characterised by inequalities of power, prefer a high degree of formality when writing emails to authority figures. On the other hand, people from low PD cultures, where no such inequality is assumed, prefer informality in corresponding contexts (Bjørge, 2007).

In terms of organisational structure, emails generally comprise two major moves (Chen, 2015). Framing moves, consisting of email opening and closing sequences, contribute to the physical layout of the email message (Kankaanranta, 2006). Content moves contribute to the key communicative goals of the email message (Kankaanranta, 2006), and comprise its core elements. In the case of AGWT Task 4 emails, such core elements include speech act realisation strategies and modification devices.

Openings and closings may be absent in responding to informal emails, but occur frequently in initiating formal emails sent up the institutional hierarchy (Bou-Franch, 2011). Although "empty of content", these sequences are "interpersonally loaded" in the sense that "in opening sequences, the social relationship between participants is negotiated and established, or recalled", and "in closing sequences, participants work to accomplish a joint, negotiated, frictionless termination of the social event" (Bou-Franch, 2011:1773). In the perspective of the rapport management framework, the choice of forms of greetings in the opening sequence is reflective of "a desire to maintain or protect harmonious relations between interlocutors" (Spencer-Oatey 2000:29). In particular, greetings can contribute to the formality/ deference politeness or informality/ solidarity politeness of the email (Bou-Franch 2011:1776).

Concerning closing sequences, previous research has found great stylistic variations, ranging from a simple "thank you" plus a signature, to good wishes (e.g. "Have a nice day!"), appeals for actions (e.g. "I look forward to hearing from you"), farewell ("See you", "Regards" or "Sincerely") or a combination of the multiple moves (Economidou-Kogetsidis, 2011: Kankaanranta, 2006). As with the opening sequence, how the closing sequence is formulated is dependent on the writer–recipient relationship (Bjørge, 2007). While L1 English writers tend to frequently close their email messages with thanking plus name (signature), suggesting an emergence of new email conventions (Biesenbach-Lucas, 2009), L2 English users, especially those from high PD cultures tend to rely on formal, epistolary closings (Bjørge, 2007; Chen, 2001; Chen, 2015).

To date, CMC research has focused heavily on areas such as the diversity of electronic genres, linguistic features, and gender differences in CMC. There has been less research on electronic speech acts, that is, the performance of a particular language function in social interaction (see Meinl, 2010, for a review), leaving this a much needed area for further empirical investigation.

2.2   L2 learners' pragmatic performance

L2 pragmatics research investigates how learners develop knowledge and ability for use of pragmatic acts and routines in the TL (for an overview of the field, see Bardovi-Harlig, 2010a, 2010b). Conventionally, the main focus of interest in L2 pragmatics research is speech acts, such as making a request or expressing an opinion. Speech act theory posits that in saying something, one is actually doing something with words (Austin, 1962). For example, in saying "Can you pass the salt?" one is producing a request. The performance of a speech act often involves the carrying out of three types of acts: (1) the act of saying things (e.g. "Can you pass the salt?"); (2) the performance of a language function by what we say (e.g. requesting someone to pass the salt); and (3) the achieving of the effect of what we say on the addressee (e.g. someone will pass the salt). Where there is a match between form (e.g. an imperative) and function (e.g. a request), the speech act is considered direct (e.g. "Pass me the salt"). On the other hand, where there is not such a correspondence (e.g. using an interrogative to make a request), the speech act is considered indirect (e.g. "Can you pass the salt?").

Speech acts are often studied in relation to politeness, that is, choices speakers make in language use to display respect towards and rapport with others. For example, instead of producing a direct request such as "Pass the salt", speakers may opt for an indirect request such as "Can you pass the salt?" to avoid coerciveness, thus reducing potential friction. Politeness may also involve using respectful forms of address such as "Sir" and "Madam", or polite routines such as saying "thank you" and "please" to make others feel respected. In selecting particular politeness strategies (e.g. deference politeness or solidarity politeness), speakers consider their role relationship with others (e.g. are they equal partners or does one hold a higher or lower social status? Do they know one another well or not?), as well as the degree of imposition (low vs. high) imposed on the addressee by the produced speech act (Brown & Levinson, 1987). For example, deference politeness is often preferred when a high imposition request is produced by a person of less power, while solidarity politeness is more likely expressed when the social distance and power difference between speakers are minimal.

Previous studies of speech acts in learner language commonly investigate linguistic and politeness strategies that L2 speakers employ for carrying out oral requests, apologies, refusals, compliments and complaints (see Ellis, 2008, for a review). But recent years have started to witness increasingly more studies focusing also on how L2 users communicate speech acts in the written mode, especially requests in emails to faculty (e.g. Biesenbach-Lucas 2006, 2007; Bjørge 2007; Chang & Hsu 1998; Chen, 2006; Chen, Rau & Rau 2016; Economidou-Kogetsidis, 2011; Felix-Brasdefer, 2012; Hartford & Bardovi-Harlig, 1996). Two generalisations emerging from the existing body of research on L2 speech act use and acquisition are relevant to this project. First, despite that some pragmatic knowledge is universal and shared among speakers of various languages, L2 users' linguistic and cultural backgrounds may still considerably impact on how they recognise and produce speech acts in the TL (see Ellis, 2008, for a comprehensive review). American learners of L2 Spanish, for example, tend to prefer conventionally indirect request strategies when interacting in the L2, due to a transfer of pragmatic norms governing their native language use (Shiverly, 2011). In contrast, Chinese learners of L2 English, tend to prefer direct request strategies but rely heavily on pre-request supportive moves to achieve indirectness, a pattern also found in their L1 (Chang & Hsu, 1998). Second, although there does not seem to be a linear relationship between one's general proficiency and his or her pragmatic competence in the TL, advanced learners' speech act use is more socially appropriate than that of their lower proficiency fellow learners (see Al-Gahtani & Roever, 2012; Felix-Brasdefer, 2007; Hendriks, 2008; Rose, 2000), particularly because of a greater use of modification devices for politeness effects (see Felix-Brasdefer, 2007; Nguyen, 2008; Otcu & Zeyrek, 2006; 2008; Warga, 2004). These findings are especially useful to our project since they can serve as an external criterion against which test-takers' performance can be compared to shed light on the construct and scoring validity of the AGWT Task 4 (Messick, 1989).

2.3   Cognitive processes in L2 pragmatic performance

L2 pragmatics research has thus far generated useful information on learners' use of linguistic and politeness strategies for communicating oral, and less often, written speech acts. However, "what is lacking is an analysis of the cognitive processes and perceptions involved in the production of these speech acts" (Felix-Brasdefer, 2008:195). According to Holzknecht et al. (2017:6), "cognitive processing is directly related to construct validity" in testing, and hence it is important to examine whether test-takers can successfully tap onto those underlying mental processes that are intended by the test. Learners' cognitive processes can be investigated via self-report data, such as introspective (concurrent) or retrospective verbal reports (Nguyen, 2017). To date, however, only a handful of L2 pragmatics studies have employed self-report data to examine the mental processes in which L2 users engage when planning, executing, and evaluating their pragmatic performance. Cognitive processes underlying pragmatic production are therefore not yet fully understood.

Retrospective methodology involves requiring learners, immediately after the completion of a learning task, to report the thought processes involved in their decision-making during the task performance. On the other hand, introspective methodology (i.e. concurrent verbal reports or think-aloud protocols) requires learners to verbalise their thoughts at the same time as they perform a task. Both methodologies are considered useful to explore learners' pragmatic decision-making processes, as well as relevant processing issues in learners' pragmatic performance, which are directly unobservable otherwise. Findings of existing studies indicate the various stages L2 speakers generally go through during their pragmatic performance. These include orientation to the context of communication and planning of their speech, execution of the speech, which may involve search, retrieval and selection of linguistic form, and review and evaluation of the speech (see Cohen & Olshtain, 1993; Woodfield, 2008).

Studies also show that, although L2 users generally consult their pragmatic knowledge (e.g. attention to politeness) before execution of a speech act (see Widjaja, 1997; Woodfield, 2012), in many cases their incomplete pragmatic knowledge in the L2 and linguistic difficulty may lead to pragmatic failure (see Cohen & Olshtain, 1993; Felix-Brasdefer, 2008; Hassall, 2008). Another important finding emerging from these studies is concerning the effect of proficiency on learners' cognitive processing. To be more specific, it has been found that as their proficiency in the TL increases, learners tend to report attending more often to pragmatics than to linguistic planning (Hassall, 2008; Ren, 2014).

Although useful methodologies in researching cognitive processes that are involved in L2 pragmatic performance, retrospective and concurrent verbal reports have to date been utilised only in a limited number of L2 pragmatics studies (see above). Concurrent verbal reports are employed in just two studies (e.g. Robinson, 1992; Woodfield, 2008). This is in stark contrast to mainstream SLA research which has relied extensively on concurrent protocols to gain insights into the minds of learners (Bowles, 2010; Camps, 2003). The distinction between concurrent and retrospective verbal reports lies in the fact that while the former collects learners' internal thoughts as these occur in real time, the latter is mainly based on learners' memories, which may be subject to decay (Ericsson & Simon, 1993), thus potentially leading learners to offer post hoc rationalisation instead (Cohen, 2013). Concurrent reports are, hence, predicted to be more complete and accurate than retrospective reports (Ericsson & Simon, 1993). The scarcity of concurrent report data in L2 pragmatics research has necessitated the need for future studies to rely more on this methodology as a means of gathering information on pragmatic decision-making and processing issues that production data alone cannot offer. Such information can serve not only to contribute to L2 pragmatics literature, but also to inform the validation of pragmatics tests.

2.4   Testing of L2 pragmatic competence

In recent years, L2 pragmatics has fast become a prolific domain of study; yet, research on testing of L2 pragmatic competence still lags behind other areas of L2 assessment (Roever, 2006, 2011). Testing instruments have also focused on a limited range of pragmatic abilities such as speech acts, routine formulae and implicatures (i.e. implicit meaning). Extended discourse is rarely used to assess these abilities, thus seriously under-representing the construct of pragmatic competence (Roever, 2011). Despite such limitations, however, findings of the available studies have shed important light on features of pragmatic language use at different performance levels. For example, it has been found that in both cases of speech act use and comprehension of implicatures, test scores increase as test-takers' proficiency increases (see Yamashita, 1996; Roever, 2006). In terms of speech act use, low proficiency test-takers tend to find low-imposition items easier than high-imposition items, whereas this does not seem to be the case for advanced level test-takers (Roever, 2006). In terms of comprehending implicatures, formulaic implicatures (e.g. indirect criticism) are found more difficult for test-takers to handle than idiosyncratic (or conventional) implicatures; however, with increasing proficiency, test-takers may score higher for formulaic implicatures (Bouton, 1998, 1999).

It should be noted that the above line of studies have focused mainly on isolated aspects of L2 pragmatic competence rather than pragmatic ability in extended discourse such as email writing.

Given the recent call for "a discursive re-orientation of pragmatics tests" to attend more to test-takers' ability to participate in extended monologs and dialogs (Roever, 2011:463), we need a greater number of empirical investigations into the pragmatics of extended discourse at different performance levels in order to inform the validation of future tests. For this purpose, an analysis of test-takers' performance in the AGWT Task 4 is relevant as this task requires paragraph-level situational writing in which test-takers must chose appropriate registers to accomplish their social goals.

In the discussion of test validation, the current project will draw on the socio-cognitive model developed by O'Sullivan (2011), and O'Sullivan and Weir (2011) which conceptualises validation in terms of three aspects – the test-taker, the test system, and the scoring system. In particular, the core of the validation argument lies in "how these three elements combine to result in a measure of candidate performance which is meaningful in terms of the underlying trait or ability being assessed" (O'Sullivan, 2012:1). In terms of test-taker component, our project will focus on how candidates' linguistic and cultural backgrounds may affect their task performance, and whether the cognitive processes employed by them are "in line with item designers' intentions and the exam's test specifications" (Holzknecht, 2017:6). With regards to the test system, our investigation will provide insights into whether the key features of pragmatic language use identified for candidates at different performance levels meet the "linguistic demands", or "expected language of the output" by test designers. Finally, in respect to the scoring system, we are concerned with whether test performance by candidates at different performance levels is consistent with external criterion-related evidence, such as findings of existing L2 pragmatics studies.

3.   RESEARCH QUESTIONS

In light of the aforementioned gaps in the current L2 pragmatics literature, this project seeks to answer three overarching research questions.

1.   What pragmatic strategies do candidates of different L1 backgrounds employ to carry out the required speech act(s) in AGWT Task 4?

2.   What is the effect of general language proficiency on candidates' pragmatic performance?

3.   What are the cognitive processes candidates of different proficiency levels go through when completing Task 4?

4.   METHODOLOGY

4.1   Participants

There were two L1 groups of participants: 48 Indonesian learners of English as a Foreign Language (EFL), and 48 Vietnamese counterparts. They were originally from two major cities in Indonesia and Vietnam, respectively. Within each L1 group, one half was judged to have Aptis CEFR B2 level (N=24), while the other half was B1 level (N =24). Each L1 group and proficiency level comprised an equal number of males (N=24) and females (N=24), and their ages ranged between 18 and 23. At the time of data collection, the participants were university students, majoring in various subjects: English linguistics, information and technology, law, medicine, and sciences. They all took English as a subject matter in their university courses of study.

The breakdown of the participants' profiles is presented in Table 1. The sampling procedures are described below.

4.2 Sampling procedures

Before data collection began, the project was reviewed and approved by the appropriate research ethics committee at Nanyang Technological University, where the Principal Investigator was based.

The sampling procedures consisted of three phases. In Phase 1, we approached the prospective participants from various universities in the two cities to invite their participation. After having explained the project and consent procedures, a total of 234 Indonesian (N=122) and Vietnamese students (N=112) volunteered to take part in our study for the following reasons.

- They were interested to know more about the Aptis test, and how it differed from other international standardised English tests (e.g. TOEFL).

- They wanted to know their actual levels of English proficiency.

- This was an opportunity to take a free, international standardised English test.

After signing the consent forms, the participants were invited to sit for a computer-based Aptis test, set up by the British Council. Before the actual test, the participants were briefed on the test components and scoring, and instructed to use the practice materials from the Aptis website (accessible at http://www.britishcouncil.org/aptis/preparation-material) to familiarise themselves with the test format. The actual test took place between October 2016 and February 2017 at two test centres in Indonesia and Vietnam. The participants were taken to a computer lab at the test centre in their location where they logged into the Aptis testing system using the key codes and pins provided by the British Council. They completed all test components within the prescribed timeframe (e.g. 25 minutes for grammar and vocabulary, 30 minutes for reading, 55 minutes for listening and so on). The test conditions applied, and if a candidate was found cheating, his or her data would be removed from the database. The test administration was facilitated by the co-investigator and RA who were based respectively in Indonesia and Vietnam. The test-takers' performances in the entire test were assessed by British Council trained raters, and the scores were subsequently submitted to the researchers.

The test results categorised the Bahasa Indonesian L1 students into the following levels: 11 at A1; 28 at A2; 34 at B1; 35 at B2; and 6 at C1 level. The Vietnamese L1 students had the following results: 2 at A1; 9 at A2; 31 at B1; 49 at B2; and 29 at C1 level.

From this data pool, we decided to analyse the AGWT Task 4 data of the B1 and B2 level candidates, because these two proficiency levels seemed to best represent the proficiency levels of the majority of EFL learners in the studied populations. Thus, in Phase 2, based on the pool of 65 B1 level and 84 B2 level candidates from both L1 groups, we randomly drew 12 females and 12 males from each level and L1 category for inclusion in the main study. As a result, the final sample in Phase 2 comprised a total of 96 students (see Table 1). The selected candidates' scores on AGWT Task 4 also suggests that they belonged to the B2.1 (n=48, M=3.25, SD =.96, Median = 3.0, Mode = 3.0) and B1.2 (n=48, M=1.60, Median = 2.0, Mode = 2.0, SD =1.16) levels (see O'Sullivan & Dunlea, 2015:66).

Finally, in Phase 3, we randomly further drew 16 students from Phase 2 sample to complete a think-aloud protocol (see Section 4.3.2 for information on the procedures). The breakdown of Phase 3 students' profiles is presented in Table 2.

Table 1: Phase 2 Participants' profiles

Proficiency levels	Vietnamese L1	Bahasa Indonesia L1	Total
Aptis CEFR B2	12 females	12 females	48
	12 males	12 males	
Aptis CEFR B1	12 females	12 females	48
	12 males	12 males	
Total	**48**	**48**	**96**

Table 2: Phase 3 Participants' profiles

Proficiency levels	Vietnamese L1	Bahasa Indonesia L1	Total
Aptis CEFR B2	2 females	2 females	8
	2 males	2 males	
Aptis CEFR B1	2 females	2 females	8
	2 females	2 females	
Total	**8**	**8**	**16**

4.3   Data

4.3.1   Test materials: The AGWT Task 4

The AGWT Task 4 version completed by 96 participants in Phase 2 took the form of a written Discourse Completion Task (see Roever, 2015). It consisted of a situational description and two prompt questions. The questions required candidates to write an email to a specific audience to express their feelings about a negative situation and suggest possible action regarding the situation. In the first question, candidates were supposed to write to a fellow member of the book club, who was also affected by the situation. In the second question, they were expected to write to the Customer Service Team, who was deemed accountable for the situation (see the test materials below).

AGWT Task 4 used in Phase 1

You are a new member of a book club. You receive an email from the club.

Dear Customers,

We are sorry to announce that from next month we will no longer be able to continue our offer of one free book every month. Also, because of problems with our delivery service, please expect a wait of 4-6 weeks before your order arrives. Please feel free to email us if you have any comments.

Customer Service Team

Question 1: Write an email to one of your friends from the club. Write your feelings about the email message you just received and suggest possible action. Write up to 50 words. You have 10 minutes.

Question 2: Now, write an email to Customer Service Team. Tell them how you feel about the service, and suggest what you would like them to do. Write up to 150 words. You have 20 minutes.

As such, the questions required candidates to carry out two different language functions. The first question involved making an indirect complaint, or a complaint directed at a non-present, third party (Boxer, 1993). On the other hand, the second question involved making a direct complaint, targeted at the recipient who was held accountable for the substance of the complaint (Olshtain & Weinbach, 1993). Because a direct complaint involves a face-to-face confrontation by expressing the complainer's displeasure and dissatisfaction towards the recipient's undesirable act, it can threaten the recipient's positive face (i.e. desire to be approved and accepted by others – see Brown & Levinson, 1987). An indirect complaint, on the one hand, does not involve a negative evaluation toward the addressee, but the complainer may risk presenting himself or herself as critical (Kozlova, 2004), thus damaging his or her own positive face. Also, in sharing his or her negative feelings,

the complainer expects the addressee to display commiseration and sympathy with the complainer (Kozlova, 2004), hence potentially threatening the addressee's negative face (i.e. desire for autonomy and freedom from imposition – see Brown & Levinson, ibid). Because of their differential propositional contents and types of face-loss involved, direct and indirect complaints may be pragmalinguistically realised in different ways (see Section 4.4.1: Pragmatic strategies for further details).

Another major distinction between the two questions lay in the social distance and relative power status between the writer and the recipient (a friend versus an unfamiliar audience). To perform well in the writing task, students need to be able to assess relevant contextual factors (e.g. the writer–recipient role relationship, rights and obligations), and make choices in language use accordingly for expressing their intended meaning.

Test-takers' email messages were graded by the British Council trained raters, using a task-specific holistic rating scale, and with respect to five criteria: (1) task fulfilment and register; (2) grammatical range and accuracy; (3) lexical range and accuracy; (4) cohesion and coherence; and (5) punctuation and spelling (O'Sullivan & Dunlea, 2015). To be more specific, the following key features were identified for B1 and B2 level performance.

Score	Level	Features
4	B2.2	• Response on topic and task fulfilled in terms of appropriateness of register: appropriate register used consistently in both responses. • Some complex grammar construction used accurately. Errors do not lead to misunderstanding. • Sufficient range of vocabulary to discuss the topics required by the task. Inappropriate lexical choices do not lead to misunderstanding. • A limited number of cohesive devices used to indicate the links between ideas.
3	B2.1	• Response partially on topic and task partially fulfilled in terms of appropriateness of register: appropriate register used consistently in one response. • Some complex grammar construction used accurately. Errors do not lead to misunderstanding. • Minor errors in punctuation and spelling but do not impede meaning. • Sufficient range of vocabulary to discuss the topics required by the task. Inappropriate lexical choices do not lead to misunderstanding. • A limited number of cohesive devices used to indicate the links between ideas.
2	B1.2	• Response partially on topic and task not fulfilled in terms of appropriateness of register: appropriate register not used consistently in either response. • Control of simple grammar construction. Errors in using complex structures. • Punctuation and spelling is mostly accurate. Errors do not impede meaning. • Limitations in vocabulary make it difficult to deal fully with the task. Errors impede meaning in most of the text. • Use of only simple cohesive devices. Links between ideas are not always clearly indicated.
1	B1.1	• Response not on topic and task not fulfilled in terms of appropriateness of register: No evidence of awareness of register. • Control of simple grammar construction. Errors in using complex structures. • Punctuation and spelling is mostly accurate. Errors do not impede meaning. • Limitations in vocabulary make it difficult to deal fully with the task. Errors impede meaning in most of the text. • Use of only simple cohesive devices. Links between ideas are not always clearly indicated.

(O'Sullivan & Dunlea, 2015:66)

4.3.2   The concurrent verbal protocol

Sixteen students participated in a think-aloud (concurrent verbal report) protocol in Phase 3. The think-aloud protocol (TAP) was employed to gain insight into the types of information to which the participants attended while engaging in carrying out the speech acts of direct and indirect complaints. It is noted that although a useful method to tap into learners' thinking, which might be inaccessible otherwise, TAP is not free from limitations. First, not every cognitive process can be verbalised. Low-attention, automatised processes are not normally available for verbalisation while processes that require some degree of effort, such as retrieving words, making sense of a new word, making decision about how to go about performing a speech act, are generally more verbal (Ericsson & Simon, 1980). Also, although it is important to make informants feel comfortable, any attempts to engage informants in social conversations during the TAP procedure may interfere with their thought processes. Attempts to ask informants to explain their thoughts may also overload their mental processing and distort the data (Ericsson & Simon, 1993). Further, although informants may benefit from some coaching so that they can verbalise their thoughts more effectively, over-demonstration or asking probing questions may risk leading informants to say what they think they are expected to say, rather than what they are actually thinking (Ericsson & Simon, 1980). Therefore, to overcome the potential pitfalls of this methodology, the following practices were undertaken.

1.   All informants were trained in the TAP procedure before actual data collection.

2.   Informants were trained in verbalising their thoughts, but told not to give extra information or engage in social conversations with the researcher during the TAP procedure.

3.   In order to become familiarised with the procedure, informants were made to practice a task that was similar to the one they would provide protocols on later. At the same time, they were also made to practice a different task in order to blindfold them and avoid promoting automaticity.

4.   To prevent overloading their cognitive processing, informants were allowed to choose to conduct TAP in any language (mother tongue or English) they felt comfortable with and were fluent in.

5.   Informants were reminded to keep thinking aloud when they kept quiet for more than 5 seconds, but not prompted what to say or asked to explain their thoughts to avoid leading and distorting their mental processes.

6.   Notes of both verbal and non-verbal behavior were made during the procedure for later member-checking with informants in order to enhance the validity of the data.

(adapted from Brown & Rodgers, 2002)

The actual TAP procedures consisted of the following steps (also see Figure 1 below).

1.   In one-to-one training sessions, participants were first explained about the TAP requirements and procedures, and had their questions, if any, answered and concerns addressed.

2.   Participants then engaged in two warm-up activities to become familiarised with the TAP procedures and the process of being audio-recorded (Woodfield, 2008). The first activity involved solving a math problem, and the second an anagram, both taken from Brown and Rodgers (2002). Participants were asked to verbalise their thoughts as they engaged in solving the problems.

3.   In the next step, participants practiced TAP with an AGWT Task 4 question that was similar to the one they would provide protocols on during the main stage of data collection. The question was taken from a retired set of Aptis test material.

4. At the end of each practice activity, participants received feedback on how effectively they conducted the TAP, and had their further questions or concerns, if any, addressed. To avoid leading them, attempts were made not to be too directive when giving feedback to the participants, however. The entire training session took approximately one hour for each participant.

5. Participants repeated the same procedures in the main data collection stage. That is, they engaged in saying out loud their decision-making thoughts while formulating their responses to the AGWT Task 4 questions. To ensure comparability with Phase 2, the writing task selected for participants to provide protocols on also focused on the two speech acts of direct and indirect complaints (see below). Data collection took approximately one hour for each candidate, and all the TAP sessions were audio-recorded for later analysis.

AGWT Task 4 used in Phase 3 (main data collection)

You are a member of a history club. You received this e-mail from the club.

Dear Member,

We are writing to tell you that the trip to Blackrock Castle has been cancelled because of lack of interest. You will be given a refund for the cost of the coach trip. However, because this is a late cancellation we cannot refund the cost of your entrance ticket to the castle. We apologize for this and thank you for your understanding.

Question 1: Write an e-mail to your friend. Write about your feelings and what you think the club should do about the situation. Write about 50 words. You have 10 minutes.

Question 2: Write an e-mail to the president of the club. Write about your feelings and what you think the club should do about the situation. Write 120-150 words. You have 20 minutes.

Figure 1: Procedure for conducting TAP
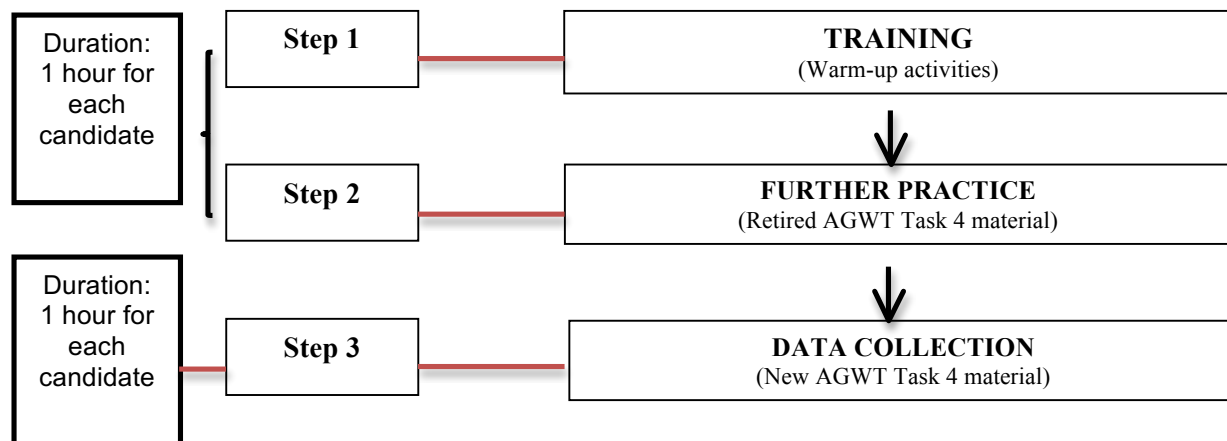
Before being employed in this study, the procedure was piloted with a Vietnamese L1 speaker. The pilot data was then discussed among the research team members, comprising two investigators and an RA, for the standardisation purpose. In the main study, the TAP with Indonesian L1 students was conducted by the Indonesian co-investigator, while the TAP with Vietnamese L1 students was conducted by the Vietnamese RA, who spoke the students' L1, respectively.

4.4   Coding procedures

4.4.1   Pragmatic strategies

To answer Research Question 1 and part of Research Question 2, students' AGWT Task 4 email messages were coded using pre-determined schemes which were developed based on the existing scholarship on email communication and pragmatic strategies for realising direct and indirect complaints (e.g. Chen, 2015; Chen, Chen & Chang, 2011; Hartley, 1996; Kozlova, 2004; Olshtain & Weinbach, 1993; Trosborg, 1995). Then the patterns of use were compared between the two L1 groups.

The coding procedures were carried out as follows. First, for the purpose of standardisation, the Principal Investigator and the RA coded 30% of the data independently, using the aforementioned coding categories (also see the sections below). Then the two researchers compared their coding and discussed the discrepancies until consensus was reached. After that, each researcher coded half of the remainder of the data.

4.4.1.1   Direct complaints

A direct complaint is an act whose purpose is to give negative evaluation of a situation or an act for which the complainee may be held responsible with an implicature that what he or she has done brings undesirable consequences to the complainer. The act of complaining is performed to communicate the complainer's disapproval of what the complainee has done, and/ or to request remedy (Olshtain & Weinbach, 1993). Table 3 presents categories employed for coding the framing moves and pragmatic strategies occurring in the candidates' second email messages.

Table 3: Coding categories for direct complaints

TYPE	DESCRIPTION	EXAMPLES (taken from data)
1. Framing moves	*Layout of the email message*	
a. Greeting/ opening	the writer opens the email with a greeting	*Hello* …(informal) *Dear* … (formal) *May categorise further into formal vs. informal greetings.
b. Self-introduction	the writer gives information on his or her identities	*I'm … , a member of …*
c. Purpose	the writer explicitly states the purpose of his or her email, or makes reference to the complainee's email	*I am writing in response to …* *I am writing to express my concern …* *I have read your email …* *May categorise further into general (e.g. I have read your email) vs. specific statements (I am writing to complain)*
d. Pre-closing	the writer signals the closing by moves such as expressing appreciation for the recipient's time, good wishes, or appealing for action	*Thanks for your time* (informal) *I look forward to hearing from you* (formal) *I wish you can overcome your problem soon and remain a great book club (formal)* *I hope you will consider my suggestion (formal)* *May categorise further into formal vs. informal pre-closing*
e. Closing	signs off and signatures	*Best,* (informal) *Sincerely,* (formal) *May categorise further into formal vs. informal closings*

TYPE	DESCRIPTION	EXAMPLES (taken from data)
2. Content moves	*Core elements of the email message*	
a. Realisation strategies	Head act; the following strategies are arranged from the <u>least direct to the most direct</u>	
1. Negative emotions (sadness, dissatisfaction)	the complainer expresses negative reaction to the complainable or asserts the complainable (with or without explicit mention of the complainee)	*I am sad that …* *It is really a pity that …*
2. Interrogation	the complainer pre-supposes that the complainee is guilty of offense and questions him/ her about the offense	*Why did you open my letter?*
3. A statement of the offensive act/ problem	Indicate what has gone wrong	*You can't solve the problem immediately*
4. Preaching	the complainer teaches the complainee about their responsibility	*You have to do what customers want. When they want you to do something, do not question it. Customers are the kings.*
5. Request for repair/ Suggestions for remedy		*Would you not do it again?*
6. Consequence	the complainer states or implies potential consequences caused by the offense	*If you open my letter again, I will move out*
b. Modifications	including linguistic elements for politeness effects	
1. Syntactic structure	embedding past tense	• *I believe* I should receive more • *I was wondering, I thought*
2. Hedges		• I'm having trouble understanding what you mean *exactly* by these bad marks? • *After all*, you made the mess. • *I'm not sure* but I think I didn't get paid for the over time I put in last week. • Is it *possible* that you will rethink what you wrote?
3. Subjunctive mood		*could, would, might*
4. Politeness marker		*please*
5. Cajolers		*you know, you see, you know what I mean*
6. Sweeteners	employed to grease the social relationship with the recipient and to put him or her into a positive mood	*I know you are doing your best* *The offer has been brilliant since the first day it was established*
7. Grounder	explanation of the negative feeling or request for remedy	*My family has been dying to get our hands on the last book of the Sherlock Holmes series*
8. Solidarity	expression of empathy with and understanding of the complainee's choice	*I am so sorry that you have to discontinue the free book offer every month* *I am fully aware of the economic crisis having some impact on the club*
9. Disarmer/ apology	employed to reduce the potential offence	
c. Intensification	Words or phrases that could increase the coerciveness of the utterance and need to be avoided	
10. Intensifiers		This news *really* broke my heart
11. Statement of urgency		Please reply to me *soon*!

Examples of how to code Email 2

Candidate 093	Move/ strategy	Modification/ intensification	Remarks
Dear Customer Service Team,	Greeting (formal)		
First of all, I'm so sorry that you have to discontinue the free book offer every month.		Solidarity	
The offer has been brilliant since the first day it was established. You brought to us, the members, all we could ever dreamed of: books such as Sherlock Holmes and the Harry Potter series, which are costly and are also rarely on sale because of their rise in popularity.		Sweetener	This whole segment counts as one sweetener as it focuses on one unified idea.
I wrote this email to give you my dearest gratitude to the service you provided us for the last six months.		Sweetener	
And also, I know you are doing your best but please solve the delivery problem as fast as you could. My family has been dying to get our hands on the last book of the Sherlock Holmes series.	Request for remedy	Sweetener (you are doing your best) Grounder (my family …)	
Your faithful member Quan	Closings (formal)		

4.4.1.2   Indirect complaints

Indirect complaints involve expressions of "dissatisfaction to an interlocutor about someone or something that is not present" (Boxer, 1993:29). According to Boxer (ibid), indirect complaints and direct complaints (in which the disapproval is directed at the hearer) are two distinct speech acts eliciting different responses. Table 4 presents categories employed for coding framing moves and pragmatic strategies occurring in the candidates' first email messages.

Table 4: Coding categories for indirect complaints

TYPE	DESCRIPTION	EXAMPLES (taken from the data)
1. Framing moves	*Layout of the email message*	
a. Greeting/ opening	the writer opens the email with a greeting	*Hello* …(informal) *Dear* … (formal) *May categorise further into formal vs. informal greetings. But we expect most greetings here would be informal because the recipient is a friend.
b. Self-introduction	the writer gives information on his or her identities	Rarely occurs in an email message sent to a familiar audience.
c. Purpose	the writer explicitly states the purpose of his or her email, or makes reference to the complainee's email	*I am writing to express my concern …* *I guess by now you should have heard about …* *May categorise further into general vs. specific statements
d. Pre-closing	the writer signals the closing by moves such as expressing appreciation for the recipient's time, good wishes, or appealing for action	*Thanks for your time* (informal) *Write to me soon! (informal)* *May categorise further into formal vs. informal pre-closing. But again, we expect most pre-closings would be informal.
e. Closing	signs off and signatures	*Best,* (informal) *Sincerely,* (formal) *May categorise further into formal vs. informal closings. Again, we expect most closings would be informal.

TYPE	DESCRIPTION	EXAMPLES (taken from the data)
2. Content moves	*Core elements of the email message*	
a. Realisation strategies	Head act; the following strategies are arranged from the <u>least direct to the most direct</u>	
1. Negative emotions/ reactions (sadness, dissatisfaction)	the complainer expresses negative reaction to the complainable or asserts the complainable (with or without explicit mention of the complainee)	*This news really broke my heart*
2. Reference to the offensive act/ problem	report what has gone wrong	*The club would stop offering one free book every month*
3. Statement of possible solution on the part of the complainee, or hopes and wishes	Indicate what the complainer thinks the complainee could/ should do (have done)	*Maybe they should change the ways of delivering books to us*
4. Future action/ alternative plan on the part of the complainer; or soliciting actions from the recipient		*I will continue to be in the club even without the offer* I know you're going to participate in Green Books club, so c*ould you introduce me to them?*
b. Modifications	including linguistic elements for politeness effects	
1. Syntactic structure	embedding past tense	• *I believe* I should receive more • *I was wondering, I thought*
2. Hedges		• I'm having trouble understanding what you mean *exactly* by these bad marks? • *After all*, you made the mess. • *I'm not sure* but I think I didn't get paid for the over time I put in last week. • Is it *possible* that you will rethink what you wrote?
3. Politeness marker		*please*
4. Subjunctive mood		*could, would, might*
5. Cajolers	devices to involve the recipient	*you know, you see, you know what I mean* *collective pronoun "we"*
6. Consultative	consulting recipient's opinion	*Do you think so? Do you feel like me?*
7. Sweeteners	employed to lessen the harshness of the complaint	*My club is interesting. I can read a book freely every month from my club. The books are very useful …*
8. Grounder	explanation of the dissatisfaction or request for remedy	*I don't have enough money to buy books*
9. Solidarity	expression of empathy with and understanding of the complainee's choice	*But they must have had some reasons … I think I can sympathise*
10. Disarmer/ apology	employed to reduce potential offense	
c. Intensification	words or phrases that could increase the coerciveness of the utterance and need to be avoided	
11. Intensifiers		This news *really* broke my heart
12. Statement of urgency		Please reply to me *soon*!

Examples of how to code Email 1

Candidate 094	Move/ strategy	Modification/ intensification	Remarks
Dear Peter How have you been doing?	Greetings (informal)		This whole segment counts as one greeting because the two phrases often go together
And have you received our book club's news that we will no longer get our free book every month?	Purpose (specific, but implicitly mentioned)		
You know I am really into reading books so this news really broke my heart.	Negative emotions	Cajoler "you know" Grounder: "I'm really into reading"	
Maybe they should change the ways of delivering books to us like converting books into soft copies and giving us to our email? Do you think so?	Statement of possible solution on part of the complainee	Hedge "maybe" Consultative "Do you think so?"	
I am busy right now, so if having any information, please send me a message. Please sending me message if you have any new information concerning this matter	Soliciting recipient's action	"please"	This whole segment counts as one because it focuses on one unified idea
Love, Quynh	Closings (informal)		This whole segment counts as one closing (sign off + signature)

4.4.2 Pragmatic accuracy and fluency

To answer Research Question 2, students' email messages were analysed in terms of two important aspects of pragmatic production: accuracy and fluency (Taguchi, 2011). Then their sub-score for each of the two aspects were correlated with their overall Aptis test score gathered in Phase 1 to examine the relationship between general language proficiency and pragmatic production.

The two constructs of pragmatic accuracy and fluency are based on Kasper's (2001) claim that pragmatic development involves acquiring pragmatic knowledge and gaining automatic control in processing this knowledge in real time. Several studies have shown that accuracy and fluency are two distinct components of pragmatic performance (see Taguchi, 2011 for a review).

Pragmatic performance accuracy is the ability to produce meaning in a socially appropriate manner (Thomas, 1995). Li (2011) operationalises accuracy of production as accuracy scores based on a scoring rubric that adopted pragmatic appropriateness as the primary criterion and grammatical accuracy as the secondary criterion. Hence, accuracy of production encompasses both accuracy and appropriateness of language use. In this project, candidates' AGWT Task 4 performance was rated based on 5 criteria: (1) task completion in terms of appropriateness of register (that is, evidence of two clearly different registers); (2) grammatical range and accuracy; (3) lexical range and accuracy; (4) cohesion and coherence; (5) punctuation and spelling (see Section 4.2.1). The criteria covered both pragmatic appropriateness and linguistic accuracy. Thus, candidates' AWGT Task 4 scores were used as accuracy scores.

On the other hand, fluency is operationalised as the number of words produced per minute (speed fluency). This was calculated by dividing the total number of words produced in each email message by the candidates by the total amount of their response time (in minutes) (see Ellis & Barkhuizen, 2005).

HOW TO COUNT WORDS

Our study uses Polio's (1997:140) word-count guidelines in counting words in the text, as follows:

a) Count **contractions** as **one word** whether correct or not [e.g., can't].

b) Count **numbers** as **one word**,

c) Count **proper nouns** in English and in other languages **as they are written** (e.g. Le Thuy Van ➔ 3 words).

d) **Do not** count **hyphenated words** as **single** words (e.g. well-written ➔ two words).

e) **Do not** include **essay titles** [or subtitles] in word count.

f) Count words **as they are written**, even if they are incorrect (e.g. alot ➔ one word).

The counting was carried out by the RA and cross-checked by the Principal Investigator to ensure reliability.

4.4.3   Cognitive processes

To answer Research Question 3, students' think-aloud data were analysed using Content Analysis (Weber, 1990) – a methodology that "uses a set of procedures to make valid inferences from text" (Woodfield, 2008:50). We followed Woodfield's recommendations for coding the data (see below).

PROCEDURE OF CONTENT ANALYSIS

1. Transcribe the think-aloud data in full. Do not exclude pauses, hesitations, changes in intonation.

2. Segment the transcript into "sense units" (that is "stretches of language which suggest more or less discrete mental processes").

3. Draw up an initial categorisation of the identified mental processes. Comparable thought processes will be labelled with the same description.

4. Code a sample of data using the categorisation.

5. Standardise and fine-tune the categorisation.

(adopted from Woodfield, 2008)

A pre-determined categorisation scheme adopted from Cohen & Olshtain (1993) and Woodfield (2008) was used to code the data. Figure 2 presents the major coding categories. Further details of the categories with illustrative examples are presented in Table 5 below.

The data were coded by both of the Co-Investigator and the RA, and cross-checked by the Principal Investigator. Cases of discrepancies were then discussed to reach consensus.

Figure 2: Major TAP categories
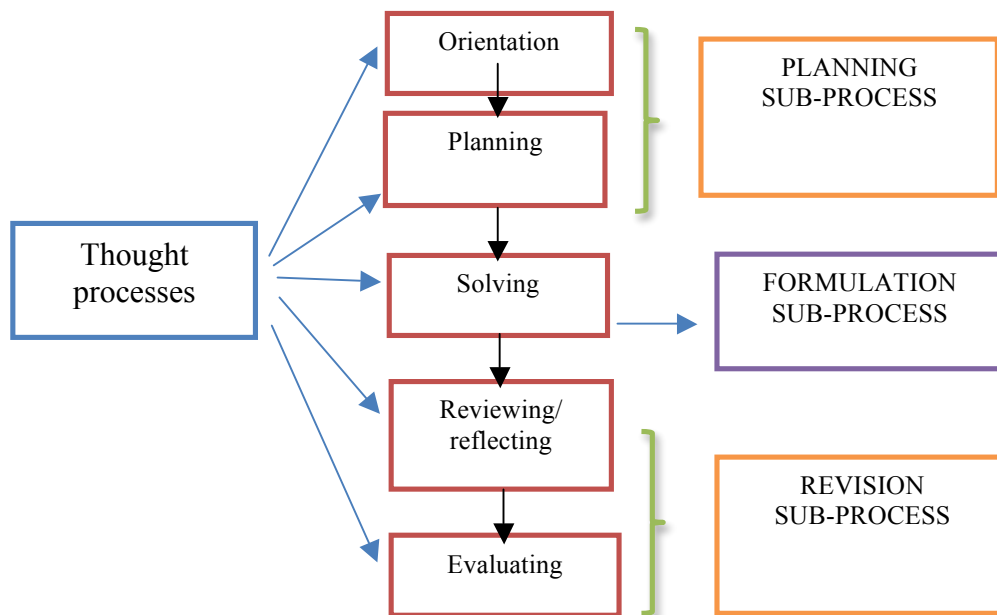
Table 5: Coding categories for TAP data

Processes	Description	Examples
Orientation	Orientation to: the social context of the discourse situation; the situated nature of discourse situation within a speech event; to decision as to whether a request would be made. *Applied to episodes which indicate how participants approach the task (e.g. attention to task goal, task language, and contextual aspects of the situation in order to formulate response to the task)*	• *Attention to task goal: "I have to write about my feelings and suggest action"* • *Attention to task language: "Feelings mean how we feel about the situation, like disappointment"* • *Attention to contextual aspects: "a friend from the club, so I know the person"* • *Language of thought: L1 or L2?*
Planning	Planning of responses in relation to socio-contextual situation. *Applied to episodes which indicate how participants consider variously configured input as potential response to the task.* *Planning can be global, i.e. global text planning (talking about plans for organizing the entire text) or local, i.e. local text planning (talking about what to write in the next clause or sentence).*	• *Instances where participants choose not to perform FTA (opt out): "Maybe it's not a good idea to express my disappointment"* • *Immediate constructions to explore sequences of possibilities: "Before I say something negative about their service, maybe I can say something nice"* • *Using metalanguage: "Maybe I can put it as a question: "May I suggest you …"* • *Language of thought: L1 or L2?*

Processes	Description	Examples
Solving/ Execution	Proposal of hypotheses as possible responses to written task. *Applied to episodes in which participants generate hypotheses in response to the task (search, retrieval, and selection of language forms), or experience linguistic difficulty which may or may not be solved.* *omission, avoidance, simplification, partial delivery, approximation are all part of the execution stage and may indicate linguistic difficulty	• *Generate hypotheses: "You should give … give 3 months … 3 month notice" (self-repair indicates retrieval)* • *Linguistic difficulty: "three months or three month?"* • *Avoidance (another evidence of linguistic difficulty): "three months … I don't know, maybe just say give notice"* • *Language of thought: L1 or L2?*
Reviewing/ reflecting	Metacognitive reflections on task and task responses including: reasons for hypotheses; reflections on identities and roles within and outside of research task; familiarity/ unfamiliarity with discourse situation.	• *Participants' encoding of the pragmatic force of the utterance: "sounds very formal"* • *Participants' beliefs about social appropriateness of the utterance: "I don't think we need to be polite, not so polite, just ask, yes, just like that"* • *Language of thought: L1 or L2?*
Evaluation	Evaluation of: appropriateness of response; of own/partner's hypotheses; of task difficulty. *Applied to episode where participants make (explicit or implicit) comparisons of alternatives*	• *"Maybe "I was wondering" is better than "Can you"* • *Language of thought: L1 or L2?*

(adopted from Woodfield, 2008)

4.5 Statistical analyses

Research Question 1 asked *What pragmatic strategies do candidates of different L1 backgrounds employ to carry out the required speech acts in AGWT Task 4?* Three aspects were analysed:
(1) the test-takers' production of framing moves (i.e. average number of moves per email message);
(2) frequencies of use of various realisation strategies; and (3) production of modification (i.e. average number of modifiers produced per realisation strategy).

Two statistical procedures were conducted. First, to test the differences between the two groups with respect to the frequencies with which they employed the speech act realisation strategies (i.e. categorical data), a series of chi-square tests of independence were conducted. Second, independent *t* tests were conducted to test the differences between the two groups in terms of their production of modification per strategy (i.e. continuous data). The independent *t* tests were also used to test the differences in terms of their production of framing moves per email message (i.e. continuous data).

Research Question 2 asked *What is the effect of general language proficiency on candidates' pragmatic performance?* To answer this question, the test-takers' pragmatic accuracy and fluency scores were correlated with each other and with the overall scores they gained in the entire Aptis test in Phase 1, using Pearson product-moment. In addition, the two proficiency groups were also compared in terms of the frequencies of use of speech act realisation strategies, production of framing moves and use of modifiers. For the comparison of frequency counts of strategy use (i.e. categorical data), chi-square tests of independence were conducted. On the other hand, the two groups' differences in terms of use of framing moves and modification (i.e. continuous data) were tested by the independent *t* tests.

Finally, to answer Research Question 3, *What are the cognitive processes candidates of different proficiency levels go through when completing Task 4?,* chi-square tests of independence were carried out to test the differences in the frequencies with which the two proficiency groups reported various types of cognitive processes (i.e. categorical data). Where the expected counts were smaller than 5, violating the assumption of the chi-square test, a Fisher's Exact test was used instead.

For all the tests, the significance level was set at .05.

5. FINDINGS AND DISCUSSION

5.1   Research Question 1: What pragmatic strategies do candidates of different L1 backgrounds employ to carry out the required speech act(s) in AGWT Task 4?

The first research question asks how the two L1 groups of test-takers performed the acts of indirect and direct complaints in email writing. To answer this question, test-takers' email data were analysed in terms of both how they framed the emails, as well as how they linguistically realised the required speech acts.

5.1.1   Framing moves

Regarding Email 1 (written to a friend), Table 6 shows that not every test-taker included an opening/ greeting and closing moves. On average, only 33 out of 48 (68.7%) email messages by the Indonesian L1 group contained an opening (e.g. *Dear/ Hi/ Hello …*) while this figure was 39 out of 48 (81%) messages for the Vietnamese L1 group. Pre-closings and closings were used even less frequently. Pre-closings occurred in 4 out of 48 (9%) messages for Indonesian L1 candidates, and in 8 out of 48 (18%) messages for Vietnamese L1 candidates. Closings were used in 12 out of 48 (25%) messages for Indonesian candidates, and in 24 out of 48 (50%) messages for Vietnamese candidates. Many email messages might include an opening, but not a closing, or vice versa. Only 11 out of 48 (23%) emails from the Indonesian group and 24 out of 48 (50%) from the Vietnamese group were completed with both moves (see Table 6). Research on email communication suggests that although opening and closing are optional elements of email messages, they often occur in initiating, formal emails (Kankaanranta, 2006; Bou-Franch, 2011). The fact that a majority of the analysed email messages did not contain both of these moves suggest that they were written in a more informal style. This finding was further corroborated by the analysis of the degree of formality of the opening, pre-closing, and closing moves, which suggests that a vast majority of them were informal rather than formal (see Table 6). This suggests that test-takers in both groups adopted an appropriate register when writing to a friend (O'Sullivan & Dunlea, 2015).

Because Email 1 was intended for someone with whom the writer was familiar, self-introduction was not necessary; thus, this move occurred infrequently in the messages: 1 out of 48 (2%) of the messages for the Indonesian L1 group, and 4 out of 48 (8%) of the messages for the Vietnamese L1 group. Statements of purpose of the message, however, occurred with much higher frequencies: 19 out of 48 (40%) of messages for the Indonesian group, and 30 out of 48 (62.5%) of the messages for the Vietnamese group. Most of these statements were also written in a general manner (e.g. *Did you get an email from the book club?*) rather than containing specific details about the complaint (e.g. *I got a message from the book club about problem with delivery service*), which effectively helped the writers avoid presenting themselves as critical, and risking damaging their positive self-image (Kozlova, 2004).

A series of independent *t* tests were also conducted to test the differences between the two groups in terms of their average production of each framing move per message (see Table 7). Results of the tests indicate that, on average, the Vietnamese L1 group produced a significantly greater number of closings ($t =2.59$, df = 94, $p <.05$) and statements of purposes ($t =2.06$, df = 94, $p <.05$) per message than the Indonesian L1 group, making the former group's email messages more formal. But there was no statistically significant difference between the two groups in their use of other moves (see Table 7).

Table 6: Framing moves across L1 – Email 1 and Email 2

	Indonesian L1 (N=48)		Vietnamese L1 (N=48)	
	Email 1	Email 2	Email 1	Email 2
Greeting	33/48	34/48	39/48	38/48
• Formal greeting	0	30	0	35
• Informal greeting	33	4	39	3
No greeting	15/48	14/48	9/48	10/48
Pre-close	4/48	10/48	8/48	26/48
• Formal pre-close	1	9	3	24
• Informal pre-close	3	1	5	2
No pre-close	44/48	38/48	40/48	22/48
Closing	12/48	21/48	24/48	34/48
• Formal closing	0	19	3	29
• Informal closing	12	2	21	5
No closing	36/48	27/48	24/48	14/48
Completion with both opening and closing	11/48	19/48	24/48	32/48
Omission of opening or closing	22/48	15/48	15/48	6/48
Self-introduction	1/48	7/48	4/48	12/48
No self-introduction	47/48	41/48	40/48	36/48
Statement of purpose	19/48	16/48	30/48	24/48
• General	10	6	19	8
• Specific	9	10	11	16
No statement of purpose	29/48	32/48	18/48	24/48

Table 7: Results of independent t tests for two L1 groups' use of framing moves in Email 1 and Email 2

	Email 1			Email 2		
	Indonesian (N=48)	Vietnamese (N=48)	*t* value	Indonesian (N=48)	Vietnamese (N=48)	*t* value
	M (SD)	M (SD)		M (SD)	M (SD)	
Opening	.67 (.48)	.83 (.38)	1.90	.69 (.51)	.77 (.42)	. 87
Self-introduction	.02 (.14)	.08 (.28)	1.37	.15 (.41)	.23 (.42)	. 98
Statement of purpose	.40 (.40)	.80 (.40)	2.06*	.33 (.48)	.48 (.55)	1.40
Pre-closing	.08 (.28)	.17 (.38)	1.23	.21 (.41)	.54 (.50)	3.56*
Closing	.25 (.43)	.50 (.50)	2.59*	.44 (.50)	.71 (.46)	2.76*

*p<.05

Unlike Email 1, Email 2 was intended for a person in authority whom the writer may not know personally. Thus, a higher degree of formality was expected (O'Sullivan & Dunlea, 2015). Findings, however, show that although more test-takers included both an opening and a closing in Email 2 (19/48 Indonesian L1 and 32/48 Vietnamese L1 candidates) than in Email 1 (11/48 Indonesian L1 and 24/48 Vietnamese L1 candidates), there appeared to be no noticeable difference in terms of the frequencies of openings (see Table 6). Also, although the majority of the opening, pre-closing, and closing moves were written in a formal style, a number of test-takers still omitted either of the opening or closing moves, or omitted both moves altogether, making their emails insufficiently formal (see Table 6).

Email 2 also contained more instances of self-identification than Email 1 (cf.: 7/48 and 12/48 Email 2 messages vs. 1/48 and 4/48 Email 1 messages by Indonesian and Vietnamese L1 groups, respectively – see Table 6) as this move was expected in email messages to an unfamiliar audience. Regarding statements of purpose, however, Table 6 shows that both groups produced fewer statements of purposes in Email 2 than in Email 1. Notably, most of these statements (10/16 for the Indonesian group, and 16/24 for the Vietnamese group) also made direct reference to the offensive act (e.g. *I am writing to complain about your delivery service*), thus potentially increasing the risk of face-threat to the complainee. Taken together, findings regarding Email 2 tend to suggest that, although the two L1 groups seemed cognisant of the different registers required by the two emails, they appeared to experience a higher degree of difficulty coping with Email 2 writing.

Regarding the between-group comparison, results of the independent *t* tests indicate that the Vietnamese L1 group also produced a significantly greater number of pre-closings ($t = 3.56$, df = 94, $p < .05$) and closings ($t = 2.76$, df = 94, $p < .05$) than the Indonesian L1 group, making the Vietnamese group's emails more formal. But the two groups did not statistically differ in their use of other moves (see Table 7).

Taken together, the findings regarding both Email 1 and Email 2 data appear to suggest that the Vietnamese candidates' email communication demonstrated a higher degree of formality compared to the Indonesian candidates.

5.1.2 Linguistic realisation

Table 8 indicates that for realising indirect complaints (Email 1), both groups employed the strategy "expression of negative emotion" most frequently (41% of the time by Indonesian L1 test-takers and 39% by Vietnamese test-takers). The other two frequently used strategies included "reference to offensive acts" (30% of the time by Indonesian L1 participants and 26% by Vietnamese L1 counterparts) and "solicitation of a future action or an alternative plan" (22% of the time by Indonesian L1 students and 26% by Vietnamese L1 students). Statements about what could have been done by the complainee were used scarcely. A chi-square test of independence was conducted to test the difference in the frequencies with which the two groups employed the above strategies. Results showed there was no statistically significant difference: $\chi 2$ (239, 3) = .93, $p > .05$. This suggests that both L1 groups have access to the same range of pragmatic strategies and display similar preference for particular strategies.

Table 8: Pragmatic strategies across L1 – Email 1

	Indonesian L1 (N=48)	Vietnamese L1 (N=48)
Negative emotion	50 (41%)	46 (39%)
Reference to offensive act	37 (30%)	31 (26%)
Statement of possible solution/ hopes and wishes	8 (6%)	9 (8%)
Future action/ alternative plans	27 (22%)	31 (26%)
Total strategies	122	117

When it comes to the realisation of direct complaints (Email 2), Table 9 shows that "requests for repair" were the most frequently used strategy by both L1 groups (55% of the time by Indonesian L1 candidates and 49% by Vietnamese candidates). This strategy was followed by "expressions of negative emotion" (25% of the time by Indonesian L1 test-takers and 31% by Vietnamese L1 counterparts). The other three strategies, i.e. "statements of the offensive act", "interrogations" and "statements of consequences" were scarcely used. These findings echo the study by Chen et al. (2011) which found that "expressions of dissatisfaction" and "requests for repairs" made up the majority of American and Chinese L1 complaints.

A chi-square test of independence was conducted to test the difference between the two groups in the frequencies with which they used the above strategies. Results showed there was no statistically significant difference: $\chi 2$ (309, 4) = 2.65, p>.05. Thus, as with Email 1, when responding to the negative situation in Email 2, both groups seem to have access to the same range of pragmatic strategies and display similar preference for particular strategies.

It is also worth noting that the types of pragmatic strategies employed by the test-takers for realising indirect and direct complaints are successfully captured by the taxonomies developed based on previous research (e.g. Chen et al., 2011; Hartley, 1996; Kozlova, 2004; Olshtain & Weinbach, 1993; Trosborg, 1995) on these two speech acts. This suggests that the two question prompts in Task 4 successfully elicit the speech acts intended, attesting to the construct validity of the questions.

Table 9: Pragmatic strategies across L1 – Email 2

	Indonesian L1 (N=48)	Vietnamese L1 (N=48)
Negative emotion	42 (25%)	43 (31%)
Statement of offensive act	11 (7%)	13 (9%)
Interrogation	8 (5%)	6 (4%)
Request for repair (including preaching)	93 (55%)	68 (49%)
Consequence	15 (9%)	10 (7%)
Total strategies	169	140

In terms of the test-takers' employment of modification to tone down the force of their complaints, it was found that students used a greater number of modifiers, both internal and external devices, in Email 2 than in Email 1 (Table 10). In Email 1, the Indonesian group produced an average of .57 modifiers totally per complaint strategy and the Vietnamese group .62. But in Email 2, these figures increased to 1.2 and 2.8 respectively. This finding is expected: direct complaints (Email 2) are more confrontational in nature than indirect complaints (Email 1), and also involve an unfamiliar audience of higher power status, and thus, may require more extensive mitigation in order to compensate for the potential face threat. The fact that test-takers mitigated Email 2 more frequently than Email 1 suggests that they were aware of the situational variability and capable of acting on it.

Results of the independent *t* tests indicate that the two groups differed significantly only with regard to Email 2. To be more specific, Vietnamese participants employed a significantly greater total number of modifiers (t= 4.57, df = 94, p <.05), as well as statistically higher numbers of internal modifiers (t= 5.19, df = 94, p <.05) and aggravators (t= 4.22, df = 94, p <.05) than Indonesian participants. The aggravators that test-takers employed in Email 2 included intensifiers (49 out of 80 instances, occurring in "expressions of negative emotion", e.g. *I'm very disappointed*) and statements of urgency (31 out of 80 instances, occurring in "requests for repair", e.g. *Please send me the book soon)*. While modifiers serve to avoid coerciveness, aggravators, on the other hand, serve to upgrade the force of what we write, thus increasing the potential face threat to the addressee. The abundance of both of these features in the Vietnamese L1 data may have helped to balance the effect of each. This may have explained why, despite their greater use of modification, Vietnamese candidates did not achieve higher AGWT Task 4 scores (i.e. pragmatic accuracy scores) than their Indonesian counterparts (Indonesian L1 group: M=2.4, SD=1.3; Vietnamese L1 group: M=2.5, SD=1.4, t=.38, df=94, p>.05).

Table 10: Results of independent t tests for two L1 groups' use of modification and intensification in Email 1 and Email 2

	Email 1			Email 2		
	Indonesian (N=48)	*Vietnamese (N=48)*	*t value*	*Indonesian (N=48)*	*Vietnamese (N=48)*	*t value*
	M (SD)	M (SD)		M (SD)	M (SD)	
Total modifiers	.57 (.75)	.62 (.62)	.32	1.2 (.81)	2.8 (2.3)	4.57*
Internal modifiers	.23 (.41)	.15 (.30)	1.01	.43 (.46)	1.6 (1.6)	5.19*
External modifiers	.33 (.59)	.47 (.52)	.1.16	.77 (.63)	1.1 (1.2)	1.96
Aggravators	.25 (.35)	.37 (.53)	1.30	.20 (.30)	.66 (.67)	4.22*

*p<.05

5.2 Research Question 2: What is the effect of general language proficiency on candidates' pragmatic performance?

The second research question asks about the effect of test-takers' general language proficiency on their pragmatic performance. Different aspects of the candidates' performance were analysed: (1) the accuracy and fluency of their production of the speech acts in focus; (2) the way they framed their email messages; and (3) the way they linguistically realised these speech acts.

5.2.1 Pragmatic accuracy and fluency

Results of the Pearson product-moment tests indicate a strong, positive correlation between the test-takers' accuracy scores (i.e. AGWT Task 4 scores) and their total scores gained in the entire Aptis test (r =.857, *p* <.05). But there was no meaningful relationship between their fluency scores and accuracy scores; as well as between their fluency scores and the total scores (*p* >.05) (Table 11). These results were corroborated by the results of the Independent *t* tests which show that the B2-level group gained significantly higher accuracy scores (i.e. AGWT Task 4 scores) than the B1-level group (*t*=7.58, df =94, *p* <.001); but there was no difference between the two groups in terms of their fluency scores (*p*>.05) (Table 12).

Taken together, the above findings tend to indicate an effect of the students' general proficiency on the accuracy of their pragmatic production. The fluency of their pragmatic production, however, does not seem to be influenced by their overall language proficiency. These findings appear to suggest that while the AGWT Task 4 can discriminate between the two proficiency groups in terms of pragmatic accuracy, there is no evidence of such discriminating power in terms of pragmatic fluency.

A plausible explanation for the lack of difference between the two proficiency groups in terms of their fluency scores may lie in the way fluency was measured in this project. Measure of fluency, or the "processing of language in real time" (Schmidt, 1992:358), is greatly varied in previous studies (see a review in Abdel Latif, 2013). For example, Skehan (2003) identifies four types of measure: (1) breakdown fluency, operationalised as silence or break in writing; (2) repair fluency, operationalised as self-corrections or revisions; (3) rate, operationalised as number of words per minute; and (4) automatisation, operationalised as lengths of run between pauses. With regard to rate, Ong and Zhang (2010) further distinguish between writing time and total time spent on the task, and recommend the employment of both measures to increase reliability.

In the current project, however, due to logistic difficulty, only one measure was used, that is, mean number of words produced per minute out of the total time spent on the task. As a large proportion of the composing time could be actually pause time (Flower and Hayes, 1981), over-reliance on this measure could be problematic. It is hence recommended that future research employ more than one type of measure and includes both product-based (e.g. quantity of text) and process-based measures (e.g. online observation of composing processes) to enhance the reliability of the results.

Table 11: Results of the Pearson product-moment test

		Fluency score	Accuracy score	Total Aptis score
Fluency score	Pearson Correlation	1	.151	.168
	Sig. (2-tailed)		.142	.101
	N	96	96	96
Accuracy score	Pearson Correlation	.151	1	.857**
	Sig. (2-tailed)	.142		.000
	N	96	96	96
Total Aptis score	Pearson Correlation	.168	.857**	1
	Sig. (2-tailed)	.101	.000	
	N	96	96	96

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

Table 12: Results of the independent t-tests

	Proficiency	N	Mean	SD	*t*
Fluency scores	B1	48	.16	.07	.97
	B2	48	.18	.05	
Accuracy scores	B1	48	1.60	1.16	7.58***
	B2	48	3.25	.96	
Total Aptis scores	B1	48	13.6	2.31	8.37***
	B2	48	17.0	1.68	

***p<.001

5.2.2 Framing moves

With regard to Email 1, Table 13 shows that only 66.7% (32/48) of the emails produced by B1-level group contained an opening/ greeting move, and this figure for the B2 level was 83% (40/48). Pre-closing and closing moves occurred even less frequently (Pre-closings: 12.5% of the time, or 6/48 email messages by each group; Closing: B1-level group: 27%, or 13/48 email messages; B2-level group: 48%, or 23/ 48 email messages). Table 13 also shows that many of the email messages excluded either openings or closings, which is a feature of informal email communication. As expected, self-introduction occurred infrequently (8% of the time, or 4/ 48 email messages by B1-level and 2% of the time, or 1/48 email messages by B2-level groups) in Email 1, because the email was intended for a familiar audience. Statements of purpose, on the other hand, occurred much more regularly (50% of the time by each group, or 25/ 48 email messages by B1-level group, and 24/48 email messages by B2-level group). Interestingly, B1-level group's email messages contained more general statements, while B2-level group's email messages contained an approximately equal number of both general and specific statements (Table 13).

Compared to the test-takers' first emails, their second emails contained more features of formal communication, including higher frequencies of use of pre-closings and closings, as well as a greater number of emails that contained both an opening and closing moves (see Table 13). This was particularly the case for B2-level candidates. This group produced pre-closings and closings for 45.8% (22/48 email messages) and 70.8% of the time (34/48 email messages), respectively in Email 2, while the corresponding figures for B1-level group were 29% (14/48 email messages) and 43.8% (21/ 48 email messages) (Table 13). Further analysis of the degree of formality of the opening and closing moves also shows that test-takers from both groups produced more formal openings and closings in Email 2, but more informal openings and closings in Email 1, which was expected of the performance of each response (O'Sullivan & Dunlea, 2015).

Regarding the other framing moves, self-introduction were found to occur more frequently in Email 2 than in Email 1, which was expected of messages sent to an unfamiliar audience (see Table 13). Statements of purpose, however, did not occur more regularly in Email 2 as compared to Email 1. In addition, as with Email 1, B2-level group's Email 2 contained more specific statements of purpose as compared to B1-level group, thus potentially increasing the risk of offending the addressee (see Table 13).

Between the two proficiency groups, B2-level candidates produced a significantly greater number of openings in Email 2 (t=3.19, df =94, p <.05), as well as a significantly greater number of closings in both emails (Email 1: t= 2.14, df =94, p <.05; Email 2: t= 2.76, df =94, p <.05) (Table 14). The higher proficiency group's greater production of formal openings, pre-closing and closings in Email 2 as compared to their lower proficiency counterparts (Table 14) suggests a higher level of awareness of the required register for the more proficient learners.

Taken together, the above findings tend to indicate that while B1-level group hardly experienced difficulty in choosing the appropriate register for Email 1, it appeared to be more challenging for them to do so in Email 2. On the other hand, despite their difficulty using statements of purpose, B2-level candidates seemed capable of employing the required registers in both responses more consistently. The two groups' pragmatic performance, therefore, seemed consistent with the expectations in terms of task fulfilment for their levels (see O'Sullivan & Dunlea, 2015:66), attesting to the scoring validity of the test (O'Sullivan, 2012).

Table 13: Framing moves across levels – Email 1 and Email 2

	B1 (N=48)		B2 (N=48)	
	Email 1	Email 2	Email 1	Email 2
Greeting	32/ 48	30/ 48	40/ 48	42/ 48
• Formal greeting	0	27	0	38
• Informal greeting	32	3	40	4
No greeting	16/ 48	18/ 48	8/ 48	6/ 48
Pre-close	6/ 48	14/ 48	6/ 48	22/ 48
• Formal pre-close	2	12	2	21
• Informal pre-close	4	2	4	1
No pre-close	42/ 48	34/ 48	42/ 48	26/ 48
Closing	13/ 48	21/ 48	23/ 48	34/ 48
• Formal closing	1	16	2	32
• Informal closing	12	5	21	2
No closing	35/ 48	27/ 48	25/ 48	14/ 48
Completion with both opening and closing	12/ 48	19/ 48	23/ 48	32/ 48
Omission of opening or closing	20/ 48	11/ 48	17/ 48	10/ 48
Self-introduction	4/ 48	9/ 48	1/ 48	10/ 48
No self-introduction	44/ 48	39/ 48	47/ 48	38/ 48
Statement of purpose	25/ 48	18/ 48	24/ 48	22/ 48
• General	18	10	11	4
• Specific	7	8	13	18
No statement of purpose	23/ 48	30/ 48	24/ 48	26/ 48

Table 14: Results of independent t tests for two proficiency groups' use of framing moves in Email 1 and Email 2

	Email 1			Email 2		
	B1 (N=48)	B2 (N=48)	*t value*	B1 (N=48)	B2 (N=48)	*t value*
	M (SD)	M (SD)		M (SD)	M (SD)	
Opening	.67 (.48)	.83 (.38)	1.9	.58 (.50)	.86 (.40)	3.19*
Self-introduction	.08 (.28)	.02 (.14)	1.38	.17 (.38)	.21 (.46)	. 49
Statement of purpose	.50 (.51)	.50 (.51)	.00	.35 (.48)	.46 (.54)	.99
Pre-closing	.13 (.33)	.13 (.33)	.00	.29 (.46)	.46 (.50)	1.69
Closing	.27 (.45)	.48 (.50)	2.14*	.44 (.50)	.71 (.46)	2.76*

*p<.05

5.2.3 Linguistic realisation

First, with regard to Email 1, both groups tended to show a strong preference for "expressions of negative emotion" (37% of the time by B1-level group and 43% by B2-level group) over other strategies. Of the remaining strategies, the students tended to employ "reference to the offensive act" (28% and 29% of the time respectively for B1- and B2-level groups) as frequently as "solicitation of future action/alternative plans" (26% and 22% of the time for B1- and B2-level groups, respectively). However, they seemed to rely on "statements of what could have been done by the complainee" much less frequently (9% of the time by B1- and 6% by B2-level groups) (see Table 15). These patterns of strategy use are relatively consistent with findings reported for two L1 groups in Section 5.1.2, suggesting that "expressions of negative emotion", "reference to the offensive act", and "solicitation of future action/ alternative plans" are major components of indirect complaints (see Kozlova, 2004).

Result of a chi-square test of independence which was conducted to test the difference in the frequencies with which the two groups employed the above strategies indicated no statistically significant difference: $\chi2$ (239, 3) = 1.49, p>.05. This suggests no effects of general language proficiency on test-takers' patterns of use of particular strategies.

Table 15: Pragmatic strategies across levels – Email 1

	B1 (N=48)	B2 (N=48)
Negative emotion	44 (37%)	52 (43%)
Reference to offensive act	33 (28%)	35 (29%)
Statement of possible solution/ hopes and wishes	10 (9%)	7 (6%)
Future action/ alternative plans	31 (26%)	27 (22%)
Total strategies	118	121

In terms of Email 2, both groups showed the strongest preference for "requests for repair" (50% of the time by B1 group and 54% by B2 group), followed by the preference for "expressions of negative emotion" (27% and 28% of the time respectively by B1and B2 groups). The remaining strategies were rarely used (Table 16). These patterns of strategy use are consistent with findings reported for the two L1 groups in Section 5.1.2, suggesting that "requests for repair" and "expressions of negative emotion" are major components of direct complaints (see Chen et al., 2011).

As with Email 1, there was no statistical difference in the frequencies with which the two groups employed strategies for realising direct complaints [$\chi2$ (309, 4) = 4.89, p>.05], suggesting no relationship between strategy use and general language proficiency. While this finding is supported by some previous L2 pragmatics studies (e.g. Nguyen, 2005, 2008), it contradicts others (e.g. Felix-Brasdefer, 2007; Hendriks, 2008; Rose, 2000), and may be explained by the narrow gap between the two groups, i.e. B1.2 vs. B2.1. Proficiency effects might have been manifested more clearly if this gap had been wider (e.g. B2.2 vs. B1.1). The findings also indicate that both groups made use of language and discourse functions identified for their respective performance levels in the British Council – EAQUALS Core Inventory for General English (see North, Ortega & Sheehan, 2010). For example, the Core Inventory specifies that at B1 and B2 levels, candidates should be able to use language to "describe experiences and events", "describe feelings and emotions", and "express opinions".
As such, the two groups' pragmatic strategies presented in Tables 15 and 16 (e.g. describing the offensive act, expressing negative emotions, suggesting possible solutions, etc.) can be said to meet the "linguistic demands", or the "expected language of the output" by Aptis test designers.

Table 16: Pragmatic strategies across levels – Email 2

	B1 (N=48)	B2 (N=48)
Negative emotion	41 (27%)	44 (28%)
Statement of offensive act	10 (7%)	14 (9%)
Interrogation	8 (5%)	6 (4%)
Request for repair	75 (50%)	86 (54%)
Consequence	17 (11%)	8 (5%)
Total strategies	151	158

Concerning the use of politeness devices, there was no difference between the two groups in Email 1 ($p >$.05), but they differed significantly with regard to Email 2 ($t = 5.93$, df =94, $p <$.05 – see Table 17). In particular, B2-level group produced a significantly greater total number of modifiers per strategy in Email 2 as compared to their lower proficiency counterparts. Since Email 2 represented a higher-imposition scenario due to the confrontational nature of the direct complaint, as well as the high degree of social distance and power difference in the writer-recipient relationship, Email 2 requires heavier mitigation than Email 1. Previous research has demonstrated that low proficiency test-takers tend to find low-imposition test items easier than high-imposition test items, whereas this does not seem to be the case for advanced level test-takers (Roever, 2006). The finding of the current project, hence, corroborates previous studies, and suggests that the second question prompt can better discriminate between different proficiency groups in terms of their use of mitigation.

Further analysis demonstrates that the higher proficiency group produced significantly more internal modifiers (t=7.89, df =94, p<.05), particularly substantially more subjunctive mood (e.g. *could, would, might*) than their lower proficiency fellow test-takers (t =2.21, df = 94, p <.05). This finding is consistent with previous L2 pragmatics studies and suggests that internal modifiers, especially syntactic modifiers such as subjunctive mood, are less noticeable and thus more difficult to learn than external modifiers, especially by lower proficiency learners (e.g. Hassall, 2001; Nguyen, 2008). The finding, hence, seems to attest to the discriminating power of the second question prompt, as discussed earlier.

Table 17: Results of independent t tests for two proficiency groups' use of modification and intensification in Email 1 and Email 2

	Email 1			Email 2		
	B1 (N=48)	B2 (N=48)	*t value*	B1 (N=48)	B2 (N=48)	*t value*
	M (SD)	M (SD)		M (SD)	M (SD)	
Total modifiers	.59 (.75)	.60 (.63)	.056	1.02 (.91)	2.98 (2.10)	5.93*
Internal modifiers	.21 (.41)	.17 (.29)	.634	.22 (.29)	1.86 (1.41)	7.89*
External modifiers	.37 (.52)	.43 (.60)	.583	.79 (.81)	1.12 (1.07)	1.65
Aggravators	.29 (.32)	.32 (.54)	.405	.37 (.33)	.47 (.54)	.84

*p<.05

5.3   Research Question 3: What are the cognitive processes candidates of different proficiency levels go through when completing Task 4?

Research Question 3 asks about the effect of general proficiency on cognitive processes underlying test-takers' performance of the AGWT Task 4. Five major groups of thought processes were examined:

1.   orientation to task requirements in terms of task goal, task language, contextual aspects and register (hereafter "orientation")

2.   global (talking about plans for organising the entire text) and local (talking about what to write in specific clause or sentence) text planning, including use of meta-language (hereafter "planning")

3.   execution of the response, including searching for, retrieving, and selecting linguistic forms (hereafter "execution")

4.   reviewing, or reflecting on task and task response (hereafter "reviewing)

5.   evaluation of the response (hereafter 'evaluation").

These five broad processes and their sub-processes can be mapped onto the skill focus and assessment areas of AGWT Task 4 as shown in Table 18.

Overall, findings show that test-takers made use of all five broad processes, though with different frequencies, suggesting that they can generally tap onto the range of cognitive processes intended by the test. For example, during the orientation stage, candidates talked about their analysis of the task requirements (what they were supposed to write about, and to whom they were supposed to write the emails). When planning their email messages globally and locally, candidates thought about discourse function (whether they wanted to suggest a solution), sequencing the information (what they wanted to say first and subsequently) and formality of language use (what lexis to use to sound more or less formal). During the execution stage, candidates searched for and selected grammatical structures and lexis from a range of options that came to their mind at the time of writing. At the reviewing and evaluation stages, candidates re-read their writing to decide whether they fulfilled the task requirements in terms of word limit, register and language usage.

Table 18: Mapping cognitive processes underlying test-takers' pragmatic production onto AGWT Task 4 test specifications

Processes	Skill focus	Areas of assessment
Orientation • Task goal • Task language • Context and register	• Transactional emails • Two distinct registers • Familiar and equal power vs. unfamiliar and unequal power audience • Function targeted: complaining	Task fulfilment in terms of appropriateness of register
Planning • Global • Local • Use of meta-language	• Discourse mode: expository and argumentative • Mostly concrete and fairly abstract information • K4–K5 lexis • B2-level grammar	Cohesion and coherence Grammar, lexis, and punctuation
Execution • Search/ retrieval • Selection	• K4–K5 lexis • B2-level grammar	Cohesion devices Grammar and lexis
Reviewing	• 50 word Email 1 and 120–150 word Email 2	Length, accuracy and appropriacy of response
Evaluation	• Two separate emails, one in an informal register, and one in formal register • K4–K5 lexis • B2-level grammar	Length, accuracy and appropriacy of response

Regarding the effect of proficiency, results of the chi-square test of independence demonstrate that the two proficiency groups did not differ in terms of their overall use of broad cognitive processes [$\chi2$ (494, 4) =9.25, $p>$.05). However, they differed in their use of orientation [$\chi2$(93, 2) = 10.8, $p <$.05], execution [$\chi2$ (275, 3) = 17.1, $p <$.05] and review processes [$\chi2$ (47, 1) =7.57, $p <.05$] (Tables 19 - 23).

To be more specific, Table 19 indicates that both groups devoted the greatest amount of time to the execution stage (56% of the time by each group). In contrast, orientation, planning, reviewing and especially evaluation accounted for a much smaller proportion of time (ranging between 3% and 17% of the time). This finding are congruent with Keys' (2000) study which shows that dictation (saying words out loud while writing them into the text) and re-reading (reading back sentences already composed) without extensive revision, both belonging to the execution stage, comprise a large proportion of learner writers' TAP talk. Students, however, engage in text planning for much a smaller amount of time (Keys, 2000).

Table 19: Results of the chi-square test of independence for frequency of use of broad cognitive processes by the two proficiency groups

	B1 level (N=48)	B2 level (N=48)	χ2	*p*
Orientation	34 (17%)	39 (13%)	9.25	.055
Planning	25 (12%)	48 (16%)		
Execution	113 (56%)	164 (56%)		
Review	25 (12%)	22 (8%)		
Evaluation	5 (3%)	19 (7%)		
Total strategies	201	292		

In terms of the orientation stage, Table 20 indicates that the B1 group tended to attend significantly more to contextual features (54% of total mentions of orientation categories) and task goal (43%) than other task requirements, while the B2 group appeared to focus most predominantly on analysis of task goal (69% of total mentions of orientation categories). The B2 group also attended significantly more to task language (e.g. "feeling means …") than the B1 group during the orientation stage (10% vs. 4% - see Table 20). The finding that the higher proficiency group attended significantly less to analysing pragmatic information (i.e. contextual features) is quite unexpected (see Hassall, 2008; Ren, 2014), but may be explained in terms of automatisation. According to Ericsson and Simon (1980), automatic thought processes such as recognition of familiar words and images are normally not verbalised. In this project, participants had engaged in two rounds of practicing TAP with AGWT Task 4 materials before actual data collection began, and become fairly familiarised with the task requirements. Thus, the process of contextual analysis may have come to automaticity, particularly in the case of more proficient participants, and become unavailable for verbalisation. Indeed, in member-checking interviews conducted at the end of the TAP, all B2-level candidates reported carefully assessing the writer–recipient role–relationship and anticipating recipient's feelings when planning their responses and selecting linguistic forms and pragmatic strategies. Apparently, their lack of verbalisation of these thought processes did not result from a lack of pragmatic awareness, but more likely from automatisation due to task familiarity.

Table 20: Results of the chi-square test of independence for frequency of use of orientation sub-processes by the two proficiency groups

Orientation	B1 level (N=48)	B2 level (N=48)	χ2	p
Goal	23 (43%)	27 (69%)	10.8	.005
Language	2 (4%)	4 (10%)		
Context	29 (54%)	8 (21%)		
Total strategies	54	39		

In terms of the planning stage, both groups seemed to attend more to local planning (e.g. planning specific details to be included in the writing) than to global planning (e.g. planning the overall structure of the writing) (Table 21). This finding corroborates L2 writing studies which show that inexperienced writers generally do not spend time developing outlines before writing and have difficulty viewing their text globally (see Becker, 2006). The lower proficiency group appeared to use more meta-language (e.g. "I will write in a formal way") when planning than their higher proficiency counterparts (48% vs. 23%), but this difference was not found statistically significant ($p>.05$).

Table 21: Planning sub-processes

Planning	B1 level (N=48)	B2 level (N=48)	χ2	p
Global	1 (4%)	4 (8%)	4.88	.087
Local	12 (48%)	33 (69%)		
Meta-language	12 (48%)	11 (23%)		
Total strategies	25	48		

As far as execution sub-processes are concerned, Table 22 shows that the most pronounced difference between the two proficiency groups appeared to lie in their use of self-repair and translation. To be more specific, while the higher proficiency group seemed to spend significantly more time on self-corrections and revisions (21% of the time for B2 group vs. 12% for B1 group), the lower proficiency group tended to rely significantly more on L1 translation to help them complete the writing (18% of the time for B1 group vs. 4% for B2 group). This finding is expected, since a higher proficiency level is often associated with heightened linguistic and pragmatic awareness, which more likely prompts learners to monitor and repair their speech. On the other hand, at a lower level of proficiency, B1 group candidates may lack linguistic resources required for completing the task, as well as experience difficulty retrieving linguistic forms, thus being more likely to fall back on L1 transfer.

Table 22: Executing sub-processes

Execution	B1 level (N=48)	B2 level (N=48)	χ2	p
Self-repair	13 (12%)	35 (21%)	17.1	.001
Search	61 (55%)	89 (54%)		
Selection	17 (15%)	33 (20%)		
Translation	20 (18%)	7 (4%)		
Total strategies	111	164		

With respect to reviewing sub-processes, Table 23 shows that the B1-level group spent most of their time (80%) reflecting on whether they had fulfilled the task requirements in terms of word count and contents. They spent much less time (20%) reviewing their language use and usage (e.g. rhetorical organisation, grammar, lexis, and spellings). Strikingly, none of the B1-level candidates reflected on whether they had used the appropriate registers. In contrast, the B2-level group spent 41% of the time reviewing their task performance and 59% of the time reviewing their language use and usage.
In three out of 13 instances, they also addressed registers.

Table 23: Reviewing sub-processes

Review	B1 level (N=48)	B2 level (N=48)	χ2	p
Task goals	20 (80%)	9 (41%)	7.57	.006
Language use and usage	5 (20%)	13 (59%)		
Total strategies	25	22		

Finally, during the evaluation stage, the B1-level candidates' attention was focused exclusively on language usage (i.e. accuracy of grammar, lexis and spellings) (5/5 instances). In comparison, the B2-level candidates attended to task performance for 26% of the time (5/19 instances) and accuracy of language usage (14/ 19 instances) for 74% of the time. Nevertheless, none of the candidates from either group spent time evaluating their choice of registers (i.e. language use), suggesting that the candidates attended more to accuracy than appropriacy when revising their work. A Fisher's Exact test, which was used instead of a chi-square test of independence due to the small expected counts, shows no significant difference between the two proficiency groups (*p*>.05).

6.   CONCLUSION

6.1   Summary of findings and implications for test validation and pedagogy

The current project sought to answer three research questions. The first research question investigated the pragmatic strategies that the two L1 groups of candidates employed to produce the speech acts of direct and indirect complaints in email discourse. The following findings were generated.

- First, although test-takers in both groups experienced fairly little difficulty adopting an appropriate register for their first response, it was less of the case for the second response. Email 2, representing a higher-imposition test item, seemed more challenging to handle for test-takers. This finding is supported by previous research which predicts a higher level of difficulty for this type of test items (Roever, 2006). That test-takers' performance fits the direction predicted by an external criterion measure can attest to the test construct validity.

- Between the two groups, the Vietnamese L1 participants tended to demonstrate a higher degree of formality in both responses. The Vietnamese test-takers also produced a greater number of both softeners and aggravation devices as compared to their Indonesian counterparts. However, results of their Aptis tests show that the two groups did not differ in terms of their AGWT Task 4 scores (i.e. pragmatic accuracy scores). It is speculated that the combination of different politeness (formality and softeners) and impoliteness (aggravation) features may have balanced out the overall perlocutionary effect of the messages, making the Vietnamese candidates' responses not necessarily more or less socially appropriate than those of the Indonesian candidates. Unfortunately, the grading rubrics (see O'Sullivan & Dunlea, 2015:66) do not explain whether this is the case. It is hence recommended that details of how the construct of appropriateness is assessed be made more transparent in the rubrics. Such transparency is useful not only for the purpose of scoring validation but also for the processes of test localisation and for the purpose of preparing students for the test.

- With regard to pragmatic strategy use, the two L1 groups appeared to have access to the same range of realisation strategies, as well as to employ these strategies with similar frequencies, suggesting the universality of the strategies and seeming to affirm the cultural neutrality of the task as claimed by test developers (see O'Sullivan & Dunlea, 2015). Also, that the realisation strategies used by both L1 groups are successfully captured by the taxonomies developed based on empirical research on the speech acts of direct and indirect complaints appears to suggest that the task successfully elicits the language functions it intends to measure, thus attesting to the task construct validity.

The second research question examined the effect of candidates' general language proficiency on their pragmatic performance in AGWT Task 4. The following findings are noteworthy.

- First, a strong, positive relationship was found between candidates' AGWT Task 4 scores and their Aptis total scores, indicating a positive effect of language proficiency on pragmatic performance accuracy. To be more specific, the more proficient the participants were, the better they performed in AGTW Task 4 in terms of both pragmalinguistic accuracy and sociopragmatic appropriacy (two constructs underlying pragmatic performance accuracy). In other words, it can be safe to suggest that AGWT Task 4 has a sufficiently strong discriminating power to distinguish between lower and higher proficiency test-takers in terms of pragmatic performance accuracy. Nonetheless, there was no relationship between candidates' total Aptis scores and their fluency scores (i.e. mean number of words produced per minute out of the total time spent on the task), suggesting no effect of proficiency on pragmatic performance fluency. This finding, however, has to be treated with caution, because the employment of a single measure of fluency might have affected the reliability of the results.

- With regard to the use of register, it was found that overall, B1-level candidates were capable of consistently using an appropriate register in Email 1, but less so when it came to Email 2. In contrast, B2-level candidates, despite some difficulty producing contextually appropriate statements of purpose, demonstrated an overall ability to use appropriate registers more consistently in both responses. The two groups' performance, therefore, is in line with test designers' expectation regarding the appropriateness of register identified respectively for their proficiency levels, thus indicating the validity of the scoring in this aspect. This finding also seems to suggest a stronger discriminating power for Email 2 (representing a higher-imposition, and hence more difficult item) as compared to Email 1 (representing a lower-imposition, and hence less difficult item).

- Concerning speech act realisation, no proficiency effect was found in terms of the participants' use of pragmatic strategies. Both proficiency groups appeared to have access to the same range of strategies and demonstrated a similar tendency in strategy use. The following B1 and B2-level Core Inventory functions were found in the email data of the two groups: "describing experiences and events", "describing feelings and emotions", and "expressing opinions", "describing hopes and plans", "expressing reaction", "expression of empathy", and "making justifications" (North et al., 2010), suggesting that their performance meets the expected language of the output for their levels. The only distinction between the two groups was the greater use of politeness devices, such as the subjunctive mood, by the higher proficiency candidates to qualify opinions and statements, particularly in the higher-imposition scenario (Email 2). This finding shows that the B2-level group's performance meets higher linguistic demands, which is expected of their proficiency level. At the same time, the finding also demonstrates the stronger discriminating power of higher-imposition pragmatic test items (Email 2) as compared to the lower-imposition item (Email 1).

- One thing to note, however, is the absence of CMC-related features such as openings and closings of email discourse in the Core Inventory (North et al., 2010). Although discourse functions such as initiating and closing conversation are included in the Inventory, the identified features seem more applicable to casual conversations than to email communication which can afford a wider stylistic variation. Considering that the Inventory represents only a minimal core of most frequently used language points for each performance level and since the ability to use language socially appropriately in email communication is an important component in the Aptis test, descriptors of this aspect of test-takers' competence need to be carefully developed and validated to enhance the test content, construct, and scoring validity. Such development can be informed by the fast growing body of empirical research on the pragmatics of email discourse (see Section 2.1).

Finally, the third research question explored how test-takers at different performance levels tapped onto their pragmatic knowledge and knowledge of writing processes to assist them to complete AGWT Task 4.

- On the one hand, findings show that generally, all the processes intended by test designers (e.g. task fulfilment in terms of appropriateness of register; selection of accurate and appropriate grammatical structures and lexis to express intended meaning; selection of accurate and appropriate coherence and cohesion markers, etc.) were evident in the data of both proficiency groups. Also, while some processes were attended to more often by higher proficiency test-takers, others were attended to more often by lower proficiency counterparts. Taken together, these findings seem to attest to both of the construct validity and discriminating power of the task.

- On the other hand, findings also show that, regardless of the proficiency levels, test-takers tended to engage more in execution than in other equally important writing processes, such as planning (orientation and planning) and revision (reviewing and evaluation). When revising their work, they also tended to focus less on appropriate language use than on accuracy of language usage. This suggests that test-takers may need training in how to make use of writing processes, particularly what to attend to when reviewing and evaluating their work in order to perform the task more effectively.

6.2   Limitations and recommendation for further research

Despite some insightful findings, the current project is not without methodological limitations. First, only one measure of pragmatic fluency was employed, which, to some extent, may limit the interpretation of the results. It is, hence, recommended that future research employ more than one type of measure of fluency and includes both product-based (e.g. quantity of text) and process-based measures (e.g. online observation of composing processes) to enhance the reliability of the results.

Second, the current project focused on comparing only two levels of proficiency, thus limiting the generalisability of the findings. Ideally, future investigations should be expanded to all different performance levels in order to gain a clearer picture of the key features of pragmatic language use across levels, thus better informing test validation.

Finally, in order to achieve a more rounded understanding of test-takers' cognitive processes, future studies can consider employing both introspective and retrospective methodologies. Since each methodology has its own pros and cons, and can provide a very different angle on the minds of test-takers, the combination of both can enhance the quality of the data, as well as the richness of the findings.

REFERENCES

Abdel-Latif, M.M.M. (2014). Recent developments in EFL writing fluency measurement. In T. Muller, J. Adamson, P. Brown, S. Herder (Eds.), *Exploring EFL Fluency in Asia* (pp.196–212). London: Palgrave Macmillan.

Al-Gahtani, S. & Roever, C. (2012). Proficiency and sequential organization of L2 requests. *Applied Linguistics, 33*(1), 42–65.

Bachman, L. (1990). *Fundamental Considerations in Language Testing*. Oxford: Oxford University Press.

Biesenbach-Lucas, S. (2009). Little words that could impact one's impression on others: Greetings and closings in institutional emails. In R.P. Leow, H. Campos and D. Lardiere (Eds.), *Little Words: Their History, Phonology, Syntax, Semantics, Pragmatic, and Acquisition* (pp. 183–195). Washington, DC: Georgetown University Press.

Bardovi-Harlig, K. (2010a). Pragmatics and second language acquisition. In R. Kaplan (Ed.), *The Handbook of Applied Linguistics* (pp. 232–243). Oxford: Oxford University Press.

Bardovi-Harlig, K. (2010b). Exploring the pragmatics of interlanguage pragmatics: Definition by design. In A. Trosborg (Ed.) *Pragmatics Across Languages and Cultures (Vol. 7 of Handbooks of Pragmatics)* (pp. 219–259).Berlin: Mouton de Gruyter.

Barron, A. (2008) Contrasting requests in inner circle Englishes. A study in variational pragmatics. In M. Puetz and J. Neff van Aertselaer (Eds.), *Developing Contrastive Pragmatics: Interlanguage and Cross-cultural Perspectives* (pp. 355–402). Berlin: Mouton de Gruyter.

Biesenbach-Lucas, S. (2007). Writing emails to faculty: An examination of e-politeness among native and non-native speakers of English. *Language Learning and Technology, 11*(2), 59–81.

Bjørge, A.K. (2007). Power distance in English Lingua Franca email communication. *International Journal of Applied Linguistics, 17*(1), 60–80.

Bou-Franch, P. (2011). Openings and closings in Spanish email conversations. *Journal of Pragmatics 43*, 1772–1785.

Bowles, A.M. (2010). Concurrent verbal reports in second language acquisition research. *Annual Review of Applied Linguistics, 30*, 111–127.

Boxer, D. (1993). Social distance and speech behavior: The case of indirect complaints. *Journal of Pragmatics, 19*, 103–125.

Brown, J.D. & Rodgers, T.S. (2002). *Doing Second Language Research*. Oxford: Oxford University Press.

Brown, P. & Levinson, S. (1987). *Politeness. Some Universals in Language Usage*. Cambridge: Cambridge University Press.

Camps, J. (2003). Concurrent and retrospective verbal reports as tools to better understand the role of attention in second language tasks. *International Journal of Applied Linguistics, 13*(2), 201–221.

Chang, Y.Y. & Hsu, Y.P. (1998). Request on email: A cross-cultural comparison. *RELC Journal, 29*, 121–151.

Chen, C. (2006). The development of e-mail literacy: From writing to peers to writing to authority figures. *Language Learning and Technology, 10*(2), 35–55.

Chen, Y.S. (2015). Developing Chinese EFL learners' email literacy through requests to faculty. *Journal of Pragmatics, 75*, 131–149.

Chen, Y.S., Chen, C.Y.D. & Chang, M.H. (2011). American and Chinese complaints: Strategy use from a cross-cultural perspective. *Intercultural Pragmatics 8*(2), 253–275.

Cohen, A.D. & Olshtain, E. (1993). The production of speech acts by EFL learners. *TESOL Quarterly, 27*(1), 33–56.

Economidou-Kogetsidis, M. (2011). "Please answer me as soon as possible'': Pragmatic failure in non-native speakers' email requests to faculty. *Journal of Pragmatics, 43*, 3193–3215.

Ellis, R. (2008). *The Study of Second Language Acquisition*. Oxford: Oxford University Press.

Ellis, R. & Barkhuizen, G.P. (2005). *Analysing Learner Language*. Oxford: Oxford University Press.

Ericsson, A.K. & Simon, A.H. (1980). Verbal reports as data. *Psychological Review, 87*(3), 216–251.

Ericsson, K. & Simon, H. (1993). *Protocol Analysis: Verbal Reports as Data* (2nd ed.).
Boston: MIT Press.

Félix-Brasdefer, J.C. (2007). Pragmatic development in the Spanish as a FL classroom: A cross-sectional study of learner requests/. *Intercultural Pragmatics*/, 4:2: 253–286.

Félix-Brasdefer, J.C. (2008). Perceptions of refusals to invitations: Exploring the minds of foreign language learners. *Language Awareness, 17*(3), 195–211.

Flower, L. & Hayes, J.R. (1981). A cognitive process theory of writing. *College Composition and Communication, 32* (4), 365–387.

Hartford, B.S. & Bardovi-Harlig, K. (1996). "At your earliest convenience": A study of written student requests to faculty. In L.F. Bouton (Ed.), *Pragmatics and Language Learning* (Vol. 7, pp. 55–69). Urbana Champaign, IL: University of Illinois, Division of English as an International Language (DEIL).

Hartley, L. (1996). What's in a complaint? Paper presented at *NWAVE 25*, Las Vegas, Nevada.

Hassall, T. (2001). Modifying requests in a second language. *International Review of Applied Linguistics in Language Teaching,* 39: 59–283.

Hassall, T. (2008). Pragmatic performance: What are learners thinking? In E. Alcon-Soler and A. Martinez-Flor (Ed.), *Investigating Pragmatics in Foreign Language Learning, Teaching and Testing (pp. 72–93).* Bristol: Multilingual Matters Ltd.

Hendriks, B. (2008). Dutch English requests: A study of request performance by Dutch learners of English. In M. Putz and J.N. Aertselaer (Eds.), *Developing Contrastive Pragmatics. Interlanguage and Cross-Cultural Perspectives* (pp. 335–354). Berlin: Walter de Gruyter.

Ishihara, N. (2009). Teacher-based assessment for foreign language pragmatics. *TESOL Quarterly, 43* (3), 445– 470.

Jenkins, J. (2009). English as a Lingua Franca: interpretations and attitudes. *World Englishes*, *28*(2), 200–207.

Kasper, G. (1997). Can pragmatic competence be taught*? NFLRC Net Work* 19.
Retrieved from http://www.nflrc.hawaii.edu/Networks/NW19

Kasper, G. (2001). Classroom research on interlanguage pragmatics. In K. Rose and G. Kasper (Eds.), *Pragmatics in language teaching* (pp. 33–62). Cambridge, UK: Cambridge University Press.

Kasper, G. & Rose, K. (2002). *Pragmatic development in a second language*. Oxford: Blackwell.

Kankaanranta, A. (2006). "Hej Seppo, could you pls comment on this!" – Internal email communication in Lingua Franca English in a multinational company. *Business Communication Quarterly*, 69(2), 216–225.

Keys, C.W. (2000). Investigating the thinking processes of eighth grade writers during the composition of a scientific laboratory report. *Journal of Research in Science Teaching, 37* (7), 676–690.

Kozlova, I. (2004). Can you complain? Cross-cultural comparison of indirect complaints in Russian and American English. *Prospect 19*(1), 84–105.

Leech, G.N. (1983). *Principles of* Pragmatics. London**:** Longman.

Li, S. (2011). The effect of input-based practice on pragmatic development in L2 Chinese. *Language Learning* 62(2). 403–438.

McKay, S. (2002). *Teaching English as an International Language: Rethinking Goals and Approaches*. Oxford: Oxford University Press.

Messick, S. (1989). Validity. In R.L. Linn (Ed.), *Educational Measurement* (pp. 13–103). New York: Macmillan.

Nguyen, T.T.M. (2008). Modifying L2 criticisms: How learners do it? *Journal of Pragmatics, 40* (4), 768–791.

Nguyen, T.T.M. (2017). Using conversation tasks and retrospective methodology to investigate L2 pragmatics development: the case of EFL criticisms and responses to criticisms. *The Language Learning Journal, 45*(3), 399–417.

Nguyen, T.T.M., Do, T.T.H., Nguyen, T.A. & Pham, T.T.T. (2015). Teaching email requests in the academic context: A focus on the role of corrective feedback. *Language Awareness, 24*(2), 169–195.

North, B., Ortega, A. & Sheehan, S. (2010). *EAQUALS Core Inventory for General English.* British Council.

Olshtain, E. & Weinbach, L. (1993). Interlanguage features of the speech act of complaining. In G. Kasper and S. Blum-Kulka (Eds), *Interlanguage Pragmatics* (pp. 108–122). New York: Oxford University Press.

Ong, J. & Zhang, L.J. (2010). Effects of task complexity on the fluency and lexical complexity in EFL students' argumentative writing. *Journal of Second Language Writing, 19*, 218–233.

O'Sullivan, B. (2012). *Aptis Test Development Approach*. London: British Council.

O'Sullivan, B. & Dunlea, J. (2015). *Aptis General Technical Manual Version 1.0*. London: British Council.

Otçu, B. & Zeyrek, D. (2006). Requesting in L2: Pragmatic development of Turkish learners of English. In *Series A: General & Theoretical Papers, LAUD 2006*, Paper 680. Essen: Universitat Duisburg Essen.

Otçu, B. & Zeyrek, D. (2008). Development of requests: A study on Turkish learners of English. In M. Puetz and J. Neff van Aertselaer (eds.), *Developing Contrastive Pragmatics: Interlanguage and Cross-Cultural Perspectives*, (pp. 265–300). Berlin: Mouton de Gruyter.

Polio, C. (1997). Measures of linguistic accuracy in second language writing research. *Language Learning.47* (1), 101–143.

Ren, W. (2014). A longitudinal investigation into L2 learners' cognitive processes during study abroad. *Applied Linguistics, 35*(5), 575–594.

Roever, C. (2006). Validation of a web-based test of ESL pragmalinguistics. *Language Testing, 23*(2), 229–256.

Roever, C. (2011). Testing of second language pragmatics: Past and future. *Language Testing, 28*(4), 463–481.

Roever, C. (2015). *Researching pragmatics.* In B. Paltridge and A. Phakiti (Ed.), *Research Methods in Applied Linguistics: A Practical Resource* (pp.387–420). London: Bloomsbury Academic.

Rose, K. (2000). An exploratory cross-sectional study of interlanguage pragmatic development. *Studies in Second Language Acquisition, 22* (1), 27–67.

Schmidt, R. (1992). Psychological mechanisms underlying second language fluency. *Studies in Second Language Acquisition, 14,* 357–385.

Shively, R.L. (2011). L2 pragmatic development in study abroad: A longitudinal study of Spanish service encounters. *Journal of Pragmatics, 43*, 1818–1835.

Skehan, P. (2003). Task based instruction. *Language Teaching, 36* (1), 1–14.

Taguchi, N. (2011). Teaching pragmatics: Trends and issues. *Annual Review of Applied Linguistics, 31*, 289–310.

Spencer-Oatey, H. (2000). Rapport management: A framework for analysis. In H. Spencer-Oatey (Ed.), *Culturally Speaking: Managing Rapport through Talk Across Cultures,* (pp.11–45). London: New York: Continuum.

Trosborg, A. (1995). *Interlanguage pragmatics: Requests, complaints, and Apologies*. Berlin: Mouton de Gruyter.

Thomas, J. (1995). *Meaning in Interaction: An Introduction to Pragmatics*. London, UK: Longman.

Warga, M. (2004). *Pragmatische Entwicklung in der Fremdsprache. Der Sprechakt 'Aufforderung'im Französischen [Pragmatic Development in the Foreign Language. The Speech Act 'Request' in French.]* Tübingen: Gunter Narr Verlag.

Weber, R.P. (1990). *Basic Content Analysis*. Newbury Park, CA: Sage Publications.

Widjaja, C. (1997). A study of date refusal: Taiwanese females vs. American females. *University of Hawaii Working Papers in ESL, 15* (2): 1–43.

Woodfield, H. (2008). Problematising discourse completion tasks: Voices from verbal report. *Evaluation & Research in Education, 21* (1), 43–69.

APPENDIX 1: B1-level data

B1 Level Email 1 Pragmatic strategies

Strategy	L1 Indonesian		Sub-total	L1 Vietnamese		Sub-total	TOTAL
	F	M		F	M		
Negative emotion	15	9	24	12	8	20	44
Reference to act	9	6	15	10	8	18	33
Wishes/ hopes	4	2	6	4	0	4	10
Future action	7	5	12	5	14	19	31

B1 Level Email 2 Pragmatic strategies

Strategy	L1 Indonesian		Sub-total	L1 Vietnamese		Sub-total	TOTAL
	F	M		F	M		
Negative emotion	13	6	19	12	10	22	41
Statement of act	4	0	4	4	2	6	10
Interrogation	1	3	4	2	2	4	8
Preaching	0	2	2	1	0	1	3
Request for repair	24	22	46	18	8	26	72
Consequence	3	8	11	3	3	6	17

B1 Level Email 1 Indo framing moves

ID	Greeting	Self-intro	Purpose	Pre-closing	Closing
008					
005	1		1		1
021					1
023	1	1	1		
004					
027			1		
037	1		1		
090	1				
072	1				
044	1			1	
049	1		1		
053					
002					
003					
016					
030					
042	1		1		
076					
217	1				
064	1		1		
061	1		1		
056	1				
062	1		1		
068	1		1		

B1 Level Email 1 Viet framing moves

ID	Greeting	Self-intro	Purpose	Pre-closing	Closing
094	1		1		1
098					
099	1		1		1
101	1	1		1	
112	1		1		1
122	1		1		1
144					
169	1		1		
173	1		1		
503	1				1
026	1		1		
506	1		1	1	
120	1	1	1		
149			1		
167	1		1	1	1
179				1	
190	1				1
194	1		1		1
198	1	1			1
199	1		1	1	1
200	1				
027					
028	1		1		1
033					

B1 Level Email 2 Indo framing moves

ID	Greeting	Self-intro	Purpose	Pre-closing	Closing
008			1		
005	1				1
021	1				
023			1		
004					
027					
037			1		
090	1		1	1	1
072	1				
044	1				
049	1		1		1
053					
002	1	1			
003	1				
016					
030	1				
042	1			1	1
076			1		
217					
064	1		1		
061	1		1		
056					
062	1	1			1
068					1

B1 Level Email 2 Viet framing moves

ID	Greeting	Self-intro	Purpose	Pre-closing	Closing
094	1		1	1	
098					
099	1				1
101				1	
112	1				1
122	1			1	1
144					1
169				1	1
173	1	1		1	1
503					
026					
506					1
120	1		1		1
149	1	1	1		
167	1	1	1	1	1
179					
190	1		1	1	1
194	1		1	1	1
198	1	1	1	1	1
199	1	1	1	1	1
200	1			1	1
027					
028	1	1	1	1	1
033	1				

B1 Level Email 1 Indo modification

ID	Syn.	Hedge	Pol.	Subj.	Caj.	Consul	Sweet	Solidarity	Ground	Inten.	Urgent	Abuse
008										1		
005												
021		1				1			3			
023									1			
004								1	1			
027												
037												
090								1				
072	1											
044									1	1		
049									1			
053									1	1		
002									1			
003									1			
016										1		
030												
042									1			
076									1			
217		1										
064									1	2		
061												
056									1			
062												
068										1		

B1 Level Email 1 Viet modification

ID	Syn.	Hedge	Pol.	Subj.	Caj.	Consul	Sweet	Solidarity	Ground	Inten.	Urgent	Abuse
094		1	2		1	1			1	1		
098												
099		1				1						
101			1	1			1		1		1	
112										2	1	
122		1	1								1	
144												
169										1		
173				1						1		
503									1			
026										1		
506								1	1			
120						1					1	
149									1			
167			1			1						
179									1			
190							2					
194			1							1		
198										1		2
199		1							1			
200						1			1	1		
027										1		
028												
033									1	1		

B1 Level Email 2 Indo modification

ID	Syn	Hedge	Pol	Sub	Caj	Consul	Disarm	Sweet	Solid	Ground	Intens	Urgent	Abuse
008		1							1	1	1		
005		2								3	1		
021				1			1	2			1		
023				1						1			
004								2					
026											1		
037										1	1		
090							1		1	2	3		
072		1	1						1	2			
044		1							1	2			
049										1		1	
053													
002								1		2			
003							2		1				
016			2					2		3			
030								4					
042		1					1			3			
076			2						1	3			
217								1		1			
064			2					1		1			
061													
056							1		2				
062								1		3			
068									1	1	2		

B1 Level Email 2 Viet modification

ID	Syn	Hedge	Pol	Sub	Caj	Consul	Disarm	Sweet	Solid	Ground	Intens	Urgent	Abuse
094		1		1				1		2	3	1	
098				1				1		1			
099								1	1	1			
101				1			1		1	1		1	
112			2								1	1	
122		1										1	
144		1							1				
169		1	1	1			1			1	1	2	
173	1					1			2	2	1	1	
503									1	1			
026													
506									1	1	1	1	
120	1								1	1	2	1	
149									1			1	
167			1						3	2		1	
179								3			1		
190								3					
194			1						1		1		
198		1							2	1		1	
199		1							2	1			
200									1	1	1		
027													
028										1			
033											1		

B1 Level Cognitive processes

Strategy	Indonesian	Vietnamese	Total
Orientation	**12**	**22**	**34**
• Task goal	8	15	23
• Task language	0	2	2
• Context	4	5	9
• Language of thought	3 L1, 1 mixed Ls	4 L1	
Planning	**10**	**15**	**25**
• Global	0	1	1
• Specific	3	9	12
• Meta-language	7	5	12
• Language of thought		4L1	
Solving/ execution	**37**	**76**	**113**
• Self-repair	3	10	13
• Search	20	41	61
• Selection	0	17	17
• Translation	9	8	17
• Using L1	3	0	3
• Language of thought	4 mixed Ls	4 mixed Ls	
Reviewing/ reflection	**3**	**22**	**25**
• Language of thought	L1	4L1	
Evaluation	**0**	**5**	**5**
• Language of thought		L1	

APPENDIX 2: B2-level data

B2 Level Email 1 Pragmatic strategies

Strategy	L1 Indonesian		Sub-total	L1 Vietnamese		Sub-total	TOTAL
	F	*M*		*F*	*M*		
Negative emotion	11	15	26	13	13	26	52
Reference to act	10	12	22	5	8	13	35
Wishes/ hopes	2	0	2	2	3	5	7
Future action	7	8	15	8	4	12	27

B2 Level Email 2 Pragmatic strategies

Strategy	L1 Indonesian		Sub-total	L1 Vietnamese		Sub-total	TOTAL
	F	*M*		*F*	*M*		
Negative emotion	8	15	23	11	10	21	44
Statement of act	3	4	7	4	3	7	14
Interrogation	1	3	4	0	2	2	6
Preaching	0	0	0	0	0	0	0
Request for repair	23	22	45	21	20	41	86
Consequence	2	2	4	1	3	4	8
Opting out	0	0	0	1	1	2	2

B2 Level Email 1 Indo framing moves

ID	Greeting	Self-intro	Purpose	Pre-closing	Closing
079					
087	1		1		1
224	1				
227					
229	1				
219					
208	1		1		
215	1				
249	1				1
058	1		1		1
067	1				1
045	1		1		1
022	1				
017	1		1	1	1
230	1			1	1
228	1				
206					
205	1		1		1
204			1		
209			1		
214	1				1
211	1		1		
210	1				
244	1			1	1

B2 Level Email 1 Viet framing moves

ID	Greeting	Self-intro	Purpose	Pre-closing	Closing
092	1		1		1
095	1		1	1	1
096	1		1		1
106	1		1		
110	1		1	1	1
131	1	1	1	1	1
143					
158	1				1
168	1		1		
182	1				
183	1		1		
193	1		1		1
125	1		1		
129	1				1
133	1				
139	1				
141					
146	1		1		1
148	1				
152	1		1		
154	1				1
157	1		1		1
164	1		1		1
177	1		1		1

B2 Level Email 2 Indo framing moves

ID	Greeting	Self-intro	Purpose	Pre-closing	Closing
079	1				1
087					
224	1				
227	1			1	
229					
219					
208	1		1		
215	1				1
249	1			1	1
058	1			1	1
067	1				1
045	1	1	1		
022	1	1			1
017	1		1		1
230	1		1	1	1
228	1		1		1
206					1
205	1	2	1	1	1
204	1				
209	2				1
214	1			1	1
211	1			1	1
210			1		
244	1	1	1	1	1

B2 Level Email 2 Viet framing moves

ID	Greeting	Self-intro	Purpose	Pre-closing	Closing
092	1		1	1	1
095	1		1	1	1
096	1		1	1	1
106	1			1	1
110	1	1	1	1	1
131	1		1	1	1
143	1		1		
158	1		1	1	1
168	1		1		1
182	1		1		1
183	1			1	1
193					1
125	1	1			
129	1	1	1		1
133	1		1	1	1
139	1				1
141					
146	1			1	1
148	1		1	1	
152	1	1			
154	1			1	1
157	1				1
164	1		2	1	1
177	1	1		1	1

B2 Level Email 1 Indo modification

ID	Syn.	Hedge	Pol.	Subj.	Caj.	Consul	Sweet	Solidarity	Ground	Inten.	Urgent	Abuse
079		1										
087									1			
224								2		1		
227												
229		1								1		
219	1			1					1			
208									1			
215												
249				2				2				
058		1					1		2			
067												
045		1										
022												
017		1	1						1			
230		1								1		
228								1				
206												
205		1		1	1							
204										1		
209									1			
214										2		
211										2		
210									1	1		
244				1								

B2 Level Email 1 Viet modification

ID	Syn.	Hedge	Pol.	Subj.	Caj.	Consul	Sweet	Solidarity	Ground	Inten.	Urgent	Abuse
092									2	1		
095									1		1	
096									1	1		
106					1				1	2	1	
110	1			1				1		2	1	
131		1				1		1				
143									1	2	1	
158												
168												
182	1	1							1			
183						1			1	1		
193						1						
125										1		
129												
133										1		
139				1					1		1	
141								1	1	1		
146						1			1			
148									1	2		
152						1						
154										1	1	
157		1							1			
164						1			1			
177									1	1	1	

B2 Level Email 2 Indo modification

ID	Syn	Hedge	Pol	Sub	Caj	Consul	Disarm	Sweet	Solid	Ground	Intens	Urgent	Abuse
079	1	1	2							1			
087	1	1							1	3			
224		1							3		1		
227		1						1	1	3			
229	1		1	1						2			
219				2					1	1			
208		1								1			
215				2					1				
249				1									
058		1					1		1	4			
067	1	1		2					1				
045		1		2			1		3	2			
022		1						3		2	1	1	
017	1		2	2			2		1	2			
230		1	3				1		1	3			
228		1						1	1	3			
206							1		2	2			
205		2		1					2	1			
204		2						1		2	1		
209	1	2		2					1	2	1		
214											1		
211				1						1	1		
210							1	1					
244		1		3			1	1		1			

B2 Level Email 2 Viet modification

ID	Syn	Hedge	Pol	Sub	Caj	Consul	Disarm	Sweet	Solid	Ground	Intens	Urgent	Abuse
092		1		1					1	1	3		
095									2	1	1		
096										1	1	1	
106		1						3		1	2	1	
110				2			1	1	1			1	
131								2	3				
143								1			1		
158				1						1	2		
168											2		
182		1											
183		1							1	3	2	1	
193			1				1	1	2	1	2	1	
125									2				
129				1					1	2	1		
133			1							2		2	
139			1						2	2		1	
141							1			2	1		
146								1	3	1			
148									2	1		1	
152				1					3			2	
154			1							1		1	
157										3	1	1	
164										3		2	
177			1				1		2	3	1	2	

B2 Level Cognitive processes

Strategy		Indonesian	Vietnamese	Total
Orientation		**9**	**30**	**39**
	Task goal	6	21	27
	Task language	0	4	4
	Context	3	5	8
	Language of thought		2L1, 2L2	
Planning		**17**	**31**	**48**
	Global	2	2	4
	Specific	10	23	33
	Meta-language	5	6	11
	Language of thought		2L1, 2L2	
Solving/ execution		**37**	**127**	**164**
	Self-repair	9	26	35
	Search	25	64	89
	Selection	3	30	33
	Translation	0	7	7
	Using L1	0	0	0
	Language of thought		3L2, 1L1	
Reviewing/ reflection		**7**	**15**	**22**
	Language of thought		3L1, 1L2	
Evaluation		**0**	**19**	**19**
	Language of thought		2L1, 2L2	

APPENDIX 3: Information sheets

INFORMATION SHEET FOR PARTICIPANTS

Dear Prospective Participants,

We would like to invite you to participate in a study and here is some information about it.

Purpose of the project

The purpose of this study is to examine English language learners' performance of Aptis General Test, an international test of English developed by the British Council. In particular, we are interested to know how you perform Writing Task 4, and how your performance is affected by your general proficiency level and cultural knowledge. Findings of the study will be useful for test developers and teachers. Your participation in the study is highly appreciated.

Study procedures and what happens to information gathered during the study

If you decide to participate,

- ✓ We will ask you to complete an Aptis General Test. The test consists of four parts: speaking (approximately 12 minutes), listening (55 minutes), reading (30 minutes), and writing (55 minutes). The test will take 2 and a half hours to complete.
- ✓ We may ask you to complete three sessions in which you will be taught how to think aloud your decision-making while completing Writing Task 4, and audio-record your say-aloud thoughts. Each session may take approximately one hour to complete.
- ✓ We will analyse your responses in the above tests to understand your performance. But the marks you receive will not affect your course assessment.
- ✓ We will not reveal your name and identity to anyone and use a fake name instead of your real name when we publish the findings;
- ✓ We will delete your data 10 years after publishing the findings.

Please also know that:

- ✓ Participation in this project is fully voluntary. But if you agree to take part, you will be requested to sign an informed consent form.
- ✓ You are free to withdraw from this study at any time without penalty, prejudice, negative consequences, repercussion, or disadvantage. Upon withdrawal, all data obtained from you will be erased and destroyed.
- ✓ There is no foreseeable risk arising from participation in this study.
- ✓ Your privacy will be protected and nothing will be shared with others that will identify you.
- ✓ This project has been approved by the Nanyang Technological University, Singapore (NTU) Institutional Review Board (IRB) (Contact person: Ms Germaine Foo, Secretariat of NTU-IRB. Email: irb@ntu.edu.sg Telephone: 65-65922495). It meets NTU's standards for research ethics.

If you have any further questions regarding the assignment or any of the above, please feel free to ask us now or contact the Principal Investigator at thithuyminh.nguyen@nie.edu.sg.

INFORMED CONSENT FORM

Name of Principal Investigator: Nguyen Thi Thuy Minh

Contact (email): **thithuyminh.nguyen@nie.edu.sg (National Institute of Education, Nanyang Technological University, Singapore)**

Title of research project: Aptis General Writing Test Task 4: An analysis of test-takers' pragmatic performance and cognitive processing

I, _____ (*participant's name*), have been given and read the Participant Information Sheet describing the nature of the project "Aptis General Writing Test Task 4: An analysis of test-takers' pragmatic performance and cognitive processing**"**, including procedures and what will happen to the collected data.

I hereby consent / do not consent* **to my participation in the above research.**

I understand the purpose and process of the research project and my involvement in it.

I also understand that

- I can, at any time, withdraw my consent for my participation without penalty, prejudice, negative consequences, repercussion, or disadvantage and demand that my personal data/information be permanently deleted from the researcher's records;

- the researcher will use the data and my personal information solely for this study;

- while the findings of the study may be published, I will not be personally identified and my personal data/information will remain confidential;

- my test scripts will be analysed for the purpose of the study but the marks I receive for the tests will not be part of the course assessment;

- my personal data/ information will be stored in a place that is safe and is accessible only to the researcher;

- my personal data/ information will be permanently deleted upon the publication of the study;

- the ethical aspects of the project have been approved by NTU's Institutional Review Board (IRB) (Contact person: Ms Germaine Foo, Secretariat of NTU-IRB. Email address: irb@ntu.edu.sg. Telephone: 65-65922495).

If I have any questions about the research at any point in time, I will contact the researcher.

Name of participant: …………………………………………..……………......

Signature: ………………………………………………….**Date**: ………………………

Researcher's confirmation statement

I have witnessed the participant signing this form.

Researcher's signature: _____**Date:** _____
*Please circle whichever applies

British Council
Assessment Research
Awards and Grants

If you're involved or work in research into assessment, then the British Council Assessment Research Awards and Grants might interest you.

These awards recognise achievement and innovation within the field of language assessment and form part of the British Council's extensive support of research activities across the world.

APTIS GENERAL WRITING TEST TASK 4: AN ANALYSIS OF TEST-TAKERS' PRAGMATIC PERFORMANCE AND COGNITIVE PROCESSING

AR-G/2018/2

Thi Thuy Minh Nguyen
Ardi Marwan