1. Introduction

In second language (L2) pragmatics, researchers have long been interested in the relationship between linguistic proficiency and pragmatic competence. Such interest arises from the observations that L2 learners may have the knowledge of a particular linguistic item but fail to express its illocutionary force appropriately, or they may adopt a particular linguistic form to convey its pragmalinguistic function in an unconventional way. Moreover, L2 learners may demonstrate knowledge of a linguistic feature and its pragmalinguistic function yet still show non-target-like sociopragmatic use [1]. Consequently, most L2 pragmatists tend to examine the relationship between linguistic proficiency and pragmatic competence in circumstances where L2 learners are producing a particular pragmatic item in a given situational context. However, very little is known about how linguistic proficiency exerts differential impacts on the comprehension of pragmatic essentials, namely, speech acts, conversational implicatures, and routine formulas [2].

In second language acquisition (SLA) research, a myriad of studies have indicated a close relationship between proficiency and learner strategies [3–6] because the employment of strategies may compensate for linguistic deficiencies in the completion of a given task [7,8]. As proficiency plays a pivotal role in L2 pragmatics, it is generally examined alone or in combination with factors such as length of residence, learning environment,
motivation, L2 exposure, gender, and multilingualism (e.g., [9]). However, it is curious that the relationship between proficiency and learner strategies has been under-researched in L2 pragmatics. One explanation may be that for a long time, L2 pragmatics has been considered “a study of second language use”, rather than “a study of second language learning” [10] (p. 150).

Taking the above together, the present study seeks to explore (1) the effects of L2 proficiency on the comprehension of speech acts, implicatures, and routines; and (2) the employment of strategies by L2 learners of different proficiencies in the comprehension of these three pragmatic components.

2. Theoretical Background

The relationship between language learners’ linguistic proficiency and pragmatic competence has long been a focal concern in L2 pragmatics research. Bardovi-Harlig [11] took the initiative in recommending cross-sectional investigations into pragmatic development at different levels of proficiency. The rationale underlying such a research agenda is that proficiency may not be a sufficient, while still being a necessary condition for pragmatic development. Since then, a considerable number of studies have examined the role of proficiency in L2 learners’ pragmatic development. In the following review, we focus primarily on how proficiency affects pragmatic comprehension, since this is the focus of our study.

Some past studies on L2 learners treated proficiency as the only variable to examine its effect on pragmatic comprehension. For instance, Cook and Liddicoat [12] examined the comprehension of request strategies between high- and low-proficiency L2 learners by using a multiple-choice discourse completion test (MDCT). Fifty Japanese and Chinese learners of English participated in this study. The results showed that high-proficiency learners interpreted direct and conventional indirect request scenarios with approximately equal accuracy. On the other hand, the low-proficiency learners interpreted direct requests most accurately, followed by conventional indirect requests and nonconventional indirect requests. Cook and Liddicoat explained that the failure of both proficiency groups to process nonconventional indirect requests was because of their limited cognitive capacity.

In an attempt to uncover the impact of proficiency on accuracy and speed when comprehending implicatures by Japanese learners of English, Taguchi [13] utilized a computerized pragmatic listening task involving indirect refusals and indirect opinions. The results suggested a significant relationship between proficiency and accuracy, but not between proficiency and speed. Taguchi therefore concluded that accuracy and speed seemed to be two different attributes and that accuracy develops more quickly than speed in second language acquisition. In the subsequent study, Taguchi [14] investigated the contribution of proficiency and item type to accuracy and speed in comprehending indirect refusals, conventional indirect opinions, and nonconventional indirect opinions in Japanese as a foreign language between elementary- and intermediate-level students. The participants consisted of English, Chinese, Korean, Spanish, and Thai learners of Japanese. The results indicated a strong effect of proficiency on the accurate comprehension of implied meanings of all types. However, proficiency did not affect the comprehension speed of any types of the implied meanings.

While some studies have examined the impact of proficiency alone, a greater number of studies on L2 learners have investigated the effect of proficiency in conjunction with factors such as learning environment and length of residence. In terms of learning environment, Bardovi-Harlig and Dornyei [15] examined learners’ pragmatic and grammatical awareness in relation to learning environment and proficiency of 16 diverse L1 learners of English. Using a contextualized pragmatic and grammatical judgment task, the results showed that the English as a foreign language (EFL) learners rated the grammatical errors as more severe than the pragmatic errors, but the English as a second language (ESL) learners rated the pragmatic errors as more serious than the grammatical errors. When it comes to proficiency, they found a positive correlation between proficiency and severity
rating. For the EFL group, the high-proficiency learners rated the grammatical errors more severely and the pragmatic errors more moderately than did the low-proficiency learners. For the ESL group, on the other hand, the high-proficiency learners rated the pragmatic errors more severely and the grammatical errors less severely than did the low-proficiency learners. In a replicated study of Bardovi-Harlig and Dornyei [15], Niezgoda and Roever [16] found that, in stark contrast, Czech EFL learners identified a higher number of pragmatic infelicities than did ESL learners, and also that they rated both pragmatic and grammatical violations as more severe than did their ESL counterparts. Furthermore, the high- and low-proficiency learners differed significantly in terms of error identification and error severity rating. Overall, proficiency appeared to have an influence on pragmatic awareness and severity of rating. The learning environment, however, seemed to have little impact on pragmatic awareness. Roever [17] assessed the L2 learners’ competence in speech acts, implicatures, and routines among speakers of 18 language backgrounds by means of a web-based test of ESL pragmalinguistics consisting of multiple-choice questions and discourse completion tests which targeted the learners’ knowledge of implicatures, routines, and speech acts. The ESL and EFL learners’ proficiency levels were classified into four levels: low, mid, high, and advanced. In addition to the L2 learners, 14 native speakers also completed the test. The results showed that the test scores of the native speakers were significantly higher than those of ESL and EFL learners, except for those of advanced learners. This study also found that the learners showed more knowledge of speech acts and implicatures as their proficiency increased. Routines, however, showed a significant relationship with L2 exposure, but not with proficiency.

In addition to learning environment, another factor under investigation in relation to pragmatic comprehension is the length of residence (LOR). Yamanaka [18] examined the extent to which proficiency or length of residence had an effect on the comprehension of implicatures. The participants included 13 native speakers of English and 43 Japanese learners of English of four proficiency levels. While watching various video clips, the participants were required to choose the best interpretation of indirect speech on a multiple-choice test. The results showed that the native speaker group significantly outperformed the learner group. In addition, proficiency appeared to have a stronger effect on the learners’ multiple-choice test performance than did LOR. Xu, Case, and Wang [19] examined the relationships among pragmatic and grammatical competence and LOR and overall L2 proficiency (intermediate vs. advanced levels) among speakers of 20 languages. They collected data with a questionnaire of 20 conversations adapted from Bardovi-Harlig and Dornyei’s [15] study. The results showed that both proficiency and length of residence had significant impacts on the learners’ abilities to recognize pragmatic infelicities and grammatical errors, and that proficiency affected both pragmatics and grammar to a greater extent than did LOR. Taguchi [20] examined the effects of proficiency and study-abroad experience on L2 learners’ ability to comprehend different types of indirect meaning. The participants were 25 native speakers of English and 64 Japanese students of English. A computerized pragmatic listening test (PLT) was administered to examine EFL learners’ ability to comprehend conventional and nonconventional implicatures. Response times were also measured while they were completing this task. The results indicated a significant contribution of proficiency to response times, but the study abroad experiences had no such effects. As for the accuracy of comprehension, the learners who had studied abroad excelled in the comprehension of nonconventional implicatures and routine expressions, but not in indirect refusals.

A few studies have also investigated the impacts of proficiency in combination with motivation, length of residence, intensity of interactions, gender, and multilingualism. Takahashi [21] examined the relationships among proficiency, motivation, and noticing of request strategies among Japanese EFL learners. The participants were given a noticing-the-gap activity to compare the request forms in native speaker–native speaker and native speaker–non-native speaker roleplay transcripts. They were also given an awareness retrospection questionnaire immediately after they completed the activity. The results indicated
that the learners’ noticing of the targeted pragmalinguistic features was closely related to motivation rather than to proficiency. This implies that motivation and proficiency operate independently in learners’ pragmalinguistic awareness and that learners of different proficiency levels may notice the targeted request forms in a similar way. Bardovi-Harlig and Bastos [22] examined the effects of proficiency, length of stay, and intensity of interaction on the recognition and production of conventional expressions, or routines. The participants included 122 ESL learners of 11 language backgrounds from low-intermediate to low-advanced proficiency levels, as well as 49 native speakers of American English. Three tasks were completed by both learners and native speakers in the following order: aural recognition task, audio-visual production task, and a background questionnaire. The results showed that both proficiency and intensity of interaction contributed to the production of conventional expressions; that intensity of interaction had a significant effect on the recognition of conventional expressions; and that length of stay had significant influences on neither recognition nor production of conventional expressions. Finally, Roever, Wang, and Brophy [9] compared German EFL and ESL learners of high and low proficiency. The participants took the web-based test of pragmalinguistics [17], which includes speech act, implicature, and routine sections. Four variables were examined, as follows: proficiency, residence, gender, and multilingualism. The results showed that proficiency had the strongest impact on pragmatic comprehension and production, but multilingualism had no effect on any of the three types of comprehension. Further analysis showed that speech act production was significantly affected by proficiency and gender. Implicature comprehension was affected only by proficiency, and the comprehension of routines was significantly affected by both proficiency and length of residence.

In summary, the aforementioned studies revealed mixed findings when proficiency was examined alone or in association with learning environment, length of residence, motivation, intensity of interactions, gender, and multilingualism in L2 pragmatic comprehension. Another area related to proficiency is its effect on the employment of learner strategies during the completion of a given task. According to Bachman [7], a combination of strategic competence, language competence, and psychophysiological mechanisms constitutes the theoretical framework for communicative language ability (CLA). In Bachman’s view, strategic competence is composed of a set of metacognitive skills used “for implementing, or executing that competence in appropriate, contextualized communicative language use” [7] (p. 84). Although the relationship between proficiency and learner strategies has long received attention in SLA research [3–6], only a handful of studies have been devoted to this line of research in L2 pragmatics, and most of them have focused on production tasks (e.g., [23–25]). Two studies [14,26] on the relationship between proficiency and learner strategies in pragmatic comprehension are reviewed in the following paragraphs.

Taguchi [26] examined the strategies used when low- and high-proficiency Japanese ESL learners engaged in a pragmatic listening comprehension task which investigated the ability to understand the implied meaning of implicatures. The verbal reports identified six inferential strategies used by the learners: paralinguistic cues, adjacency pair (a unit of conversation with an exchange of one functionally related turn by two speakers) [27], background knowledge, key word inferencing, logical reasoning, and speaker intention. The findings revealed that the number of strategies used was positively correlated with level of item difficulty. In other words, for more difficult items, the learners used more inferential strategies. The learners seemed to employ multiple strategies with the more difficult items. For the easier items, however, they may have used a single strategy or none at all because the intended meanings of the implicatures were embedded in a recognizable context. In addition, paralinguistic cues and adjacency pairs were found to be most frequently employed by the learners. With regard to strategy use by learners of different proficiency levels, this study found a statistically significant difference between high- and low-proficiency learners. The high-proficiency learners tended to employ paralinguistic cues, adjacency pair, and speaker intention strategies, while the low-proficiency learners tended to use strategies such as background knowledge and keyword inferencing.
Another study by Taguchi [14] examined the effects of proficiency and types of implied meaning on a Japanese pragmatic listening test. The researcher recruited 63 students of English, Chinese, Korean, Spanish, and Thai speakers who were studying Japanese as a foreign language in the USA. Thirty of them were elementary-level students and 33 were intermediate-level students. The students were required to perform a computerized listening test, which comprised three types of implied meaning (indirect refusals, conventional indirect opinions, and nonconventional indirect opinions) and fillers. To understand their cognitive processes, ten of the students were further selected for introspective verbal reports. The introspective verbal reports revealed that the students employed strategies such as using contextual cues, adjacency pair patterns, and knowledge of linguistic conventions while completing the test. In terms of contextual cues, the students relied on the speaker’s tone, intonation, and hesitation when they did not understand. Extended tones or rising intonation were associated with disagreement by the students. As for adjacency pair patterns, the students could expect a preferred second-pair turn when they heard the first utterance, e.g., a greeting–greeting pair. A disfavored second-pair turn therefore could be associated with negative implied meaning. Finally, the students could rely on knowledge of linguistic conventions such as adverbs to choose a correct answer. The findings further indicated that the intermediate-level students could take advantage of the linguistic conventions more than elementary-level students could.

Overall, while learner strategies are deemed an essential subset of L2 learners’ competence [8,28,29] and are closely associated with L2 proficiency [3], there is a paucity of research on the relationship between proficiency and learner strategies in comprehending L2 pragmatics, so understanding how and why learners comprehend various pragmatic components in different ways is still limited. A study that investigates the influences of learner strategies used by learners of different proficiency levels on pragmatic comprehension is therefore expected to reflect distinct routes employed by learners of different proficiency levels and provide deeper insight into why different proficiency groups have different performances on pragmatic comprehension. Hence, the current study aimed to investigate the following questions:

1. Does L2 proficiency affect learners’ overall pragmatic comprehension, as well as the comprehension of speech acts, implicatures, and routines?
2. Does L2 proficiency affect learner strategies in comprehending speech acts, implicatures, and routines?

3. Method
3.1. Participants

The participants in this study were 74 Chinese learners of English registered in Freshman English at a university of technology in central Taiwan in the summer semester of 2019. In this university, all the non-English majors taking Freshman English are placed into different proficiency classes based on their English scores on the Joint Four- and Two-year Technological and Vocational College Entrance Examination administered by the Testing Center for Technological and Vocational Education. The technological and vocational college entrance examination is a nationwide exam held once every year in May in Taiwan. For the year of 2019, the total number of test-takers was 104,384. This exam assesses general English proficiency with various test question types such as multiple choice (vocabulary, conversation, and reading comprehension), fill-in-the-blanks, and Chinese–English translation. Test-takers were given 100 minutes to complete the examination. Thirty-three students (19 males and 14 females) were selected from a high-proficiency class, and forty-one students (38 males and 3 females) were selected from a low-proficiency class. The mean score of the high-proficiency group was 92.4, which was equivalent to B1 level, while that of the low-proficiency group was 42.6, which was equivalent to A2 level (see Table 1). Although the participants’ proficiency was fairly homogeneous within each group, the variation within the high-proficiency group was larger (SD = 7.92) than the low-proficiency group (SD = 1.48).
Table 1. Entrance examination scores for the high- and low-proficiency groups.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
<th>Max</th>
<th>Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>High proficiency</td>
<td>33</td>
<td>92.4</td>
<td>90</td>
<td>7.92</td>
<td>100</td>
<td>80</td>
</tr>
<tr>
<td>Low proficiency</td>
<td>41</td>
<td>42.6</td>
<td>43</td>
<td>1.48</td>
<td>45</td>
<td>40</td>
</tr>
</tbody>
</table>

3.2. Instrument

The instrument used in this study was an MDCT developed by Roever [17] with a total of 36 items. As the space is limited, the full task can be found on https://reurl.cc/L02E9X (accessed on 6 April 2021). Each item has a situational description as the prompt, followed by four options. One of the items in this MDCT reads as follows:

Ella borrowed a recent copy of TIME Magazine from her friend Sean but she accidentally spilled a cup of coffee all over it. She is returning the magazine to Sean. What would Ella probably say? Make sure your choice fits the situation and Sean’s answer.

Ella:  
(a) Sorry, I want to buy a new copy.  
(b) I have spilled a cup of coffee over your magazine. Do you still want it?  
(c) I ruined your magazine so I’ll replace it.  
(d) Sorry, Sean, I ruined your magazine. I’ll buy you a new copy.

Sean: No, don’t worry about replacing it, I read it already.  
Answer: (d)

The 36 items are evenly divided into sections on speech acts, implicatures, and routines, each of which consists of 12 items. The speech act section consists of four items of apology, four of request, and four of refusal. The dominance and distance variables are kept constant, and the only variable manipulated is the degree of imposition. The dominance refers to an indicator of one interlocutor’s power is over another. Distance refers to the familiarity between interlocutors. Imposition means a face threatening act borne on the hearer. Half of the items are of high imposition, while the other half are of low imposition. All the items have rejoinders.

The second section deals with implicatures. In this section, eight items are related to idiosyncratic implicatures and four to formulaic implicatures. Although both types of implicatures depend on the listener’s ability to draw inferences, the difference between idiosyncratic and formulaic implicatures is that the latter is “more patterned, which makes it easier to decode for listeners who know the pattern but nearly impossible for those who do not” [30] (p. 286). The distribution of idiosyncratic and formulaic implicatures, according to Roever [17], is reasonable in that the ratio (8:4) reflects the more frequent occurrences of idiosyncratic implicatures in real life.

The last section concerns routines, including situational routines, functional routines, and second turns from adjacency pairs. The occurrence of situational routines is bound to a small number of “situational conditions which must be fulfilled for the utterance to be felicitous” [17] (p. 15). To put it another way, the use of situational routines is highly context-sensitive because the factors governing a particular context are limited and invariable. One good example is “Do you have anything to declare?”, which is asked by a customs official when travelers enter a country. Functional routines, on the other hand, are used to manage conversational discourse, thus allowing more flexibility and occurring across a wide range of contextual situations, such as introduction, information, question, and invitation. As for the adjacency pair, the second turn must be functionally dependent on the first turn, as exhibited in a two-part exchange of a conversation (e.g., A: How are you? B: Fine, thank you).

3.3. Data Collection

The MDCT was administered to the learners during their normal class hours. For each section, they were allotted 15 minutes to complete it. However, 12 volunteers, six
from each proficiency group, were asked to complete the task at a different time for the collection of verbal reports because retrospections “provide a viable—perhaps more effective—means of obtaining empirical evidence as to learner strategies than other means have provided” [31] (p. 134). After the learners finished each item, the first author immediately asked him/her the same question: “Why did you choose this answer?” Such an immediate retrospective technique has been employed in L2 pragmatics research [23] to detect the learners’ underlying thoughts in the completion of a pragmatic task.

To ensure the successful collection of verbal reports, the first author provided two training sessions to familiarize the learners with the verbalization process. During the training, they were provided each time with two MDCT items from Liu’s [32] study and were asked to report their cognitive processes when choosing the answer.

In the actual verbal retrospection, the learners were given two minutes to complete each question. In addition, they were given three minutes to report their thoughts and record their mental processes in either Chinese or English on smartphones. The audio files were transcribed verbatim for the analysis of strategy use.

3.4. Data Analysis

The first research question asked, “Does L2 proficiency affect the comprehension of speech act, implicatures, and routines?” To answer this question, the researchers tallied all the accurate responses for each student. Each correct response was awarded one point, whereas each incorrect answer was scored zero. The MDCT data were further analyzed and computed by employing an independent t-test to examine the proficiency effect on the learners’ overall comprehension, as well as their comprehension of speech acts, implicatures and routines, respectively.

The second research question asked, “Does L2 proficiency affect learner strategies in comprehending speech acts, implicatures, and routines?” To uncover the strategies employed, a coding scheme of learner strategies was constructed. The researchers analyzed the transcripts by content analysis [33]. First, we read the transcripts carefully and repeatedly, trying to identify meaningful statements indicating strategy use. Next, we grouped these meaningful statements to formulate thematic categories. Finally, we gave each category a heading, a description and an example. Table 2 lists eight strategies: sociopragmatics, hearer’s response, relevance, keyword/key phrase, life experience/world knowledge, amount of information, intuition, and multiple strategies. One point that should be noted here is that multiple strategies was treated as an independent category and coded when the learners used more than one strategy for a given item.

Table 2. The coding scheme for learner strategies.

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Sociopragmatics</td>
<td>Considering social power, social distance, ranking of imposition or level of directness/politeness between interlocutors in the exchange.</td>
<td>For this question, I think C is the best because it sounds more polite. (L1)</td>
</tr>
<tr>
<td>2 Hearer’s response</td>
<td>Attending to the hearer’s response in the exchange.</td>
<td>For Q5, I chose B because Jack replies “not very long”. In B, Sally asks “Have you been waiting long?” That’s why it’s B. (H6)</td>
</tr>
<tr>
<td>3 Relevance</td>
<td>Judging the relevance of the interlocutor’s utterances in the exchange.</td>
<td>I think A is correct because Brian doesn’t answer Felicity’s question about his raise but shifts to coffee instead. (H4)</td>
</tr>
</tbody>
</table>
Table 2. Cont.

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Keyword/key phrase</td>
<td>Focusing on a particular word/phrase in the exchange.</td>
<td>The answer is A. The word well-typed shows that Tanya doesn’t like Derek’s essay. (H3)</td>
</tr>
<tr>
<td>5 Life experience/world knowledge</td>
<td>Referring to the learner’s life experience or knowledge of the world.</td>
<td>Normally, August is summertime in the northern hemisphere. So, undoubtedly, summer mornings shouldn’t be cold. So C is the answer. (H5)</td>
</tr>
<tr>
<td>6 Amount of information</td>
<td>Attending to sufficiency of the information given by the interlocutors in the exchange.</td>
<td>For Q2, I picked D because besides apologizing to Sean, Ella offers a way of repayment, but other options don’t mention repayment. (H6)</td>
</tr>
<tr>
<td>7 Intuition</td>
<td>Appealing to the learner’s intuitive judgment.</td>
<td>For Q20, I chose D. I can’t say why. I just think D is better. (L7)</td>
</tr>
<tr>
<td>8 Multiple strategies</td>
<td>Using more than one strategy from 1 to 7 for a single item.</td>
<td>For Q2, I chose D. In A, although she has apologized to Jean, she doesn’t provide a remedy (coded as amount of information) . . . C is too direct (coded as sociopragmatics) (H10).</td>
</tr>
</tbody>
</table>

Note: The underline indicates the specific strategy use from the coding.

Based on the coding scheme, we coded 432 verbal reports (12 persons × 36 items) independently. Consensus estimates of inter-rater reliability were calculated by adding up the number of cases which were coded as the same strategies and dividing that number by the total number of cases. The inter-rater reliability was 78%, which was above the cut-off for a satisfactory level of 70% or greater [34]. Then, we resolved the divergences through discussions. After that, Chi-square tests were employed to examine if there were statistically significant relationships between proficiency and learner strategies.

4. Results

4.1. Results for Research Question 1

The first research question asked whether proficiency affected L2 learners’ pragmatic comprehension. Table 3 and Figure 1 compare the MDCT scores between the high- and low-proficiency groups. In between-group comparisons, the high-proficiency group significantly outperformed the low-proficiency group in terms of overall performance, \( t (72) = 10.89, p < 0.05 \), as well as performances in speech acts, \( t (55) = 9, p < 0.05 \); implicatures, \( t (72) = 9.14, p < 0.05 \); and routines, \( t (72) = 4.54, p < 0.05 \). In within-group comparisons, the high-proficiency group performed the best on speech acts (\( M = 8.33, SD = 2.19 \)), followed by implicatures (\( M = 7.64, SD = 2.12 \)), and routines (\( M = 6.94, SD = 1.94 \)). The post-hoc analysis showed that they performed significantly better on speech acts than on routines, \( F (2, 64) = 4.87, p < 0.05 \). No significant differences were found between speech acts and implicatures, \( F (2, 64) = 4.87, p > 0.05 \), nor between implicatures and routines, \( F (2, 64) = 4.87, p > 0.05 \).

Table 3. Comparisons of multiple-choice discourse completion task (MDCT) scores between the high- and low-proficiency groups.

<table>
<thead>
<tr>
<th></th>
<th>High-Proficiency</th>
<th>Low-Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Overall</td>
<td>22.8</td>
<td>4.40</td>
</tr>
<tr>
<td>Speech acts</td>
<td>8.33</td>
<td>2.19</td>
</tr>
<tr>
<td>Implicatures</td>
<td>7.64</td>
<td>2.12</td>
</tr>
<tr>
<td>Routines</td>
<td>6.94</td>
<td>1.94</td>
</tr>
</tbody>
</table>

Note: \( p < 0.05 \).
Conversely, the low-proficiency group performed the best on routines \((M = 4.9, SD = 1.91)\), followed by speech acts \((M = 4.29, SD = 1.52)\) and implicatures \((M = 3.51, 1.76)\). The post-hoc results revealed that they performed significantly better on speech acts than on implicatures, \(F (2, 80) = 8.23, p < 0.05\). Furthermore, the scores on routines were significantly higher than those on implicatures, \(F (2, 80) = 8.23, p < 0.05\). However, no significant difference was found between speech acts and routines, \(F (2, 80) = 8.23, p > 0.05\).

Table 4 displays success rates by item types and proficiency. In terms of speech acts, both high- and low-proficiency learners found requests most challenging. Regarding implicatures, items measuring formulaic implicatures were more difficult than idiosyncratic implicatures for both groups. With respect to routines, functional routines were the most challenging for both high- and low-proficiency learners, followed by situational implicatures and adjacency pairs.

### 4.2. Results for Research Question 2

The second research question asked whether proficiency affected the use of learner strategies. The answer to this question was based on the quantitative and qualitative analyses.

#### 4.2.1. Quantitative Analysis

Table 5 shows the raw frequencies and percentages of the learner strategies used by the high- and low-proficiency groups. For the high-proficiency group, multiple strategies had the highest frequency of occurrence, followed by life experience/world knowledge, relevance, hearer’s response, intuition, sociopragmatics, amount of information, and key word/key phrase. For the low-proficiency group, however, intuition had the highest frequency of occurrence, followed by life experience/world knowledge, multiple strategies, hearer’s response, relevance, sociopragmatics, key word/key phrase, and amount of information.

To investigate whether there was a significant relationship between proficiency and learner strategies, a Chi-square test of independence was performed. The results indicated that the relationship between proficiency and learner strategies was statistically significant, \(x^2 (7, N = 435) = 90.22, p < 0.01\). The coefficient of contingency was 0.414, \(p < 0.05\), suggesting a moderate relationship between these two variables. An examination based on the values of the adjusted standardized residual (values that are above 1.96) in Table 5 revealed that proficiency was particularly associated with the use of intuition, relevance, amount of information, life experience/world knowledge, and multiple strategies. The high-proficiency learners tended to use life experience/world knowledge, amount of information, relevance, and multiple strategies significantly more often than did the low-proficiency learners.
proficiency learners. Conversely, the low-proficiency learners tended to use intuition significantly more frequently than did the high-proficiency learners. Such a finding also revealed that the high-proficiency group seemed to vary their strategy use to a greater extent than did the low-proficiency group.

Table 4. Success rates by item types and proficiency.

<table>
<thead>
<tr>
<th></th>
<th>High Proficiency</th>
<th>Low Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Speech acts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apology</td>
<td>78.2% (97/124)</td>
<td>42.6% (70/164)</td>
</tr>
<tr>
<td>Request</td>
<td>51.6% (67/124)</td>
<td>26.2% (43/164)</td>
</tr>
<tr>
<td>Refusal</td>
<td>89.5% (111/124)</td>
<td>39.6% (65/164)</td>
</tr>
<tr>
<td><strong>Implicatures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Idiosyncratic</td>
<td>68.9% (182/264)</td>
<td>34.1% (112/328)</td>
</tr>
<tr>
<td>Formulaic</td>
<td>52.2% (69/132)</td>
<td>20.7% (34/164)</td>
</tr>
<tr>
<td><strong>Routines</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Situational</td>
<td>58.5% (116/198)</td>
<td>39.8% (98/246)</td>
</tr>
<tr>
<td>Functional</td>
<td>38.6% (51/132)</td>
<td>36.5% (60/164)</td>
</tr>
<tr>
<td>Adjacency pairs</td>
<td>59% (39/66)</td>
<td>51.2% (42/82)</td>
</tr>
</tbody>
</table>

Table 5. Distribution of the learner strategies used by high- and low-proficiency groups.

<table>
<thead>
<tr>
<th></th>
<th>SP</th>
<th>INT</th>
<th>HR</th>
<th>REL</th>
<th>KWD</th>
<th>AoI</th>
<th>LW</th>
<th>MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>freq</td>
<td>10</td>
<td>13</td>
<td>19</td>
<td>32</td>
<td>7</td>
<td>63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p.c.</td>
<td>(50%)</td>
<td>(12.4%)</td>
<td>(47.5%)</td>
<td>(66.7%)</td>
<td>(87.5%)</td>
<td>(58.9%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>freq</td>
<td>10</td>
<td>92</td>
<td>21</td>
<td>16</td>
<td>2</td>
<td>1</td>
<td>44</td>
<td>30</td>
</tr>
<tr>
<td>p.c.</td>
<td>(50%)</td>
<td>(87.6%)</td>
<td>(52.5%)</td>
<td>(33.3%)</td>
<td>(40.0%)</td>
<td>(12.5%)</td>
<td>(41.1%)</td>
<td>(30.3%)</td>
</tr>
<tr>
<td>a.s.r.</td>
<td>0.0</td>
<td>8.9</td>
<td>0.4</td>
<td>2.4</td>
<td>0.4</td>
<td>2.1</td>
<td>2.0</td>
<td>4.7</td>
</tr>
</tbody>
</table>

Note: SP = sociopragmatics, INT = intuition, HR = hearer response, REL = relevance, KWD = keyword/key phrase, AoI = amount of information, LW = life experience/world knowledge, MS = multiple strategies, a.s.r. = adjusted standardized residual.

4.2.2. Qualitative Analysis

While the quantitative analysis examined whether the high- and low-proficiency learners differed significantly in the numbers of the strategies used, the qualitative analysis revealed how a specific strategy was employed by both learner groups. Here we selected intuition, relevance, life experience/world knowledge, and multiple strategies because they presented the most interesting findings.

The strategy of intuition was used when the learners decided on the answer immediately, without any justifications. The high-proficiency learners used this strategy only for implicatures and routines. However, this strategy was observed across all the task items for the low-proficiency group, probably because they did not quite understand the prompts and options. One thing worth noting is that regardless of proficiency, there was a high tendency for the learners to choose a wrong answer if they used this strategy. For the high-proficiency learners, the success rate of using this strategy was 42% (5 out of 12), while for the low-proficiency learners, it was 35% (32 out of 92). Such a finding suggests that comprehension without scrutinizing contextual clues could easily lead to wrong answers in a pragmatic task, as shown in Example (1).

(1) I chose D for Q20. I just thought that D is the best. (L1)

The strategy of relevance was coded when the learners were deciding the answer by judging if the interlocutors’ utterances were relevant to each other. This strategy worked successfully for the high-proficiency learners on the implicature items, particularly the POPE Q questions. The POPE Q implicature is formulaic, in that an interlocutor answers a
yes–no question by asking another (e.g., “Is the Pope Catholic?” or “Does the sun rise in the east?”) [35]. Example 2 shows how a high-proficiency learner recognized the relevance of the two questions and chose the correct answer:

(2) I chose D for Q18. Maria asked if the professor would give them a lower grade for the late submission. Frank asked: “Do fish swim?” Of course fish can swim, so this means they will get lower grade. (H2)

In (2), H2 successfully identified the structural and functional relationships between the two questions, so the answer he chose was accurate. In fact, the high-proficiency learners using this relevance strategy indicated a very high rate of success (80.7%, 25 out of 31). On the contrary, the low-proficiency learners using this strategy showed a comparatively lower success rate (58.4%, 7 out of 12). Example 3 reveals how a low-proficiency learner, despite considering the relevance of the interlocutor utterances, merely perceived the literal meaning of the exchange and failed to recognize the semantic and discoursal connections of the two questions in Pope Q implicatures, thus leading to an incorrect choice.

(3) I chose C for Q24. Mike asked an important question: “Is the Pope Catholic?” So this apartment is only leased to those who believe in Catholics. (L12)

In (3), Mike is searching for an apartment in New York and tells Jane about a place he has looked at. Jane asks if the rent is high, and Mike replies, “Is the Pope Catholic?” L12 merely associated the price of rental with the religion of the tenants rather than a purposeful utterance that responded in the affirmative to Jane’s question.

The next strategy was life experience/world knowledge. The high-proficiency learners used this strategy exclusively for implicature and routine items. While failure was found when this strategy was used on routine items, the success of using this strategy for implicatures relied on whether the contextual clues mirrored the learners’ personal experiences and knowledge of the world. If the clues were tangible, the learners were able to form correct hypotheses about the speaker’s intention, as shown in Example (4).

(4) I chose C for Q19. Normally speaking, August is summer in the northern hemisphere. Summer mornings aren’t cold. There’s no doubt about that. (H10)

In (4), Jenny and Darren are college students in Southern California. Jenny asks Darren if the weather is cold, and Darren responds by saying: “Jenny, it’s August.” H10 realized that Southern California should be very warm in August since it is located in the northern hemisphere, so she chose C, “It’s warm like usual in August”, based on her knowledge of geography and natural phenomena. However, although the success rate of using this strategy for the high-proficiency learners was 71.2% (42 out of 59), failure could also occur when the contextual clues for deriving the correct implicatures were less transparent, as indicated in Example (5).

(5) I chose A for Q20. Carrie thinks she’s getting older. She probably guessed that she’s given the wrong change many times, so now the customers start to count their money. (H3)

In (5), Carrie thinks she is getting old and ugly because the men are starting to count their change. H3 only made a reasonable assumption by associating aging with negligence. However, he did not consider the connection between “getting ugly” and “counting change”. It seems that considering aging and ugliness simultaneously was difficult for the learners when choosing the correct answer (cf. [17]).

For the low-proficiency learners, the use of this strategy was observed not only in implicatures and routines but also in speech acts. However, the success rate was only 32.6% (14 out of 43). In terms of implicatures, the learners tended to focus on the literal meaning of a particular utterance and failed to examine the relevance of the entire discourse, as shown in Example (6).

(6) I chose C for Q16. I think Brian cares about the coffee. He must be a man of taste. (L8)

In (6), Felicity asks Brian about his raise, but Brian responds by saying that the coffee is awfully weak. It is apparent that this exchange violates Grice’s Maxim of Relevance, which expects that a person’s contribution to the conversation is relevant to the context in
which it is uttered. L8 was unable to read between the lines and resorted to the quality of coffee, thinking that Brian was complaining about the coffee.

Finally, multiple strategies was coded when the learners used more than one strategy for a single item. For both learner groups, the use of this strategy worked well for the speech act items. The success rates were 83% (40 out of 48) for the high-proficiency group and 86% (6 out of 7) for the low-proficiency group. A closer look at the employment of multiple strategies showed that sociopragmatic knowledge, amount of information, and hearer’s response were the top three strategies used in combination for choosing the right answers. Example (7) shows how a high-proficiency learner used these strategies to make a judgment on a single item.

(7) I chose B for Q3. In B, Steven tells Vivian why he cannot lend the book to her tomorrow. Steven provides the reason in B, and he says “Sorry”, which makes him sound more polite than the other options. D can’t be the answer. In D, Steven says: “Sure, here you are.” But Vivian’s response in the last sentence is “Hmm, how about if I make the photocopies right now?” This exchange doesn’t make any sense. (H6)

In (7), Vivian wants to borrow an accounting book from Steven until the next day so that she can copy a few pages, but Steven refuses her request. H6 considered B to be the correct answer because Steven provides an adequate reason by saying that he has to use the book himself. Furthermore, the use of an illocutionary force indicating device (IFID) increases the politeness of Steven’s refusal. In this case, we can clearly see that H6 used the strategies of amount of information and sociopragmatics to judge the appropriateness of option B. H6 also used the hearer’s response strategy to determine that choice D would make this exchange nonsensical because this option did not correspond to Vivian’s last remarks.

5. Discussion

Unlike previous studies merely focusing on a single pragmatic component at a time, the present study has elucidated the comprehension of speech acts, implicatures, and routines at high- and low proficiency levels in a comprehensive way. Furthermore, the current study captures the developmental order of pragmatic components. It appears that L2 learners tended to acquire routines first, followed by speech acts and implicatures. Finally, specific subtypes within pragmatic components posed similar level of difficulty regardless of proficiency. Such findings may be explained in terms of the attributes of these pragmatic components.

To answer the speech act items, the learners needed to understand the situational prompts and to evaluate the interlocutors’ power-distance relationships and degrees of imposition to successfully choose the most appropriate response that fit the situations and hearers’ responses. Advanced proficiency is therefore advantageous for speech act comprehension because learners need to use both the pragmalinguistic and sociopragmatic resources available to them at the same time to make the best choice. Requests were the most difficult type for both proficiency learners. This may be because requests are more complex than apologies and refusals as they involve diverse and specific syntactic structures (e.g., conditional structures, tense, aspect), request strategies (e.g., implicit, explicit), and lexical choices (e.g., downtoners, hedges) corresponding to various contextual factors.

Compared to speech acts, implicatures have less to do with sociopragmatics and have a stronger association with the language part of pragmatics because they are seen as “textbook cases of pragmalinguistic items” [36] (p. 139). Learners of higher proficiency are expected to have a greater likelihood than those of lower proficiency to decode the literal meaning of an utterance and to derive its implied meaning by recognizing the flouting of a Gricean maxim. Formulaic implicatures were the most difficult type. A possible explanation of the current results is that formulaic implicatures are nearly recognizable for speakers who can identify the patterns. In other words, the learners cannot rely on contextual clues only. Instead, learners need to be familiarized with the conventional patterns to fully comprehend [17].
However, the present research found that the influence of proficiency on routines is less salient. Routines are characterized as context-dependent and L2-specific expressions which require a great deal of exposure to the target culture to be skillful in [20,22,37]. Given these characteristics, high proficiency learners without target culture exposure have been found to be stagnant in the comprehension of routines in EFL settings even after years of instruction [37]. As a result, high proficiency does not always guarantee superior comprehension of routines because learners may still struggle with the subtle differences between similar expressions such as “nice to meet you” and “nice to see you” [38,39]. Conversely, low-proficiency learners seem to have an advantage in correctly recognizing short and easily-remembered expressions such as “You too” or “Do you have a minute?” to a certain extent [38]. This may explain why routines had the lowest scores in the high-proficiency group but the highest in the low-proficiency group. Among the routine types, functional routines were the hardest because they can be applied to a greater variety of situations and this presumably increases more difficulty to remember [17]. On the other hand, situational routines are restricted to specific situations with unvaried contextual factors. Adjacency pairs prevail in daily conversations so they were the easiest type of routines.

In terms of the relationship between proficiency and learner strategies, the findings showed that high- and low-proficiency learners employed different learner strategies to tackle the comprehension of speech acts, implicatures, and routines. For speech acts, the high-proficiency learners employed more multiple strategies for speech acts than the low-proficiency learners did. The employment of multiple strategies means the high-proficiency learners took advantage of the composite use of sociopragmatic knowledge, amount of information, and hearer’s response when answering each question. Conversely, the low-proficiency learners primarily used a single strategy, such as intuition, hearer’s response, or life experience/world knowledge, for each question. As illuminated by the conversation analysis, cooperative principles, and extensive research [17,40–42], the core of speech acts concerns how context (e.g., distance, power, imposition) constrains the illocutionary force and meaning of an utterance and what linguistic forms and intended messages are associated with the contextual constraints in a variety of situations between turns of a conversation. This indicates that when comprehending speech acts, interlocutors need to consider multiple aspects simultaneously. In this study, the use of sociopragmatic knowledge aids the high-proficiency learners to identify the relationship between the context and the nuances in linguistic expressions. The use of amount of information helped these learners to judge whether a speech act provided sufficient information that was appropriate to a given situation. The employment of hearer’s response helped learners identify the component that could complete the turn in a sequence and select the most relevant information [43]. Given the nature of speech acts, it is understandable that the high-proficiency learners employed multiple strategies and obtained higher scores in this section, whereas the use of single strategies by the low-proficiency learners led to failure to a greater extent.

As for implicatures, the high-proficiency learners utilized relevance and life experience/world knowledge more frequently than the low-proficiency learners, who preferred to use intuition. The comprehension of implicatures depends on the inference of a speaker’s utterance and behavior, along with contextual information [44,45], particularly when the presumption or the principles of communication are violated [42]. In this study, the use of relevance helped the high-proficiency learners identify the violation of communicative principles on a textual basis, and such awareness assisted them to derive implicatures from the course of searching for any types of information based on life experience/world knowledge in the potential contexts available to them. The Pope Q questions are a good example. When A asks B whether their professor will lower their grade for the late submission, B’s utterance “Do fish swim?” can evoke pertinent information in the learners’ minds. Based on their past experiences or knowledge of the world, fish do swim, which implies that the professor will lower A and B’s grades because they did not hand in the assignment on
time. Overall, the frequent employment of relevance and life experience/world knowledge could explain why the high-proficiency learners were more likely to perform better on implicatures. On the other hand, the low-proficiency learners relied more on intuition, suggesting that they did not identify the violation of the communicative principle. The lack of awareness limited their chances to induce relatable world knowledge or experience that could possibly help them better understand the situation.

With regard to the routines, although both proficiency groups employed life experience/world knowledge, multiple strategies, and intuition, the use of these strategies did not guarantee accurate comprehension. Routines are defined as a sequence of highly conventionalized prefabricated utterances associated with standard situations, which are stored and learned in the memory as unanalyzed wholes rather than using grammatical knowledge to analyze and generate the patterns [46–48]. For L2 learners to master the knowledge of routines, they need to process routines as chunks or macrolexemes [17,20], retrieve such knowledge from their long-term memory, and map the form and function in a given situation. Namely, to choose correct responses to formulaic and fixed expressions in specific situations, learners in effect need not make further inferences; they need only memorize them [17]. Hence, this explains why the use of these strategies was less effective for the prepatterned expressions.

6. Pedagogical Implications and Conclusions

The contributions of the present study are twofold. First, although proficiency has been extensively investigated in L2 pragmatics, most research has focused on its impact on single pragmatic components—speech acts, implicatures, or routines. However, the present study delineated a more comprehensive picture of the influence of proficiency by examining these three components simultaneously. The other contribution is the examination of the employment of learner strategies in association with proficiency. Although learner strategies have been widely investigated in SLA studies, they have been under-researched in L2 pragmatics. In this study, a close relationship has been identified between proficiency and learner strategies, which in turn would affect pragmatic comprehension. The high-proficiency learners demonstrated more flexibility in using various strategies to increase accuracy, while the low-proficiency learners were found to be restricted in their strategy use. Furthermore, the usefulness of learner strategies varies. The use of learner strategies may be beneficial to the comprehension of speech acts and implicatures, but not to routines.

The findings of the present study shed light on pedagogy. First, teachers can arrange a pragmatic curriculum in the order of routines, speech acts, and implicatures. This is because routines are short, conventionalized expressions which require the least proficiency to acquire. Speech acts can be taught later as they entail multiple and specific sociopragmatic and pragmalinguistic knowledge to master. Implicatures can be taught last, for they place higher demands on linguistic competence to decode the literal meanings and generate inferences. For speech acts, teachers may allocate more time on requests since they are the most challenging for learners of both proficiency. In addition, a teacher can direct students’ attention to sociopragmatic knowledge, amount of information, and hearer’s response via authentic audiovisual vignettes [49]. With regard to implicatures, teachers should spend more time on formulaic implicatures than idiosyncratic ones because the former are more patterned, thus amenable to instruction [35]. Teachers can provide examples to raise the learner’s awareness by comparing examples taken from English and their own languages. Finally, teachers can utilize video clips from naturally occurring interactions. More efforts should be devoted to functional routines through contextualized input and guided metapragmatic noticing [30] so that learners can memorize the form–function relationship and realize they can be applied to diverse situations.

Author Contributions: Conceptualization, H.-Y.T. and Y.-S.C.; Data curation, H.-Y.T. and Y.-S.C.; Formal analysis, H.-Y.T. and Y.-S.C.; Funding acquisition, Y.-S.C.; Methodology, H.-Y.T. and Y.-S.C.; Writing—original draft, H.-Y.T. and Y.-S.C.; Writing—review & editing, H.-Y.T. and Y.-S.C. All authors have read and agreed to the published version of the manuscript.
Funding: Ministry of Science and Technology, Taiwan: 108-2410-H-167-005.

Institutional Review Board Statement: The study was conducted according to the guidelines of the Declaration of Helsinki, and approved by the Ethics Committee of National Changhua University of Education (protocol code NCUEREC-108-054 and 2019/09/20).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Conflicts of Interest: The authors declare no conflict of interest.

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