Teacher Language Awareness Revisited: An Exploratory Study of the Level and Nature of Language Awareness of Prospective Iranian English Teachers

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Abstract
A teacher's language awareness (TLA) is generally believed to exert a tremendous influence on language instruction. However, reviewing literature revealed that it has not received due attention in teacher training centers in Iran. Therefore, this paper reports on an investigation into the metalinguistic awareness of prospective teachers at Teacher Education Universities of Iran training to be junior and senior high school English teachers. The study focuses on the test performance of these prospective teachers as an indication of their explicit knowledge base and also the relationship between the metalinguistic knowledge and their error identification capability. To that end, a metalinguistic knowledge test (MKT) and a grammaticality judgment test (GJT) were administered to 207 student teachers to canvass the nature and extent of their repertoire of explicit knowledge about language and of grammatical terminologies as part of their TLA. The results revealed a moderate level of metalinguistic knowledge and a significant relationship between metalinguistic knowledge and error identification ability. Moreover, the findings of the study shed light on the prominence of metalinguistic knowledge as a means of improving teachers' linguistic proficiency, detected the lacunae in student teachers' knowledge about language and signaled the need for improvement in prospective teachers' metalinguistic knowledge.

Keywords: Teacher Language Awareness, Metalinguistic Knowledge, Knowledge about Language, Prospective English Teachers

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1. Introduction

Since the beginning of the 1980s, language awareness has received substantial attention in language pedagogy. There has been a wealth of debate on language awareness both regarding the language growth of learners and, to a lesser degree, concerning the examination and scrutiny of language by teachers of language (see, e.g., Carter, 1994; Donmall, 1985; Fairclough, 1992; Hawkins, 1984; James & Garrett, 1991; McCarthy & Carter, 1994; Roehr & Gáñem-Gutiérrez, 2013; Svalberg, 2016; Tarone, 2009; Tellier & Roehr, 2013; van Lier, 1995, 1996). Van Lier (2001) pointed out that "two particular areas that should gain in strength are concerted and integrative approaches to language awareness across the curriculum and a strong push for language awareness in teacher education" (p. 164). The purported language awareness development enveloping both local and second-/foreign-language teaching, has endeavored to discover ways of boosting the language awareness of both learners and of their teachers (Andrews, 2007).

The underpinning thought behind the particular centralization of the language awareness development on the language awareness of learners is that learners who are capable of analyzing and depicting language correctly are likely to be more effectual users of the language (e.g., Banks, Leach, & Moon, 1999; Harmer, 2003; Kerr, 1998; Roehr, 2012; Zhang & Li, 2016). A direct relationship is presumed between explicit knowledge of formal properties of language and performance in using the language. With regard to the teachers, the assumption is that the teachers’ knowledge of the language they teach and their ability in analyzing it will conduce directly to teaching effectiveness. This is the viewpoint espoused for instance, by Edge (1988) who argues that "knowledge about language and language learning still has a central role to play in English language teacher training for speakers of other languages" (p. 9). The language awareness development activities in studies
carried out by Bolitho and Tomlinson (1980, 1995), Thornbury (1997) and Wright (1994) demonstrated such an assumption. Likewise, Elder (1994, 2001), investigating the concept of teacher language proficiency for assessment purposes, suggests that language teachers need to (a) possess sufficient proficiency in the target language (TL) to afford ample and well-formed patterns for their learners, (b) adjust their input to make it more comprehensible to learners, and, (c) possess adequate metalinguistic knowledge both to offer explanations of grammatical structures and to respond to learner errors.

Andrews (1997, 2003) emphasizing the interrelationship between language awareness and proficiency, asserted that TLA, a professional characteristic which is regarded as one of six principal themes that presently inform the language teacher education agenda (Borg, 2011), encompasses both their subject matter knowledge (knowledge about language) and language proficiency (their knowledge of language). Specific to TLA is a metacognitive facet, drawing from both kinds of knowledge, which enables the teacher to design learning activities, modify and mediate input from other sources, and respond to learners' production and questions in the context of such activities. The language awareness of the L2 teacher also embraces an awareness of language from the learners' perspective, including awareness of the learners' interlanguage development and the degree to which the language content in the materials and lessons presents difficulties for students (Andrews, 1997, 1999a, 1999b). As Wright (2002) succinctly puts it, "a linguistically aware teacher not only understands how language works, but understands the student's struggle with language and is sensitive to errors and other interlanguage features" (p. 115). Additionally, Andrews (1999b, 2001, 2007) asserted that TLA has a great deal of influence on the quality of the input, that is, "language contained in materials, language produced by other
Explicit knowledge about language is apparently a crucial component of any L2 teacher's language awareness, defined by Mitchell, Hooper and Brumfit (1994) as "a new title for an old concern: that pupils learning languages in formal settings should acquire some explicit understandings and knowledge of the nature of language, alongside the development of practical language skills" (p. 2). On the other hand, Ellis (2004) defines explicit knowledge as the declarative knowledge of the phonological, lexical, grammatical, pragmatic, and sociocritical characteristics of an L2 alongside the metalanguage for labeling this knowledge. Likewise, as Alderson, Clapham, and Steel (1997) argue "it would appear that whatever explicit knowledge consists of, it must include metalanguage, and this metalanguage must include words for grammatical categories and functions" (p. 97). Studies carried out in the 1980s and 1990s revealed that learners undertaking teacher education programmes were mostly from a 'post traditional grammar' period and, as a result of this, had a less than confident mastery of knowledge about language and possessed meager language awareness (Chandler, Robinson, & Noyes, 1988; Williamson & Hardman, 1995; Wray, 1993). In a similar vein, the literature on TLA suggests that not all teachers possess sufficient metalinguistic knowledge to explain grammatical rules or to utilize the efficiency of varied options within form-focused instruction approaches (Andrews, 1999a, 2003; Bolitho, 1988; Ellis, 2008; Mitchell, 2000; Wright, 1991; Wright & Bolitho, 1997). Andrews (1994, 2003) and Bolitho (1988) note a perceptible insufficient grammatical knowledge or awareness among teacher trainees in the English speaking West. Bolitho (1988), for instance, asserted, "More and more initial trainees are arriving on courses without even a basic working knowledge of the systems of their own language and are
uncomfortably surprised to find, in early classroom encounters, that some adult learners, after years of formal language study at school, know more about grammar than they do!" (p. 74).

The assumption that learning the explicit rules of TL grammar will lead to the ability to present acceptable TL explanations to L2 learners would seem highly arguable given that in foreign language (FL) teaching contexts grammar is taught to L2 learners in their native language rather than through the medium of the TL (Duff & Polio, 1990; Kim & Elder, 2005; Polio & Duff, 1994). Also, worth mentioning are the findings of previous investigations evaluating learners' levels of metalinguistic knowledge (Alderson, Clapham, & Steel, 1997; Elder & Manwaring, 2004; Elder, Warren, Hajek, Manwaring, & Davies, 1999; Green & Hecht, 1992; Renou, 2000). The limited ability of many advanced undergraduate learners of the foreign language to verbalize grammatical rules in the TL is probably attributed to such factors as conceptual uncertainty about the language functions, restricted language proficiency, insufficient implicit and explicit knowledge of TL, inadequate metalanguage knowledge, or even a combination of these factors. Whatever the leading cause, given its paramount importance for university language departments in training qualified teachers, teachers' levels of language awareness should be considered as an essential prerequisite for their requirement. The repercussions of recruiting underqualified language teachers often include a dearth of lucidity on what being a language teacher actually involves and brings about negative language learning upshots, such as lack of class participation, fewer meaningful peer and teacher interactions, fewer opportunities for language development, and low scores on measures of academic accomplishment (Harper & de Jong, 2009).
A large number of studies have been conducted, with their foci mainly at the macro-level, for instance, Wright and Bolitho’s (1993) paper on the need of language awareness in language teacher education and the effectiveness of a number of pertinent activities, and Borg’s (2001) cognitive discussion about language awareness. Despite a large body of research characterizing how language awareness affects teacher behavior (e.g., Andrews, 2003, 2006, 2007; Berry, 2004, 2014; Bloor, 1986; Borg, 2011; Myhill & Jones, 2007; Myhill, Jones, Lines, & Watson, 2012; Robertson, Keating, & Cooper, 1998; Svalberg, 2007, 2012), further research is required to delve into the nature and dimensions of TLA over different EFL/ESL contexts. Consequently, given the significance of TLA as an essential component of teacher professionalism (Shulman, 1999) as well as a subcomponent of the second language (L2) teachers' pedagogical content knowledge (Andrews, 2001, 2003), this study explored the Iranian prospective English teachers' metalinguistic awareness and their understandings of explicit knowledge about language. Thus, the following research questions were formulated to examine the issues at hand:

1. What level of metalinguistic awareness in terms of explicit knowledge of grammar and grammatical terminology do Iranian prospective EFL teachers possess?
2. What metalinguistic rules/terms are troublesome for prospective English language teachers?
3. What is the relationship between prospective English language teachers' metalinguistic knowledge and their ability to identify error?

2. Method
2.1 Participants
The participants were 207 students (91 male & 116 female) selected from among an original pool of 311 male and female undergraduate trainee teachers majoring in teaching English as a foreign language (TEFL) at Teacher Education Universities of Iran in 2016. To pick up such a sample, the Michigan Examination for the Certificate of Proficiency in English
(ECPE) test (2010) was administered among the original population. After scoring the test papers, through their performance on the ECPE, 207 students whose scores fell between one standard deviation above and one standard deviation below the mean were selected as the participants. This strategy helped us to have a homogenized group of participants. These students were all high school-leavers beginning a four-year full time undergraduate course in English language teaching, ranging in age from 18 to 25.

2.2 Instrumentation

2.2.1 Metalinguistic Knowledge Test (MKT)
The MKT is an adaptation of a test of metalanguage devised by Alderson, Clapham, and Steel (1997) which itself drew heavily upon an earlier test designed by Bloor (see Bloor, 1986). The test was comprised of four sections, each focusing on a different facet of explicit knowledge of grammar and grammatical terminology. Section 1 measured participants’ ability to recognize metalanguage. This section of the test was made up of two tasks with a total of 18 items. The first task provided the participants with a sentence and 14 different grammatical categories (for instance, countable nouns, prepositions, and finite verbs) which they were supposed to select one example of each grammatical item from the sentence. The second task in this section comprised four items, each consisting of a sentence and a grammatical function (for example, direct object). Participants were expected to underline the word(s) in the sentence which performed a particular function. Section 2 focused on the participants' ability to produce appropriate metalinguistic terms. This section included a single task with twelve items; each item consisting of a sentence in which a word or phrase was underlined. In this part, the participants were asked to provide a grammatical term which would precisely described each of the underlined words/phrases. In turn, sections 3 and 4 presented the participants with 17 ungrammatical sentences,
each containing a typical learner error in relation to a specific language structure. In section 3, they were asked to identify and correct errors while in section 4 they were supposed to explain the grammatical rule thought to be violated for the identified error. For the purposes of administration, the content of the MKT was organized into two parts. Part 1 comprised Sections 1 and 2, while Part 2 consisted of Sections 3 and 4. Ten minutes were allocated to each part of the test. After ten minutes, participants were required to move on to Part 2, whether or not they have finished Part 1.

2.2.2 Grammaticality Judgment Test (GJT)

The GJT taken from Ellis (2006) comprised 68 sentences, evenly divided between grammatical and ungrammatical. There were four sentences to be judged for each of 17 grammatical structures that were targeted in sections 3 and 4 of MKT. The participants were required to indicate whether each sentence was grammatical or ungrammatical. Ellis asserts that GJT is an untimed test which primarily measures explicit knowledge; therefore, the participants undertook the test with no time limit.

2.3 Test Administration and Scoring Procedures

After determining the homogeneity of the participants, they sat the MKT and the GJT tests in one session under careful supervision and without the opportunity to consult reference materials or each other.

The MKT was scored using the mark-scheme devised by Alderson et al. (1997). In section 1, participants were given 2 marks for correct answers and zero marks for wrong or unanswered items. The maximum possible score for this part was 36. In section 2, participants were given 2 marks for fully correct answers, 1 mark for partially correct answers and zero marks for wrong or unanswered items. The maximum score possible in this part was 24. In section 3, participants were awarded 1 mark for correct answers and zero mark for wrong or unanswered items. The maximum possible score for this part was 17. Two criteria were applied to score the responses to section 4 of
the MKT. The first criterion concerned the formulation of a rule to account for the identified error (rule formulation score). For each item, criteria were set that would determine whether a given explanation was an adequate formulation of the appropriate rule or not. It is important to note that the criteria for adequate formulation of a rule did not require the use of metalinguistic terminology, but simply the ability to express the concept/s considered to be central in each case. In other words, we tried to avoid, in so far as possible, any confusion between what was tested (knowledge of language) and the means utilized to articulate this knowledge (metalinguage) (Berry, 2005). To determine the criteria for each item, the judgments of two applied linguists together with consulting pertinent instructional or descriptive grammar books were exploited. The participants scored one mark for a properly formulated rule and a maximum of 17 for this part of the test. The second criterion was related to the participants' scores for their use of metalinguistic terminology (metalinguage score). As the test rubric did not require the students to use metalinguage, the two examples offered before embarking on the test oriented them to use metalinguistic terminology which was really difficult to avoid in some cases. For each item, a list of acceptable metalinguistic terms was generated. The participants had to use only one of the specified terms to score one mark for each item in this category, as the maximum possible score in this section was 17.

The GJT items were scored dichotomously as either correct (1 point) or incorrect (0 point), with items left unanswered scored as incorrect. Separate scores for the grammatical and ungrammatical sentences were calculated, as the maximum score for this test was 68.

2.4 Tests Reliability and Validity

The reliability of the MKT and the GJT was calculated using Cronbach Alpha. The alpha for the MKT and the GJT were .78 and .84 respectively. In the case of the rule formulation section of the MKT, inter rater reliability for the scores given by the two raters was also established, yielding $r = .89$. 
Douglas (2001) stresses the importance of showing that the instruments used actually measure what one intended them to measure. Hence, the construct validity of these two tests had already been verified by Ellis (2005) and Ellis and Loewen (2007) using exploratory and confirmatory factor analyses.

3. Results

Table 1 displays the descriptive statistics for the participants' performance on the four sections of the MKT. As shown in this Table, the mean score for the overall test is 48.49 %, revealing a moderate level of metalinguistic awareness. The table also shows that the participants’ mean scores on the four components from highest to lowest were respectively error correction, metalanguage recognition, metalanguage production and rule formulation as well as metalanguage use measure.

Table 1

<table>
<thead>
<tr>
<th>Descriptive Statistics of the MKT</th>
<th>N</th>
<th>Range</th>
<th>Percentage Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1 (Metalanguage recognition)</td>
<td>207</td>
<td>24.00</td>
<td>56.19</td>
<td>4.95</td>
</tr>
<tr>
<td>Section 2 (metalanguage production)</td>
<td>207</td>
<td>16.00</td>
<td>40.41</td>
<td>4.41</td>
</tr>
<tr>
<td>Section 3 (error correction)</td>
<td>207</td>
<td>7.00</td>
<td>79.41</td>
<td>2.11</td>
</tr>
<tr>
<td>Section 4 (rule formulation)</td>
<td>207</td>
<td>15.00</td>
<td>35.05</td>
<td>5.22</td>
</tr>
<tr>
<td>Section 4 (metalanguage use)</td>
<td>207</td>
<td>13.00</td>
<td>26.23</td>
<td>4.39</td>
</tr>
<tr>
<td>Section 4 (total)</td>
<td>207</td>
<td>27.00</td>
<td>30.58</td>
<td>9.47</td>
</tr>
<tr>
<td>MKT (total)</td>
<td>207</td>
<td>59.00</td>
<td>48.49</td>
<td>16.19</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>207</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The sequence of increasing difficulty along with the percentage correct of rule formulation scores for each of the 17 items of part 2 in the MKT are provided in Table 2. It also shows the percentage of incorrect responses for each item due to the weak rule formulation and the percentage of nonprovision of response. Third person 's', possessive 's', plural 's', and
modal verbs were the structures for which the respondents did best in terms of expressing an acceptable rule, whereas the structures that were most problematic for them from most to least difficult were ergatives, dative alternation and unreal conditional.

Table 2
Percentage Correct, Percentage Incorrect and Percentage Unanswered for Rule Formulation Scores, Section 4 of MKT

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>percentage correct</th>
<th>percentage incorrect</th>
<th>percentage unanswered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third person 's'</td>
<td>66.42</td>
<td>23.85</td>
<td>9.73</td>
</tr>
<tr>
<td>Possessive 's'</td>
<td>61.34</td>
<td>21.47</td>
<td>17.19</td>
</tr>
<tr>
<td>Plural 's'</td>
<td>61.30</td>
<td>23.11</td>
<td>15.59</td>
</tr>
<tr>
<td>Modal verbs</td>
<td>58.76</td>
<td>25.49</td>
<td>15.75</td>
</tr>
<tr>
<td>Regular past tense</td>
<td>51.65</td>
<td>28.74</td>
<td>19.61</td>
</tr>
<tr>
<td>Comparatives</td>
<td>51.54</td>
<td>28.49</td>
<td>19.97</td>
</tr>
<tr>
<td>Question tags</td>
<td>48.61</td>
<td>31.52</td>
<td>19.87</td>
</tr>
<tr>
<td>Indefinite article</td>
<td>45.59</td>
<td>24.42</td>
<td>29.99</td>
</tr>
<tr>
<td>Yes/no questions</td>
<td>42.53</td>
<td>29.49</td>
<td>27.98</td>
</tr>
<tr>
<td>Verb complements</td>
<td>41.68</td>
<td>31.58</td>
<td>26.74</td>
</tr>
<tr>
<td>Since and/or</td>
<td>33.72</td>
<td>43.86</td>
<td>22.42</td>
</tr>
<tr>
<td>Adverb placement</td>
<td>28.64</td>
<td>49.73</td>
<td>21.63</td>
</tr>
<tr>
<td>Relative clauses</td>
<td>25.92</td>
<td>43.65</td>
<td>30.43</td>
</tr>
<tr>
<td>Embedded questions</td>
<td>17.94</td>
<td>50.21</td>
<td>31.85</td>
</tr>
<tr>
<td>Unreal conditional</td>
<td>15.57</td>
<td>31.78</td>
<td>52.65</td>
</tr>
<tr>
<td>Dative alternation</td>
<td>11.53</td>
<td>38.22</td>
<td>50.25</td>
</tr>
<tr>
<td>Ergatives</td>
<td>10.21</td>
<td>29.61</td>
<td>60.18</td>
</tr>
</tbody>
</table>

Table 3 demonstrates the descriptive statistics for the respondents' performance on the GJT. They scored high in this test, achieved a mean score of 81.02%, revealing that they were capable of performing to a high level with regard to judging the grammatical appropriateness of sentences embodying the targeted structures. Moreover, the levels of their performance were analogous when judging both the grammatical (M= 83.23%) and ungrammatical sentences (M = 78.82%).
The percentage of correct responses for items of the GJT in accordance with each grammatical structure assessed (there were four sentences to be judged for each of 17 grammatical structures) is presented in Table 4. An intriguing point concerning the GJT test is that third person 's', plural 's' and possessive 's', - the structures for which participants obtained high scores when asked to express a rule —were not amid the three structures that they recognized the most straightforward when required to make a grammaticality judgment.

Table 4

<table>
<thead>
<tr>
<th>Percentage Correct for Items in GJT</th>
<th>Percentage Correct</th>
<th>Percentage Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modal verbs</td>
<td>87.37</td>
<td>Question tags</td>
</tr>
<tr>
<td>Indefinite article</td>
<td>87.03</td>
<td>Since and for</td>
</tr>
<tr>
<td>Adverb placement</td>
<td>86.85</td>
<td>Embedded questions</td>
</tr>
<tr>
<td>Plural 's'</td>
<td>86.78</td>
<td>Unreal conditional</td>
</tr>
<tr>
<td>Third person 's'</td>
<td>84.95</td>
<td>Ergatives</td>
</tr>
<tr>
<td>Possessive 's'</td>
<td>84.54</td>
<td>Relative clauses</td>
</tr>
<tr>
<td>Regular past tense</td>
<td>84.39</td>
<td>Dative alternation</td>
</tr>
<tr>
<td>Yes/no questions</td>
<td>83.57</td>
<td>Comparatives</td>
</tr>
<tr>
<td>Verb complements</td>
<td>83.46</td>
<td>Since and for</td>
</tr>
<tr>
<td>Question tags</td>
<td>79.44</td>
<td></td>
</tr>
</tbody>
</table>

In order to determine the relationship between the students' metalinguistic knowledge and their error identification ability, the Pearson product-moment correlation was run between the scores obtained for the different components of the MKT and the scores on the GJT. Results showed that that there were large positive significant correlations between participants' performances on the four sections of the MKT and GJT (Table 5).
Table 5
Pearson Product-Moment between Performance on the Components of MKT and Performance on GJT

<table>
<thead>
<tr>
<th>Sections</th>
<th>Correlations</th>
<th>GJT-Gram.</th>
<th>GJT-Ungram.</th>
<th>GJT Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1 (metalanguage recognition)</td>
<td>Pearson Correlation</td>
<td>.539*</td>
<td>.556**</td>
<td>.704**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>207</td>
<td>207</td>
<td>207</td>
</tr>
<tr>
<td>Section 2 (metalanguage production)</td>
<td>Pearson Correlation</td>
<td>.479**</td>
<td>.509**</td>
<td>.634**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>207</td>
<td>207</td>
<td>207</td>
</tr>
<tr>
<td>Section 3 (error correction)</td>
<td>Pearson Correlation</td>
<td>.385*</td>
<td>.430*</td>
<td>.522**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>207</td>
<td>207</td>
<td>207</td>
</tr>
<tr>
<td>Section 4 (rule formulation)</td>
<td>Pearson Correlation</td>
<td>.530**</td>
<td>.473**</td>
<td>.650**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>207</td>
<td>207</td>
<td>207</td>
</tr>
<tr>
<td>Section 4 (metalanguage use)</td>
<td>Pearson Correlation</td>
<td>.530**</td>
<td>.473**</td>
<td>.650**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>207</td>
<td>207</td>
<td>207</td>
</tr>
<tr>
<td>Section 4 total</td>
<td>Pearson Correlation</td>
<td>.556**</td>
<td>.436*</td>
<td>.647**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>207</td>
<td>207</td>
<td>207</td>
</tr>
<tr>
<td>MKT total</td>
<td>Pearson Correlation</td>
<td>.671**</td>
<td>.620**</td>
<td>.835**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
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<tr>
<td></td>
<td>N</td>
<td>207</td>
<td>207</td>
<td>207</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
4. Discussion

This study intended to scrutinize the prospective English teachers' metalinguistic awareness and their understandings of explicit knowledge about language. As for the first research question, results of the MKT indicate that these prospective teachers achieved a mean score of less than 50 percent and as a group performed fairly poorly on this test. One notable characteristic of performance on the test as a whole is that the error correction task proved to be the simplest task, followed by the metalanguage recognition task, the metalanguage production task, and the rules formulation and metalanguage use task. As Andrews (1999a) points out, this order of mean scores indicates the cognitive demand related to each of the four tasks; correcting errors and recognizing metalinguistic terminology is perceived as cognitively less demanding than producing metalanguage or explaining errors. Andrews further argues that the error correction task essentially assesses the respondents' language proficiency rather than their explicit knowledge about language. The metalanguage recognition test which measures the participants' explicit knowledge about language is cognitively less demanding than the rule formulation and metalinguistic production tests in that respondents are not asked to provide any terminology but only to match given terms to examples. Metalinguistic production task is also cognitively demanding as it requires the participants to "look within their own mental store of explicit knowledge about language in order to seek the appropriate metalinguistic terms to describe a language item" (Andrews, 1999a, p. 152). In the case of the cognitive difficulty of the rule formulation and metalanguage use task, Andrews asserts that this test necessitates reflecting upon a grammatical error which has been rectified, making explicit the rule which has been violated and applying proper metalanguage so as to account for the rule.
The participants obtained less than 50 percent of correct responses on the rule formulation task. Their grasp of metalinguistic terms which has a moderate correlation with their rule formulation ability is even more inadequate, though we must admit that they may have intentionally chosen not to employ specialized language in this part of the test. The respondents’ poor performance on the rule formulation task coincides with the findings of previous studies (Green & Hecht, 1992; Harper & Rennie, 2009; Sorace, 1985; Tsang, 2011) which reveal that students, even those with substantial experience of instruction on the formal features of language do not fully acquire the rules of the language they are learning. Additionally, it seems that in this study in line with Bialystok (1979), Green and Hecht (1992), Renou (2000), Tsang (2011) and Sangster, Anderson, and O’Hara (2013), the participants have acquired sufficient knowledge to realize some grammatical rules better than others. Several researchers (e.g., Hadjioannou & Hutchinson, 2010; Weaver, Bush, Anderson, & Bills, 2006) concur with Myhill (2005) who asserts that the finding reported above may be due to a 'deficit model of grammar teaching' (p. 78) represented by decontextualised teaching with separate grammar lessons rather than utilizing approaches recommended by Weaver et al. (2006) who suggest that knowledge about language be taught by integrating its study in reading and writing meaningful and authentic materials and tasks.

With regard to the second research question, the easiest rule explanations (i.e., third person 's', possessive 's' and plural 's') which posed the least difficulty to the prospective teachers - all make frequent appearance in their guidance and/or high schools English textbooks, whereas the more troublesome structures- ergatives, dative alternation, and relative clauses - appear somewhat later in their educational progression. Consequently, there may be some correlation between educational exposure to the structures of
the English and item difficulty. The instruction of the structures at the beginning stages of learning is likely to result in their recycling and consolidation at the following stages and in consequence students acquire a greater command of them. But, there is also the possibility of the involvement of other factors in determining difficulty, for instance processing constraints (Pienemann, 1998) and the transparency of form-meaning connections (DeKeyser, 2005). With regard to plural and possessive 's', the connection between the morphemes and their corresponding pluralizing and possession functions appears to be reasonably transparent and the pertinent rule may for this reason be more easily expressible (Ellis, 1996, 1999). The lower frequency of other forms in the input contributes to the regular disappearance of those forms as a focus of instruction, for example the necessity of using the active verb form with ergative verbs like 'increase'. In explaining the ungrammaticality of the sentence 'The price of the cars was increased', the students would need an understanding of the class of ergative verbs and its particular exemplars, together with knowledge of the difference between the active and passive mode, including the notion of hidden agency. N. Ellis (1999) asserts that there is much likelihood of acquiring such structures implicitly on an item-by-item basis, originally as formulaic sequences. Consequently, it is conceivable that the student teachers in this study may never have experienced or required to express the pertinent rule and this may account for the reason for the failure of over 60 percent of the participants in attempting even an explanation for this item. Likewise, the relevant rule regarding the formulation of the unreal conditional is complicated, entailing the knowledge of complex verb forms and syntactic interdependency between clauses. This may be the reason why 52 percent did not give a response to this item and only 31 percent provided correct responses.

As regards metalinguistic terminology, it is apparent from some of the muddled answers provided by the students that most of them are perplexed
about both their meaning and function. Consider the explanation given for the wrong verb forms in the question represented in Figure 1.

**Question**
Dose Peter *has* an American car?

**Explanation**
In this sentence, ‘has’ should be written in past 'had'. 'Had' is used for possessive nouns, and here it means Peter had an American car.

*Figure 1. Example illustrating participant's metalinguistic awareness*

In the next example represented in Figure 2, the student has confounded metalinguistic terms in accounting for the overuse of modals:

**Question**
I *must have to* clean my room.

**Explanation**
It is not necessary to put ‘must’ here because you cannot put a noun before a noun.

*Figure 2. Example illustrating participant's metalinguistic awareness*

It can be inferred from these examples and many others that most of the prospective teachers, for a variety of reasons, have inadequate knowledge of both the grammatical rules of English and the pertinent terminologies through which such rules are conventionally expressed. It is quite evident from the language of the students' answers displayed above that in many cases they are endeavouring to imitate the language of pedagogical grammar books by referring to concepts of restraint (for instance, 'you cannot put') or obligation (for instance, 'should be written') which are typical of instructional rules, without having a coherent conceptual knowledge. Some students, as illustrated in Figure 3, probably more conscious of their inadequate knowledge, were constrained to rectifying the error without any generalization beyond the specific instance:

**Question**
The carpet *that you bought it* is very attractive.

**Explanation**
You should delete 'it'.

*Figure 3. Example illustrating participant's metalinguistic awareness*
This answer which was not considered correct in our test is possibly more advantageous as feedback for a student than the garbled answers represented above.

Regarding the third research question, results presented in Table 5 indicate a statistically significant correlation ($r = .83$) between scores on the MKT and scores on the ungrammatical and grammatical GJT sentences which assess exemplars of the identical set of structures. The significant contribution of both the rule and metalinguistic terminology part to this relationship suggests that there is association between recognition, production and explanation, possibly due to the contribution of explicit knowledge to the resolution of both kinds of item (N. Ellis, 2005). However, as Alderson, Clapham, and Steel (1997), Brumfit, Mitchell, and Hooper (1996), Elder, et al. (1999) also concluded despite the considerable difference in the difficulty of the two test, as shown by the difference in means (48.49 on MKT and 81.02 on the GJT) we cannot assume that if an L2 learner is capable of detecting an error, s/he can also clarify why the item is incorrect or refer to the related rule. The significant differences in difficulty across the tests at the item level are in line with Clapham (2001), Hu (2002), Alderson and Hudson (2013), and Graus and Coppen (2015) who found an analogous variation in performance on specific items according to task demands. While the identification of errors in the application of a modal verb, adverb placement, and an indefinite article was the simplest task for the students, these were not, as we have seen above, the most straightforward items to expound. On the contrary, there are several items, such as the comparative, which were more difficult on the GJT than the MKT. It appears that a wrong response on an error identification item does not always denote lack of metalinguistic knowledge.
5. Conclusion
The findings of this study manifest a number of major concerns that need to be addressed in any discussion of how to achieve enhancements in prospective teachers' language awareness and their knowledge about language. The results of the study revealed that the student teachers studying at Teacher Education Universities have disturbingly inadequate knowledge and significant lacunae in their knowledge about language and also in many cases, an insufficient grasp of the technical terminologies needed to elucidate the rules of English grammar to L2 students, if or when needs be. It was argued that language teachers require high levels of language proficiency to be able to present rich and well-formed patterns for their students as well as an adequate explicit knowledge about language to respond properly to learner needs. Bennett and Carre (1993) characterize subject knowledge as substantive knowledge (the content of the subject) and procedural knowledge (how the subject works) and assert that good teachers require both types of knowledge to teach effectively. Within the classroom context the teachers responsible for learners' language development should possess both an implicit understanding of how language works and they should also be able to explain this explicitly to the learners they teach. A deficient understanding of the language, how it works and how learners acquire and use it, is likely to exert both negative influence on the teachers' ability to deliver input and the learners' ability to enhance their uptake. As Svalberg and Askham (2014) concluded "teachers with well-developed TLA have a wider range of options to draw on and TLA is thus an essential component in the teacher's tool kit" (p. 123). However, it should be noted here that we are not encouraging a straightforward return to fundamentals, with the decontextualised grammar instruction as an end in itself; but rather advocating teaching about language terms and structures, generally conceived, as a means of presenting analytic
tools for interpreting language and a metalanguage to scaffold the discussion of texts.

The findings of this study call for diagnostic assessment of prospective teachers' language awareness and identifying gaps in their knowledge and understandings, not just their competence in using the target language, by utilizing an instrument analogous to the MKT. Both the GJT and the MKT enjoy the standardized sampling of a variety of grammatical structures and with reference to the MKT, careful attention was given to determine criteria for (a) the identification of indicators of grammatical knowledge rather than an insistence on precise rule formulations and (b) the assessment of grammatical knowledge separately from the use of metalinguistic terminology. The separation of the two is obviously essential given the arguments concerning the usefulness of such terminology for teaching objectives (Berry, 2005). Given the contribution of TLA to effective teaching, teacher education programmes have an important role here to address the existing gaps and redress them so as to prepare qualified language teachers with high levels of metalinguistic knowledge and the pedagogical skills to develop students' linguistic proficiency.

References


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