High and Low Achievers' Strategy Use Profile in IELTS Speaking Section: Evidence from Iran[1]

Mohammad Sajedifard[2], Allameh Tabataba'i University, Tehran, Iran

Hojjat Abedi[3], Shahid Beheshti University, Tehran, Iran

Abstract

High and low achievers' strategy use profiles in the speaking skill appear to be rare, with the few studies examining their strategy use profiles only in skills such as reading and writing. Another gap can be observed in the scrutiny of effective and ineffective strategy use in speaking tests. The study was carried out with thirty male and female high and low achieving test takers who engaged in the speaking section of IELTS and reported their strategy use through stimulated recalls in the Iranian context. Data collection involved two key phases: The test takers first went through a familiarization phase where they learned how to carry out stimulated recalls. This phase was followed by the main phase of the study where the test takers took the IELTS speaking exam, verbalizing their strategies after each of its three speaking tasks. The researchers used Huang's (2013) taxonomy of speaking strategies to analyze the garnered data. Results indicated high achievers' heavier reliance on strategic behaviors compared with low achievers. The findings also revealed high achievers' greater use of effective strategies than low achievers, and low achievers' more frequent use of a noticeably higher number of ineffective strategies compared to high achievers. More specific outcomes revealed that the variations between the two groups were mainly in the frequency of meta-cognitive, communication, approach, and social strategy categories. The results primarily confirm high and low achievers' varied strategic behavior profiles in test situations and the significance of effective strategy employment for higher test scores.

Resumen

Los estudios sobre los perfiles de uso de estrategias para el habla parecen ser raros. Los pocos estudios que examinan el uso de estrategias se enfocan a habilidades como lectura y escritura. Se puede observar otra brecha en el escrutinio del uso de estrategias efectivas e ineficaces en los exámenes de expresión oral. El presente estudio se realizó en el contexto iranícon treinta participantes de alto y bajo rendimiento examinados que realizaron la sección oral del examen IELTS e informaron sobre su uso de estrategias a través de recordatorios estimulados . La recopilación de datos involucró dos fases clave: los examinados primero pasaron por una fase de familiarización en la que aprendieron cómo realizar recordatorios estimulados. Esta fase fue seguida por la fase principal del estudio donde los examinados tomaron el examen de expresión oral IELTS, verbalizando sus estrategias después de cada una de sus tres tareas de expresión oral. Los investigadores utilizaron la taxonomía de estrategias de habla de Huang (2013) para analizar los datos recopilados. Los resultados indicaron una mayor dependencia de los de alto rendimiento en los comportamientos estratégicos en comparación con los de bajo rendimiento. Los hallazgos también revelaron un mayor uso de estrategias efectivas por parte de los de alto rendimiento que de los de bajo rendimiento, y el uso más frecuente de los de bajo rendimiento de un número notablemente mayor de estrategias ineficaces en comparación con los de alto rendimiento. Los resultados más específicos revelaron que las variaciones entre los dos grupos se produjeron principalmente en la frecuencia de las categorías metacognitivas, de comunicación, de enfoque y de estrategia social. Los resultados confirman principalmente los variados perfiles de comportamiento estratégico de los alumnos de alto y bajo rendimiento en situaciones de prueba y la importancia del empleo de estrategias eficaces para obtener puntuaciones más altas en las pruebas.

Introduction

Tests are generally considered an influential decision-making tool, particularly in today's competitive educational world where individuals with different capabilities or potential are assessed on the basis of their achievement and abilities (Zhang et al., 2011). This is especially true about high-stakes tests. Stenlund et al. (2017) contend that such tests may lead to highly prized goals like admission to higher education or employment for test takers. Test takers might need certain test taking skills and strategic awareness to be successful in such tests. Their strategic behavior in significant test taking situations has drawn the attention of researchers in language testing field, whether it be English as a foreign language (EFL) or English as a second language (ESL) (e.g., Barkaoui et al., 2013; Murray & Riazi, 2018; Nikolov, 2006), indicating how critical it is to EFL and ESL researchers in various contexts.

A glance at the literature on test takers' strategic behaviors reveals certain conspicuous gaps. Test taking strategies (i.e., strategy use in test situations) appear to have received far less consideration compared to learning or study strategies both in English and other fields, in both western and non-western contexts. Even in EFL or ESL contexts, the limited studies examining test takers' strategic behavior in test situations

---

have primarily focused on the skills of reading and writing (e.g., Cohen & Upton, 2007; Murray & Riazi, 2018; Nikolov, 2006). Speaking is a demanding productive skill, which differs from the other language skills particularly due to its communicative nature requiring the speaker to interact with another person spontaneously under real time constraints (Pawlak, 2018). This quality of speaking might elicit varied strategic behaviors from test takers (particularly from those with different attentional or linguistic potentials or strategic awareness). Despite the significance of speaking, the studies on strategy use in speaking tests (particularly in high stakes tests, such as IELTS and TOEFL) have been limited to a handful in non-Iranian contexts (i.e., Barkaoui et al, 2013; Fernandez, 2018; Huang, 2013; Swain et al, 2009).

Even more importantly, a glance at the literature reveals a lack of previous research specifically comparing the strategic behavior of high and low achieving test takers during a speaking test, in both Asian and Western contexts. In addition, the limited previous studies on strategy use in speaking test situations have failed to explore the quality of test takers' strategies or differentiate between their effective and ineffective strategies (See Barkaoui et al, 2013; Huang, 2013). Exploring the quality of the strategies employed by high and low achieving test takers (for example, through differentiating strategies into effective and ineffective ones) may contribute to a more profound understanding of how ineffective strategy use can influence test takers' speaking performance.

Understanding high and low achievers' strategic performance during a speaking test can assist language teachers in finding the weaknesses and potentials of each group of learners, meeting their strategic needs and better preparing them for high-stakes tests such as IELTS. Researchers may also benefit from results related to high and low achieving test takers' strategic behavior profile. Differentiating between effective and ineffective strategies employed by high and low achievers can present more reliable information on the type of strategic behavior (i.e., effective or ineffective strategies) influencing the two groups' test performance. The present study aimed to examine Iranian high and low achieving test takers' strategic behavior in three speaking tasks of IELTS through stimulated recalls as well as their use of effective/ineffective strategies in this speaking test.

Literature Review

Speaking Skill Test Taking Strategies

 According to Cohen (2006, 2014), researchers involved in language testing divide test taking strategies into three types: 1) language learner strategies, 2) test management strategies, and 3) test-wise strategies. Cohen (2012) defines language learner strategies as those dealing with the ways in which test takers operationalize the four basic language skills as well as some other relevant skills including the lexical and grammatical aspects of a language, and translation. Such strategies help test takers prompt the required knowledge for dealing with a task (Cohen, 2014). Test management strategies are defined by Cohen (2012, 2014) as those strategies that work as conscious actions or thoughts facilitating the test taker's meaningful response to test items and tasks. The final category of strategies, test-wiseness, assists test takers in responding to test items or tasks through knowledge of the format or characteristics of the test (Cohen, 2012). Unlike language learner and test management strategies, test-wise strategies are regarded construct-irrelevant.

The prior research on test takers' strategic behavior during a speaking test has been mainly conducted in the last decade or so (Barkaoui et al., 2013; Fernandez, 2018; Huang, 2013; Swain et al., 2009). The research on speaking test strategy use has been conducted mainly on the integrated tasks of the TOEFL iBT Test (e.g., Barkaoui et al., 2013; Swain et al., 2009), with IELTS speaking tasks receiving inadequate attention. The research on strategy use during speaking is also limited to a handful of studies, primarily conducted in western or East Asian contexts (e.g., Barkaoui et al., 2013; Fernandez, 2018). These few studies have not provided any information on a comparison of high and lower achievers' strategy use during speaking. They rarely present a separate profile of test takers' effective and ineffective strategies in a speaking test. Finally, a majority of the studies on speaking strategies (e.g., Barkaoui et al., 2013; Fernandez, 2018) have not employed very comprehensive speaking strategy classifications. Such existing gaps in the previous studies have led to the need for the current study.

In the literature on speaking strategies, there are different taxonomies. Researchers (Barkaoui et al., 2013; Fernandez, 2018) contend that a majority of these speaking strategy taxonomies in the literature are limited to only a few strategy categories and individual tactics (in this study, individual strategies and tactics are used interchangeably). For instance, as valuable as the taxonomy employed by Fernandez (2018) is, it is

limited to only eighteen tactics. A survey of the literature on speaking strategy taxonomies reveals that the taxonomy developed by Huang (2013) might be the most comprehensive in the literature with its six strategy categories and ninety tactics. What is more, a majority of the strategy taxonomies employed in previous speaking test strategy studies are mainly suitable for integrated speaking tasks in the TOEFL iBT Test (Barkaoui et al, 2012; Swain et al, 2009) or limited to only one speaking task of IELTS (Fernandez, 2018).

High and Low Achievers

High achievers are defined as students who have received higher grades in content areas or certain achievement tests (Hong et al., 2006), while low achievers are learners with lower grades (Wen & Johnson, 1997). These two learner groups have been found to be different in many different areas including self-regulated strategy use, learning motivation, and self-efficacy. High achieving students have been shown to be better at self-regulation and the use of strategies to deal with task challenges in comparison to low achieving students (e.g., Bai et al., 2014; DiFrancesca et al., 2016; Hong et al., 2009). With regard to motivation for learning, high achievers appear to be more concerned about and interested in learning (Abu-Hamour & Al-Hmouz, 2013; Rao et al., 2000). The third difference can be found in self-efficacy, with high achievers possessing higher self-efficacy levels when compared to low achievers (Guo & Bai, 2019). Additionally, research has indicated that high and low achieving test takers may have different strategic behavior profiles which are related to high achievers' higher tendency toward more effective test taking strategies (Dermitzaki et al., 2008) or their higher use of deep-level strategies compared to low achievers (e.g., Hong et al., 2006).

The current study varied from previous speaking strategy use and high and low achiever comparison studies in that it was an exclusive comparison of high and low achieving test takers' strategy use reports in the neglected EFL context. Another difference can be related to the fact that the few studies comparing high and low achieving learners observationally in language test situations are mainly limited to reading and writing skills (Dermitzaki, et al., 2008; Nikolov, 2006; Bai, 2018). The final difference between the present study and the previous ones might be that the current study attempts to present a clear account of high and low achieving test takers' competence in using strategic behaviors in test situations, by differentiating their employed strategies into effective and ineffective ones. By considering the reported differences between high and low achievers and particularly high achievers' superiority, in this study the researchers assume that high and low achieving test takers might resort to different strategic behaviors in a productively demanding speaking test situation which may require test takers use all their available resources to spontaneously communicate their responses. The following research questions were formulated based on the objectives of the study:

1. *What strategic behaviors (i.e., strategy categories and tactics) do Iranian high and low achieving IELTS test takers report in the three speaking tasks of IELTS?*

2. *How do Iranian high and low-achieving IELTS test takers report effective and ineffective tactics in the three speaking tasks of IELTS?*

Method

In this study, introspection was used to explore Iranian high and low achieving IELTS test takers' strategy use. Introspective methods of data collection can assist researchers in gaining access to the mental processes involved in language processing and production, which is impossible with non-introspective methods (e.g., Dörnyei, 2007; Gass & Mackey, 2016).

Participants

The participants of the study were 49 Iranian university students who had recently taken the IELTS Test and whose IELTS scores in the speaking section were between 4 and 8.5. They participated in the research voluntarily and their consent was obtained by the researchers prior to the research (Guo & Bai, 2019). In the current study, the researchers drew on expert test-raters' opinions to define high and low achievers. They operationally defined the high achieving test takers as those who had scored between 7 and 8.5 on the speaking section of IELTS. On the other hand, test takers who had scored between 4 and 5.5 were classified as low achieving test takers. As a result of the selection criteria, the researchers selected 30 out of the initial 49 participants as high and low achievers. The 30 male and female test takers (with an almost equal gender distribution in the two groups) ranging in age from 24 to 30 (mean age=26) were studying in the Humanities Department.

Instruments

Verbal Report (stimulated recall)

In this study, participants verbally reported their self-observation of speaking strategies that they used in the IELTS speaking session. There are two types of self-observations, stimulated recall and retrospective questionnaires/journal entries/interviews (Gass & Mackey, 2000, 2016). In this research, we used stimulated recall (see also immediate retrospection in Yi'an, 1998), which has been reported to be more reliable than delayed retrospection (Ericsson & Simon, 1987). The higher reliability of stimulated recall may be due to the shorter time lag between task performance and verbalization in stimulated recalls, as compared to delayed retrospection. That is, the time interval is shorter in stimulated recalls, and this may help test takers recall their thinking processes more easily and accurately, resulting in a more reliable verbalization of those thoughts.

Stimulated recalls were also preferred to self-revelation or think-aloud (another common tool in language testing) because of their lower susceptibility to reactivity (Ericsson, 2002). In think-aloud, test takers may experience different internal processes depending on whether they perform a language task with or without thought process verbalization. This may result from dual processing—carrying out a learning task while talking about thinking processes at the same time (Ellis, 2001). However, in stimulated recalls, test takers do not have to perform a language task and talk about the thinking processes simultaneously, which lowers reactivity. The spontaneous nature of the speaking skill, which makes concurrent verbalization/think-aloud impossible (Gass & Mackey, 2016), is another reason for the selection of stimulated recalls. Another rationale is that despite the support for self-revelation or think-aloud (Cohen, 2000), the need for researchers' creation of the real exam circumstances (Gu & Shi, 2012) may not allow for the concurrent verbalization in the case of studies on test-taking strategy use.

Finally, stimulated recalls need either aural or visual support, with some researchers emphasizing the superiority of visual over aural support (e.g., Dörnyei, 2007; Gass & Mackey, 2016). However, in this study the researchers used audio recording, rather than video recording, during the speaking session for the immediate recall to respect the participants' preference.

Three IELTS Speaking Tasks

Three IELTS speaking tasks were used for the study. These tasks are in the form of interviews conducted by an IELTS examiner, and they normally last between eleven and fourteen minutes. In the first task, there is generally an introduction, followed by some questions on general topics. The task typically lasts about four or five minutes. In the second task, the candidate is given a cue card with some questions on a certain topic. The candidate is given one-minute preparation and is then expected to have a monologue on the cue card questions for one to two minutes. In the last task in the speaking section of IELTS, which is a discussion and lasts about four to five minutes, candidates are asked to talk about abstract matters. The speaking task topics were selected randomly from a Cambridge IELTS book, following Fernandez (2018). The topic of the first task was television, and the topic for the second and third tasks was friendship.

Data Collection Procedure

To collect the data, the researchers first invited the participants to take part in the study, and obtained their oral consent. Next, two different versions of the research were conducted. The test takers initially went through a familiarization phase (See Barkaoui et al, 2013; Swain et al, 2009) which helped them become familiar with the process of verbalizing thoughts (i.e., stimulated recalls). This version of the test provided the test takers with an opportunity to practice carrying out stimulated recall after each speaking task before the main phase of research. This phase helped the participants learn how to report their speaking strategies by using stimulated recalls. During the familiarization phase, all the test takers were given the same required instructions on how to do the stimulated recall after speaking tasks based on the literature. After one week the researchers began the research phase (i.e., main phase) of the IELTS speaking task. In carrying out the research phase, the researchers went to considerable effort to make the speaking session similar to the real exam circumstances (Gu & Shi, 2012).

During the research phase, each test taker was asked to participate in the speaking session while their speaking time was audio-recorded. Since the time interval between the speaking session and the stimulated recall is important, the verbalizations were carried out immediately after each of the three IELTS speaking tasks. An audio recording of each test taker's speaking was played back to them as a stimulus to help them retrieve and verbalize their strategies during the speaking task. They were similarly given the permission to

start or to pause replays of the audio-recordings and verbalize the thoughts they had before, during and immediately after each task. The researchers used non-leading questions to prompt them to verbalize their thoughts at particular moments or explain their verbal reports more. Unlike the speaking tasks, no specific time limit was set for the verbalization (Gu & Shi, 2012). The verbal reports were conducted in Persian, the official language in Iran and one which worked like an L1 (Dörnyei, 2007; Gass & Mackey, 2000) for the participants.

Since one of the objectives of this study was to identify effective and ineffective tactics and find their frequency, the researchers developed a 3-point checklist (ineffective, neutral, and effective) to differentiate between and determine effective and ineffective tactics. They drew on Huang's (2013) 90 tactics (Appendix) along with the definitions and examples of each tactic in order to design the checklist. Next, they asked thirty experienced IELTS teachers to identify the effectiveness of each tactic in the checklist.

Data Coding and Analysis

The researchers audio-recorded the test takers' speaking sessions and stimulated recalls during the verbal reports for the purpose of data analysis. The spoken data was then transcribed, coded and analyzed to identify the existing strategies. The researchers drew on Huang's (2013) taxonomy of the six strategy categories of approach, communicative, cognitive, meta-cognitive, affective and social and 90 tactics employed in IELTS speaking tasks (Appendix) to code and analyze the data. It should be noted that based on the preliminary analysis of their data, the authors of the present study divided some of Huang's (2013) tactics into subcategories.

Coding the data involved certain stages. For the ease of coding the researchers first assigned numbers and codes to Huang's (2013) taxonomy of speaking strategies, which comprised six categories and 90 tactics. In the next stage, a trained research assistant (RA) coded 33% of the high and low achievers' verbal report data, using these numbers and codes. Next, the first researcher randomly coded 20% of the same data, using the same coding scheme.

To estimate inter-coder reliability, the researchers followed previous researchers (Fernandez, 2018; Goh, 2002; Huang, 2013; Swain et al., 2009) by using inter-coder agreement percentage. The inter-coder agreement percentage between the RA and the first researcher was 91%. The RA and the researcher discussed and resolved the differences in their coding. Next, the RA continued coding the remaining transcripts. For speaking performance scores, the researchers asked two professional IELTS examiners to independently rate the test takers' speaking based on the scoring rubrics for IELTS speaking section. The raters discussed their disagreements in scoring until 100% scoring consistency was established (See Swain et al., 2009). Finally, the researchers used frequency counts and percentages to answer both the first and the second research questions.

Results

In the following, the results concerning the Iranian high and low achieving IELTS test takers' overall use of strategies (i.e., strategy categories) and tactics (i.e., individual strategies) are presented.

Research Question #1: What strategic behaviors (i.e., strategy categories and tactics) do Iranian high and low achieving IELTS test takers report in the three speaking tasks of IELTS?

As Table 1 indicates, high and low achieving test takers in this study reported a total of 1913 tactics and six strategy categories in their verbal reports. Out of this total, high achievers reported 1075 (56.2%) tactics whereas low achievers reported only 838 (43.8%).

Strategy Category	Low achievers		High achievers		Total	
	Frequency	Percentage (in relation to total strategy use)	Frequency	Percentage (in relation to total strategy use)	F	%
Approach	97	5.07	179	9.36	276	14
Communication	203	10.6	279	14.6	482	25
Cognitive	174	9.09	173	9.04	347	18
Meta-cognitive	248	12.9	331	17.3	579	30
Affective	65	3.39	81	4.23	146	7
Social	51	2.66	32	1.67	83	4
Total	838	43.8	1075	56.2	1913	100

Table 1: Low and high achievers' strategic behaviors across strategy categories

The high and low achieving test takers had both similarities and variations in terms of the hierarchy of strategy category use, and rather considerable variations in the frequency of these categories. For low achievers, meta-cognitive (12.9%) and communication (10.6%) strategies had the largest percent of those reported, followed by cognitive (9.09%) and approach (5.07%) categories. The least frequent strategy categories in the low achievers' reports were affective (3.39%) and social (2.66%) strategies. Similarly, the two most frequent strategy categories in the high achievers' verbal reports were meta-cognitive (17.3%) and communication (14.6%) strategies, followed by approach (9.36%) and cognitive (9.04%) categories. Affective (4.23%) and social (1.67%) strategies were the least frequent in the high achievers' verbal reports, similar to the low achievers' data. Table 1 also indicated some variations in the frequency of strategy categories between the groups, with high achievers reporting more tactics in each category.

In addition to analyzing categories of strategy use, the researchers analyzed high and low achievers' use of individual tactics. A detailed analysis of the occurrences of the various tactics within Huang's (2013) six strategy categories is presented in Table 2.

Individual Strategy		Frequency		Percentage in relation to the total number of strategies used	
No.	Approach	Low	High	Low	High
1	Developing reasons	14	13	0.73	0.68
2	Generating choices	31	64	1.62	3.35
3	Generating ideas	19	23	0.99	1.20
4	Identifying task format	5	8	0.26	0.42
5	Identifying task purpose	1	3	0.05	0.16
6	Making choices	23	57	1.20	2.97
7	Recalling questions	2	4	0.10	0.21
8	Recalling what one has said	2	7	0.10	0.36
No.	Communication	Low	High	Low	High
1	Abandoning	7	1	0.36	0.05
2	Approximating	6	2	0.31	0.31
3	Avoiding	20	24	1.05	1.25
4	Borrowing	2	3	0.10	0.16
5	Code-switching	2	2	0.10	0.10
6	Coining words	1	1	0.05	0.05
7	Elaborating to clarify meaning	7	16	0.37	0.84
8	Elaborating to fill time	2	3	0.10	0.16
9	Elaborating to meet requirements	3	3	0.16	0.16
10	Guessing	9	-	0.47	-
11	Linking	20	25	1.05	1.31
12	Paraphrasing	5	17	0.26	0.89
13	Pausing to formulate speech	17	6	0.89	0.31
14	Pausing to generate ideas/solutions	14	17	0.73	0.89
15	Pausing to make choices	17	8	0.89	0.42
16	Referring to notes	3	7	0.16	0.37
17	Referring to questions	4	5	0.21	0.26
18	Repeating	9	16	0.47	0.84
19	Restarting	4	5	0.21	0.26
20	Reviewing notes	-	-	-	-
21	Simplifying	21	22	1.10	1.15
22	Slowing down	-	2	-	0.10
23	Spelling out to clarify meaning	-	-	-	-
24	Spelling to ensure comprehension	1	-	0.05	-
25	Stalling to fill time with — Time-gaining cliché sentences	2	7	0.10	0.37
	Stalling to fill time with — Gap fillers	1	29	0.05	1.52
26	Thinking ahead	2	1	0.10	0.05
27	Using keywords	19	57	0.99	2.98
28	Using L1	5	-	0.26	-
29	Using L2 to organize thoughts	-	-	-	-
No.	Cognitive	Low	High	Low	High
1	Analyzing linguistic choices	5	4	0.25	0.21
2	Analyzing questions	7	7	0.37	0.37
3	Anticipating examiner's feedback	2	1	0.10	0.05
4	Anticipating problems	1	1	0.05	0.05
5	Anticipating questions	9	13	0.47	0.68
6	Anticipating rating criteria	2	2	0.10	0.10
7	Attending to oral production	19	34	0.99	1.78
8	Attending to task requirements	3	15	0.16	0.78
9	Using imagination	22	13	1.15	0.68

10	Inferring		2	-	0.10	-
11	Memorizing		1	-	0.05	-
12	Organizing thoughts		10	11	0.52	0.56
13	Outlining		-	2	-	0.10
14	Recalling vocabulary		48	42	2.51	2.20
15	Recalling what one has written		2	-	0.10	-
16	Translating		31	13	1.62	0.68
17	Using intuition		4	2	0.21	0.10
18	Using mechanical means		6	13	0.31	0.68
No.	Meta-cognitive		Low	High	Low	High
1	Evaluating language skills		10	10	0.52	0.52
2	Evaluating affect		13	8	0.68	0.42
3	Evaluating language production		36	33	1.88	1.73
4	Evaluating mental process		10	20	0.52	1.05
5	Evaluating performance	During speaking	3	-	0.16	-
		After speaking	24	28	1.41	1.64
6	Evaluating strategies		18	36	0.95	1.88
7	Evaluating task	During speaking	2	-	0.10	-
		After speaking	21	46	1.10	2.40
8	Generating goals		2	5	0.10	0.25
9	Generating future solutions		5	5	0.25	0.25
10	Generating future strategies		4	-	0.21	-
11	Setting goals		23	31	1.20	1.62
12	Identifying problems		8	13	0.42	0.68
13	Monitoring examiner's feedback		2	2	0.10	0.10
14	Monitoring time		15	21	0.78	1.10
15	Planning		2	6	0.10	0.31
16	Self-monitoring		8	11	0.42	0.56
17	Self-correcting	Mistakes	22	14	1.15	0.73
		For higher quality	3	21	0.16	1.10
18	Evaluating what one has heard		17	21	0.89	1.10
No.	Affective		Low	High	Low	High
1	Fearing judgment		2	12	0.10	0.62
2	Justifying affective state		8	9	0.42	0.47
3	Justifying performance		36	41	1.88	2.14
4	Lowering anxiety		1	1	0.05	0.05
5	Monitoring affective state		17	17	0.89	0.89
6	Overriding affective challenges		1	-	0.05	-
7	Engaging in positive self-talk		-	1	-	0.05
8	Asking questions to lower anxiety		-	-	-	-
No.	Social		Low	High	Low	High
1	Asking examiner questions to direct conversation		2	-	0.10	-
2	Asking examiner questions to engage the examiner		-	-	-	-
3	Attending to the listener's interest		3	4	0.16	0.20
4	Creating a positive impression		2	13	0.10	0.68
5	Seeking clarification		41	13	2.14	0.68
6	Seeking social interaction		-	2	-	0.10
7	Using examiner's feedback in one's response		-	-	-	-
8	Seeking examiner's feedback		1	-	0.05	-
9	Seeking help		2	-	0.10	-

Table 2: High and low achievers' tactics use

Overall the high and low achieving test takers employed 84 out of the 90 tactics available in Huang's (2013) taxonomy, leaving six tactics to be missing in the data, as indicated in Table 2. The missing tactics were from different categories.

Table 2 also indicates both similarities and variations between the two study groups in terms of tactic use hierarchy/order, while in terms of tactic use frequency the variations are more outstanding than resemblances. For instance, the tactics most commonly reported by the two groups in the approach category (generating choices, making choices and generating ideas) were reported in a similar order by both high and low achieving test takers. However, the two groups differed in the frequency of the tactics, with the high achievers reporting more of such tactics compared to low achievers.

Research Question #2: How do Iranian high and low-achieving IELTS test takers report effective and ineffective tactics in the three speaking tasks of IELTS?

The second research question aimed at the test takers' effective and ineffective tactics. The usefulness or appropriateness of the strategies was determined based on thirty expert IELTS teachers' answers to a 3-

point checklist. Table 3 indicates the high and low achievers' use of effective and ineffective tactics, as reported during their stimulated recalls.

Strategy Category	Low achievers		High achievers		Total	
	Frequency	Percentage (in relation to total effective & ineffective strategy use)	Frequency	Percentage (in relation to total effective & ineffective strategy use)	F	%
Effective Tactics	308	25.7	558	46.6	866	72.3
Ineffective Tactics	185	15.4	147	12.3	332	27.7
Total	493		705		1198	100

Table 3: Effective and ineffective tactics reported by high and low achievers

As Table 3 indicates, 1,198 (62.6%) out of the total of 1,913 tactics reported by the high and low achieving test takers were defined either as effective or ineffective, while 37.4% were defined as neutral. The high and low achieving test takers appeared to report different levels of effective strategies. The high achievers reported 558 (46.6% of the total tactics used) whereas the low achievers reported only 308 (25.7% of the total tactics used). On the other hand, the two test taking groups indicated minimal variations in the use of ineffective tactics. That is, 185 ineffective tactics (15.4% of the total tactics used) were reported by the low achievers, with the high achievers reporting 147 (12.3% of the total tactics used).

Discussion

The current study was conducted with thirty high and low achieving IELTS test takers in the Iranian context to discover their strategic behaviors (i.e., self-reported use of strategy categories), and their use of particularly effective and ineffective tactics. The results indicated that the high achieving test takers reported more strategies and tactics during simulated recalls than their low achieving counterparts. This finding may first corroborate the literature implying high achievers' heavier reliance on strategic behaviors compared to low achievers (Dermitzaki et al., 2008; DiFrancesca et al., 2016). It seems that high achieving test takers are more strategic in their test situation behavior than their low achieving counterparts. The finding may indicate high achievers' higher levels of strategic awareness during tests. When high achievers engage in a testing situation, they might be mentally better prepared for the challenges of a demanding test compared to low achievers, and able to consciously use their available linguistic and attentional resources to deal with the challenges. It might also be the case that in practice, high achievers understand the significance of strategic competence as part of their communicative competence for the successful completion of a communicative task.

The results revealed some similarities between high and low achievers in the hierarchy of strategy category reports. Evidence of these findings can be seen in previous studies indicating metacognitive (e.g., Barkaoui et al, 2013; Huang, 2013) and communication (e.g., Huang, 2013; Swain et al, 2009) strategies as highly reported strategy categories during the speaking section of high-stakes tests such as IELTS and TOEFL.

The findings also lend support to other studies indicating the lower frequency of affective (Swain et al, 2009) and social (Huang, 2013) strategies in the speaking section of high stakes tests such as IELTS and TOEFL. This finding might imply the existence of a hierarchy of strategy significance. It seems that certain strategy categories (such as the meta-cognitive and communication categories in this study) are essential for test takers in test situations, irrespective of test takers' achievement levels. On the contrary, other strategies (such as the social and affective categories in this study) might serve test takers, whether high or low achiever, less. This may possibly have to do with the educational environment, or more specifically (the IELTS) classroom structure in the Iranian context, where certain strategic behaviors might be nurtured in (EFL) learners more than others, whether directly or indirectly. However, this assumption may require in-depth observational studies of IELTS teachers' classrooms.

The results indicated rather considerable variations between high and low achievers in the frequency of meta-cognitive, communication, approach and social categories. As stated earlier, metacognitive and communication strategies might serve as a must in test taking situations. There might be two reasons for the higher frequency of these categories in the high achievers' verbal reports. Since these strategy categories are important (e.g., Barkaoui et al, 2013; Huang, 2013), it is reasonable to expect high achievers who are strategically aware and competent test takers to use them more. The speaking section of IELTS is a complex test taking situation and it may be logical to expect the more competent test takers like high achievers to use more strategies than the less strategically conscious and less well-prepared test takers.

In high-stakes testing situations, more successful test takers may employ strategy types capable of assisting them in dealing with complex tasks. It seems that the Iranian high achieving test takers were more conscious of orienting themselves to the task, which could be a reason for their heavier reliance on approach strategies compared to low achievers. This might have been particularly due to high achievers' heavier reliance on the decision related tactics of generating and making choices, which in turn might attest to high achievers' possible preference for better choices during tests. Interestingly, one strategy category which low achievers reported using more frequently than high achievers was the social category. This may be rooted in low achievers' undue concern with the examiner while performing the speaking test, and most probably due to their frequent resort to seeking clarification from the examiner.

Tactic use analysis indicated similarities in the hierarchy of most frequently reported tactics by high and low achievers and variations in the frequencies of such tactics. This might mean that certain tactics may serve as a must for the speaking section of the IELTS test, irrespective of high and low achievement. For instance, seeking clarification can be considered a common tactic for both high and low achievers in the social category. However, the higher frequency of tactics in high achievers' data seems to be rooted in high achievers' higher level of strategic competence and awareness, which possibly results in their heavier reliance on essential and common tactics compared to low achievers. Additionally, our results indicated high achievers' higher use of effective strategies in comparison to low achievers. In contrast, low achievers used ineffective strategies more than high achievers. This finding matches those of other researchers (Dermitzaki et al., 2008; DiFrancesca et al, 2016) reporting high achievers' greater use of effective strategies in test situations and low achievers' reliance on mainly ineffective strategies. Compared to other findings in this study, this finding may help explain high achievers' higher levels of strategic competence or awareness, and by contrast, low achievers' possibly incomplete strategic competence. High achievers seem to better understand what tactics and strategies to use when faced with a challenging test experience, such as the speaking test with its uniquely spontaneous nature, and this knowledge may result in their greater use of effective strategies to successfully deal with test challenges. Additionally, high achievers' greater use of effective strategies as well as low achievers' greater use of ineffective strategies might have possibly been another reason why high achievers outperformed low achievers.

Conclusion

In the current study there were certain limitations that may reduce the generalizability of the findings. These limitations may include the impossibility of the verbalization of certain strategies by nature even despite the use of stimulated recalls, test takers' selectivity in strategy report, the exclusion of average achievers in the study, as well as a lack of correlational design to understand the link between strategy usage and test scores. Future studies in both Iranian and non-Iranian contexts can provide a more accurate understanding of high and low achieving test takers' strategic behavior profiles by considering these limitations.

Despite the limitations, certain conclusions and implications for students, teachers and major decision makers in the field of language education can be offered in the present study. The findings imply potential variations in high and low achieving test takers' strategic behavior profiles. High achievers might be strategically more conscious of the processes they go through during a test and may employ their available strategies more than low achievers. Having understood the difficulties of the test situation, high achievers may look for more effective strategies to deal with the challenges while their low achieving counterparts may resort to ineffective strategies, resulting possibly from their incomplete strategic competence. Further, certain strategy categories and individual learner strategies (tactics) might be similarly used by high and low achieving test takers. This is because such strategies are more essential for a test situation like a speaking test.

The findings may have implications for students, teachers and major decision makers such as curriculum and syllabus designers. Since there were variations between high and low achievers in their strategic behaviors (i.e., high achievers' strategically more successful behavior), teachers may want to consider training and raising awareness of strategies in their classrooms. This is particularly suggested in high-stakes test-preparation classrooms, and for low-achieving students; low achieving students should work on improving their strategic behavior and enhancing their strategy knowledge. In the study low achievers indicated a heavy reliance on ineffective strategies, which means that strategy use awareness should be raised in such students. Finally, major decision makers such as curriculum and syllabus designers may want to focus on strategic competence as a significant part of communicative competence and even possibly include effective strategy application in the scoring system of high-stakes tests like IELTS or English syllabus or curriculum.

References

Abu-Hamour, B., & Al-Hmouz, H. (2013). A study of gifted high, moderate, and low achievers in their personal characteristics and attitudes toward school and teachers. *International Journal of Special Education, 28*(3), 5-15.

Bai, B. (2018). Understanding primary school students' use of self-regulated writing strategies through think-aloud protocols. *System 78*, 15-26. https://doi.org/10.1016/j.system.2018.07.003

Bai, R., Hu, G., & Gu, P. Y. (2014). The relationship between writing strategies and English proficiency in Singapore primary schools. *The Asia-Pacific Education Researcher, 23*(3), 355-365. https://doi.org/10.1007/s40299-013-0110-0

Barkaoui, K., Brooks, L., Swain, M., & Lapkin, S. (2013). Test-takers' strategic behaviors in independent and integrated speaking tasks. *Applied Linguistics, 34*(3), 304-324. https://doi.org/10.1093/applin/ams046

Cohen, A. D. (2000). Exploring strategies in test taking: Fine-tuning verbal reports from respondents. In G. Ekbatani & H. Pierson (Eds.), *Learner-directed assessment in ESL* (pp. 131-145). Erlbaum.

Cohen, A. D. (2006). The coming of age of research on test-taking strategies. *Language Assessment Quarterly, 3*(4), 307-331. https://doi.org/10.1080/15434300701333129

Cohen, A. D. (2012). Test-taking strategies. In C. Coombe, P. Davidson, B. O'Sullivan, & S. Stoynoff (Eds.), *The Cambridge guide to second language assessment* (pp. 96-104). Cambridge University Press.

Cohen, A. D. (2014). Using test-wiseness strategy research in task development. In A. J. Kunnan (Ed.), *The companion to language assessment* (pp. 893-905). Wiley/Blackwell.

Cohen, A. D., & Upton, T. A. (2007). 'I want to go back to the text': Response strategies on the reading subtest of the new TOEFL. *Language Testing, 24*(2), 209-250. https://doi.org/10.1177/0265532207076364

Dermitzaki, I., Andreou, G., & Paraskeva, V. (2008). High and low reading comprehension achievers' strategic behaviors and their relation to performance in a reading comprehension situation. *Reading Psychology, 29*(6), 471-492. https://doi.org/10.1080/02702710802168519v

DiFrancesca, D., Nietfeld, J. L., & Cao, L. (2016). A comparison of high and low achieving students on self-regulated learning variables. *Learning and Individual Differences, 45*, 228-236. https://doi.org/10.1016/j.lindif.2015.11.010

Dörnyei, Z. (2007). *Research methods in applied linguistics.* Oxford University Press.

Ellis, R. (2001). Introduction: Investigating form-focused instruction. *Language Learning, 51*(1), 1-46. https://doi.org/10.1111/j.1467-1770.2001.tb00013.x

Ericsson, K. A. (2002). Toward a procedure for eliciting verbal expression of nonverbal experience without reactivity: Interpreting the verbal overshadowing effect within the theoretical framework for protocol analysis. *Applied Cognitive Psychology, 16*(8), 981-987. https://doi.org/10.1002/acp.925

Ericsson, K. A., & Simon, H. A. (1987). Verbal reports on thinking. In C. Færch & G. Kasper (Eds.), *Introspection in second language research* (pp. 24-53). Multilingual Matters.

Fernandez, C. J. (2018). Behind a spoken performance: Test takers' strategic reactions in a simulated Part 3 of the IELTS speaking test. *Language Testing in Asia, 8*(18), 1-20. https://doi.org/10.1186/s40468-018-0073-4

Gass, S. M., & Mackey, A. (2000). *Stimulated recall methodology in second language research.* Erlbaum.

Gass, S. & Mackey, A. (2016). *Stimulated recall methodology in applied linguistics and L2 research.* Routledge.

Goh, C. C. M. (2002). Exploring listening comprehension tactics and their interaction patterns. *System, 30*(2), 185-206. https://doi.org/10.1016/S0346-251X(02)00004-0

Gu, X., & Shi, C. (2012). A retrospective study on test-takers' cognitive and metacognitive processes in taking a compound dictation test. *Chinese Journal of Applied Linguistics, 35*(4), 400-420. https://doi.org/10.1515/cjal-2012-0030

Guo, W. & Bai, B. (2019). Effects of self-regulated learning strategy use on motivation in EFL writing: A comparison between high and low achievers in Hong Kong primary schools. *Applied Linguistics Review.* https://doi.org/10.1515/applirev-2018-0085

Hong, E., Peng, Y., & Rowell, L. L. (2009). Homework self-regulation: Grade, gender, and achievement-level differences. *Learning and Individual Differences, 19*(2), 269-276. https://doi.org/10.1016/j.lindif.2008.11.009

Hong, E., Sas, M., & Sas, J. C. (2006). Test-taking strategies of high and low mathematics achievers. *The Journal of Educational Research, 99*(3), 144-155. https://doi.org/10.3200/JOER.99.3.144-155

Huang, L.-S. (2013). Cognitive processes involved in performing the IELTS speaking test: Respondents' strategic behaviors in simulated testing and non-testing contexts. *IELTS Research Reports Online Series, 1*, 1-51. https://www.ielts.org/-/media/research-reports/ielts_online_rr_2013-1.ashx

Murray, J. C. & Riazi, A. M. (2018). Composing strategies reported by high and low achievers in the TOEFL-iBT integrated task: Implications for investigative pedagogy. *Writing & Pedagogy, 10*(1-2), 129-160. https://doi.org/10.1558/wap.30570

Nikolov, M. (2006). Test-taking strategies of 12- and 13-year-old Hungarian learners of EFL: Why whales have migraines. *Language Learning 56*(1), 1-51. https://doi.org/10.1111/j.0023-8333.2006.00341.x

Pawlak, M. (2018). Investigating the use of speaking strategies in the performance of two communicative tasks: The importance of communicative goal. *Studies in Second Language Learning and Teaching, 8*(2), 269-291. https://doi.org/10.14746/ssllt.2018.8.2.5

Rao, N., Moely, B. E., & Sachs, J. (2000). Motivational beliefs, study strategies, and mathematics attainment in high- and low-achieving Chinese secondary school students. *Contemporary Educational Psychology, 25*(3), 287-316. https://doi.org/10.1006/ceps.1999.1003

Stenlund, T., Eklöf, H. & Lyrén, P.-E. (2017). Group differences in test-taking behavior: An example from a high-stakes testing program. *Assessment in Education: Principles, Policy & Practice, 24*(1), 4-20. https://doi.org/10.1080/0969594X.2016.1142935

Swain, M., Huang, L. S., Barkaoui, K., Brooks, L., & Lapkin, S. (2009). *The speaking section of the TOEFL iBT (SSTiBT): Test-takers' strategic behaviors.* (TOEFL iBT Research Report, 10). Educational Testing Service.

Wen, Q., & Johnson, R. K. (1997). L2 learner variables and English achievement: A study of tertiary-level English majors in China. *Applied Linguistics, 18*(1), 27-48. https://doi.org/10.1093/applin/18.1.27

Yi'an, W. (1998). What do tests of listening comprehension test? A retrospection study of EFL test-takers performing a multiple-choice task. *Language Testing, 15*(1), 21-44. https://doi.org/10.1177%2F026553229801500102

Zhang, W., Liu, M., Zhao, S. & Xie, Q. (2011). English test-taking strategy use and students' test performance. *Asian EFL Journal, 13*(2), 133-168. http://asian-efl-journal.com/PDF/Volume-13-Issue-2-Zhang.pdf

Appendix

Tactics in Huang's (2013) Taxonomy with Definitions

Individual Strategy in Each Category		
Approach		**Definition**
1	Developing reasons	Test-taker/learner offering explanations for doing what he/she does
2	Generating choices	Test-taker/learner generating choices
3	Generating ideas	Test-taker/learner generating ideas
4	Identifying task format	Test-taker/learner trying to figure out the format of the task
5	Identifying task purpose	Test-taker/learner trying to figure out the purpose of the task
6	Making choices	Test-taker/learners narrowing down the choices in response to the question
7	Recalling questions	Test-taker/learner thinking about the meaning of the questions
8	Recalling what one has said	Test-taker/learner thinking about what he/she has said during the task
Communication		**Definition**
1	Abandoning	Test-taker/learner abandoning ideas or utterances
2	Approximating	Test-taker/learner using lexical or grammatical substitution to approximate meanings
3	Avoiding	Test-taker/learner thinking about avoiding areas that pose linguistic difficulties
4	Borrowing	Test-taker/learner borrowing phrases from the question
5	Code-switching	Test-taker/learner simultaneously using both L1 and L2 in his/her response
6	Coining words	Test-taker/learner coining a word to compensate for missing knowledge
7	Elaborating to clarify meaning	Test-taker/learner elaborating on his/her response in order to clarify meaning
8	Elaborating to fill time	Test-taker/learner elaborating on his/her response in order to fill time
9	Elaborating to meet requirements	Test-taker/learner elaborating on his/her response in order to fulfill the task requirements
10	Guessing	Test-taker/learner guessing by using linguistic or other cues
11	Linking	Test-taker/learner making connections between his/her previous knowledge or experience and what he/she is responding to
12	Paraphrasing	Test-taker/learner paraphrasing to clarify meanings
13	Pausing to formulate speech	Test-taker/learner taking pauses in order to formulate a response
14	Pausing to generate ideas/solutions	Test-taker/learner taking pauses in order to generate ideas
15	Pausing to make choices	Test-taker/learner taking pauses in order to narrow down the choices
16	Referring to notes	Test-taker/learner referring to the notes during oral production
17	Referring to questions	Test-taker/learner referring to the questions in order to respond
18	Repeating	Test-taker/learner repeating words or phrases in order to fill the time
19	Restarting	Test-taker/learner restarting/reformulating his/her response
20	Reviewing notes	Test-taker/learner reviewing notes in order to formulate response
21	Simplifying	Test-taker/learner simplifying his/her response
22	Slowing down	Test-taker/learner slowing down the speed of delivery to formulate speech
23	Spelling out to clarify meaning	Test-taker/learner spelling out a word to clarify meaning
24	Spelling to ensure comprehension	Test-taker/learner spelling out a word to ensure the examiner's understanding
25	Stalling to fill time with — Time-gaining cliché sentences	Test-taker/learner stalling his/her response to fill time with sentences that do not appear necessary but can give the test taker sufficient time to think of ideas
	Stalling to fill time with — Gap fillers	Test-taker/learner stalling his/her response to fill time with gap fillers like "you know"
26	Thinking ahead	Test-taker/learner thinking ahead
27	Using keywords	Test-taker/learner using key words to formulate speech
28	Using L1	Test-taker/learner using L1
29	Using L2 to organize thoughts	Test-taker/learner using L2 to organize thoughts
Cognitive		**Definition**
1	Analyzing linguistic choices	Test-taker/learner analyzing different linguistic choices for the response

2	Analyzing questions		Test-taker/learner analyzing task questions
3	Anticipating examiner's feedback		Test-taker/learner anticipating examiner's reactions
4	Anticipating problems		Test-taker/learner anticipating their problems during the task
5	Anticipating questions		Test-taker/learner anticipating the question
6	Anticipating rating criteria		Test-taker/learner anticipating a task's rating criteria
7	Attending to oral production		Test-taker/learner directing attention to or concentrating on a specific aspect of a task
8	Attending to task requirements		Test-taker directing attention to task requirements
9	Using imagination		Test-taker/learner using imagination in order to respond
10	Inferring		Test-taker/learner seeking to understand by using information in the text, dialogue, or monologue to guess the meanings of linguistic items or to make up missing information
11	Memorizing		Test-taker/learner trying to memorize what was said in the dialogue or what was written in the text
12	Organizing thoughts		Test-taker/learner organizing ideas
13	Outlining		Test-taker/learner outlining the content of his/her response
14	Recalling vocabulary		Test-taker/learner recalling vocabulary
15	Recalling what one has written		Test-taker/learner thinking about what he/she has written
16	Translating		Test-taker/learner translating between languages
17	Using intuition		Test-taker/learner using intuition in order to respond
18	Using mechanical means		Test-taker/learner writing things down
Meta-cognitive			Definition
1	Evaluating language skills		Test-taker/learner evaluating language proficiency after completing a task
2	Evaluating affect		Test-taker/learner evaluating his or her emotional state
3	Evaluating language production		Test-taker/learner evaluating language production after completing a task
4	Evaluating mental process		Test-taker/learner evaluating his/her thinking process
5	Evaluating performance	During speaking	Test-taker/learner evaluating language performance during speaking test
		After speaking	Test-taker/learner evaluating language performance after speaking test
6	Evaluating strategies		Test-taker/learner evaluating the strategies used to perform the task
7	Evaluating task	During speaking	Test-taker/learner evaluating the task during speaking test
		After speaking	Test-taker/learner evaluating the task after speaking test
8	Generating goals		Test-taker/learner generating goals
9	Generating future solutions		Test-taker/learner generating solutions in response to their performance after a task
10	Generating future strategies		Test-taker/learner generating strategies
11	Setting goals		Test-taker/learner setting a goal for task completion
12	Identifying problems		Test-taker/learner identifying problems in performing a task
13	Monitoring examiner's feedback		Test-taker/learner monitoring the examiner's feedback
14	Monitoring time		Test-taker/learner monitoring the time while performing a task
15	Planning		Test-taker/learner engaging in planning in order to perform a task
16	Self-monitoring		Test-taker/learner self-monitoring his/her performance during the task
17	Self-correcting	Mistakes	Test-taker/learner self-correcting errors in his/her oral production
		For higher quality	Test-taker/learner self-correcting correct sentences in his/her oral production to replace them with better linguistic choices
18	Evaluating what one has heard		Test-taker/learner evaluating what he or she has heard
Affective			Definition
1	Fearing judgment		Test-taker/learner minding oral production for fear of judgment
2	Justifying affective state		Test-taker/learner using reasons to justify their emotions that might affect their performance
3	Justifying performance		Test-taker/learner justifying his/her performance
4	Lowering anxiety		Test-taker/learner lowering his/her anxiety
5	Monitoring affective state		Test-taker /learner monitoring his/her emotional state during the task
6	Overriding affective challenges		Test-taker/learner conquering his/her negative emotion
7	Engaging in positive self-talk		Test-taker/learner encouraging him/herself through positive statements

8	Asking questions to lower anxiety	Test-taker/learner asking the examiner questions to lower his/her anxiety
Social		Definition
1	Asking examiner questions to direct conversation	Test-taker/learner asking the examiner questions to decide what to talk about
2	Asking examiner questions to engage the examiner	Test-taker/learner engaging in conversation by asking the examiner questions
3	Attending to the listener's interest	Test-taker/learner directing attention or concentrating on the listener's interest
4	Creating a positive impression	Test-taker/learner trying to create a positive impression on the examiner
5	Seeking clarification	Test-taker/learner seeking clarification from the Examiner
6	Seeking social interaction	Test-taker/learner seeking interaction with the examiner
7	Using examiner's feedback in one's response	Test-taker/learner using the examiner's feedback in his/her response
8	Seeking examiner's feedback	Test-taker/learner seeking the examiner's feedback
9	Seeking help	Test-taker/learner seeking help from the examiner