

International Journal of Psychology Research



ISSN Print: 2664-8903
ISSN Online: 2664-8911
Impact Factor: RJIF 5.24
IJPR 2024; 6(1): 69-77
www.psychologyjournal.in
Received: 03-01-2024
Accepted: 13-02-2024

Revathi Srinivas
Professor, The English and
Foreign Languages University,
Hyderabad, Telangana, India

Dr. Orazgeldi Bayramberdiyev
Dovletmammet Azadi
Turkmen National Institute of
World Languages, Ashgabat,
Turkmenistan

‘Watched’ or ‘not watched’: Investigating the effects of planning condition on speaking performance of ESL learners

Revathi Srinivas and Dr. Orazgeldi Bayramberdiyev

DOI: <https://doi.org/10.33545/26648903.2024.v6.i1b.52>

Abstract

For ESL learners, processing time-pressure is one of the fundamental issues in speaking in English as the working memory capacity is regarded being limited in processing information. While Peter Skehan’s Limited Attentional Capacity Model (1996) argues that learners’ attention is limited, Peter Robinson’s Cognition Hypothesis (2001) claims that while performing tasks, learners can access various resource streams. Based on Rod Ellis’ (2005) framework, this study investigated the links between different stages of speech production i.e., Conceptualization, Formulation, and Articulation, and effective interventions regarding how time-pressure were handled by students of class VII with reference to complexity, accuracy, and fluency. Participants were asked to view two videos and narrate the story. The study compared the ‘Watched’ condition with a control condition. Findings of the study indicate that the ‘Watched’ condition had significantly increased fluency and complexity but had not affected accuracy of the performance of the sample.

Keywords: Performance, planning conditions, complexity, accuracy, fluency

1. Introduction

Performance is a significant external factor that affects knowledge and accomplishes a crucial function in our cognitive development. It assists in addressing the difficulties that the learners encounter while learning to speak in English. Memory as a cognitive ability holds a critical position in speech production process. Therefore, learners of English as a second or foreign language require time in order to sift through their memory while searching for suitable lexical information when they perform speaking activity. Encoding and storing of desired information, and retrieving the same when needed from our memory system are handled by information processing models and production of spoken language comes under the umbrella of the models of spoken production.

It is essential to know *how* students perform on the speaking tasks-the way they do-and identify areas that may restrict their efficiency by hindering the growth of their language skills.

According to Levelt’s model of first language (L1), Speech Production (Levelt 1989, 1993, 1999) ^[24-26], information processing in L1 speaking contains the stages of Conceptualization, Formulation, and Articulation as well as a speech comprehension system through which the output of each stage can be monitored: the pre-verbal message, the inner speech plan, and the overt speech plan. Speaking in a native language to a large extent is an incremental, parallel, and automatic process (Kormos 2006, p.7-8) ^[23].

Unlike native language speaking, which is largely regarded as being based upon easy, fluent and automatic processes, speakers of English as a second language (L2) have at least the following four sources of problems in communication, as argued by Dörnyei and Scott (1997) ^[8], cited in Kormos (2006) ^[23]:

1. Resource deficits,
2. Processing time-pressure,
3. Perceived deficiencies in their own language output, and
4. Perceived deficiencies in decoding the interlocutor’s message.

Corresponding Author:
Revathi Srinivas
Professor, The English and
Foreign Languages University,
Hyderabad, Telangana, India

It seems that processing time-pressure in speaking is one of the fundamental problems in speaking of English as a second language given that our working memory capacity is regarded as being limited in processing information (Baddeley 1986, 2003) ^[1]. This bottleneck is likely to impede language learning and development of speaking performance in the ESL context. In the Conceptualization and Formulation stages, compared to L1 speakers, L2 speakers generally experience more time-pressure in their speech performance. Beginner level L2 learners would have more time-pressure to handle than their L1 peers in the compilation of articulatory motor programs too. However, since the intermediate and advanced level L2 learners have acquired the basic acoustic templates of the target language phonetics, the articulation of the encoded phonetic plans is likely to implicate automatic motor programming, which would require little conscious awareness.

Researchers often regard the Conceptualization stage as being the least contrasting process between speaking English as a first language and as a second language. However, for processing L2 forms either learned (But not proceduralized) or missing in the L2 mental lexicon, L2 speakers are generally slower than their native peers. This implies that in contrast to the direct link between meaning and L1 representations, the time required to access and retrieve target L2 lemmas from one's mental lexicon is longer, and on its own it is less efficient in processing of language with the speakers of English as a second language than the native speakers of English.

Secondly, due to resource deficits in L2 communication (Dörnyei and Scott 1997; Kormos 2006) ^[8, 23], ideas, which have been conceived beforehand, so that they can be expressed in real-time speech, sometimes encounter gaps in the L2 mental lexicon. As a result, L2 speakers generally are more tentative in the conceptualization of ideas in their speech production. They develop strategies to achieve the best possible match between what they can conceive and articulate and what they must compromise on due to a lack of L2 resources - the issues of 'cognitive comparison' and 'selective attention' (Doughty 2001) ^[9].

At the stage of formulation, L1 speakers rely on an automatic processing in most instances to encode morphological and phonological information, which makes speech production easy and fast, once the ideas are conceptualized. L2 learners may have to memorize or construct utterances through explicit rules from declarative memory. Therefore, the formulation of L2 syntactic, morphological, and phonological forms during speech production is less of an automatic and more of a controlled process that requires explicit attentional resources. Hence L2 speakers need more time to compose morpho-syntactic and phonological information from the mental lexicon; however, the real-time nature of any speech production does not readily allow extra time for processing, so L2 speakers often experience pressure due to shortage of time while speaking in real-life situations.

Considering the fact that time-pressure affects L2 speech processes and impedes learners from retrieving newly learned but not yet automatized linguistic structures, the researchers identified an existing gap in the literature.

Hence the study aimed at examining the comparison between an experimental condition that provides degrees of planning opportunities to reduce time-pressure at a specific phase of speech production, with the control condition,

which is a baseline designed to involve the least possible planning opportunity. Time planning condition employed in the study should be able to provide learners with opportunities to overcome time-pressure in speech by giving the learners sufficient practice in accessing relevant linguistic knowledge as effectively as possible, using forms and functions, and proceduralizing them in long term memory of the learners.

2. Literature Review

Past two decades have witnessed a transition of both research interest and classroom practice from Communicative Language Teaching to Task-Based Language Teaching Approach (Bygate and Samuda 2005; Robinson 2011; Skehan, Bei, Li and Wang 2012) ^[3, 30, 40]. The proponents of TBLT paradigm (Ellis, 2003; Bygate, 2005; Branden, 2009; Skehan, 2014) ^[11, 3, 2, 41] suggest that tasks are the most efficient instruments for teaching learning of language, which allow students to concentrate specifically on meaning and also lead to an imbedded focus on structural forms of language. Employing tasks in teaching and learning of English language eases problems that arise in communicating and also issues in the use of English in the real-world situations where meaning is primary (Ellis 2003; Skehan 1998) ^[11, 32]. For this study, using the Task-Based Language Teaching approach to explore intervention that focuses on time-pressure reduction has at least the following two advantages: (1) it provides evidence from the discourse level, which resembles real-time speaking activities; (2) it connects speech processing conditions with speech product, along with language performance seen in terms of certain standardized measures such as complexity, accuracy, and fluency (CAF) (Ellis 2009; Housen and Kuiken 2009; Norris and Ortega 2009; Skehan 2009a) ^[14, 22, 2, 34]. This will, in turn, provide evidence for evaluating the potential interventions that can be used in language learning classrooms around the globe.

There are two juxtaposing views available in the present literature on cognitive approaches to teaching-learning methods of language i.e., Peter Skehan's The Limited Attentional Capacity model (LAC) (1996) and Peter Robinson's Cognition Hypothesis (2001). The first perspective argues that learners' attention span is limited and therefore they are not able to pay equal amount of attention to key performance elements; whereas the second theory argues that while performing tasks learners can access various resource streams and therefore their attention is not restricted in such circumstances.

While both the perspectives have led to comprehensive and impactful studies in their relevant fields of research, this study, as its potential theory, adopts the Limited Attentional Capacity Model that was proposed by Skehan (1996) ^[31], which provides insights into the spoken production and process of language. The Limited Attentional Capacity (LAC) theory is based on cognitive approaches in language learning that define the features of task characteristics, which might influence spoken language performance. The majority of cognition related research carried out in Task-Based Language Teaching (TBLT) paradigm posits growing emphasis on learners' language analysis and puts specific focus on aspects of language performance. Several researchers accept that linguistic skills and second language performance constructs consist of multiple segments and they can be measured efficiently through complexity,

accuracy, and fluency (CAF) variables. CAF variables are employed to evaluate and assess both spoken performance as well as “indicators of learners’ performance-based skills” (Housen and Kuiken, 2009) ^[22]. Further, the multi-functional nature of CAF variables enables their use depending on the requirements of the task in teaching-learning situations. In terms of fluency, for example, an assessment of a speaking task can be performed based on the number of pauses, the word rate per minute, calculation of reformulations, and other associated measures depending upon the focus of a study. Besides, it is not mandatory to use all fluency measures while testing performance and therefore, it is directly associated with task demands. Each task is distinct and has its own features and every one of it is a potential factor in itself that might affect performance. Thus, it is possible to better understand numerous data in the second language classroom when performance is analyzed in the light of particular task-based element.

According to Dörnyei and Scott (1997) ^[8] cited in Kormos (2006) ^[23], processing time-pressure is one of the factors that affects L2 speech and impedes retrieval of newly learned but not yet automatized linguistic structures. Therefore, effective interventions that focus on easing the bottleneck of processing time-pressure during real-time speaking should be explored. The aim of the study was to examine the effect of planning conditions that would reduce time-pressure, which in turn it is believed, would affect the performance of L2 speakers of English.

As per Skehan’s theory, task complexity decreases the second-language learners’ accessible attention capability during production of language. Based on cognitive theories, the concept of Limited Attentional Capacity (LAC) indicates that during task performance, attention is compromised in such a manner as ‘trade-offs’ take place among different performance components of language. This process is known as the ‘trade-off’ hypothesis in literature, according to Skehan (1998) ^[32]. It argues that due to their limited attention when performing a task, learners are often forced to disperse their attention for different task requirements. As a consequence, a learner cannot devote equal attention to all of the language factors that affect his or her performance, which can be detected when assessing language.

This study employs tasks that focus on meaning and examines task implementation factors which possibly affect learner production that further have an impact on their results of performance as involved in the meaning-making procedure. Factors of task implementation process stand for planning conditions as allocated time to a task and some external elements as introducing a distinct element into a task. Researchers have arrived at a consensus on giving time to plan when performing tasks may provide opportunities for learners to ‘notice the gap’ between task demands and linguistic resources, and then strategically allocate attentional resources to ‘focus on form’ (Long and Robinson, 1998) ^[27] so as to increase accuracy, fluency, and complexity in speech production (Skehan, 1998) ^[32]. Ellis (2005) ^[15] proposed a framework of task-based planning, which primarily distinguishes two types of planning conditions according to when the planning occurs: pre-task planning and within-task planning. Pre-task planning is conducted before learners perform a task. Within-task planning is conducted on-line while learners are performing a task. Pre-task planning can also be allocated into two

different categories as rehearsal and strategic planning with the difference being whether learners have opportunity to actually perform the complete task as a preparation, that is, ‘rehearsal’; or are only allowed time to consider the content and expressions to be encoded before speaking on the task in their working memory, i.e. ‘strategic planning’. Two of these distinctions in Ellis’s (2005) ^[15] framework provide the background for the current study, which explores the links between different stages of speech production and effective interventions regarding how time-pressure is handled.

Based on Rod Ellis’s (2005) ^[15] model, this study adopted one of the experimental conditions and compared one pressure reduction condition (i.e. experimental condition) with a control condition. The control condition is a baseline condition designed to involve the least possible planning opportunity either before or within the task. In contrast, the experimental planning condition provides certain degree of planning opportunities to reduce time-pressure at a specific phase of speech production: conceptualization, formulation, and articulation, or a combination of the speech production phases. The comparison between the Experimental condition with the Control condition can help us understand the effect of time-pressure reductions for pedagogical purposes as well.

In order to transmit the required message to the receiver in communication, planning is an important act of formulating content in choosing which linguistic instruments to select from the memory. In other words, planning informs a speaker about what to say and how to convey a message in a decision-making process. A condition of planning generally includes allocating a particular time to the learner in order to accomplish the given tasks. For any task in the literature, there is no specified time constraint or whatsoever.

In a significant research study in ESL literature Peter Skehan first described the three dimensions of performance in 1996, as the three measurable constructs of language. Following that, Housen and Kuiken (2009) ^[22] state that the beginnings of this combination - complexity, accuracy, fluency-are prominent in second language research studies where a difference gets created between fluent and accurate use of the target language in order to explore the development of second language oral proficiency.

Operating definitions of the three constructs in ESL are provided below:

Ellis (2003, p. 340) ^[1] describes complexity, as ‘the extent to which the language produced in performing a task is elaborate and varied’, accuracy as the capacity to speak without making any error in speech, and fluency as the ability to process the L2 as Lennon (1990) states with ‘native-like rapidity’. According to Ellis (2003, p. 342, cited in Housen and Kuiken, 2009) ^[1, 22] a fluency is ‘the extent to which the language produced in performing a task manifests pausing, hesitation, or reformulation’.

Task Conditions

All the speaking task conditions conducted in the here-and-now mode - speakers narrate a story while watching the video simultaneously. The ‘Control’ (No Pre-watching, No Planning) is the baseline performance condition in which participants start to narrate the story without pre-watching and without planning. The ‘Watched’ condition allows speakers to watch the movie silently once before narration process starts.

All the speaking conditions had been conducted in the here-and-now mode - speakers have narrated a story while watching the video simultaneously. 'Control' (No Pre-watching, No Planning) is the baseline performance condition in which participants narrate the story without pre-watching and without planning. The 'Watched' condition allows speakers to watch the movie silently once before the actual narration starts.

3. Research question and research design

According, the following research question was formulated: Does the 'Watched' condition (Condition 2), which targets time-pressure reduction at the Conceptualizer stage, result in significantly more complex and more fluent speech in comparison to the Control condition (Condition 1)?

Since the present study aims to respond to the research question for which data collected by the researchers was quantitative in nature, a data collection and analysis technique from quantitative research design was adopted. Thus, the study adopted quantitative research design, which is experimental in nature. All the data provided in this study were collected through video recordings of the learners' spoken language and semi-structured interviews with the participants. The performance was measured in terms of dependent variability of performance in the video recorded data transcripts of learners. Therefore, quantitative approach was adopted for the study and the data was analyzed and interpreted statistically.

4. Sample and Methodology

The subjects of the research were thirty students of class VIII, aged between 14 and 15, from an English-medium CBSE affiliated school in Hyderabad, Telangana. They were in the middle of their academic session with 7 years of exposure to English and were native Telugu and Urdu speakers who learned English as a second language. They were selected on a voluntary basis.

The researchers selected the sample through the technique of random sampling to obtain the desired data in this research. Further, they were all exposed to two different videos of the target narrative task under one particular time-pressure condition for the purpose of the study. Instructions were provided to the learners before the task was conducted and time was carefully maintained during the performance.

Data were collected through one-on-one meetings with participants over a period of fifty hours, which meant that each student took two hours approximately to complete the task. Once the students arrived for data collection, the participants were assigned to one of the task conditions by the researcher. All the speaking conditions were conducted in the here-and-now mode - speakers narrate a story while watching the video simultaneously.

To help participants become familiar with the speaking conditions, a page of task instructions in English was provided prior to execution of tasks. The participants' comprehension of the instructions was checked through a few questions and sample practice with the researcher. Their teacher also conducted all communication around the instructions of the task in English, Telugu and Urdu languages. After a participant was clear about the data collection procedure, the researchers played the video. At the beginning of the video, the same instructions appeared again on the screen. Shortly after that, the computer told the speaker to get ready to speak in 5 seconds, and then the task started and their task performance was recorded.

After transcribing the recorded data each learner's speech transcript was analyzed for accuracy, fluency, complexity, and lexical variety through employing the same measures of speech performance used in the pilot study of this research.

5. Data Collection Tools

Drawing on works of Skehan and Foster (1999, 2005) [37-38], the researchers used two videos from the *Mr. Bean* series to elicit speaking performance. Using two videos can avoid some task irrelevant variables such as learners being unfamiliar with the narrative task.

The presentation sequence of the two videos was counter-balanced, and the study reports the mean scores of the two video performances as the results.

Description of Speaking Conditions (Independent Variables)

Speaking conditions	Pre-watching (5 min)
1 Control	-
2 Watched	√

Control and Experimental Conditions

Condition	Operationalization	Targeted location [#]	Hypotheses	Evidence from the literature
Control	Watch+ tell	-	-	-
Watched	Watch, Watch+ tell	Conceptualizer	C, F	Skehan and Foster 1999 [37]

Condition one is the Control condition, and gives no planning and no pre-watching opportunities for speakers. In its operationalization, a learner sat in front of the computer. The researchers then asked the learner to narrate the events while watching the normally played video. The learner had to narrate in response to what he/she was watching. It is a challenging condition because the speaker, without knowing the story content before speaking, was simultaneously narrating the story merely guided by watching the on-going frames of the video.

From the linguistic perspective, borrowing the terms from Bygate and Samuda (2005, p. 48) [3], it is hard for speakers to take the 'perspectives' of either the speaker's or the presumed listener's attitude, or to 'preview', that is,

consider the background and foreground of what is happening and what is about to happen - these are two important linguistic resources that lead to 'framing' a narration toward discourse coherence.

The 'Watched' condition (Condition 2) allows speakers to watch the video once before narrating the story. 'Watching' is a type of 'pre-task activity' as stated by Skehan and Foster (1999) [37], which provides exposure to the task material before the real task performance. This manipulation is intended to reduce time-pressure at speech conceptualization by exposing to speakers the story content first. In this way, a greater proportion of attention becomes available to attend to formulation (And to 'focus on form') while the speaker is performing the task, and his/her speech

performance can therefore be enhanced. Few studies have explored the effect of pre-watching. Skehan and Foster (1999) [37], as an exception, compared the effects of having and not having a pre-watching opportunity. However, contrary to its theoretical assumptions, their study did not find significant results on the CAF measures of performance. A similar line of research that involves easing

speech conceptualization may be strategic planning. For example, Pang and Skehan (2014) [41] in a qualitative study found that during strategic planning, learners reported that they selectively prepared for speech content or language forms.

The 'Watched' condition allows speakers to watch the movie silently once prior to the narration.

Task Conditions

Conditions	Learners	Task duration	
1. Control	Fifteen	One week (Ten hours approx.)	Performance of 30 participants was video recorded.
2. Watched	Fifteen	One week (Ten hours approx.)	

In the quantitative study such as this, a few important steps were followed to prepare the data for statistical analysis. The researcher first inspected the raw data in the study. The fifty speech samples collected in the study (Sample size of each condition is ten video-recorded speech samples) were transcribed and converted into the text format by the researchers manually using InqScribe software program. The basic segmentation of measuring units for analysis was AS Units (Foster, Tonkyn and Wigglesworth 2000) [19]. Codes that were employed in the study such as measures of language on complexity (e.g. subordination) and language accuracy (e.g. error-free clauses) were computed by the researchers manually in a meticulous manner. Further, the language fluency (e.g. mid pause) component of performance measure was also counted and calculated manually by the researcher.

As for the coding of the lexical diversity, the researchers

used CLAN software program, and it was computed by the command 'VOCD' in CLAN software program.

Since the overarching aim of this study is to examine whether the proposed time-pressure reduction has a positive effect on L2 speaking performance, the measures of speaking performance hold an important deciding position. Researchers generally regard speaking performance as multi-componential and consisting of at least the following prominent dimensions: syntactic complexity, accuracy, fluency, and lexis (Ellis 2003; Ellis and Barkhuizen 2005; Norris and Ortega 2009; Skehan 1998, 2009a) [1, 15, 2, 32, 34].

Indicators of these performance aspects have been widely used in the Task-Based Language Teaching (TBLT) literature as discussed in Housen and Kuiken (2009) [22]. Table 5 lists those performance measures that were employed in this research study.

Table 1: Measures of speaking performance (Dependent variables)

Components	Measures Descriptions
Fluency (Speed)*1	1 Speech Rate*2-The number of words per minute for a speech sample.
Fluency (Breakdown)	2 AS End Pause-The average length of pauses at the end of AS units.
Fluency	3 AS Mid Pause-The average length of pauses in the middle of AS units.
Fluency (Repair)	4 Reformulation-The number of strings in a speech sample are repeated with some syntax, morphology or word order modifications, etc.
Complexity	5 Total Words-Total number of words in a speech sample.
	6 ML_AS-The average number of morphemes per AS unit.
Accuracy	7 Subordination-Total number of subordination clauses and verb infinitives divided by Total AS units (Foster, Tonkyn and Wigglesworth 2000).
	8 EF Clause-Total number of error free clauses (Which has no error in syntax, morphology, or word order, etc.) in a speech sample.
Lexical Diversity*3	9 EF Clause Rate-Total number of error-free clauses divided by total number of clauses.
	10 D-Adjusted type token ratio*8

*1. Following Skehan (2009a) [37], fluency was measured in three aspects: speed, breakdown, and repair.

*2. Following Yuan and Ellis (2003) [11] we used 'pruned' words - the words that were repeated, reformulated and reduced were excluded from the calculation.

*3. Here we follow the CLAN manual in calling D 'lexical diversity'.

The type token ratio is the total number of different words divided by total sum of words.

6. Results

The results of descriptive and inferential statistics are given in Table 2. Since tests of statistical significance can be greatly affected by sample size, a very weak effect can be 'statistically significant' while a strong effect can fail to attain 'significance' if sample sizes are large or small respectively. However, effect size, which is the standardized index of the magnitude of an effect, makes it possible to compare the effects of different variables within a given

study or to compare the effects of the same variable across different studies. It is also unbiased with regard to the scale of the measurement the researcher used as well as the standard errors of the dependent variables.

Therefore, in Table 2 the effect size of each contrast being significant or not is given. Table 2 shows the findings of a meta-analysis that synthesizes the effects of all four types of planning conditions in comparison to the control condition.

Table 2: Descriptive and Inferential Statistics for Speaking Conditions

Measures	Condition-1	Condition-2
	N=5	N=5
1.Speech-Rate	69.92 (30.57371)	84.64 (22.28515)
2. AS-End-Pause	6.10748 (2.55730)	4.48551 (1.62998)
3. AS-Mid-Pause	3.3697 (1.66448)	3.51333 (1.56753)
4. Reformulation	8.4 (2.07364)	8.6 (7.09225)
5. Total-Words	349.6 (152.86857)	423.2 (111.42576)
6. ML-AS	7.23332 (0.69082)	7.52857 (1.3354)
7. Subordination	0.16996 (0.06476)	0.2201 (0.11238)
8. EF-Clause	44.0 (15.41104)	44.2 (5.35724)
9. EF-Clause-Rate	0.73654 (0.82266)	0.64183* (0.073082)
10.Lexical Diversity	26.1056 (6.77789)	34.0044 (9.4350)

#Scores have been transformed in order to obtain a normal distribution

Note: The table presents all the mean scores of the dependent variables (i.e. performance measures). Standard deviation is given in parentheses. The results of the four MANOVAs comparing each of the experimental condition with the control condition (using Pillai’s trace) are: ‘Watched’ vs. ‘Control’: $F(28) = 3.12, p < .05, p < 1$; ‘On-line Planning’ vs. ‘Control’: $F(28) = 4.53E6, p < .05, p < 1$; ‘Watched On-line Planning’ vs. ‘Control’: $F(28) = 6.09E6, p < .05, p < 1$; ‘Watched Strategic Planning’ vs. ‘Control’: $F(28) = 3p < .05, p < 1$.

Table 3: Descriptive and Inferential Statistics for Video 1 Speaking Conditions

Measures	Control group	Watched
	N=10	N=10
1.Speech-Rate	72.44 (15.51)	102.16* (23.57)
2. AS-End-Pause	5.48 (1.59)	4.88 (2.66)
3. AS-Mid-Pause	3.65 (0.67)	4.29 (2.22)
4. Reformulation	10.6 (5.02)	12.4 (4.27)
5. Total-Words	362.2 (77.58)	510.8* (117.89)
6. ML-AS	7.32 (0.59)	8.75** (0.68)
7. Subordination	0.21 (0.04)	0.25 (0.09)
8. EF-Clause	51.6 (11.10)	48.8 (17.51)
9. EF-Clause-Rate	0.73 (0.04)	0.56* (0.13)
10. Lexical Diversity 1	23.46 (5.20)	30.26 (10.33)
11. Lexical Diversity 2	0.30 (0.05)	0.27 (0.04)

Note: The table presents all the mean scores of the dependent variables of Video1 (i.e. performance measures). Standard deviation is given in parentheses.

The results of the four MANOVAs comparing each of the experimental condition with the control condition (using Pillai’s trace) are: ‘Watched’ vs. ‘Control’: $F(8) = 550.657, p = 0.033 < .05$.

Table 4: Descriptive and Inferential Statistics for Video 2

Measures	Control group	Watched
	N=10	N=10
1.Speech-Rate	60.48 (18.97)	90.76* (21.91)
2. AS-End-Pause	5.99 (2.11)	5.04 (2.21)
3. AS-Mid-Pause	4.31 (1.17)	3.67 (0.67)
4. Reformulation	10.40 (8.08)	11.8 (3.7)
5. Total-Words	302.40 (94.85)	453.8* (109.5)
6. ML-AS	6.22 (0.59)	7.09* (0.37)
7. Subordination	0.16 (0.08)	0.21 (0.08)
8. EF-Clause	32.00 (6.08)	55.80** (15.12)
9.EF-Clause-Rate	0.61 (0.13)	0.75 (0.07)
10.Lexical Diversity 1	28.15 (8.92)	35.18 (16.82)
11.Lexical Diversity 2	0.36 (0.08)	0.33 (0.07)

Note: The table presents all the mean scores of the dependent variables of Video 2 (i.e. performance measures). Standard deviation is given in parentheses.

The results of the four MANOVAs comparing each of the experimental condition with the control condition (using Pillai’s trace) are: ‘Watched’ vs. ‘Control’: $F(8) = 8365.37, p = 0.008 < .05$.

A Synthesis of Experimental Results

Measure	Condition-2
1.Speech-Rate	-14.72
CI [95%]	[-50.66, 21.227]
2. AS-End-Pause	1.623
CI [95%]	[-6.278, 9.522]
3. AS-Mid-Pause	-0.144
CI [95%]	[-4.163, 3.875]
4. Reformulation	-0.2
CI [95%]	[-7.496, 7.096]
5. Total-Words	-73.6
CI [95%]	[-323.764, 176.564]
6. ML-AS	-0.295
CI [95%]	[-2.88, 2.29]
7. Subordination	-0.050
CI [95%]	[-5.017, 4.916]
8. EF-Clause	-0.2
CI [95%]	[-19.576, 19.176]
9. EF-Clause-Rate	0.095
CI [95%]	[-0.041, 0.230]
10. Lexical diversity	-7.896
CI [95%]	[-21.648, 5.855]

Note: This analysis synthesizes the significant mean difference of experimental condition relative to the control condition. Significant contrasts at $p < .05, p < 1$; ns = non-significant.

A: Effect size d

B: Lower and upper 95% Confidence Interval.

From Table we can see that first; the ‘Watched’ condition was designed to reduce time-pressure at the stage of Conceptualization under Speech Processing Model. This condition did not have any significant effects on general measures of speech such as fluency, complexity, and accuracy.

Table 5: Descriptive and Inferential Statistics for Video 1 and Video 2 Combined Together with the Speaking Conditions

Measures	Control group	Watched
	N=10	N=10
1. Speech-Rate	66.446 (17.51)	96.46*** (22.28)
2. AS-End-Pause	5.74 (1.78)	4.96 (2.31)
3. AS-Mid-Pause	3.98 (0.96)	3.98 (1.58)
4. Reformulation	10.5 (6.34)	12.1 (3.78)
5. Total-Words	332.3 (87.56)	482.3*** (111.42)
6. ML-AS	6.77 (0.80)	7.92** (1.02)
7. Subordination	0.18 (0.07)	0.23 (0.09)
8. EF-Clause	41.8 (13.33)	52.30 (15.86)
9. EF-Clause-Rate	0.67 (0.11)	0.66 (0.14)
10. Lexical Diversity 1	25.81 (7.31)	32.72 (13.41)
11. Lexical Diversity 2	0.33 (0.07)	0.29 (0.05)

Note: The table presents all the mean scores of the dependent variables of Video1 and Video 2 combined together. (i.e. performance measures). Standard deviation is given in parentheses.

The results of the four MANOVAs comparing each of the experimental condition with the control condition (using Pillai's trace) are: 'Watched' vs. 'Control': $F(8) = 2074.59$, $p = 0.000 < .05$.

7. Discussion

Here we can recall that condition one is the Control condition, which does not provide any planning and pre-watching opportunities for learners before narration. This condition is the most difficult experimental condition designed because the participants, unaware of the story content prior to speaking, were narrating the story simply guided by watching the on-going frames of the Mr. Bean video during the task.

From the linguistic perspective, borrowing the terms from Bygate and Samuda (2005, p. 48) [3], it is hard for speakers to take the 'perspectives' of either the speaker's or the presumed listener's attitude, or to 'preview', that is, consider the background and foreground of what is happening and what is about to happen - these are two important linguistic resources that lead to 'framing' a narration toward discourse coherence. This condition is hypothesized as being the hardest among all the conditions - involving what Ellis (2005) [12] described as 'Pressured On-line Planning', since it is having the least possible planning time (Before and within the task).

The 'Watched' condition on the other hand, allows speakers to watch the video prior to narrating the video clip. It is worthwhile noting here that the 'Watched' condition was designed to reduce time-pressure in spoken performance at the stage of Conceptualization by exposing the speakers to the story content in advance. A greater proportion of attention becomes available to attend to Formulation stage (And to 'focus on form') while the speaker is doing the task, and their performance in speech can therefore be improved.

Few studies have explored the effect of pre-watching. Skehan and Foster (1999) [37], as an exception, compared the effects of having and not having a pre-watching opportunity. However, contrary to its theoretical assumptions, their study did not find significant results on the CAF measures. The comparison of these two conditions helps us understand how the 'Watched' condition can reduce time-pressure at the Conceptualization stage. The study hypothesized that watching has a similar effect to strategic planning and can help learners produce more similar effect to strategic planning and can help learners produce more complex and more fluent speech.

Comparing the performance of learners in the 'Control condition' with 'Watched' condition it is found that the mean differences are significant in Speech Rate, Total Words, and ML_AS.

The study also found the effect of the 'Watched condition' on speaking performance as it has significantly increased *fluency* (Measured by Speech Rate) but did not affect significantly other components of fluency breakdown and repair (measured by AS End Pause, AS Mid Pause, and Reformulation). It has also significantly increased *complexity* (Measured by Total Words, and ML_AS). However, this condition did not affect speech accuracy, which was measured by the rate of error-free clauses (EF Clause Rate) or lexical diversity. It is worth noting here that the 'Watched' condition was designed to reduce time-pressure at the Conceptualization stage. This condition was the limited condition because the learners were made directly narrate the video story after watching without any planning acted.

Comparing the Experimental Condition with the Control Condition

Experimental conditions	Complexity	Accuracy	Fluency	Lexis
Watched	Higher ^a	Ns ^b	Higher	Ns

a: 'Higher'/'Lower' refers to a certain intervention that has significantly higher/lower complexity/ accuracy/fluency than the control condition;

b: 'Ns' refers to no significant difference that was found.

According to the findings of the study, comparing 'Control' condition with 'Watched' condition the mean difference is significant in Speech Rate, Total _Words, and ML_AS. Here, we can see effect of the 'Watched' condition on speaking performance as it has significantly increased fluency (Measured by Speech Rate) but did not affect notably other components of fluency breakdown and repair (measured by AS End Pause, AS Mid Pause, and Reformulation). It has also significantly increased complexity (Measured by Total Words, and ML_AS). However, this condition did not affect speech accuracy measured by the rate of error-free clauses (EF Clause Rate) or lexical diversity.

If language teachers are equipped with this knowledge that L2 speakers are not likely to attend to form unless real-time pressure of performance at the Conceptualization stage is reduced - a 'Meaning Priority' principle in L2 speaking, then they might focus on meaning before addressing formulator stage of the speech process. This will help

learners to develop their speech in a lesser time-pressured context while learning how to speak in the second language classroom.

Further, by evaluating the pedagogical condition, if the present objective is to improve the learner's fluency, based on the outcomes acquired from this research, mentally preparing our learners through addressing the Conceptualizer stage of speech processing (As it is done in this study through pre-watching conditions) will have positive impact on their fluency in speech. Likewise, if the emphasis is on enhancing the use of elaborate language as a complexity of speech, more importance could be provided to the time provided for learners, along with thorough information in pre-task activities to work on meaningful content instead of rushing through the main task without much preparation. Hence, based on thorough planning and design holds a key role when sequence-based tasks are performed where time- pressure is handled. If that were achieved then it would lead to a balanced development of spoken language. It would also allow instructors to detect a learners' inclination to indulge in just one specific element of language. For instance, it might be feasible to notice and prevent the learners from excessively attending to accuracy alone and consequently, this would lead in orderly advancement in holistic way. In addition, such knowledge could be integrated into higher levels of learners as meta-cognitive awareness and they could be specifically guided to acquire control over their speech by monitoring time-pressure in real life communication situations.

8. Conclusion

Monitoring of speech production, which has often been neglected in many L2 teaching- learning contexts, teaching of speaking curricula and methods should be highlighted in language instruction. Accordingly, interventions at the content Conceptualization (Bygate and Samuda 2005) ^[3] can extend and organize the content of what is being said in spoken performance. In conclusion, the three processes (i. e. Content Conceptualization, Linguistic Formulation, and Speech Monitoring) are key to attain desirable outcome in L2 speech and they should be the focus of speech interventions in second language classrooms.

This study is significant as it draws the attention of the teachers to the need to equip themselves with the knowledge that L2 speakers are not likely to attend to form unless real-time pressure of performance at the Conceptualization stage is reduced-a 'meaning Priority' principle in L2 speaking, then they might focus on meaning before addressing formulator stage of speech process. This will help learners develop their speech in a lesser time-pressured context while learning how to speak in the second language classroom. Preparing the learners through addressing the Conceptualizer stage of speech processing will have positive impact on their fluency in speech, rewarding in terms of time, effort, and achievements all of which will hopefully lead to a critical mass of independent learning.

9. References

1. Baddeley AD. Working Memory. Oxford: OUP; c1986.
2. Branden K, Bygate M, Norris JM. Task-based language teaching: A reader. Amsterdam: John Benjamins Publishing Company; c2009.
3. Bygate M, Samuda V. Integrative planning through the use of task-repetition. In: Ellis R, editor. Planning and task performance in a second language. Amsterdam: John Benjamins; c2005. p. 37-76.
4. Crookes G. Planning and interlanguage variation. *Stud Second Lang Acquis.* 1989;11:367-383.
5. Crookes G. The utterance, and other basic units for second language discourse analysis. *Appl Linguist.* 1990;11(2):183-199. DOI: 10.1093/applin/11.2.183.
6. Creswell JW. Mapping the developing landscape of mixed methods research. In: SAGE handbook of mixed methods in social and behavioral research. 2010;2:45-68.
7. Creswell JW. Educational research: Planning, conducting, and evaluating quantitative and qualitative research. 4th ed. Boston, MA: Pearson; c2012.
8. Dörnyei Z, Scott ML. Communication strategies in a second language: Definitions and taxonomies. *Lang Learn.* 1997;47:173-210.
9. Doughty C. Cognitive underpinnings of focus on form. In: Robinson P, editor. Cognition and second language instruction. Cambridge: CUP; c2001. p. 206-257.
10. Ellis R. Interlanguage variability in narrative discourse: Style shifting in the use of the past tense. *Stud Second Lang Acquis.* 1987;9:1-20.
11. Ellis R. Task-based language learning and teaching. Oxford: OUP; c2003.
12. Ellis R. Integrative planning through the use of task-repetition. In: Ellis R, editor. Planning and task performance in a second language. Amsterdam: John Benjamins; c2005. p. 3-36.
13. Ellis R. The study of second language acquisition. Oxford: OUP; c2008.
14. Ellis R. The differential effects of three types of task planning on the fluency, complexity and accuracy in L2 oral production. *Appl Linguist.* 2009;30(4):474-507.
15. Ellis R, Barkhuizen G. Analysing learner language. Oxford: OUP; c2005.
16. Foster P. Doing the task better: How planning time influences students' performance. In: Willis J, Willis D, editors. Challenge and change in language teaching. Oxford: Heinemann; c1996. p. 126-135.
17. Foster P, Skehan P. The influence of planning on performance in task-based learning. *Stud Second Lang Acquis.* 1996;18:299-324.
18. Foster P, Skehan P. The influence of source of planning and focus of planning on task-based performance. *Lang Teach Res.* 1999;3:185-214.
19. Foster P, Tonkyn A, Wigglesworth J. Measuring spoken language: A unit for all reasons. *Appl Linguist.* 2000;21(3):354-375.
20. Bui HYG. Task readiness: Theoretical framework and empirical evidence from topic familiarity, strategic planning, and proficiency levels. In: Skehan P, editor. Processing perspectives on task performance. Amsterdam: John Benjamins Publishing Company; c2014. p. 63-93.
21. Guar-Tavares MG. Pre-task planning, working memory capacity and L2 speech performance. Unpublished Ph.D. thesis. Universidade Federal de Santa Catarina, Brazil; c2008.
22. Housen A, Kuiken F. Complexity, accuracy, and fluency in second language acquisition. *Appl Linguist.* 2009;30(4):461-473.
23. Kormos J. Speech production and second language acquisition. Mahwah, NJ: Lawrence Erlbaum Associates; c2006.

24. Levelt WJM. Speaking: From intention to articulation. Cambridge, MA: The MIT Press; c1989.
25. Levelt WJM. Producing spoken language: A blueprint of the speaker. In: Brown C, Hagoort P, editors. Neurocognition of language. Oxford: OUP; c1999. p. 83-122.
26. Levelt WJM, Roelofs A, Meyer AS. A theory of lexical access in speech production. *Behav Brain Sci.* 1999;22:1-75.
27. Long M, Robinson P. Focus on form: Theory, research, and practice. In: Doughty C, Williams J, editors. Focus on form in classroom SLA. Cambridge: CUP; c1998. p. 15-41.
28. Lynch T, Maclean J. Exploring the benefits of task repetition and recycling for classroom language learning. *Lang Teach Res.* 2000;4:221-250.
29. Robinson PJ. Cognition and second language instruction. Cambridge: Cambridge University Press; c2001.
30. Robinson PJ. Task-based language learning: A review of issues. *Lang Learn.* 2011;61(1):1-36.
31. Skehan P. A framework for the implementation of task-based instruction. *Appl Linguist.* 1996;17(1):38-62. DOI: 10.1093/applin/17.1.38.
32. Skehan P. A cognitive approach to language learning. Oxford: OUP; c1998.
33. Skehan P. Task-based instruction. *Lang Teach.* 2003;36(1):1-14. DOI: 10.1017/s026144480200188.
34. Skehan P. Modelling second language performance: Integrating complexity, accuracy, fluency and lexis. *Appl Linguist.* 2009;30(4):510-532.
35. Skehan P. Lexical performance by native and non-native speakers on language-learning tasks. In: Daller H, Malvern D, Meara P, Milton J, Richards B, Treffers-Daller J, editors. Vocabulary studies in first and second language acquisition: The interface between theory and application. London: Palgrave Macmillan; c2009. p. 107-124.
36. Skehan P, Foster P. The influence of planning and post-task activities on accuracy and complexity in task-based learning. *Lang Teach Res.* 1997;1(3):16-33.
37. Skehan P, Foster P. The influence of task structure and processing conditions on narrative retellings. *Lang Learn.* 1999;49:93-120.
38. Skehan P, Foster P. Strategic and online planning: The influence of surprise information and task time on second language performance. In: Ellis R, editor. Planning and task performance in a second language. Amsterdam: John Benjamins; c2005. p. 193-218.
39. Skehan P, Foster P. Complexity, accuracy, fluency and lexis in task-based performance: A meta-analysis of the Ealing research. In: Van Daele S, Housen A, Kuiken F, Pierrard M, Vedder I, editors. Complexity, accuracy and fluency in second language use, learning and teaching. Brussels: Royal Flemish Academy of Belgium for Sciences and Arts; c2008. p. 263-284.
40. Skehan P, Bei X, Li Q, Wang Z. The task is not enough: Processing approaches to task-based performance. *Lang Teach Res.* 2012;16(3):170-187.
41. Skehan P. The context for researching a processing perspectives on task performance. Amsterdam: John Benjamins Publishing Company; c2014. p. 1-26.