

ENGAGEMENT AS A DYNAMIC BUT PERCEIVABLE VARIABLE
IN LANGUAGE CLASSROOM INTERACTIONS

by

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Declaration of Authorship

I declare that this thesis is my own work and, to the best of my knowledge and belief, it does not contain material published or written by a third party, except where permission has been obtained and/or appropriately cited through full and accurate referencing.

Signature: Lydia Shepherd

A handwritten signature in black ink that reads "Lydia Shepherd". The signature is written in a cursive style with a large initial 'L' and 'S'.

Date: 15th May 2022

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Dedication

I would like to dedicate this thesis to my mother, Carole Shepherd. She has been an example to me in every way. Her fearlessness and creativity in the classroom has had me engaged for as long as we both can remember.

Abstract

Engagement is understood as a multifaceted concept comprising behavioral engagement, emotional engagement, and cognitive engagement. These three dimensions are not always synchronized, and teachers may find students highly cognitively engaged, but not emotionally. Therefore, students can be engaged at varying degrees with some not engaged at all, and this disengagement can lead to decreased motivation and achievement. Keeping this in mind, it becomes critical that teachers understand what engages their students in the classroom. For this reason, the following study was conducted in order to find out whether or not teachers are aware of what engages their students, when their students are engaged, and if so, how? Over the span of a semester, researchers recorded two classrooms, over several lessons. Each video was displayed to the student represented in the video, and their respective teacher. The learners were then asked to self-rate their engagement as they watched themselves. Subsequently, the teacher was asked to watch the same video and, using the verbal and nonverbal cues of the learner, rank their judgment of the learner's engagement. Upon completion of the learner's and teacher's idiodynamic responses, they underwent an interview to explain the dips and spikes from the response graphs produced by the software. After careful analysis of the graphs and verbal responses from both parties, the research revealed that the teachers were unable to identify if and when students were faking engagement, and on average assumed higher engagement throughout the class than the students had self-reported. In other words, teachers had a harder time perceiving the differences between engagement and disengagement in their students. Using the consistencies found in both the teacher and student responses, this paper aims to highlight the common patterns of learner engagement, disengagement, and fake engagement.

Search Terms: engagement, disengagement, fake engagement, idiodynamic, pragmatics, classroom interaction, saving face, classroom interaction

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Chapter 1: Introduction

Learner engagement can be defined as a multidimensional concept comprising active participation and involvement in the classroom (Mercer et al., 2020). With the notion of engagement gaining ever greater popularity, many curriculum designers have been striving to develop pedagogies based on fostering more active participation in school settings (Padgett, 2019). Despite the prominence engagement holds, it still seems, however, to be absent in many learning environments. More importantly, there is a lack of awareness among teachers relating to how students reflect engagement (Mercer et al., 2020). Learner engagement plays a necessary role in addressing student boredom, high dropout rates, and overall low achievement (Fredricks et al., 2016). An easier way to measure engagement is through student participation in effective practices, leading to measurable outcomes (Kuh et al., 2007). Educators can better see these measurable outcomes in the form of assignments or assessments, but struggle to do so in real time, amid class sessions. This study explores the topic of engagement and attempts to establish the degree to which teachers are aware of actual student engagement, disengagement, and fake engagement.

Through a semester-long research study, the concept of engagement in the classroom was analyzed in the following forms: engagement, disengagement, and fake engagement. Learner engagement plays a necessary role in addressing student boredom, high dropout rates, and overall low achievement (Fredricks et al., 2016). Although the influence of engagement is obvious, it can often seem elusive to instructors. To further understand the concept of engagement, it can be defined as student participation in effective practices, leading to measurable outcomes (Kuh et al., 2007). Although all teachers desire the highest levels of engagement within the class, students are victims to human nature and therefore cannot maintain engagement always.

Faking engagement can be as prevalent as overt disengagement. Everyone who has ever learned, or worked in any form is well versed in the act of faking engagement. Whether fighting back sleep by nodding one's head in agreement, or looking tentatively and studiously at a laptop, all the while being distracted by amazon.com. Faking engagement is an unavoidable part of the learning process. It is because of this that the

research at hand does not seek to eliminate disengagement altogether, that would be impossible. Rather than eliminate it, this study aimed to identify both engagement and disengagement and calibrate the identifiable factors. That way, teachers can better sustain engagement and redirect when disengagement becomes obvious. Likewise, the research explored in what ways teachers incorrectly perceive student engagement by asking the students themselves. These students revealed their secrets, as well as their thought process when engaged, disengaged, and when they are faking engagement. This research used the students' secrets to reveal patterns and consistencies within two classrooms in hopes of creating engagement tools for classrooms anywhere.

Chapter 2. Background and Literature Review

In this corpus, the key concepts used in this research are explored and defined using past academics and their applicable writings. The topic at hand: engagement, disengagement, and fake engagement, are defined, explained, and rationalized. Examples of how engagement has been utilized and measured in the past are given in order to bring comparison and fair validity to the current research. Finally, examples of documented, observable, non-verbal behaviors in regards to student engagement are given in hopes of offering a base line of understanding around student engagement within the classroom.

2.1 Definitions

Generally speaking, when we engage we are “occupied or busy doing something” (Hiver et al., 2021, p. 1). In feigning or faking engagement, though, we attempt to *appear* outwardly “occupied or busy” but we are merely pretending to be so (Mercer et al., 2020). Many of us become masters of feigning engagement in front of others. We make eye contact but look past the person. We nod in agreement without hearing a word. We laugh at appropriate times not even knowing if what was said was funny. Language learners are no different. According to Mercer, et al. (2020), “learners sometimes consciously manipulate their behaviors in order to feign engagement in front of the teacher... which may outwardly resemble engagement but may in fact be complete disengagement or acts of compliance as students enact the diligent learner role.” (p. 162). Additionally, engagement is a multi-dimensional state that we enter and exit at any given time; it is dynamic (Appleton et al., 2008). We can be intensely involved in something or with someone at one moment, lose interest and become distracted the next, and end up disconnected all together until something grabs our attention and engages us again. Moreover, this process often happens in mere seconds. Hence, engagement is not categorical in the sense that we either are or are not engaged which makes it even more complex to recognize and thus assess in a classroom setting (Hiver et al., 2021).

Although language classroom research such as those found in this literature review provides evidence on the influence and effect on engagement in second language learning as well as alternatives for assessing it (Mercer et al., 2020). The specific purpose

in this study is to examine the dynamic processes of learner task (dis)engagement and the challenges faced by language teachers to decode learners' nonverbal communication indicative of it. What makes learners engage, disengage or fake engagement on a moment-by-moment timescale? What affective processes within the learner are involved? What are the observable indicators of genuine engagement, fake engagement and disengagement, if there are any? Are language teachers effective at decoding the "deception" of learners when they feign engagement? This chapter uses the idiodynamic method (see MacIntyre, Chapter 10, Appendix E) to examine the fluctuating nonverbal indicators of (dis)engagement during L2 task performance and considers the impetuses reported by learners to engage (or not) with a task. It also provides evidence of the efficacy of language teachers' ability to discern between genuine engagement, fake engagement and disengagement from one moment to the next and the nonverbal indicators they use to arrive at their conclusions.

2.2 Genuine vs. fake engagement

Because engagement requires action on the part of the learner, several behavioral elements are necessary for it to be genuine—again with the caveat that at any given time, various combinations of the elements are possible—thus increasing the complexity even further. Among them are: 1) attention; 2) commitment; and 3) persistence to the task; as well as the perception that said task is 4) meaningful and has value (Schlechty, 2011). For instance, learners might participate in the completion of a task, and they might even find it of value, but unless they are also committed and persist to the end, genuine engagement is not achieved; rather, Schlechty (2011) would call this merely being "on-task." Such on-task classroom involvement that appears to be engagement (but in reality is not) can be characterized as learners enacting different forms of compliance. For example, language learners who are strategically compliant, fake the act of engagement to conform to expectations; those who are ritualistically compliant feign engagement by doing the bare minimum to evade negative consequences; learners who participate in retreatism do not create difficulties in the classroom or for the teacher, providing that compliance is not forced upon them; and finally, those who are rebellious reject compliance and actively

distract others (Schlechty, 2011). This study considers “retreatism” and “rebellious compliance” as disengagement.

Similarly, Nystrand and Gamaron (1991) outline two kinds of engagement. The first, procedural, reflects mere adherence to classroom expectations by carrying out the role of paying attention and completing assignments (which this study proposes is equated with “faking”). Second, substantive engagement reveals sustained personal commitment to deeper understanding and learning (which this study purports to be genuine engagement); it is more complicated and often cannot be ascertained by scrutinizing the behavior of individual learners. Not all engaged learners express their engagement in identical ways. Procedurally engaged learners (i.e., “fakers”) usually behave normally and cause few problems and are unlikely to appear off-task compared to completely disengaged students. Substantively engaged students (i.e., genuinely engaged), on the other hand, may ask more questions, have a “twinkle in the eye” (p. 263) or display “rapt attention for a long period of time”—or they may do none of these things. Hence, this inability to clearly distinguish “genuine” from “fake” engagement led Nystrand and Gamaron (1991) to report, “Clearly, the manifestations of student engagement are sundry, ambiguous, and elusive. Often there simply are no clear behavioral manifestations...(p. 263).”

In the context of language learning, Mercer et al. (2020) attempted to understand engagement from the learners’ perspective and used focus groups and in-depth interviews to examine why and when language learners disengage, how they fake it, and the motives for learners’ pretenses. The study revealed that learners’ disengagement is often a response to their own mental states of boredom or moodiness, physical classroom conditions (e.g., poor lighting and seating arrangements that did not stimulate student interaction), lecture-style teacher delivery, irrelevant content, and prioritizing coursework other than that to which the class is devoted. Furthermore, learners who fake engagement reported using primarily nonverbal cues (e.g., gaze behavior, gestures, postures and nodding) and work-related actions (e.g., note-taking and reading) to misleadingly demonstrate that they are attentive and participating. Two primary drives undergird learners’ stated motives for feigning engagement: social expectations such as being

polite, respectful and considerate of others; and keeping their teacher happy (Mercer et al., 2020).

2.3 (Dis)engagement is dynamic and complex

In defense of the dynamicity of engagement, Hiver et al. (2021, p. 4) discuss different timescales on which it might play out. They propose that engagement can be discussed as being long-term, like that which spans years such as the engagement necessary to learn a language; and it can also be considered on a scale of mere minutes as a learner's engagement vacillates on the same task and/or with the same person on a moment-by-moment basis. They also suggest that because engagement "does not emerge in a vacuum," it is context-dependent; and that not only is it influenced by the classroom (and beyond), it is also contingent upon an "object," or "with a topic, a person, a situation, or in an activity or task" (p. 4). They propose that student engagement is not fixed or enduring and that it can and does evolve. Hiver et al. (2021) call for further research on studies that evaluate engagement's flexibility, explore its dynamic evolution, and/or concentrate on re-engaging disengaged and disaffected learners. The purpose of this study is to at least in part, heed that call.

The multidimensional nature of engagement and learners' ability to activate certain dimensions but not others lends further complexity to the construct (Trowler, 2010). Among the dimensions are: 1) behavioral—i.e., which implies active participation; 2) cognitive—i.e., which involves thoughtful, mental effort; and 3) affective—i.e., which implicates personal emotional reactions (Fredricks et al., 2004). That is to say, a language learner could be actively participating in a task but exert little to no mental or affective energy. Likewise, the same learner could be emotionally and thoughtfully invested in a task but not actively contributing to its achievement. To further the complexity of its multidimensionality, a learner's task engagement is also embedded in the social context of the classroom or its situated milieu (Svalberg, 2009), bringing the total to at least four different dimensions that are not necessarily simultaneously activated. A genuinely engaged learner ticks all four boxes. For engagement to be genuine and for it to drive profound and meaningful learning, it requires activation of all the dimensions--not just behaviors that feign an appearance of being on-task and

attentive. In sum, “engagement is a dynamic, multidimensional construct comprising situated notions of cognition, affect and behaviors – including social interactions – in which action is a requisite component” (Hiver et al., 2021, p. 27).

2.4 The nonverbal observability of engagement

Previous investigations addressing the observability of the various dimensions of engagement (behavioral, cognitive, affective and social), suggest that there are visible *behavioral* cues that indicate an engaged state such as sitting in the front of the class and avidly taking notes (Mottet, 2000). Furthermore, learners’ nonverbal attentiveness is associated with their engagement. According to Frymier and Houser (2016), learners’ nonverbal behaviors are a more accurate reflection of their engagement than their oral behavior. Learners display an array of nonverbal behaviors influencing teachers’ perceptions and treatment of learners in the classroom (Brooks & Woolfolk, 1987). Among them are nonverbal actions that disclose their interest and engagement in learning. According to Mottet (2000) nonverbal savvy teachers easily discern engaged students in the classroom given their recurrent eye contact, erect posture and positive facial expressions. Furthermore, these nonverbally communicative learners are more likely to be perceived by their teachers as more engaged and exerting greater effort into the lesson and their learning (Mottet et al., 2006). However, Mercer et al. (2020) revealed that these cues may be deceptive as learners self-reported the use of similar behaviors to *fake* their engagement.

Another avenue to consider is that because one of the primary dimensions of engagement is affective, detecting emotion cues along with the behavioral ones may lead to more accurate decoding of engagement behaviors on the part of language teachers. Effectively speaking, the main mode through which learners communicate their feelings and attitudes is through their actions and vocal cues. If what a learner says (verbal channel) conflicts with how they say it (nonverbal channel), teachers preferentially consider *how* it is said over *what* is said in their interpretation of learners’ messages. Words tend to communicate content whereas actions or nonverbal cues serve primarily an affective, relational, or emotional role (Richmond et al., 2012). Because communication using the verbal modality is more often learned while the meaning of nonverbal actions is

gleaned instinctively and spontaneously, the nonverbal channel is given precedence over the verbal in transmitting authenticity and genuineness, making deception much more difficult. Due to the close interrelationship between words, embodiment and voice, the least deceptive communication transpires when the system functions cohesively to transmit consistent meanings. Furthermore, when communication cues are transmitted simultaneously, they together create a compensatory and additive effect (Leather & Eaves, 2008).

Nonverbal cues are the principal means through which individuals communicate emotion in the language learning and teaching process, both in performing behavioral cues (encoding) and in identifying such cues (decoding) in other people (Richmond & McCroskey, 2012). Engagement has a large emotional component. To date, there are no studies investigating the variations in the ongoing engagement of language learners or of teachers' accuracy in rating said engagement. In the context of language classrooms, other emotions such as language anxiety (Boudreau et al., 2018; Gregersen, et al., 2014; Gregersen et al., 2017; MacIntyre, et al., 2011; MacIntyre & Gregersen, 2021), enjoyment (Boudreau et al., 2018; Elahi Shirvan & Talebzadeh, 2018) and empathy (Al-Tamini & Gregersen, in press) have successfully been examined using the idiodynamic technique which captures in-the-moment reactions of language learners on short time scales. In fact, Gregersen et al. (2017) took the added step of ascertaining a language teacher's accuracy in decoding the nonverbal expression of emotion (in this case, language anxiety) of a language learner via the idiodynamic technique by comparing the learner's self-ratings with the idiodynamic observations of the teacher who watched the same video of the learner. They discovered that the teacher could detect some anxiety-related cues but not others and that her decoding accuracy improved with cues indicative of increasing anxiety and worsened when attempting to identify the nonverbal reactions accompanying decreasing anxiety.

Chapter 3. Methods

The following chapter reviews the methodologies and procedures used in the present study. The primary research questions are first defined in order to guide the following content of discussion and data collection. Given below is the context of the study, and the details of participants involved. The principal procedures are then presented, including all data collecting tools. Lastly, the specific research approach that was taken by the researcher is further defined.

3.1 Research Questions

This study takes a similar approach to the aforementioned study by Gregersen et al. (2017). It examines engagement as part of a dynamic system that is in constant flux and interacting with other influencing variables at any given moment; it also examines fluctuations in learner engagement operating in real time and attempts to ascertain whether language teachers can detect engagement, fake engagement and disengagement. The research questions are as follows:

RQ1: Is engagement a dynamic process?

RQ2: What makes learners engage, disengage or fake engagement on a moment-by-moment timescale?

RQ3: What are the observable indicators of genuine engagement, fake engagement and disengagement, according to: a) learners and b) teachers?

RQ4: What affective processes within the learner are involved?

RQ5: Are language teachers effective at decoding engagement, disengagement and the “deception” of learners when they feign engagement?

3.2 Research Setting and Participants

Six consenting participants who were enrolled in two different sections of an academic writing course at the American University of Sharjah in the United Arab Emirates participated in the study. All participants had completed consent forms before the research began. For the sake of this study, the participants' names have been replaced by sudanames in order to maintain their anonymity. The American University of Sharjah is a private, international institution using the American system. It is located in Sharjah, a

neighboring emirate to Dubai and contains a diverse population of over 6,000 enrolled students. The six writing students (three female and three male) that were chosen to participate in this study, had completed at least one previous semester of academic writing. All were of typical university age (19-23) and were studying a variety of different majors. Four were from Arab countries (Palestine, Jordan, and Syria), one was from India, and one from Iran. Their self-reported English proficiency level on a scale from one to ten was consistently eight or above. All were multilingual.

Table 1 reveals specific information for each of the six participants along with their pseudonyms:

Table 1: *Description of participants*

Pseudonym	Gender	Country of Origin	1st Language(s)	Other Languages	Major	Self-reported English Proficiency Scale:1-10
Najwa	female	Palestine	English	Arabic, French	Computer Engineering	9
Sara	female	Jordan	Arabic	English	Computer Engineering	8 - 9
Minal	female	India	English	Malayalam, Hindi	Electrical Engineering	10
Ahmed	male	Palestine	English	Arabic	Computer Engineering	8
Mahdi	male	Iran	Farsi, English	Arabic	Business	10
Mohammad	male	Syria	English, Arabic		Computer Science	10

Also providing data were two consenting professors. These professors also completed consent forms before the commencement of any research. They are referred to as “teacher 1” and “teacher 2”. Each teacher had been placed in one of the two sections in which the student participants were enrolled. Both were female; teacher one was from Canada, spoke English as her first language and had been teaching writing for 26 years; the teacher 2 was from Bosnia and spoke Bosnian/Croatian/Serbian (B/C/S) as a first language and English as a second. She has 12 years of experience teaching writing.

3.3 Data Collection and Analysis Procedures

At the beginning of the Spring 2022 semester, recruitment forms were sent to all students in the two established writing courses (see Appendix B). 16 total students responded to be in the study. To establish which students would be best suited for the study, a questionnaire was given in the form of an introductory class questionnaire. Amongst many “ice breaker” questions, students were asked 3 questions pertaining to their own level of engagement. A self-reflection of sorts (see Appendix C). Students were asked,

“In general, how well do you manage your attention on a writing task?”

“How engaging do you think the material in this class is?”

“Please rate your level of engagement in this academic semester”

All questions were answered using a basic 1-10 Likert scale (Likert, 1932). When reviewing the answers to the questionnaire, it was found that all of those who had volunteered to be part of the study had also answered 7.5 and above for all 3 questions. Although this was not the anticipated outcome, it was not surprising seeing that if a student was willing to use their extra time to participate in a voluntary academic study, they were also more likely to be on the higher end of engagement in a classroom context as well.

The six learner participants were video recorded on four separate days during their writing classes. Videographers had been present and filming for at least four class periods previous to the one in which the final video was created in order to familiarize the

participants with the presence of the cameras. Along with that, the videographers were careful to film the class broadly, in a position further away from any one student, and simply zoom in on the student needed for data. That way no student felt singled out, and the data could be as organic and unaffected as possible. On the day of videotaping the final video recording, three videographers were present to capture the behavior of the three participants in each class. Care was taken to focus in on the participants' faces as well as pan out to have images in which the participants' postures could be clearly observed. For the first three participants, the class had been given the writing task of a 30 minute "free write" on their chosen research topics. Subsequently, the class was divided into 4 groups to each share their free writes. Those who were not sharing took notes in order to provide feedback. Specifically, they were asked to identify three elements: 1) a question they had that could further their peers' research; 2) something they found interesting about their peer's topic; and 3) something they would like to learn more about. The second three participants, in a different class, were assigned the task of finding appropriate sources for a preselected debate topic. The instructions for this task were to discuss their debate topics with their class partners and provide four points of feedback (two points that could strengthen the argument and two that could weaken it), as well as find three academic sources regarding their topic. For both classes, topics were self-selected by the students and the written product was to be shared with the class, but not turned in until later in the semester. It should be noted that because data collection for this study occurred during the Covid-19 pandemic, participants were wearing surgical face masks that covered their nose and mouths throughout the class due to the health and sanitary guidelines stipulated by the university. This challenge is discussed in more detail within the limitations of this study.

Immediately after the class, the researchers edited the full-length video down to five minutes for the purposes of using it for participants to self-rate their levels of engagement using the idiodynamic technique. Lengths of the original videos varied depending on how much time was spent on the task, but were anywhere from 15 to 90 minutes long. The researchers attempted to include those moments during the class where participants' nonverbal cues appeared to be suggestive of fluctuations in their engagement. It was not established what moments were or were not engaged, only that

there was a change in behavior or significant movement. The next day, participants were invited one-by-one to a quiet office to view the video excerpts that had been loaded from the camera to the computer. Participants individually watched the footage of their classroom behavior on a computer screen with two researchers present. One was filming the encounter while the other took charge of the computer and subsequent interview. Using software designed specifically for the purposes of studies such as this (MacIntyre, 2012; MacIntyre & Legatto, 2011), participants “idiodynamically” self-rated the moment-to-moment fluctuations in their engagement levels. More information on the idiodynamic software can be found in Appendix E. The prompt participants were given was:

In the next few minutes I will ask you to watch yourself on video as you were completing a task in your writing class. I would like you to click right when you feel you are maintaining or increasing your engagement and click left when you feel your engagement is decreasing.

To respond to the prompt, participants indicated increasing engagement by right clicking the computer mouse (up to “+5”) or decreasing engagement by left clicking the mouse (down to “-5”). This procedure generated a bitmap graph and Excel spreadsheet that reflected the vacillations in each participant’s self-rated engagement. It is important to note that the spreadsheet numerical data and bitmap graphs were directly linked to the video data. This allowed the researcher to go back into the video data and discover what the student was doing or saying at any moment in the video recorded segments and look for changes in facial expression, gesture, gaze behavior and posture, and by listening for changes in vocalic behavior. Researchers remained in the room with each student during the explanation of software, and a trial run using a sample video. However, after the student expressed confidence in the software, researchers left the room, but remained close by, in order to give participants the freedom and comfort to react honestly, without being monitored. Immediately following the idiodynamic data collection, participants were interviewed by a researcher and were asked to account for the changes in their self-reported engagement, specifically highlighting the reasons for spikes and dips in the data by addressing the following questions:

1. What nonverbal cues were you looking for to establish engagement?
2. What nonverbal cues were you looking for to establish disengagement?
3. What were you feeling each time you had a surge?
4. What were you feeling each time you had a dip?
5. Do you think your teachers know when you are truly engaged in the classroom?

After collecting the students' self-ratings of their classroom task engagement, the professors of the participants each arrived to the same office, at different times to observe the videotapes of the three students corresponding to their class. Both professors used the same idiodynamic data gathering process outlined above to assess the engagement cues of their respective students. They, too, received a bitmap of their responses and were asked to explain the reasons for the dips and spikes in their ratings by answering the following questions:

1. Let's look at this surge. What nonverbal cues were you observing in order to establish engagement?
2. Let's look at this dip. What nonverbal cues were you observing in order to establish disengagement?
3. Let's take a look at these surges again. Do you think students could be faking engagement?
4. Why do you think students fake engagement?

Once researchers had the students' and professors' engagement ratings, they compared the students' self-ratings against the professors' third person ratings to discover convergences and divergences in the data.

3.4 Research Approach

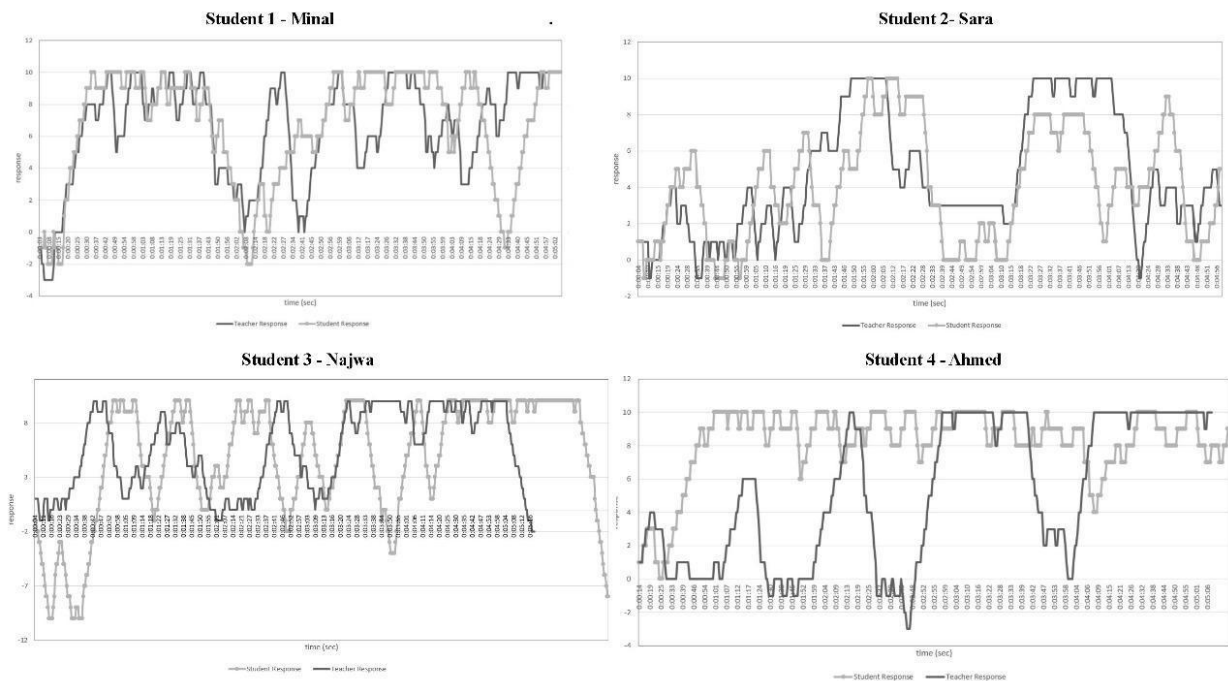
This research is considered to be a case study. Although many qualitative resources were used, such as a pre-study questionnaire (Appendix C) and post interviews, a case study approach is best suited given that the research was conducted in a real-world context using students in a classroom as participants. The study took place at the American University of Sharjah in the United Arab Emirates in two, 200 level English-program courses. The video data was collected during the semester; whilst all

interviews, and data triangulation happened after week 12 of the semester. The full timeline of research can be found below in Appendix A. The approach taken by the researchers in this study, was to collect data in the most organic and applicable way possible. The goal was to receive information in a way that could be applied to any classroom. This is why such great care was taken when filming and interviewing. Because students may be apprehensive in revealing disengagement or fake engagement, researchers were careful in explaining the expectation that no person is always engaged, and that their honesty throughout the research process would be respected.

Chapter 4. Results and Discussion

The following section discusses the aforementioned research questions. Each research question is restated and discussed using the specific findings of the research study. Using several tables and figures, the data gathered is presented in order to visualize and better present the findings of the study. In each section, the research questions and their subsequent discussions are analyzed in relation to the classroom context.

Figure 1 contains the six idiodynamic graphs of each of the participants. Each graph contains the responses of both the individual participant as well as their teacher. The length of the videos that participants rated ranged from four minutes and 46 seconds to five minutes and 17 seconds, with roughly 31 seconds separating the shortest from the longest excerpt.



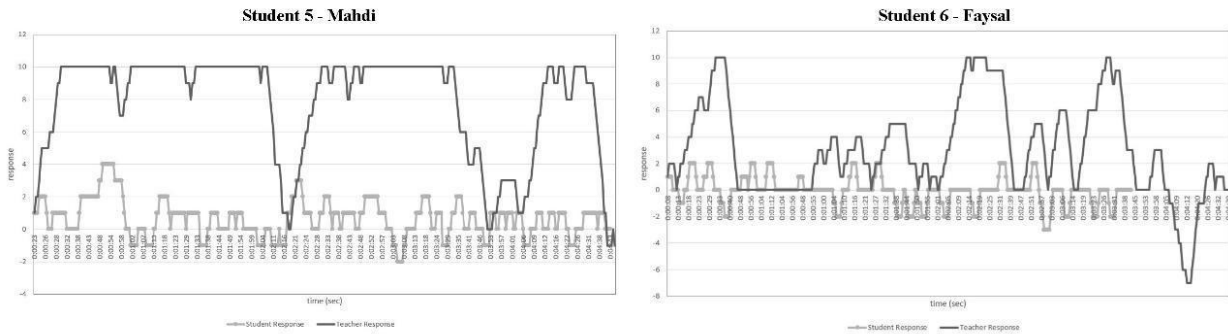


Figure 1: *Idiodynamic Response Graphs of Participants and Teachers*

4.1 RQ1: Is engagement a dynamic process?

To better explain the concept of “dynamic process”, one must look at its origins. Van Gelder and Port (1995) used the following definition: “Roughly speaking, we take dynamical systems to be systems with numerical states that evolve over time according to some rule” (p. 5). This was the beginning of the Dynamic Systems Theory, or DST. Afterwisch, DST was then applied to cognition, language development, and second language acquisition (De Bot, K. 2008). According to De Bot, DST in relation to language learning now refers to the ever evolving, fluctuating, often unpredictable process that happens cognitively during the language learning process.

In consideration of our RQ1 concerning whether task engagement is dynamic, the figure shows, as expected, that participants’ (dis)engagement is highly dynamic, both intrapersonally and interpersonally. That is to say, variability is found within and among participants. The information on Table 2 used the information from Figure 1 to examine participants’ fluctuations between engagement and disengagement. It highlights the amount of time in minutes and seconds each participant reported trending up towards engagement and trending down towards disengagement. Column one shows the number of significant fluctuations each participant went from being engaged to disengaged. To be considered “significant,” the dip was a movement greater than two points.

Table 2: *Frequency and duration (in minutes and seconds) of upward and downward trends in learner participant reports of (dis)engagement*

Pseudonym	# of significant dips into disengagement	Duration trending upward (engaged)	Duration trending downward (disengaged)
Najwa	8	3 min 44 sec	1 min 31 sec
Sara	3	3 min 07 sec	1 min 34 sec
Minal	5	4 min 01 sec	1 min 05 sec
Ahmed	6	3 min 15 sec	1 min 54 sec
Mahdi	10	2 min 42 sec	2 min 14 sec
Faysal	12	2 min 33 sec	2 min 39 sec

It was invariably the case that the participants in this study spent more time engaged on their task than disengaged. Two participants (Minal and Ahmed) spent over four minutes of their roughly five minute video engaged, three participants (Najwa, Sara and Mahdi) spent over three minutes, and only one (Faysal) spent between two and three minutes. The frequency with which participants fluctuated significantly, that is to say, more than two full points at one time on the idiodynamic scale ranged from three (Sara) to twelve (Faysal).

4.2 RQ2: What makes learners engage, disengage or fake engagement on a moment-by-moment timescale?

Tables 3 summarizes the information gathered from learner participants during their post-idiodynamic interview concerning the factors that stimulated their engagement, disengagement or desire to feign engagement, using data from their explanations for the

dips and spikes in their bit graphs as well as the answers to the general interview questions.

Table 3: *Factors Arousing Participants' States of (Dis)Engagement*

Pseudonym	Arousal factors ENGAGEMENT	Arousal factors FAKING	Arousal factors DISENGAGEMENT
Najwa	<p>Interacting with peer about task.</p> <p>Independently fulfilling task.</p> <p>Providing feedback and/or presenting information to group.</p>	<p>Noticed being filmed.</p>	<p>Task had just started so she was “prepping mentally.”</p> <p>Conversation re-directed to other peer.</p> <p>Distracted: “I wasn’t even doing anything.”</p> <p>Admiring peer’s outfit and hair.</p> <p>Off task conversation.</p>
Sara	<p>Found peer’s topic interesting.</p> <p>Independently fulfilling task.</p> <p>Providing feedback and/or presenting information to group.</p>	<p>Did not want to appear rude when she lost interest in peer’s reading.</p>	<p>Same thing going on for too long.</p>

Minal	<p>Taking notes on group assignment.</p> <p>Leading the group.</p> <p>Providing feedback and/or presenting information to group.</p> <p>Answering questions from group members.</p>	No faking evidenced	<p>Task had just started: “Wasn’t in the zone yet.”</p> <p>“Class felt like it was going on too long.”</p> <p>“Needed a break.”</p> <p>Distracted by memories of having dated the peer who was talking.</p> <p>Off task conversation</p>
Ahmed	<p>Leading the group.</p> <p>Interacting with peer about task.</p>	Noticed being filmed	<p>“Goofing off” with peer.</p> <p>Off task conversation.</p>
Mahdi	<p>Independently fulfilling task.</p> <p>Interacting with peer about task.</p>	No faking evidenced	Teacher explanations: “I was zoning out.”
Faysal	<p>Independently fulfilling task.</p> <p>Interacting with peer about task.</p> <p>Teacher directive.</p>	Heard teacher’s steps approaching.	<p>Off task conversation</p> <p>Finished task.</p> <p>Distracted: Received email notification.</p>

From Table 3 we can surmise that the most significant factors for engagement included interacting with peers on the task (four participants), working independently to fulfill the task (four participants), providing feedback and/or presenting to the group (three participants), and taking a leadership role (two participants). Other responses mentioned by participants were finding another’s ideas interesting, taking notes, answering questions, and listening to teacher’s directives.

Concerning factors that incited participants to fake engagement, two confessed to noticing that the camera was filming them, one heard the teacher’s footsteps approaching

from behind, and another did not want to be perceived as being rude when they lost interest in what their peer was reading. Two participants claimed that they had no instances of fake engagement during their (roughly) five-minute video clip.

Reasons for disengagement were far more varied than those proposed for engagement or for faking it. A two-way tie competed for the most frequent reasons participants gave for disengaging from the classroom task. With four participants supporting each, the reasons were 1) off-task conversation with the group or another peer, and 2) being distracted by other thoughts. For Najwa, her distraction came in the form of admiring her peer’s outfit and hair; for Minal, she was reminiscing about having dated the male peer who was speaking; and for Faysal, it was a notification on his phone. For three of the participants, the trigger for disengagement was related to the task or class lasting too long. Lastly, two participants self-rated their behavior at the beginning of the video when they had just arrived to class as being disengaged and both credited this to “prepping mentally” (Najwa) and not yet “being in the zone” (Minal).

4.3 RQ3(a): What are the observable nonverbal indicators of genuine engagement, fake engagement and disengagement, according to learners?

Table 4 reveals the nonverbal cues that learner participants observed in their videos that indicated their (dis)engagement or the actions they took to feign engagement.

Table 4: *Nonverbal Cues Accompanying (Dis)Engagement—From the Learner Perspective*

Pseudonym	Nonverbal cues ENGAGEMENT	Nonverbal cues FAKING	Nonverbal cues DISENGAGEMENT
Najwa	Leaning forward. Fidgeting stops. Head nodding. Eye contact. Touching face.	Pretending to take notes.	Fidgeting with hair tie. No eye contact. Checking nails. Computer scrolling.

	Fidgeting (with eyebrow).		
Sara	Eye contact. Head nodding. Turning body toward interlocutor.	Pretending to listen to peer by looking in their direction.	No eye contact. Fidgeting with pen, hair, and phone.
Minal	Eye contact. Nodding. Upright posture. No fidgeting.	No faking evidenced.	No eye contact. Restless fidgeting. Slouching.
Ahmed	Twisting hair. Turning body toward interlocutor.	Pretending to work on the computer.	“Dozes off.”
Mahdi	Turning body and face toward interlocutor. Gestures while speaking.	No faking evidenced.	Remaining silent.
Faysal	Upright posture	Pretending interest with the board	Slouches.

From the learner participants’ perspective (the teacher participant data follows later), the observable indicators of participants’ (dis)engagement can be categorized into four nonverbal codes: posture, eye behavior, gestures and head movement. Concerning nonverbal cues indicative of engagement, the most cited code was posture, with all six participants mentioning this as an indicator of their engagement, but with a few different nuances. Three (Sara, Ahmed and Mahdi) mentioned that their engagement was signaled

by turning their bodies toward their interactants; two (Minal and Faysal) mentioned having an upright (as opposed to slouching) posture; and one (Najwa) pointed out that she leaned in toward her peer. The second highest nonverbal code participants cited as revealing their engaged state was gesture, but with slight discrepancies evidenced in how such gestures were performed. While two participants (Najwa and Minal) drew attention to their lack of fidgeting, three respondents (Najwa, Ahmed and Mahdi) noticed active gesturing. For example, Najwa commented that when she massages her eyebrow she is in deep concentration (“When I’m playing with my eyebrow, I’m thinking a lot”). Ahmed noticed that he uses self-adaptive gestures, twisting locks of his hair, and Mahdi indicated that his speech-related gestures become more animated. Three participants (interestingly all three females and no males) mentioned that they nod their heads in a form of back channeling when they are engaged and listening to their peers. Likewise, all three female participants mentioned that when they are engaged, they make eye contact with their interlocutor. None of the males mentioned this. Although these gender differences were unexpected, they are not necessarily surprising. Hall (1978) has been researching gender nonverbal communication differences since the 1970s and has consistently found a significant difference in the gender effect for visual-plus-auditory in nonverbal communication styles (J.A. Hall, 1978). Women having much higher visual-plus-auditory communication. Meaning, females are more extrovertedly expressive or obvious in nonverbal communication when speaking to both other women and men. (J.A. Hall, 2013).

As learner participants discussed their nonverbal cues that indicated disengagement, the most common response (3, all female) was that they fidgeted or manipulated items in their environment, whether that be a hair tie and fingernails (Najwa) or a pen, hair and phone (Sara). Lack of eye contact was also mentioned by the same three participants as signaling disengagement. For example, Sara said, her disengagement was manifested by “me looking anywhere else but where the conversation is happening.” As for the males in the group, their nonverbal signals of being disengaged included “dozing off” (Ahmed), remaining silent (Mahdi), and slouching (Faysal).

Feigning engagement tended to be manifested in pretending to be involved in different activities, varying from taking notes (Najwa); to faking listening to a peer (Sara); to working on the computer (Ahmed); to placing attention on the board (Faysal). Two of the participants, Minal and Mahdi, claimed to not have feigned engagement during the video clip they were shown.

4.4 RQ4: What affective processes within the learner are involved?

During the post-idiodynamic interview, learner participants were asked what they felt during each state of (dis)engagement. Table 5 highlights their responses.

Table 5: *Feelings Accompanying Learners' States of (Dis)Engagement*

Pseudonym	Feelings	Feelings
	ENGAGEMENT	DISENGAGED
Najwa	Responsible.	Ambivalence.
Sara	Interest.	Bored. Sleepy. “Zoned out.”
Minal	Responsible. Excitement.	Tired. Bored. Nostalgic
Ahmed	Excitement.	Passive.
Mahdi	Responsible. Connected.	Distracted.

Faysal	Excitement.	“That’s it. I’m done.”
	Happy.	

Najwa, Minal and Mahdi all mentioned feeling “responsible” while engaged. For Najwa, her sense of responsibility was based on the importance of task (“Is this part relevant or can I pretty much guess what they are going to say?”). For Minal, her feelings of responsibility come from early training (“I’m an older sibling so I tend to take control in that way”). Finally, for Mahdi, he felt responsible because he was thinking: “I had to get this done.” For Minal, Faysal, and Mahdi, they all became significantly more engaged when put into a leadership role, either by their own doing, or when pressured by the inaction of their peers. Another recurring feeling during engagement was “excitement”. The three people who shared this feeling (Minal, Ahmed and Faysal) all mention that it was incited by sharing their work with their peers. Sara commented that her overriding emotion was “interest” especially because she felt she was “benefitting from it [the task] in some type of way.” Other feelings participants shared while engaged were “connected” (Mahdi) and “happy” (Faysal).

Concerning the feelings experienced during disengagement, Sara and Minal both attributed them to boredom and feeling sleepy or tired. Najwa, Ahmed and Faysal had related but different responses. While Najwa exhibited a kind of ambivalence (“It’s not that important”), Ahmed conveyed passivity (“I’m doing what I’m supposed to do”) and Faysal commented (as his disengagement occurred at the end of the session), “That’s it. I’m done.” Several students expressed a sort of ‘balancing act’ when disengaged. There was a sort of internal dialogue on whether the student could afford to check out or not. For example, when asked Minal expressed balancing when she can get away with disengagement. “If I speak up a lot in class discussions, I can afford being disengaged sometimes.” Sara had a similar inner dialogue in relation to listening to her peers saying, “Is this part relevant or can I pretty much guess what they’re saying”. Because one occasion of disengagement on Minal’s part was triggered by memories of having dated one of the members of her group, the feeling that accompanied that specific disengaged moment might be labeled “nostalgia.”

Now this study will focus its attention to teacher participants' responses and answers. In order to answer the second part of the aforementioned research question three. Regarding the perception and ranking of student engagement, from the viewpoint of the teacher research subjects.

4.3 RQ3(b): What are the observable nonverbal indicators of genuine engagement, fake engagement and disengagement, according to *teachers*?

Table 6: *Nonverbal Cues Accompanying (Dis)Engagement—From the Teacher Perspective*

Teacher 1	Engagement	Faking	Disengagement
Najwa	Typing.	No faking evidenced.	Eyes roaming around the room.
	Looking at computer, peers, notes.		Lack of eye contact.
	Direct eye contact.		Checking nails.
	Turning body toward group.		Fidgeting (with eyebrow).
	Leaning in.		Touching face.
	Gesturing while speaking.		Looking down at the computer.

Sara	<p>Writing actively.</p> <p>Nodding.</p> <p>Looking up while writing.</p> <p>Direct eye contact.</p> <p>Responsive facial expressions.</p> <p>Gesturing while speaking</p> <p>Shifting attention appropriately.</p> <p>Smiling.</p>	No faking evidenced.	<p>Looking away from interlocutor.</p> <p>Looking down.</p> <p>Adjusting mask.</p> <p>Checking phone.</p>
Minal	<p>Typing.</p> <p>Looking at interlocutor.</p> <p>Talking.</p> <p>Nodding.</p> <p>Smiling.</p> <p>Gestures when speaking.</p> <p>Variation in facial expression.</p> <p>Posture directed towards speaker.</p>	No faking evidenced	<p>Eyes half closed.</p> <p>Eyes roaming.</p> <p>No eye contact.</p> <p>Adjusting computer.</p> <p>Adjusting mask.</p> <p>Looking down.</p>
Teacher 2	Engagement	Faking	Disengagement
Ahmed	<p>Talking to partner.</p> <p>Gesturing.</p> <p>Direct eye contact.</p>	No faking evidenced.	Eyes looked “odd” (not moving across screen).

	Eyes moving across the screen.		
Mahdi	Posture directed toward interlocutor.	No faking evidenced.	Purposeless scrolling on computer.
	Leaning in.		Seemed tired.
	Facing speakers		
Faysal	Talking to interlocutor.	No faking evidenced.	Looking around.
	Leaning in.		Distracted by camera.
	Eyes moved across screen.		
	Posture directed toward interlocutor.		

When we compare the nonverbal cues that learner participants reported as indicative of engagement, disengagement or faking engagement from Table 4 with the teacher participants' responses in Table 6, we see significant correspondence. Among the most common points of agreement between learners and their teachers on what constitutes engaged nonverbal cues are direct eye contact with interlocutors (3 mentions) and posture that is: a) leaning in (2 mentions), and b) directed toward the speakers (3 mentions). Head nodding as a back channeling mechanism was also mentioned twice.

In comparing learner and teacher participant responses concerning the nonverbal indicators of disengaged behavior we see the same trend toward agreement. Like the learners, teachers identified the main cues as being a lack of eye contact and fidgeting—whether that be with fingernails and eyebrows (Najwa), their masks (Najwa, Sara, and Minal), the phone (Sara) or their computers (Minal and Mahdi). Teacher 2 used eye behavior as a means of ascertaining engagement in an unusual way in that for all three of her learners, she was focusing on whether their eyes were moving across the screen as they read (engaged) or merely gazing at the computer (disengaged).

4.5 RQ5: Are language teachers effective at decoding engagement, disengagement and the “deception” of learners when they feign engagement?

Table 7: *Congruences and Discrepancies in the Frequency and duration (in minutes and seconds) of spikes and dips in learner and teacher participant reports of (dis)engagement*

PSEUDONYM	LEARNER RATINGS	TEACHER RATINGS	Difference between teacher and learner	LEARNER RATINGS	TEACHER RATINGS	Difference between teacher and learner
	Duration trending upward (engaged)	Duration trending upward (engaged)		Duration trending downward (disengaged)	Duration trending downward (disengaged)	
Najwa	3:44	4:12	+0.28	1:31	1:07	-0.24
Sara	3:07	3:40	+0.33	1:34	1:18	-0.16
Minal	4:01	3:23	-0.38	1:05	1:43	+0.38
Ahmed	3:15	3:33	+0:18	1:54	1:36	-0:18
Mahdi	2:42	3:33	+0:51	2:14	1:13	-1:01
Faysal	2:33	2:23	-0:10	2:39	2:17	-0:22*

*During the study, there was a technical issue when asking the teacher to rate the engagement levels of Faysal. Due to technical glitches, the 5 minute and 12 second video stopped at only 4 minutes and 40 seconds. The teacher wasn't able to continue indicating engagement levels after this time, which is why there is a slight incongruence in the data for Faysal.

To create this table, the researcher copied the learner information found in Table 2 above and added the teachers' data to facilitate comparisons and calculate the differences in the learner and teacher responses concerning the instances and duration of learner engagement and disengagement. Let's begin with the most obvious of the three situations: teachers' inability to detect fake engagement. Four learner participants confessed that they were faking engagement at various times during their video segments but both teachers claimed that there were no instances of faking throughout any of the footage.

The second important finding is that teachers significantly under-rate learners' disengagement; that is to say, they think learners are engaged when in fact, they are not. The study begins answering this question by first examining what participants thought about whether their teachers know when learners are disengaged or faking it and the reasons they might feign engagement, so for this, we go directly to the post-idiodynamic interviews.

When questioned in the interview about whether their teachers can identify when students are disengaged, four of the six participants said that teachers can always tell, while the other two suggested that teachers can only at times detect disengagement. Among those who assumed that teachers knew "100% of the time," was Najwa who speculated that "some things are universal" and one of them is the behavior of disengaged students who "do the same things." Ahmed also mentioned the 100% figure and added that disengagement is "extremely obvious," especially when it pertains to him because "If I'm really engaged, I always ask questions, and I'll always be the first one to talk and participate and all that. And when I'm not, I usually just sit in the back if it's late in the day. I'm just not in the mood to do anything. And I feel like all teachers can see." Among those who believed that teachers only sometimes picked up on learners' disengagement was Minal who said, "It depends, because there's a certain skill to it. If we're doing a writing task and I quickly check my email that's harder to notice. Also because I answer in class a lot it's harder for the professor to notice. So because of that, I wouldn't get into trouble for it."

Participants' answers to whether teachers can detect fake engagement were much more varied. Although Najwa believed that "no, I don't think they can tell" because "I can sit here and not respond and you're not gonna know." Sara disagreed and claimed, "I think it's pretty obvious. It's the same like in conversation. You can tell if someone is listening to what you're saying or not." For Minal, teachers' detection of learners pretending to be engaged was dependent upon how much effort the learner was putting into faking it. For Faysal, he boasted that teachers know when others are faking it, however they never know with him "...cause I'm actually good at it."

Concerning why learners fake engagement, participants' responses varied between notions of not wanting to be rude or disrespectful and wanting to impress the

teacher. According to Najwa, “I don’t want to look like I’m rude, it’s like I’m listening I promise, I’m just really tired.” Likewise, Sara was also concerned about being perceived as rude and commented that it is important for her not to be perceived as disinterested but also she did not want her grade to be impacted. Minal said, “I base a lot of my self-worth on what professors think of me. So it’s just like I really care what this professor thinks of me and I don’t want to, like, disappoint them.” Also concerned about his impression is Ahmed:

I care about how the teacher sees me--not only grade-wise, but first impressions are a big thing. So like, if I come in the first day and I seem like I just woke up she’s gonna look at me like this lousy student that doesn't know anything. So it's just I like having them see me as an active student...

For Mahdi, his concern is for the teacher’s feelings: “I want them to like, feel like someone's listening to them.”

Turning our attention toward the reasons teacher participants gave for learners’ faking engagement, similar responses were found. In both cases, teachers did not think their students were faking engagement even though in four of six cases, participants were able to demonstrate specific times when they were indeed pretending to be engaged. However, when teacher participants were asked hypothetically about the possibility that learners might fake engagement, both teachers agreed that it was for impression management purposes. Teacher 2 suggested that students want “teachers to think well of them” so they “may perk up just because the teacher is walking by.” Teacher 1 agreed:

I think when students pretend to listen to me, it's slightly different than when they pretend to listen to each other...I think when it's the instructor, when it's me, and the person grading them, they know that I'm grading their class participation.... And there's like an authority question there. So I think sometimes, you know, you fake it, because some figure of authority came in and told you to do something.

Teacher 2 also commented about impressing their peers--that they “want to appear like they’re a good student...even to their classmates.” The notion of faking for the sake of classmates was also brought up by Teacher 1: “I think it's a kind of faking out of wanting

to be nice to classmates, right? Like, I'm listening. I'm not really hearing what you're saying, but I'm listening. To save face, to show respect.”

Teacher 2 also wanted to give learners the benefit of the doubt:

I don't think that last part was fake. It's hard with the faking questions. Because I guess for me, it's a question of like, for whose benefit? I don't know if she's doing it. I don't think she's faking for the benefit of some authority figure like me who might catch her out...She may be pretending to listen more intently than she's really listening...but again, I think it's pretty hard to tell.

Teacher 2 continued to expand on the good intentions of learners and their desire to engage when she said,

I think what is being faked is the ability to really understand their classmates because this is the first time they're hearing about their classmates' project... They're...trying to communicate, “I take what you're saying seriously, and I think what you're doing is important.” So they will nod sagely at some, although it's completely unconnected to whatever sentence that person is really saying at that time...because what they're communicating is the bigger point, which is, “what you are doing is important,” and it's a genuine intention.

In summary, in answer to the research question concerning teachers' efficacy at decoding learners' states of engagement, they not only could not identify when student participants were faking engagement, they also tended to over-rate the instances and duration of engagement. That is, teachers thought learners were engaged much more than they actually self-reported being.

Chapter 5. Review of Study and Conclusion

In the final chapter of this thesis, the secondary considerations are discussed. Firstly, the possible implications for teachers and educators found in the results of this research are explained. To better outline the intentions and mindfulness of this study, all ethical considerations are more clearly defined. After which, a discussion and disclosure of the limitations is also presented along with data examples. Finally, the full conclusion and take away is given that recapitulates the more significant points, as well as discusses the most important message of the study as a whole.

5.1 Implications

This research contains key elements that can be considered when evaluating how students view engagement versus how teachers view engagement. Rather than hypothesizing on student engagement or assessing separate data, this study was able to receive data and answers from students themselves. After they had already experienced the class dynamic and interaction with the specific section and course. The environment data was collected in was familiar, and all videos were taken from a distance, therefore it was as organic as an environment as possible. The goal was to catch students in a normal classroom experience, as untainted by research pressures as possible. It also helped that fifteen of the students volunteered to take part in the study, although only 6 total were chosen to participate in the interview process. Because of this, it was unclear who the researchers were recording while in the classroom. The students knew that recording was happening, they just usually did not know who exactly were the recording subjects. Because students were able to watch themselves in the most organic environment possible, the significance of their responses is only heightened. It is fairly representative of an every-day class experience and how any one of the students may react in a course. Likewise, how any instructor may perceive their students on any given day.

Through the findings of this study, teachers and academics can take away some general truths. Firstly, there are some reliable non-verbal indicators of true engagement teachers can look for when assessing engagement. These include: direct eye contact with interlocutors, bodily posture, specifically leaning towards conversation partners, or

forward directed towards the speaker, and head nodding. Forms of back channeling, such as responsive nodding, writing, and hand gestures were confirmed to be a correct reflection of engagement.

Likewise, there are several forms of pragmatic communication that the teacher's considered to be indicators of disengagement that were inaccurate. These instances were either indicators of higher engagement, or sustained engagement. Examples of these were fidgeting with the face and hair. These examples exemplify the nuance of pragmatic variability especially in reference to teacher perception of student engagement. Some forms of fidgeting were actually signs of higher engagement in some students. When asked about this, one student (Najwa) claimed that these fidgets were, "more intentional, and I repeat those (fidgets) often."

Given that assessing student engagement in the classroom is nuanced and dynamic, there are certainly some constants that seem relatively reliable. Teachers have the opportunity to take these findings and utilize them in the classroom. In some ways, the significance of this research lies in the fact that it contains implementable tools for assessing and maintaining engagement that can be used in almost any language or non language classroom. It acts as a guide and resource for teachers to use when attempting to better classroom engagement.

5.2 Ethical Considerations

Although the ethics of this study may be implied, it is important to acknowledge the steps taken. Especially given the continued involvement of the researcher and some of the participants, outside of a research capacity. Given that many of the participants are continued supporters and followers of the present research, special care was given when addressing ethical considerations, and thus it is best that they are acknowledged.

All participants in this study were granted anonymity, and given alternate names for identification. Any possible identifiable attributes were not included in the study as to avoid unintentional identification. The study happened in two required English courses amongst many, therefore the specific class undergoing these assessments can not be specifically identified using this study. The recordings used for the purpose of this study occurred during regular class sessions, in moments in which the assigned professor has

tasked the class with a group assignment. Therefore no extra time or task was taken during normal class hours. It also goes without saying that the participant's success in the class was completely unrelated to their participation in this study. This fact was made clear to all participants before the interview process in the form of both verbal acknowledgements, as well as written in the original consent forms. All mandatory informed consent forms were distributed and completed. All personal information, including consent forms was kept at a secure location outside the used university academic campus. All permissions and approvals, including submission to the university ethics committee and institutional permits were completed and filed.

5.3 Limitations

This research took place over one semester, in two classes, at a particular university; because of this, the findings are somewhat limited to the demographics and facts of the setting. Although the implications stated in this study can be widely applied in classrooms throughout the world, further research in other classrooms, perhaps with a wider scope, different demographics, and separate classroom topics would further validate the findings proposed here.

As for the limitations existent in this study, one must address the barrier the Covid-19 pandemic has caused. As aforementioned, this study took place in the Spring semester of 2022. This was the first semester that the hosting university, the American University of Sharjah returned to a fully in-person undergraduate program, since transitioning to a virtual program as response to the Covid-19 pandemic. Because of remaining restrictions, all students were required to wear medical masks in class, at all times. Therefore, in the videos taken for this study, all students were wearing masks. This provided some challenges when the teachers were reacting to the nonverbals of the students, given they could not directly see the students' faces from the nose down. Regardless of this challenge, the researchers and participants in this study do not believe this fact to invalidate or limit the research done, given that this study aimed to provide practical readings and tools to be used in the classroom. Mask wearing is now a practical element of many classrooms around the world. Furthermore, pragmatic nonverbal communication takes place all over the body. Although nose-down facial expressions were inaccessible,

students and teachers could still rely on all nonverbal cues reliant on the body, and nose-up face. According to Van Wagner's (2003) article, "Types of Nonverbal Communication" they identify 8 different major forms of in-person nonverbal communication. Of those 8 forms, students and teachers in this study were still able to utilize 7.5. The half being half of one's facial expressions, only due to the coverage of mandatory face masks (Van Wagner, 2003).

In any study taking place in a multicultural setting, one must address the cultural differences that may be happening in a classroom, especially if it could affect any findings or results. Such is the case now. As disclosed, the participants of this study were quite diverse in demographics. Therefore, cultural pragmatic differences could certainly be at play. However, there are some things that may lead readers to believe these differences would have been minimal. Firstly, all participants in the study (including the instructors) were educated in English programs for at least 4 years. Student participants had attended English-based programs in high school. More importantly, there was no moment indicated during the interview and response process where cultural differences made an open difference in perception of engagement. One teacher respondent did address her consciousness of cultural differences,

Now, thinking about the actual practical part of this, I realize that I make this assumption that listening involves eye contact. And I make this assumption because I've spent so much time in classrooms in the United States. But when I think about it more broadly, I know that eye contact works differently in different places. So I clicked down every time she stopped maintaining eye contact with the person she was listening to and now I question whether this was my own sort of assumption.

In the particular case the above teacher was reacting too, her responses as well as the student's matched up well, and because of the same nonverbal cue (misdirected eye contact). Because this pattern often repeated, there were no obvious cultural misperceptions that could be indicated during the response process.

5.4 Conclusion

This study began with the intention to examine the dynamic processes of learner task (dis)engagement and the challenges faced by language teachers to decode learners' nonverbal communication indicative of (dis)engagement by using the idiodynamic technique and open-ended interviews. There was significant interest in those factors that engage and disengage learners and the reasons why learners may at times feign engagement. The emotions that accompanied (dis)engagement were also under consideration. To address these questions, it was necessary to explore the observable indicators of genuine engagement, disengagement and fake engagement and discover which nonverbal cues learners and teachers focus on to ascertain engaged states.

The evidence in this particular study suggests that engagement is a very dynamic process with engagement and disengagement fluctuating on a moment-by-moment basis within the context of this small population. The most common motivations to engage in a task were direct peer interaction, taking initiative in sharing work and assuming leadership roles; disengagement was most often incited by off-task conversation and distractions present in the environment. The four learners who confessed to faking engagement mentioned the presence of the camera and the teacher roaming around the classroom as the impetuses for their pretenses. The nonverbal codes most often involved in ascertaining learners' engagement were eye behavior, posture, gestures and head movement. When learner participants were asked, they observed that engaged learners made direct eye contact, maintained posture directed toward the interaction and leaned in, used speech-related gestures and employed head nodding as a back channeling mechanism to show they were attentive. The disengaged, however, looked everywhere but at the interlocutor, their posture was turned slightly away and slouching, their hands were busy fidgeting and head nodding was not evident. Teacher responses concerning nonverbal indicators were very similar with the exception that one of the teachers was astute enough to notice whether learners' eyes were actually moving across the computer screen or merely gazing aimlessly. Engaged learners' emotions included feeling

responsible, interested and excited while the disengaged learners felt bored, passive and tired.

As to the efficacy of teachers' accuracy in decoding learners' state of engagement, results were mixed. First, teachers did not see any signs of faking engagement by any of the four learners who explicitly showed points on the video where they were pretending to be engaged. Second, teacher participants tended to give learners the benefit of the doubt and believe they were engaged when they actually were not. That said, however, when comparing the idiodynamic ratings of the learners and teachers, learners were honest about how frequently they became disengaged, and although many students assumed the teachers could indeed tell they were attempting to fake engagement, they, in fact, could not. Finally both learner and teacher participants agreed that when learners did fake, it was usually for impression management purposes and trying to spare the feelings of the teacher. In short, to save face with both their teachers, and fellow students.

Educators know that engagement is a precursor to learning and that the more teachers know about the inner workings of learners' thinking, feeling and acting, the better they can address learners' needs. "Strong teachers don't teach content. Google has content. Strong teaching connects learning in ways that inspire kids to learn more and strive for greatness" (Jensen, 2013, cited in Ferlazzo, 2014). So, with this study, the hope is that teachers can take away the advice of the learner participants. Not to eliminate disengagement, but to better assess when attention is lost in the classroom, and therefore redirect. Furthermore, to plan lessons that are conscious of what will keep students engaged the longest. Lastly, to understand that although engagement is obviously a dynamic process in the classroom context, it is also something that can be assessed and utilized to better the language learning experience.

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Appendix A

Research Timetable

This research was tested in the spring semester of 2022 at the American University of Sharjah. The research was integrated throughout the semester, with collaborative efforts in order to achieve reasonable deadlines and give all participants and researchers ample time to complete the relevant tasks.

Research Phase	Objective	Deadline
Background research and design materials	Complete literature review and compile all helpful resources. Train all researchers on idiodynamic software. Design interview materials/scripts.	January 2022
Recruitment and Participants	Recruit participants for study. Contact teachers in order to use classrooms/ learners.	February 2022
Conduct interviews and begin writing	Conduct student recordings in the classroom. Interviews with students about personal engagement. Conduct teacher interviews/ responses to student engagement. Write up findings.	March 2022
Collect data and analyze.	Using implications from this study, finalize findings and write up implications/ relevancy for learners/ instructors.	April 2022
Catalyze	Incorporate feedback from board members, advisor, and peers. Present findings. Submit final draft.	May 2022

Appendix B

Recruitment Script

Dear _____,

I trust my email finds you well. Myself and my grad students, Angel Merchant and Lydia Shepherd, are doing a study on learner engagement as part of our TESOL program. Our study involves recording both video and audio of your normal classroom session. A summarized version of the recording will then be played back for you as the teacher where you will be asked to rate the engagement levels of your students. Some students will be selected at random, and will also be shown the video, and asked to self-rate their engagement levels. The aim of the study is to find out the degree to which teachers can identify true engagement in the classroom. We would very much appreciate it if we could carry out this study with you and take up 10 minutes of your time at most. Any recordings, and ratings of engagement will be kept entirely anonymous in the research write up.

Looking forward to hearing from you soon,

Tammy, Angel, and Lydia

Appendix C

Pre-study Questionnaire

What languages do you speak?

Your answer _____

What is your major?

Your answer _____

In general, how well do you manage your attention on a writing task?

1 2 3 4 5 6 7 8 9 10

Not very well at all Extremely well

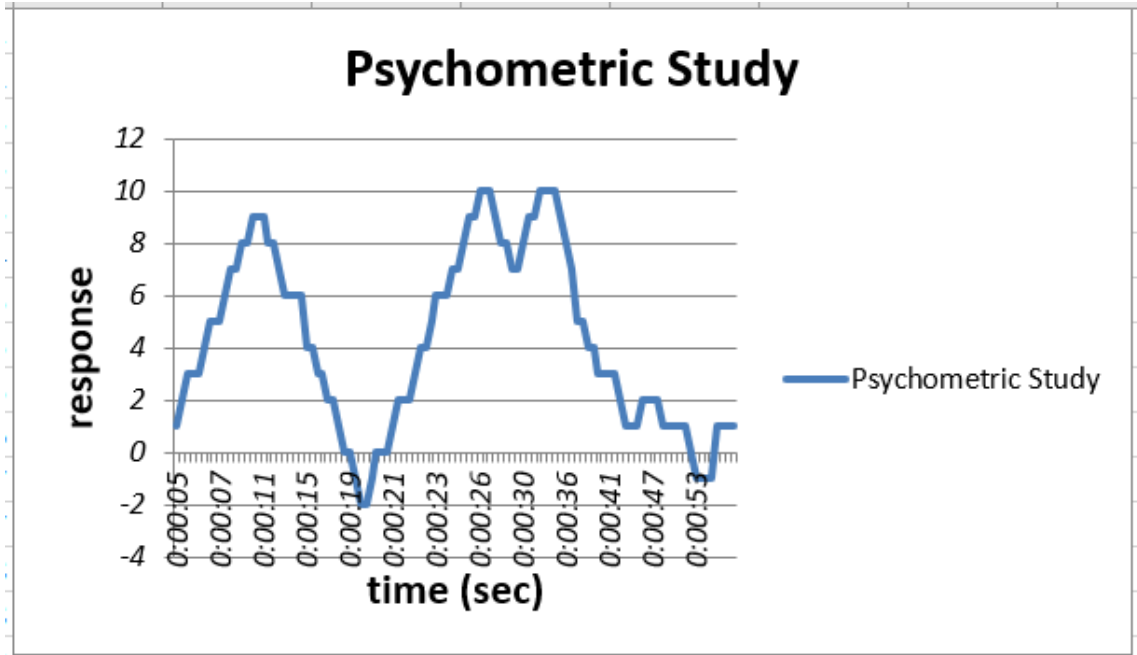
How engaging do you think the material in this class is?

1 2 3 4 5 6 7 8 9 10

Not engaging at all Very engaging

Appendix D

Base Sample of Idiodynamic Graph



Appendix E

Idiodynamic software resources:

Getting started powerpoint:

https://docs.google.com/presentation/d/1ruwA-y7pbtwiXejHA2bkt_CmtG8Vg1XdjjmXqXXqfBw/edit?usp=sharing

Detailed instructions:

<https://docs.google.com/document/d/1mA9QIVBYGP1DuNIM60mYkeF8mFzAODWjBzQ7zoh2aiA/edit?usp=sharing>

Vita

Lydia Shepherd was born in 1996, in Atlanta, Georgia, in the United States of America. She had a mixed early education which included stints in Atlanta public schools, homeschooling, and a year-long program at a private Christian school in Augusta, Georgia. She completed her highschool education at New School for the Arts and Academics, a charter school in Tempe, Arizona, U.S.A.. She received the honor of being admitted to the JSA summer preparatory school at Georgetown University, Washington D.C.. She was then awarded the Lumberjack Scholarship at Northern Arizona University, from which she graduated, with honors. Her degree was a Bachelor of Political Science with minors in International Relations and Arabic. During her time at NAU, she studied abroad twice. She attended Al Akhawayn University in Ifrane, Morocco, and the American University of Sharjah, U.A.E.. She was awarded the Student Achievement Award in Arabic Language in her junior year of university.

Ms. Shepherd moved permanently to the United Arab Emirates in 2019 and worked as a graduate research assistant for three years in the TESOL graduate department at the American University of Sharjah. In the same year, she began a Master's program in Teaching English to Speakers of Other Languages at the same school. She has been working as the music librarian for the Firdaus Orchestra which premiered and featured at Expo 2020, Dubai.

Ms. Shepherd is a member of the AUS Arabic Ensemble, the AUS choir, and the National Honor Society of the U.S.A.