Developing a Student Self-Disclosure Measure: A Pilot Study

Mohsine Jebbour

Independent Researcher, Morocco
Email: mohsine.jebbou@gmail.com

Abstract
This pilot study was designed to introduce a student self-disclosure measure with 183 participants enrolled in the English department at a Moroccan university. The types of self-disclosures inherent in language learning theory guided the development of a ten-item questionnaire. The instrument measured the participants' self-report of frequent self-disclosures with reference to the class they were attending. Upon collection of data, the questionnaire was subjected to exploratory factor analysis. The findings of the unrotation analysis showed that the student self-disclosure measure is unidimensional, as nine items loaded highest on the first factor and had an acceptable internal consistency. However, results from the rotation analysis revealed that the student self-disclosure measure consists of two dimensions, which were labelled as frequent types of self-disclosure and infrequent types of self-disclosure based on their mean scores. Although the seven items tapping frequent types of self-disclosure may be used to create a unidimensional measure, especially that the construct reached an acceptable internal reliability, there is room for ensuring a sound collection of data and analysis to improve the quality of the questionnaire in the main study.

Keywords: student self-disclosure, unidimensional measure, English language classroom, university
1. INTRODUCTION

The English language pedagogy places learners at the center and trains them to use language to express themselves (Dörnyei & Muir, 2019; Dörnyei, 1994; Iida, 2016; Larson-Freeman & Anderson, 2012; Richards & Rodgers, 2001). When doing so, such learners may communicate their personal disclosures, including personal opinions, feelings, likes, and experiences in the English language arts class (Jebbour, 2018b; Stotsky, 1995). Earlier research reported that students are willing to reciprocate their personal disclosures in the teaching-learning process (see Jebbour & Mouaid, 2019; Goldstein & Benassi, 1994). In these studies, student self-disclosure was examined as an outcome variable rather than treated as a predictor variable. Thus, the need to understand students’ use of self-disclosures as an independent construct in second language (L2) classes was the main rationale for conducting this study. Using keywords, particularly student self-disclosure, student self-disclosure measure, student self-disclosure questionnaire, and student self-disclosure scale when conducting the review of literature resulted in locating some studies that have examined the target construct in different classroom settings. However, all these studies suffer from using a specific scale that measures students’ self-disclosures in the educational context in general and the language classroom in particular. For instance, student self-disclosure was measured by reading instructor narratives (Ebersole, McFall, Brandt, 1977), asking students to provide a description of their personal lives (Derlega, Anderson, Winstead, & Greene, 2010), using classroom observations (Jebbour & Mouaid, 2019), and adapting items from the Jourard Self-Disclosure Questionnaire (DeWine, Bennett, & Medcalf, 1978; Myers, 1998), which was initially developed to study self-disclosure in personal relationships. The fact that self-disclosure in personal relationships differs from self-disclosure in the educational context (Cayanus & Martin, 2016; Lannutti & Strauman, 2006) was another reason that motivated this study to introduce a student self-disclosure measure in the classroom context.

Specifically, this study aimed to introduce a measure of student self-disclosure with students from the English language classroom at university. From a research perspective, developing a student self-disclosure measure would motivate researchers to approach the construct as a predictor variable and understand its effects on other classroom variables in future studies. From a pedagogical perspective, the development of a student self-disclosure measure would allow practitioners to be aware of what aspects of their students’ personal life emphasize in the learning process and inform these instructors of whether those aspects of self-disclosure encourage the production of language.

2. LITERATURE REVIEW

Self-disclosure involves “any message about the self that a person communicates to another” (Wheeless & Grotz, 1976, p.338), where new acquaintances share personal information to uncover how much they trust and like each other (Derlega, Winstead, & Greene, 2008). A meta-analytic review of self-disclosure and liking posited that self-disclosure is “viewed as a positive reward and that liking occurs when the recipient believes...”
Developing a Student Self-Disclosure Measure

he or she has been personally singled out for intimate disclosure” (Collins & Miller, 1994, p.465). Accordingly, individuals’ communication of self-disclosures plays a key role in establishing close relationships (Derlega, Metts, Petronio, & Margulis, 1993), engaging in effective communication (Mckay, Davis, & Fanning, 2009), and hence achieving long-term satisfaction in relationships (Meeks, Hendrick, & Hendrick, 1998).

This pilot study considers learners’ personal information in the educational context. Thus, self-disclosure was operationally defined as students’ verbal sharing of personal information in the classroom. These self-disclosures may take different dimensions, including breadth, depth, duration, positivity, negativity, and relevance. Breadth or amount of self-disclosure involves the number of personal matters communicated in face-to-face interaction like using four disclosures in a lesson. Depth involves revealing intimate/sensitive personal information, where the sharing of such personal matters is a socially inappropriate instructors and classmates (Myers, 1998). Duration explains how long self-disclosure lasts (West & Turner, 2010). While positivity entails disclosing a desirable aspect of a person’s life, like graduating from university with distinction (Derlega et al., 2010), negativity involves flattering aspects of one’s experience, such as lying to teachers. However, relevance is concerned with revealing disclosures that explain the course material (Cayanus, Martin, & Goodboy, 2009).

Language learning theory places great emphasis on students’ sharing of self-disclosures in the teaching-learning operation. For instance, there exist a number of L2 motivational strategies that involve aspects of students’ personal disclosures in the classroom, where teachers are required to create an atmosphere that allows learners to know each other by reciprocating their personal feelings, fears, desires, etc. (Dörnyei, 1994). Additionally, humanistic and communicative oriented language teaching approaches, particularly community language learning and task-based language learning suggest various classroom techniques that involve students’ self-disclosures in the learning process. To illustrate, speaking-oriented activities, such as reflection and observation, free conversation, and opinion-gap tasks give students an optimal opportunity to voice their personal disclosures including opinions, stories, preferences, and attitudes in class (Richards & Rodgers, 2001; Larson-Freeman & Anderson, 2012). In the L2 classroom, students also have a chance to reflect on their personal beliefs, feelings, experiences, likes/dislikes, daily habits, family members, and friends (Hanauer, 2012; Jebbour, 2018b; Jebbour & Mouaid, 2019; Mercer, 2013; Stotsky, 1995).

The value of sharing personal information is observed in providing instructors with information that can be used to meet learners’ individual needs (Rouse & Bradley, 1989). A related advantage is the fact that the self-disclosing students may receive supportive feedback from the teacher and classmates (Szczygiel, 2019). A further benefit arising from sharing personal disclosures is that the speakers have a chance to produce meaningful output and have a voice, “honoring what they have to contribute to the teaching-learning relationship and building their confidence and sense of empowerment” (Dunlap & Lowenthal, 2013, p.271). At last, engaging in self-disclosure plays a key role in increasing students’ feelings of motivation about language, humanizing the language learning environment, making language learning meaningful, and encouraging student interaction (Dörnyei, 1994; Hanauer, 2012; Iida, 2016; Jebbour, 2018b). Thus, L2 pedagogy should not
focus solely on the acquisition of linguistic knowledge but should be a literacy practice that increases learners’ understanding of self and authenticates their learning experience (Hanauer, 2014; Iida, 2016).

3. RESEARCH METHODS
3.1 Research Problem
Although student self-disclosure is an underlying aspect of English language pedagogy, there is a lack of a scale that measures the construct in the educational context in general and the language classroom in particular. Thus, the aim of this study was to introduce a student self-disclosure measure in the English language classroom at university. Drawing on language learning theory, the types of personal information that learners may share when learning English inspired the development of a questionnaire that measures students’ instrumental frequency of self-disclosures.

3.2 Participants
This pilot study involved 183 undergraduate students (94 men, 82 women, and 7 unreported) from the department of English studies at a Moroccan university. Participants voluntarily supported this study by filling out the questionnaire during class time. The participants’ age ranged from 18 to 25. As for their education level, 84 participants reported to be first year students, 53 were second year students, and 46 were third year students.

3.3 Instrument
The types of self-disclosures that students may share in the language classroom as mentioned in the work of Dörnyei (1994), Hanauer (2012), Jebbour and Mouaid (2019), Jebbour (2018b), Larson-Freeman and Anderson (2012), Mercer (2013), and Richards and Rodgers (2001) guided the development of a ten-item Student Self-Disclosure Scale (see Appendix). The items were constructed to measure the instrumental frequency of students’ self-disclosures in the classroom setting. Sample items were: “I often express my personal interests”, “I talk about my personal experiences in class”, “I often give my views about events in the society”, and “I share my likes and dislikes in class”. Respondents indicated how each item reflects the frequency of sharing personal information in class using a 6–item Likert Scale response set, ranging from 1(strongly disagree) to 6 (strongly agree).

3.4 Procedure
Initially, the researcher received teachers’ permission to administer the questionnaire during class time. Then the participants were requested to complete an instrument entitled Student Self-Disclosure Scale with reference to the class they were attending. After obtaining their approval to participate voluntarily in the study, the researcher explained the directions to students, who demonstrated understanding of the task at hand. The participants took between five and ten minutes to turn in the questionnaires.
3.5 Data Analysis

After collecting data from participants, the questionnaire was pooled for exploratory factor analysis (EFA) with the aim to develop a student self-disclosure measure. Additionally, reliability analysis, particularly Cronbach’s alpha was employed to test the internal consistency of the scale items. Finally, Pearson correlations were conducted to test the size of the relationship between extracted dimensions within the instrument. A p-value of less than .01 was required for statistical significance.

4. FINDINGS

To explore the factorial structure of Student Self-Disclosure with the sample, all the ten items were subjected to an EFA with varimax rotation. The Kaiser-Meyer-Olkin measure of sampling adequacy was KMO = .76, above the commonly recommended value of .5 (see Yong & Pierce, 2013), and Bartlett’s test of sphericity was found to be significant, χ² (45) = 292.10, p < .001. Based on these indicators, employing EFA was appropriate with the sample and the ten items.

Examination of the principal component factor analysis showed that three factors had an eigenvalue greater than one. Regarding the results of the unrotation method (see Table 1), nine items loaded positively highest on the first factor – the other item “I often discuss my family and friends in class” also loaded relatively highly on that first factor. Three items (“I talk about my personal experiences in class”, “I discuss my personal feelings in class”, and “I often discuss my family and friends in class”) cross-loaded higher than .4 on two factors. As Table 1 shows, all the ten items correlated above .3 with one another, suggesting reasonable factorability. Reliability testing for the ten items reported an acceptable coefficient alpha of .74, supporting the internal consistency of measure. Table 1 includes the items, factor loadings (FL), and item total correlations (ITC).

Table 1: Factor loadings and item total correlations of the student self-disclosure scale

<table>
<thead>
<tr>
<th>Items</th>
<th>FL</th>
<th>ITC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I often express my personal interests</td>
<td>.58</td>
<td>.43</td>
</tr>
<tr>
<td>2. I talk about my personal experiences in class</td>
<td>.58</td>
<td>.43</td>
</tr>
<tr>
<td>3. I often give my views about events in the society</td>
<td>.52</td>
<td>.37</td>
</tr>
<tr>
<td>4. I share my likes and dislikes in class</td>
<td>.55</td>
<td>.40</td>
</tr>
<tr>
<td>5. I present my attitudes toward events occurring at the university</td>
<td>.56</td>
<td>.42</td>
</tr>
<tr>
<td>6. I discuss my personal feelings in class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I am open to talk about my daily activities in class</td>
<td>.51</td>
<td>.37</td>
</tr>
<tr>
<td>8. I often discuss my family and friends in class</td>
<td>.58</td>
<td>.43</td>
</tr>
<tr>
<td>9. I share what I do in my free time</td>
<td>.45</td>
<td>.32</td>
</tr>
<tr>
<td>10. I often express my personal beliefs</td>
<td>.58</td>
<td>.43</td>
</tr>
</tbody>
</table>

Notes. Extraction method; principal component analysis; Unrotation method; all loadings are larger than .40.

---

1 Item 8 loaded at .46 on the second factor compared to .45 on the first factor.
However, the rotation method yielded a two-factor solution as the best fit for the data, accounting for 43.08% of the variance (see Table 2). The first factor contains seven items: ‘I often express personal interests’; ‘I often give my views about events in the society’; ‘I share my likes and dislikes in class’, ‘I present my attitudes toward events occurring at the university’; ‘I am open to talk about my daily activities in class’; ‘I share what I do in my free time’; and ‘I often express my personal beliefs’. Given the mean of the seven factors (M = 3.65; SD = 1.08) was close to the point slightly agree, this dimension was labeled as Frequent Types of Self-Disclosure. This dimension had an eigenvalue of 3.02 and accounted for 30.25% of the variance.

The second factor consists of three items: ‘I talk about my personal experiences in class’; ‘I discuss my personal feelings in class’; and ‘I often discuss my family and friends in class’. Since the mean of the three items (M = 2.75; SD = .91) was close to the point slightly disagree, this dimension was labeled as Infrequent Types of Self-Disclosure. This dimension had an eigenvalue of 1.28 and accounted for 12.82% of the variance.

To explore the reliability of the scale, the internal consistency estimate of reliability analysis was computed for the two dimensions. Cronbach’s alpha for the two dimensions were Frequent Types of Self-Disclosure, α = .70 and Infrequent Types of Self-Disclosure, α = .56. Such results indicated satisfactory reliability for the first dimension and unsatisfactory reliability for the second dimension. A number of reasons were addressed in the discussion section to account for the low reliability for the items relating to the second factor.

The bivariate correlation coefficients were computed between the two extracted dimensions of student self-disclosure. The results of the correlational analysis showed that the relation between the two dimensions was statistically significant, r = .43, p < .01, indicating that the two dimensions tap in one aspect of student self-disclosure.

Table 2: Exploratory factor analysis of the student self-disclosure scale

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Items</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Frequent Types of Self-Disclosure</td>
<td>1. I often give my views about events in the society</td>
<td>.79</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. I share what I do in my free time</td>
<td>.68</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. I often express my personal beliefs</td>
<td>.61</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. I present my attitudes toward events occurring at the university</td>
<td>.47</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. I am open to talk about my daily activities in class</td>
<td>.45</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. I share my likes and dislikes in class</td>
<td>.45</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. I often express my personal interests</td>
<td>.44</td>
<td></td>
</tr>
<tr>
<td>2. Infrequent Types of Self-Disclosure</td>
<td>8. I talk about my personal experiences in class</td>
<td></td>
<td>.73</td>
</tr>
<tr>
<td></td>
<td>9. I discuss my personal feelings in class</td>
<td></td>
<td>.70</td>
</tr>
<tr>
<td></td>
<td>10. I often discuss my family and friends in class</td>
<td></td>
<td>.64</td>
</tr>
</tbody>
</table>

Notes. Extraction method; principal component analysis; Rotation method; Varimax with Kaiser Normalization. Factor loadings less than .4 were suppressed.
5. DISCUSSION

Given this pilot study was the first to introduce a student self-disclosure measure in the language classroom context, the results from this manuscript are incomparable with those of prior research. Results from the unrotation method showed that the Student Self-Disclosure Scale was internally reliable and unidimensional since nine items loaded highest on the first factor – item 8 also loaded relatively highly on that factor – and had an acceptable internal consistency. However, results from the rotation method indicated that the Student Self-Disclosure measure consists of two factors, namely Frequent Types of Self-Disclosure and Infrequent Types of Self-Disclosure. While the first factor consisted of seven items (personal interests, personal views, likes and dislikes, attitudes, daily activities, free time, and personal beliefs) and was found to be internally reliable, the second factor contained three items (personal experiences, personal feelings, and family and friends) and reached low internal reliability.

These findings suggest the types of activities that teachers use in the study program in the target English classes. The participants’ teachers tend to implement instructional techniques that allow students to communicate their opinions and likes over activities that involve the sharing of feelings and experiences. Current results provide support to Jebbour and Mouaid’s (2019) observation that English language learners share their opinions and likes rather than reveal their experiences in class. The fact that the participants considered the communication of feelings and experiences infrequent in the learning process implies that their instructors tend to exclude activities inherent in humanistic-based methods in classroom teaching (see Richards & Rodgers, 2001). In contrast, the teachers tend to prefer the use of activities championed by communicative language teaching (see Larson-Freeman & Anderson, 2012) in the sense that the sharing of personal preferences and attitudes in class was a frequent behavior among the students.

The rarity of employing humanistic-oriented activities in the target research setting may explain why the three items tapping Infrequent Types of Self-Disclosure separated from the seven items relating to frequent Types of Self-Disclosure. Therefore, results from the questionnaire may inspire the main study to edit the current instrument in efforts to reach consensus regarding the unidimensionality of the student self-disclosure measure.

First, regarding scale items, almost all items were loaded higher than .5 except for item 8. Also, items 2, 6, and 8 cross-loaded higher than .4 on two factors. Thus, while item 8 can be reworded or omitted when administering the measure in the main study, the other three items may be omitted and administer the new questionnaire with the remaining seven items.

Second, as for the efficacy of analysis, this study ran factory analysis only. While the sub-scale containing the seven items of Frequent Types of Self-Disclosure is enough to argue that the scale is unidimensional, the results do not provide a through picture without employing confirmatory factor analysis, which was not possible with the small sample size in the pilot study. The low number of respondents and the exclusion of humanistic-based activities in the research setting may explain the low internal consistency of the dimension, Infrequent Types of Self-Disclosure. Thus, the main study needs collect data from language learners at a university with a sample of at least 250 participants to obtain sound results from EFA and confirmatory factor analysis. Pooling the questionnaire to EFA deems necessary with the hope to get loadings relatively above .7 to offer support for the items creating a
Mohsine Jebbour

The use of confirmatory factor analysis would target this weakness in the pilot study, where the purpose is to ensure a strict interpretation of the unidimensionality of the student self-disclosure scale. It is recommended that the main study adopt a qualitative approach in data collection and analysis. Both collecting data on the activities that teachers employ in their classes and the types of self-disclosures that students may not share in class my help generate new items. Such a study will enrich the dimension of frequent Types of Self-Disclosure and will provide further information about the dimension of Infrequent Types of Self-Disclosure if a decision is made to include it in the main study.

Third, concerning validity, this study relied on the theoretical domain of students’ self-disclosure in L2 theory to ensure a sound generation of items and hence establish content validity. While this step is an essential procedure in the development of a quantitative measure, it is not enough to guarantee construct validity. Accordingly, establishing construct validity in the main study requires demonstration of criterion-oriented validity by exploring the relationship between student self-disclosure and another outcome variable (e.g., student motivation, students’ affect for self-disclosing, etc.). Prediction of the outcome variable would suffice this purpose.

6. CONCLUSION

This study attempted to introduce a measure of student self-disclosure in the English language classroom at university. Results from the unrotation method indicated that the questionnaire is internally reliable and unidimensional since all items – except for item 8 – loaded highest on the first factor. However, results from the rotation method showed the presence of two factors, which were labelled Frequent Types of Self-Disclosure and Infrequent Types of Self-Disclosure based on their mean scores. The seven items constituting the first factor are enough to create a scale and give support to the unidimensionality of the measure since only four items per scale are needed to verify the correlation between items within each latent construct (see Hinkin, 1998).

Yet, issues concerned with Scale items, the efficacy of analysis, and construct validity need to be considered to improve the quality of the instrument in the main study. To recap, item 8 may be reworded or omitted before collecting data from participants in the main study. Second, the items forming Infrequent Types of Self-Disclosure may be omitted and administer the questionnaire among a larger sample of at least 250 with the remaining seven items. Such a sample is needed to run confirmatory factor analysis to ensure the development of a unidimensional measure (see Hinkin, 1998). Third, qualitative studies are a point of departure to help enrich the understanding of the two dimensions, especially Infrequent Types of Self-Disclosure if its items are included in the main study. Lastly, such a future study needs explore the relationship between student self-disclosure and another outcome variable in efforts to establish construct validity.
REFERENCES


Appendix: Student Self-Disclosure Scale
Directions: this questionnaire is composed of statements relating to your self-report of your personal information in the class you are attending now. You are kindly requested to answer the items on this questionnaire. All information collected in this study will be used for research purposes only. Data will be
Developing a Student Self-Disclosure Measure

treated in strict confidence. If you are willing to participate voluntarily in this study, write the number that best indicates your level of agreement next to each item using the flowing scale:

1 = Strongly disagree
2 = Disagree
3 = Slightly disagree
4 = Slightly agree
5 = Agree
6 = Strongly agree

1. ________I often express my personal interests
2. ________I talk about my personal experiences in class
3. ________I often give my views about events in the society
4. ________I share my likes and dislikes in class
5. ________I present my attitudes toward events occurring at the university
6. ________I discuss my personal feelings in class
7. ________I am open to talk about my daily activities in class
8. ________I often discuss my family and friends in class
9. ________I share what I do in my free time
10. ________I often express my personal beliefs

Thank you very much for your time and help!