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A tool for assessing literacy skills of adolescents and (young) adults in Dari as first language and German as second language (Lit-L1-L2)

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The assignment of adolescent and adult learners to preparatory classes or language courses should not only be based on their knowledge of their second language (L2), but also on their literacy skills in the first language (L1). In this article, we describe a tool (Lit-L1-L2), which was developed to assess the literacy skills of learners with L1 Dari and with little knowledge of their L2 German. It can be administered without any knowledge of Dari, as it is based on language independent criteria for assessment of behavior and handwriting.

Keywords: German as a Second Language, Dari, multilingual diagnostics, reading and writing skills.

1. Introduction

Although flight and migration of young people from crisis zones and the integration of late-entry pupils in the school system are not new phenomena, there are surprisingly few studies on how adolescents and (young) adults with little schooling or with limited literacy skills acquire a second language. With only a few exceptions, our theories and hypotheses on second language acquisition are based on empirical studies, in which highly educated and literate learners are examined: e.g., college students or the children of people with university degrees (e.g., Tarone and Bigelow 2012; Young-Scholten 2013). However, with respect to the speed of acquisition of a second language among adolescents and adults, a heterogeneous picture is apparent, which is dependent upon many influencing factors, including school education and literacy experience (cf. Czinglar 2018).

In different *Bundesländer* (Germany's component states), different kinds of "preparatory classes" are meant to prepare recently

immigrated pupils for regular school or for vocational training, whereby, per Gamper and Schroeder (2016), the mastery of literacy structures is key for the linguistic integration and subsequent educational path of refugees, both adolescents and (young) adults. Basic skills in the written language (reading and writing) are the presupposition, although recently immigrated learners have, for the most part, to develop oral and written skills in the second language (L2) at the same time. In contrast to learners of a second written language, for learners who are not sufficiently literate in their first language (L1), this can be a very long, drawn-out process. Studies of L2 acquisition of English have shown that highly developed literacy skills in the first language accelerate the acquisition of educationally-relevant linguistic abilities (e.g., Collier 1989; Cummins 2000).

Therefore, it is necessary to consider the L1 literacy skills of L2 learners. Usually, to this end, learners are asked about their educational biography (e.g., Van de Craats et al. 2006; Weber 2016). However, the length of schooling in the country of origin is often not a reliable predictor for L1 literacy skills of the learner (e.g., Tarone et al. 2009). Despite mandatory school attendance for 6 to 14 year-olds in Afghanistan, only 25 percent of children attend school for nine years and only 10 percent reach the twelfth grade (cf. nuffic education 2015). And even in the case of longer schooling, successful acquisition of literacy skills is not guaranteed, such that Afghan adolescents can often only read and write in their first language at primary school level (cf. Faselı 2018). In addition, due to war, fleeing from crisis areas, and a lack of infrastructure or material resources, the educational biographies of these young people are often interrupted. In many cases, basic literacy skills are thus lacking, such that the number of years of schooling reported by the learners is only tendentially informative as a predictor of their literacy skills, but not in every individual case.

Hence, we have combined the tool of Tarone et al. (2009) with other tests to develop Lit-L1-L2, a new tool for assessing the literacy skills of adolescents and (young) adults with L1 Dari. Ravid and Tolchinsky (2002) distinguish between two facets of *literacy*: (i) the discursive style of the written language, presupposing knowledge of registers and genres, and (ii) writing as a notational system that uses a set of graphic signs to compose messages in the written modality.

With regard to our target group, we focus on the narrow definition of literacy skills in (ii), i.e., on the basic abilities that are required to be able to read and write in a language. Numerous studies, both on mono- and bilingual children (e.g., Bialystok 2002; Krafft 2014; Verhoeven 2007 for German) and on monolingual adults (e.g., Castro-Caldas et al. 1998; Huettig and Mishra 2014; Huettig and Pickering 2019), demonstrate the influence of literacy skills on other linguistic and cognitive abilities. Along with Tarone et al. (2009), we start from the assumption that literacy skills in both L1 and L2 (and possibly in other languages) are relevant for the process of acquiring an L2.

In section 2, we first describe briefly the situation of recently immigrated adolescents and young adults in Germany and especially in the State of Hesse, i.e., the *Bundesland* in which our study is situated. In section 3, we present the Lit-L1-L2 tool for assessing literacy skills and, in so doing, examine both the modeling of literacy skills and the details of the methodological approach adopted in the development and testing of the tool. In section 4, we present the results of the application of Lit-L1-L2 to 18 adolescent and adult L2 learners of German with L1 Dari and validate them by using various methods.

2. Recently immigrated adolescents and adults in Germany

In 2015, for the first time, more than half of newly immigrated children and adolescents in Germany as a whole came from Asia: the largest numbers from Syria (27.9%) and Afghanistan (11.8%). Of the 640,561 new immigrants in 2015, 31.26% were school age (6 to 18 years old). The proportion of these late-entry pupils in the school system was thereby doubled (cf. von Dewitz et al. 2016). Another 47.48% immigrated to Germany as young adults between the ages of 19-25. In this age group, pupils from Afghanistan are in the majority (39%), most of them are male and identify Dari or Farsi as their L1 (cf. Baumann and Riedl 2016: 58-66). Dari is, in addition to Pashto, an official language in Afghanistan, and, like Farsi in Iran and Tajik in Tajikistan, it is a variety of New Persian (cf. Strobl 2013). Although these recently immigrated adolescents tend to have more education than the average in their country of origin, the proportion of

the adolescents who have not gone to school at all, and presumably have no or only minimal literacy skills in their first language or in other languages, is still 11.6%. At least another 13.3% have, on their own account, completed only one to five years of schooling in the country of origin (cf. Baumann and Riedl 2016: 89-99).

Depending on the *Bundesland*, the support measures and models of integration for assisting recently immigrated adolescents and young adults to start their careers differ greatly (Massumi et al. 2015: 45). In Hesse, adolescents up to 16 years of age usually attend secondary schools with different kinds of preparatory courses for German as a Second Language, while for older adolescents from 16 years onwards completely parallel preparatory classes were installed at vocational schools. For a maximum of two years they attend these classes exclusively with other recently immigrated pupils, which are supposed to prepare them for the transition into vocational training or for transfer into another educational track (so called *InteA*-classes, which stands short for *Integration und Abschluss*: “integration and graduation”; cf. Hessisches Kultusministerium 2015). Learners who have reached the age of majority or are adults attend literacy courses (*Alphabetisierungskurse*) that are offered by educational institutions. These courses are based on the concept for a countrywide literacy course developed by the Federal Office for Migration and Refugees (BMBF) (cf. Feldmeier 2015). Two-thirds of the adult asylum applicants from Afghanistan in the first six months of 2017 are not able to demonstrate any schooling (BAMF 2017b). 10% of all Afghan immigrants since 2013 are illiterate; if we also include functional illiterates, the number rises to 16% (BAMF 2017a). According to UNESCO figures, the literacy rate in Afghanistan is under 50% (UNESCO 2016). On the other hand, around one quarter of the adult Afghans had attended high school or university before coming to Germany (BAMF 2017b). Since 2014, residency status is no longer required for admission to German institutions of higher education, so that, in principle, refugees can begin a course of studies. For the purpose of the Higher Education Entrance Qualification, they must, among other things, demonstrate their knowledge of German e.g., via TestDaF (Test for German as Foreign Language) or DSH (German Language Examination for University Entrance). In the BMBF-

financed *Integra*-courses, they are given targeted linguistic and technical preparation for these German exams (BAMF 2016).

3. Lit-L1-L2: A tool for measuring basic literacy skills

The diagnostics tool Lit-L1-L2, developed as part of the project “German as a Second Language in Unaccompanied Refugee Minors” (DaZ-UMF) at the University of Kassel, is designed to determine the basic literacy skills of Dari speaking adolescents and young adults.

3.1. Preliminary methodological considerations and the pilot study

As concerns the formulations and the content of the tasks, a tool for assessing basic reading and writing skills of adolescents and (young) adults who only recently began to acquire German as a second language must be of simple design, since otherwise it is vocabulary and knowledge of grammar that will be tested. Oral knowledge of Dari can be presupposed for all learners, but not necessarily reading and writing knowledge – hence even in L1, the tasks designed must be simple in nature to promote their successful accomplishment. Like German, Dari belongs to the Indo-Germanic family of languages, but it is written from right to left using Arabic letters and according to the principles of a so-called abjad script, i.e. a consonantal writing system in which (short) vowels are normally not written (cf. Adli 2014; Strobl 2013).

Following the fundamental idea of Tarone et al. (2009), we started out using three tools for measuring basic reading and writing skills that were developed in the USA: the *Native Language Literacy Screening Device* (NLLSD; Hudson River Center for Program Development 1999) accompanied with the *Literacy Rating Scale* of Tarone et al. (2009), and the *Native Language Literacy Screening Manual* (NLS; Florida Department of Education 2014). For the purpose of a pilot study, these tasks were translated into Dari and German and adapted to the target group of adolescent learners, and further criteria for evaluating behavior and handwriting were added. This pilot version was tried out, evaluated and validated by a

linguistic analysis with 18 male unaccompanied refugee minors (Schumacher et al. 2019). It became apparent that some changes in the tasks proposed and the evaluation criteria were needed, in order to improve the validity of the tool. On the basis of the pilot version and a broad review of the literature on various testing instruments (among others, Faddy et al. 2008; Ledl 2003; Naville 1997), a completely new tool was developed by Schumacher (2020). This new tool is described in greater detail in the following section.

3.2. Tasks and tested skills

All of the tasks are designed in such a way that even learners with very limited L1/L2 skills can attempt them, so as to save face. The Lit-L1-L2 tasks are divided into four parts: A. reading comprehension and spelling abilities, B. handwriting fluency, C. reading fluency and D. free text production. Part A includes tasks in which subjects are asked to evaluate the semantic correctness of simple statements like “Fish live in the water” (true/false) or to mark syntactic or orthographic errors in a short sentence. Since at least basic knowledge of vocabulary, morphosyntax and orthography in German or, respectively, in Dari are required to master these tasks, this part is only done in the stronger language and the choice of language is left to the learners.

درست	نادرست	
✓	✗	← بطور مثال: ماهی ها در آب زندگی می کنند.
✓	✗	← رنگ آفتاب آبی است.

Figure 1. Example of a reading comprehension exercise in Part A of Lit-L1-L2 in Dari: the highlighted part shows how to mark true/false; see Schumacher (2020).

In Part B, among other things, writing speed under time pressure is measured, by having the learner write the same simple sentence as often as possible in 60 seconds (see Figure 2). Learners who write faster have achieved a higher level of automatization of motor handwriting ability. Greater handwriting fluency has a positive impact on text quality, since the working memory is less burdened by motor

tasks and has more resources available for higher order processes of text planning and text editing (e.g., Connelly et al. 2005). The working memory is tested by a single sentence being written from memory and the number of deviations being counted.

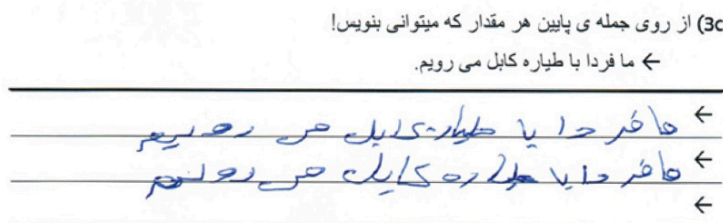


Figure 2. Writing speed under pressure: Subj03 manages to write it two times during 60 seconds, a skilled writer manages about seven times; see Schumacher (2020).

Part C tests reading fluency using a reading task in which the learner has to read aloud two texts that differ in linguistic level (e.g., only main clauses, first-person perspective, repetitions vs. main and subordinate clauses, more abstract statements in the third person) and in layout (e.g., line spacing, font size, one sentence per line vs. justification). Here, just the time required to read the texts, regardless of correctness, already tells us a great deal about how much the working memory is still employed with basic reading processes like phonological decoding, which has a negative impact on the understanding of the text (e.g., Souvignier 2013). Part D presents the learner with the task of producing a short text at his or her level relatively freely. In order to assure a minimal comparability of the texts, the two main characters (Tom and Wahid), the type of text (a story) and six content-words are given. The content-words are provided both as text and image. Thus, a text can be produced relatively freely according to each learner's linguistic level and a minimum length of the texts is guaranteed. Moreover, the task can also be solved without writing skills by simply copying the six words.

3.3. Rating procedure and evaluation criteria

In order to ensure an assessment procedure that is as objective as possible, a rating sheet with detailed instructions on all assessment

criteria and measurement values was created (see Table 1). The detailed instructions help the raters to choose a value on a four-point (0-3) scale. The assessment criteria were already tried out and adapted in the pilot study, and they were subsequently further secured by way of targeted teaching observations (Schumacher 2020). The performance of the subjects was assessed on three different levels (3.3.1 to 3.3.3).

3.4. Evaluation of behavior

While the subjects were accomplishing the tasks, the raters were evaluating their behavior using a rating sheet (see Table 1), which includes, among others, the following criteria: (i) Uncertainty when reading and writing that becomes apparent by e.g., facial expression/gestures, or explicit verbalizations. (ii) Measures for managing one's own attention or for focusing: e.g., tracing words or sentences with pen or finger; subvocalizing or audible reading along; a seated position that reduces the distance between eyes and paper. (iii) Automatization of motor processes when reading and writing, e.g., handwriting fluency; tensing of the writing hand.


		0	1	2	3	Pkt.
Außenwirkung						
Mimik und Gestik		sehr unsicher, frustriert	eher unsicher und angestrengt	ab und zu angestrengt	entspannt, locker, sicher	
Berührungen am Kopf (Mund, Stirn etc.)		durchgehend	> 10x bzw. > Hälfte d. Zeit	< 10x bzw. < Hälfte d. Zeit	nie	
verbales Verhalten						
Kommentare zu schwieriger Bewältigung		> 3x	2-3x	1x	nie	
Nachfragen		> 3x	2-3x	1x	nie	
Maßnahmen zur Fokussierung						
Sitzhaltung		sehr unruhig, ständig anders	meist unter 45° geneigt	meist über 45° geneigt	gerade bis leicht geneigt	
Folgen der Wörter mit dem Stift oder Finger		durchgehend	oft	ab und zu	nie	
stille Mundbewegung oder hörbares Lesen		durchgehend	oft	ab und zu	nie	

Table 1. Excerpt from the *Rating Sheet for Evaluating Behavior* in Part A including detailed instructions for the use of the four-point-scale; see Schumacher (2020).

3.4.1. Evaluation of handwriting

For the evaluation of the handwriting, only such criteria were used as can be judged by raters who do not know the script in question:

1. Level of development of fine motor skills, to the extent that this can be seen from the handwriting: e.g., pen pressure (high/normal), trace of line (sure/unsure, inconsistent/uniform).
2. Fitting of the text within the page and/or the line margins: e.g., going over the margins, bunching up at the end of a line or one sentence per line.
3. Segmentation of words and sentences: e.g., irregular spacing between letters or words, missing punctuation at the end of sentences.
4. Consistency of grapheme form in each context: e.g., size of writing or letters, slant of the grapheme, formation of the same grapheme, recognizability and maintaining of x-height, ascenders and descenders.

The handwriting was evaluated in Part B and Part D, whereby Part B includes tasks that facilitate the comparison of graphemes in the same context, since the subjects had to write the same sentence several time.

Figures 3 and 4 show two texts from Part D: one from Subj13, the subject with the lowest rating, and one from Subj06, whose handwriting in Dari achieved the highest rating of all 18 subjects. One can see that the text by Subj13 in Figure 3 fills fewer lines than that of Subj06, the pen pressure is clearly stronger, the spacing between the grapheme groups is too large, the letters slant in different directions, and the descenders are almost missing.

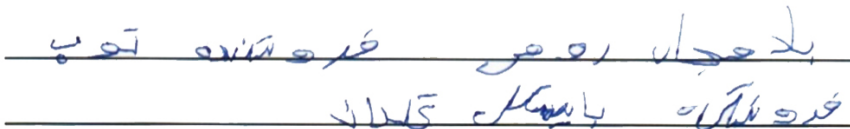


Figure 3. Free text production task (Part D) of Subj13.

In contrast, the slant of the letters for Subj06 in Figure 4 is uniform, x-height, ascenders and descenders can be easily identified, and no excessive spacing between grapheme groups is noticeable.

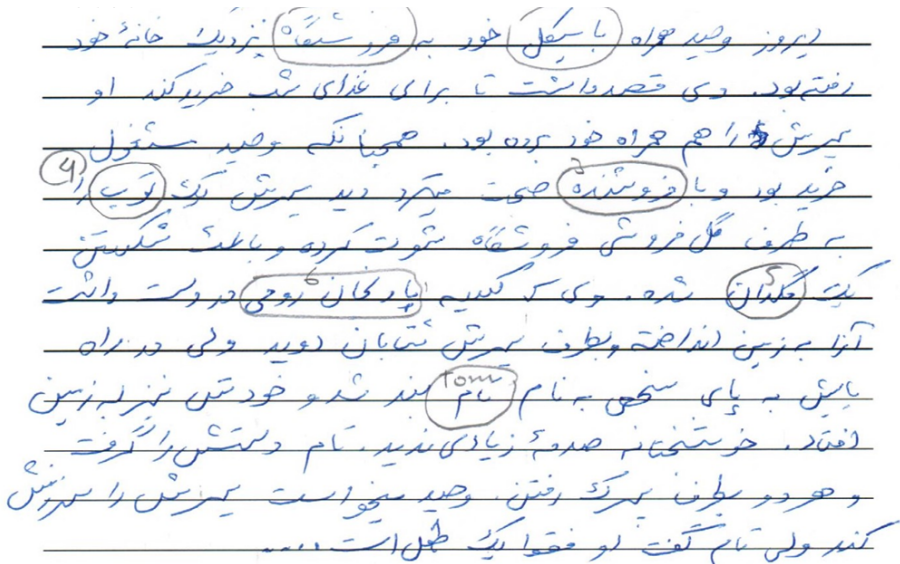


Figure 4. Free text production task (Part D) of Subj06.

3.4.2. Skill measurement

In certain places, it was possible to establish measured values, e.g. for fluency in writing and reading aloud (see Section 3.2), which enter the overall evaluation by way of the same four-point scale as 3.3.1 and 3.3.2. These scores complement the higher inference ratings, and the exact scores can be used for validating the rating procedure (cf. Lotz et al. 2013): In fact, there is a close connection between writing and reading speed and the overall scores in Lit-L1-L2 (Schumacher 2020).

3.5. Participants and implementation of Lit-L1-L2

The completely redesigned tool Lit-L1-L2 was tested in dari and German with 18 male subjects who fled to Germany as adolescents or

(young) adults. In the interview on their linguistic biographies, most of the subjects reported that, in addition to German, they also speak Arabic, English or Pashto. On their own account, however, their writing and reading skills are most highly developed either in German or in Dari. The age of the 18 subjects is between 15 to 40 years and at the time of the survey, they had lived in Germany from 6 to 31 months. They had been attending a school or a German course in Germany for at least one month and for at most two years. Their school experience before arriving in Germany also differs greatly: Some participants had already attended school in their country of origin (mostly Afghanistan, some Iran) for 12 years and some had, in addition, completed or started a university degree program, whereas others had no school experience in their country of origin at all (Schumacher 2018).

		Age	LOR	First written language	L1 school attendance		L2 German school/course	Higher literacy skills in	
				Language	Age	Afgh.	total	total	
Code	Group	Yrs.	Mos.	Yrs.	Yrs.	Yrs.	Mos.	Dari/Ger	
Prob01	<i>Integra</i>	37	18	Dari	6	12	12	7,5	Dari
Prob02	<i>Alpha</i>	27	24	Dari	15	1	1	2	Ger
Prob03	<i>InteA</i>	19	19	Dari	6	10	10	12	Dari
Prob04	<i>Integra</i>	24	25	Pashto & Dari	7	12	12	20,5	Dari
Prob05	<i>InteA</i>	19	26	Dari	11	3	3	18	Dari
Prob06	<i>Integra</i>	40	25	Dari	5,5	9	12	8	Dari
Prob07	<i>Integra</i>	27	25	Farsi	7	4	12	8	Dari
Prob08	<i>Integra</i>	27	31	Farsi	7	0	12	10	Dari
Prob09	<i>InteA</i>	20	28	Dari	6,5	6	6	20	Dari
Prob10	<i>InteA</i>	19	28	Dari	8	1	1	18	Dari
Prob11	<i>InteA</i>	23	28	Dari	7	7	7	19	Dari
Prob12	<i>Integra</i>	21	29	Dari	5	10	10	21	Dari
Prob13	<i>Alpha</i>	17	28	German	15	0	0	24	Ger
Prob14	<i>Alpha</i>	15	6	Dari	6	0	0	3	Dari
Prob15	<i>InteA</i>	21	19	Dari	5	11	11	17	Dari
Prob16	<i>Alpha</i>	40	15	Dari	7	2 + 6	8	4	Dari
Prob17	<i>Alpha</i>	19	18	Dari	6	5	5	24	Dari
Prob18	<i>Alpha</i>	17	8	Dari	7	0 (5)	1 (6)	1	Dari

Table 2. Information on the heterogeneous backgrounds of the 18 subjects.

The subjects can be arrayed into three different groups (six subjects per group), which are expected to differ significantly in their schooling and literacy experience in L1 Dari and L2 German. Group 1 (*Integra*) consists of participants in so-called Integra-courses at the University of Kassel (see Section 2). The members of this group are mostly young adults who have already started or completed a

university degree program in their first language and are preparing for the German test that is a requirement for university admission. Mid-to-high-level literacy skills, both in Dari and in German, are to be expected from them. The pupils in Group 2 (*InteA*) were preparing for a German secondary school certificate (“*Hauptschulabschluss*”) in *InteA*-classes at a vocational school in Kassel (see Section 2). In German, we expect low-to-mid-level literacy skills from them, but without a test, it is hard to predict their literacy skills in Dari. The members of Group 3 (*Alpha*) are mostly young adults attending literacy courses in German. They have no or very low-level literacy skills in German and possibly different (but presumably rather low) levels in Dari. As we did not find enough young adults in these courses at the time, the study includes also three subjects at the age of around 40 years (see Table 2).

The test was conducted by the first author with each subject individually. It lasted, on average, 54 minutes for both languages (plus, on average, 12 minutes for a monolingual biographical interview) and was done first in the language in which the subject reported to be more literate in. The subjects all used the same pen for writing and identical paper print-outs of the tasks, and, while doing the tasks, they were filmed with a digital video camera mounted on a tripod. Afterwards, the video recordings were evaluated by two specially trained students of GFL/GSL, independently of one another, using the rating sheet that was developed. The two raters did not have mastery of the Dari (written) language; neither did they know the subjects nor could they assign them to one of the three groups. In order to test whether raters who are able to read and understand the texts produced in Dari would possibly arrive at different assessments, the handwriting in the Dari texts was also evaluated by two raters (a teacher and a student) with written language abilities in their L1 Dari.

3.6. Validation by a linguistic analysis of the texts

For the purpose of further validation, the freely written texts from Part D were evaluated by linguistically trained native speakers (of German and Dari, respectively) in terms of basic linguistic categories, in order to determine an indicator for the subjects’ writing, reading and textual

skills that is largely independent of the assessments in Lit-L1-L2. The following criteria were chosen for the linguistic analysis, on the basis of relevant literature (e.g., Griebhaber 2012; Housen et al. 2012; Reich et al. 2008) and with regard to the fact that they should also apply to very simple texts in German and likewise in Dari: (i) lexicon and grammar (four indicators): text length in tokens (words), lexical diversity (lemmas/tokens), syntactic complexity (sentences were coded as T-units: words/T-unit, dependent clauses/T-unit). (ii) literacy skills (four indicators): orthography (correctly spelled words/tokens), fulfillment of the task (number of actually used words from those specified), text structure (recognizable stringing together of words, sentences or textual parts), cohesive devices and individual textual design (number of anaphora, sentence conjunctions, temporal expressions, adjectives etc./tokens). Each of these indicators were normalized to the maximum (1) and added together (max. 8; Table 4).

4. Results and validation of Lit-L1-L2

In this section, we present an extract of the results that we were able to obtain with Lit-L1-L2 and show how the assessment procedure can be validated through comparison with data that is gathered by other means. Table 3 contains the total number of Lit-L1-L2 points that results from the addition of the scores of the two German-speaking raters, who arrived at very similar assessments independently of one another (interrater reliability: Spearman's Rho .732, see Schumacher 2018). A comparison of the handwriting assessments of the German- and Dari-speaking/writing raters shows no divergences. The latter achieve outstanding interrater reliability among themselves (Spearman's Rho .821), and the agreement with the results of the German-speaking raters is also high (Spearman's Rho .738).

Table 3 is constructed in such a way that the lines are sorted in ascending order per the overall Lit-L1-L2 results for German and Dari. The range from a minimum of 346 to a maximum of 668 points shows that the tool is capable of distinguishing between subjects with different levels of literacy. Despite the small number of subjects, the three subject groups are relatively well reflected by the results sorted in ascending order: the learners in literacy courses (in white) are at the

very bottom of the scale, the *InteA* pupils (in a medium shade of grey) are approximately in the middle, and the participants in *Integra*-courses (in dark grey) obtain the best results (Schumacher 2018). Only Subj16, Subj03 and Subj17 do better than would be expected from their group assignment, especially Subj17 stands out very positively, since he obtained the fifth-best result of all subjects while participating in an Alpha course.

Group	Subjects	Lit-L1-L2 (max. 718)	Lit-L1-L2 w/o A (max. 612)	Part A (max. 106)	L1 minus A (max. 306)	L2 minus A (max. 306)	L1 vs. L2: L1 is...
Alpha	Subj02	346	322	24	169	153	equal
Alpha	Subj13	445	376	69	170	206	worse
Alpha	Subj18	455	397	58	234	163	better
Alpha	Subj14	481	448	33	242	206	better
InteA	Subj05	512	456	56	227	229	equal
InteA	Subj09	530	445	85	239	206	better
Alpha	Subj16	542	476	66	262	214	better
InteA	Subj10	556	484	72	245	239	equal
InteA	Subj15	562	491	71	262	229	better
InteA	Subj11	573	489	84	244	245	equal
Integra	Subj04	593	513	80	255	258	equal
Integra	Subj08	596	501	95	273	228	better
InteA	Subj03	601	515	86	263	252	equal
Alpha	Subj17	616	536	80	284	252	better
Integra	Subj01	629	532	97	270	262	equal
Integra	Subj06	636	539	97	280	259	equal
Integra	Subj12	642	543	99	267	276	equal
Integra	Subj07	668	567	101	281	286	equal
	<i>Median</i>	<i>567,5</i>	<i>490</i>	<i>80</i>	<i>258,5</i>	<i>234</i>	<i>equal</i>

Table 3. Results of the 18 Subjects sorted per their scores in Lit-L1-L2.

In addition, the results of Part A are separated out in Table 3 to compare the results for Dari and German, for which a point differential of more than 10% from the median in L1 Dari was established as threshold for a clear deviation (25 points). As the grey scale corresponding to the ranking shows, Lit-L1-L2 without Part A yields very similar results as Lit-L1-L2 overall. Part A was only done in the stronger language, which for all subjects besides the two weakest ones (Subj02 and Subj13) was their L1 Dari. Subj13 is also the only learner who performs considerably worse in Dari than in German. All other subjects either perform about equally well in both languages or better in Dari, which they also reported to be their stronger language in the interview. The Lit-L1-L2 results thus also

correspond to the subjects' comparative assessments of their literacy skills in L1 and L2 (see Table 2). It can be noted that the subjects' stronger language accounts for 57% of the overall evaluation and the weaker language for only 43%, which, in light of the fact that vocabulary and knowledge of grammar were also tested in Part A, seems fair to us. The weighing of the individual test parts by the number of points should, however, be systematically taken into consideration in the next revision. It would be interesting to make a detailed comparison between the performances in L1 and in L2 in the spirit of the interdependence hypothesis (Cummins 2000; Berthele and Lambelet 2018). However, a considerably larger number of subjects would be needed to investigate this issue, since the subjects differ greatly with respect to other influencing factors: above all, exposure to and instruction in German.

The linguistic analysis of the freely produced texts in German and Dari examined eight indicators (16 for L1 and L2 together; see Section 3.5). The data in Table 4 are sorted according to the results of the linguistic analysis (LingA), which largely matches the assessment by Lit-L1-L2 and even seems to reflect the three subject groups better than the Lit-L1-L2 assessment, as Subj17 is included in the *Alpha*-group, whereas he is rated much better by Lit-L1-L2.

Group	Literacy Skills	Subjects	LingA L1+L2 (max. 16)	LingA L1+L2 (%)	Lit-L1-L2 (max.718)	Lit-L1-L2 (%)
Alpha	no-to-low	Subj02	5,44	34%	346	48%
Alpha	no-to-low	Subj13	5,64	35%	445	62%
Alpha	no-to-low	Subj17	6,60	41%	616	86%
Alpha	no-to-low	Subj14	6,96	43%	481	67%
Alpha	no-to-low	Subj16	7,26	45%	542	75%
Alpha	no-to-low	Subj18	7,51	47%	455	63%
InteA	low-to-mid	Subj05	8,86	55%	512	71%
InteA	low-to-mid	Subj10	9,18	57%	556	77%
InteA	low-to-mid	Subj15	9,68	60%	562	78%
InteA	low-to-mid	Subj09	9,90	62%	530	74%
InteA	low-to-mid	Subj11	11,65	73%	573	80%
Integra	mid-to-high	Subj04	11,91	74%	593	83%
InteA	low-to-mid	Subj03	12,19	76%	601	84%
Integra	mid-to-high	Subj12	12,22	76%	642	89%
Integra	mid-to-high	Subj06	12,23	76%	636	89%
Integra	mid-to-high	Subj08	12,57	79%	596	83%
Integra	mid-to-high	Subj07	12,92	81%	668	93%
Integra	mid-to-high	Subj01	13,39	84%	629	88%

Table 4. Comparison between linguistic analysis and Lit-L1-L2 (sorted according to LingA).

A more detailed look at his performance, however, shows that this is not necessarily the case and rather points to certain weaknesses in the linguistic analysis. In the interview, Subj17 reports that he has been attending a German course for two years (in comparison to the others, this is a relatively long time). The teacher, on the other hand, regards his presence as irregular and his behavior as unreliable. He is, however, very active in a boxing club and in a football club, and he has a lot of contact with native speakers. On his own account, he only went to school for five years in his country of origin and did so reluctantly and irregularly. Nonetheless, his orthography and his grammar in Dari are faultless, and, moreover, in contrast to all other subjects, he uses the register of the written language in Dari, as becomes clear in the use of certain verbs and prepositions. Despite his limited school experience, Subj17 obtained the best score for Dari in Lit-L1-L2, as based on his confident and fluent writing behavior, his harmonious handwriting and his confident and fluent reading aloud. In addition, on the basis of the video, his reading performance was judged as entirely correct by a native Dari speaker. For this learner, the length of his school attendance in his country of origin does not at all provide the right predictions about his actual literacy skills. This makes clear the need for an assessment tool like Lit-L1-L2.

Evidently, our linguistic analysis is not sufficiently differentiated, in order to suitably identify all necessary literacy skills: Subj17 obtains only 43% of the maximum score in the linguistic analysis of his Dari text and only 40% of the maximum score in that of his German text. Above all, the brevity of his texts (33 words in Dari vs. a maximum value of 149 words and 32 words in German vs. a maximum value of 195 words) has a negative impact here. In his case, we impute this less to lacking skills than to lacking interest or excessive nonchalance. Although the other indicators for text length are relativized to the number of words/tokens, a short text provides only limited opportunities for text arrangement and for using cohesive and individual textual design devices. In contrast to Lit-L1-L2, the handwriting is not included in the analysis and the written language register is only taken into account by way of grammatically-oriented indicators like average sentence length, the portion of embedded dependent clauses, and cohesive or individual textual design devices.

The analytical criteria were first developed on the basis of the German texts, which did not contain any differences in register. For the purpose of further validation, it would thus be desirable in the future to broaden the linguistic analysis to include features like handwriting and written language register, which can be quantified in both languages.

5. Summary and outlook

A large group of recently immigrated adolescents and adults currently speak Dari as their first language (L1) and confront both researchers and teachers with major challenges, when it comes to diagnosing their basic reading and writing skills in their L1. As we have shown, surveying the duration of school attendance in the country of origin is not sufficient for estimating L1 literacy.

In this article, we have presented a tool for diagnosing basic reading and writing skills of adolescent and adult L2 learners of German with L1 Dari (Lit-L1-L2). We focus on the presentation of the methodological approach adopted in the development, testing and validation of the assessment tool Lit-L1-L2. The tasks are designed in such a way that they can be done by adolescents and adults with limited literacy skills in both languages. Following several pilot steps, the tool was tested with 18 male adolescents and adults with divergent literacy skills. The results show that the tool is reliable and valid:

1. German speaking raters assess the Dari handwriting very similarly to two raters with L1 Dari,
2. there is overall a high degree of interrater reliability, and
3. the Lit-L1-L2 results largely match the learners' actual literacy and linguistic skills.

The latter was tested by way of a linguistic analysis of the texts produced. This linguistic analysis needs to be further developed in the future. Needless to say, given the small number of subjects, the result is not representative. In the future, the tool should be tested with a larger group of subjects and further optimized in terms of the organization and weighing of the individual test parts.

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