

Stereotypes versus Research Results Regarding Functionally Illiterate Adults

Conclusions from the First German Level-One Survey and the Learner Panel Study

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Abstract

While within UNESCO functional *literacy* sometimes is discussed from the perspective of functional *illiteracy* (Street, 1992), this is nearly always the case regarding German adult education. But illiteracy is a difficult term and separates populations at a dichotomous line. This is necessary for negotiating resources with policy makers, but stigmatizing and excluding. Alongside with this essentialist label stereotypes about functionally illiterates are reproduced. Knowledge about this subgroup relies a lot on research with participants from Adult Basic Education. Several assumptions about sociodemographic situation and attitudes of participants seem to shape the common notion of the subpopulation in Germany. The recent *representative learner study* 'AlphaPanel' (Lehmann, Fickler-Stang, Maué 2012; Rosenblatt, Bilger 2010) confirms many of these assumptions. But figures from the first *representative household survey* on functional illiteracy, the 'Level-One Survey (LEO)' (Grotlüschen & Riekmann 2011), do not confirm these findings.

Stereotypes rising from research with participants, such as the assumption that they be mostly unemployed, isolated people with no school degree, may apply to the majority of adult basic education (ABE) participants, but not the majority of functionally illiterate adults as a whole.

The article first discusses theoretical aspects of the terms 'literacy' and 'illiteracy'. The first conclusion will take into account the danger of (re-)producing stereotypes by using dichotomous terms. The problems that arise with hierarchical competence models and curricula, which also imply a deficit model of those who are located in low areas of the hierarchy and in early stages of the curriculum, will sharpen the point of view. To elaborate this, the authors make use of two more literacy curricula regarding financial and health literacy.

The theoretical problem will end up in Spivak's notion of *strategic essentialism*. The two studies mentioned above will then be introduced and embedded into the broader context of the German National Strategy for Basic Education. The third section will show that even within rather similar assessment studies compelling differences can be found between participants of ABE and the complete subpopulation. The discussion in the fourth section asks whether it might be possible that many adults are quite at ease even with low literacy skills and therefore will not participate in any class. The stereotype of functionally illiterates in desperate need of help and support (delivered by adult education) is – according to the data – not only reproduced by mass media, but by practitioners, learner organizations and researchers as well. The main sources of these stereotypes are the experiences from courses – their generalization proves to be problematic, as the comparison with the German household survey on literacy shows.

Keywords: adult education, literacy, functional illiteracy, survey, Germany

Functional Illiteracy and the Problem of Essentialist Categories that Could Reproduce Stereotypes

In order to engage in international discussion on literacy and functional illiteracy it is crucial to first clarify the terms that are being used. This is of particular importance because most recent notions concerning literacy as a social practice (Barton & Hamilton, 2003) challenge the dichotomous definition of literacy, used by UNESCO from the late 1970s, which draws a simple distinction between those who are literate and those who are not.

“A person is functionally illiterate who cannot engage in all those activities in which literacy is required for effective functioning of his group and community and also for enabling him to continue to use reading, writing and calculation for his own and the community’s development.” (UNESCO, 2007, p. 529)

This definition is quite general and difficult to operationalize, but above all, it splits the population into two, whereas most surveys of adult literacy present a hierarchy of levels, rather than a dichotomy. Moreover, literacy is now regarded as a social practice, which is situated, local, and multiple (Barton & Hamilton, 1998; Street, 2003; Street & Lefstein, 2007; UNESCO Education Sector, 2008). However, there is still a political demand to know how many adults are functionally illiterate. This demand reduces even the most sophisticated scale to a dichotomy of those who are functionally illiterate and those who are not. As in all dichotomous conceptions of difference, the weaker groups easily become vulnerable and subject to stereotypes, prejudices and essentialisms (men/women, white/black, literate/illiterate).

Low levels of skills can easily be misinterpreted as an individual deficit. This deficit model becomes even more apparent when we attempt to find a general term for the subpopulation. Do we call them “learners”, ignoring those who currently do not participate in classes? Do we talk about “functionally illiterate adults”, stigmatizing them and creating a new vulnerable subgroup in a society already full of illegitimate inequalities? Moreover, how can we call speakers of minority languages functionally illiterate when they show a good oral command of German and therefore participate in a survey? This label only applies to German as a written language. It is still possible that Turkish, Greek or Russian immigrants are fully literate in their own language.

On the other hand, an excessively detailed differentiation within this group would split them into smaller and smaller groups, making it even more difficult for their voice to be heard in public debates. While accepting that literacies are multiple and situated, we have no other means of measurement other than drawing a line in the scale in a dichotomous manner in order to inform policy makers. While this form of essentialism, labeling a group of adults functionally illiterate, is

deficit-oriented, it is strategically important in order to make the subgroup visible. Such strategic essentialism originates in feminist and intercultural debates (Spivak, 2009, p. 3).

Levels and their Potential to Reproduce Deficit Views of Those on the Lowest Levels

Can literacy be seen as hierarchical? And if so, should those who belong to the lowest range of the group be seen as in need of support? Do they have a deficit which needs to be fixed?

The French structuralist Pierre Bourdieu reminded us that the hierarchical use of language is the result of social conflict (Bourdieu, 2005, p. 58). Different languages and dialects have been integrated into one language – French in this case – a procedure which implies that other languages are less legitimate. The written version of this legitimate language is presented as official, and is most useful to bureaucrats and most familiar to bureaucrats and intellectuals. These two subgroups benefited most from historical changes in France and established their specific use of literacy as the legitimate one. A normative lettering and scripture spread over France, pushing dialects and minority languages aside. Today, normative ideas of literacy could possibly be pushing different uses of literacy aside: What cannot be measured ceases to exist. Such criticism is often directed towards large scale surveys.

It can be concluded that

- a) Literacies should be noted as social practices. Literacies are multiple, and especially multilingual.
- b) There is a hierarchy in literacy, but it is a result of social conflicts and can be changed according to different needs. If digital literacy should become more legitimate than reading classical literature and writing formal letters, this will change the hierarchy.
- c) Literacy according to its current definition can be measured on a hierarchical scale, but the scale is also a result of social conflicts and negotiation, especially because in its operationalization we lose some of the richness of everyday literacy practices.

These debates are well known in light of IALS, PISA and – at least in Germany – PIAAC discussions. Competencies in large scale surveys are defined as pragmatic and functional; classifying individuals as competent if they fulfill the task (Klieme & Hartig, 2008). The humanist critique regarding this approach reminds us that the idea of ‘functioning in a society’ underlying the term functional literacy has also been subject to international discussions. Western countries have defined their literacy problems as the more noble ‘functional illiteracy’, whereas in so called “developing countries” literacy problems are addressed as ‘illiteracy’. Moreover, ‘functioning in society’ has been discussed as not being the only worthwhile investment (Limage, 1996). The most recent Scottish adult literacy

survey, using a re-run of IALS instruments, came to the conclusion that comparability of instruments is less important than an optimal match between the philosophical approach of policy makers and practitioners on the one hand and survey instruments on the other hand (St. Clair, 2011).

This leads to the conclusion that hierarchical models might also foster deficit models if not stereotypes regarding those at the lowest end of the scale while applying legitimate literacy concepts as normal and natural – thus covering ongoing conflicts about what is legitimate and who benefits from it.

Financial Literacy and Health Literacy Curricula: Blaming the Victim?

The functionalist approach has also been criticized regarding further domains of literacy, i.e. financial literacy or health literacy. Both in the 1980s (Lankshear & Knobel, 2011, p. 10) as well as in recent publications on financial literacy, researchers comment that financial literacy education programs tend to individualize the learner's problem of low income and dissatisfying financial situations, thereby leading to deficit models (Sprow Forté, 2012, p. 2), which include the idea of 'blaming the victim' (Bittlingmayer, Drucks, Gerdes & Bauer, 2010).

Critics also suggest that financial literacy education often simply aims to incorporate those on low incomes into the system rather than empowering them to question the inequalities within the society they live in (Lankshear & Knobel, 2011, p. 10). Sprow Forté (2012, p. 4) concludes: "The possibility that financial education benefits other people or institutions more than the financial education learners themselves has largely been ignored". If this is true for financial literacy, it is true for health literacy education as well. While early approaches were inspired by Paulo Freire (just as literacy and financial literacy education as a whole was), the curricula seldom show empowerment, dialogue or "conscientização" (Freire, 1996), but rather focus on individual changes to prevent avoidable health problems (Coady, 2013, p. 3). This is despite the fact that global data suggest the main underlying factor influencing health is poverty not individual behavior (ibid).

Financial and health literacy discussions inform us that

- a) Financial and health literacy is only partly under the control of the individual; it is largely a result of social factors (such as family and neighborhood) as well as inequalities within the global society (such as the negotiation of wages and health insurance in global competition)
- b) Although efforts have been made to empower financial and health literacy learners, the curricula still focus on individual behavior changes, thereby suggesting a deficit model of the learner and reproducing the status quo.

Stereotypes versus Research Results Regarding Functionally Illiterate Adults

Regarding financial and health situation it is quite straightforward to accept these research results. But is *literacy*, being able to read and write on a basic level, also a problem of poverty and intersecting factors such as class, age, gender and culture? The level-one survey data (see below) show that literacy correlates with all these factors, but we do not necessarily know the direction of the correlation: Was 'class' a reason for lack of achievement at school leading to such adults having poor literacy or is poor literacy the reason why adults have poorly paid jobs, for having to carry out monotonous and precarious work and therefore belong to the lower class? Analysis of longitudinal data sets such as the British birth cohorts suggest this is a vicious circle (Parsons & Bynner, 2007; EU High Level Group of Experts on Literacy, 2012).

We can also question whether ABE curricula unintentionally teach participants to understand their low literacy level as an individual deficit? While we know little about what is really taught in German basic education classes, the so-called National Strategy on Adult Literacy and Basic Education (<http://www.bmbf.de/de/426.php>) suggests that such 'learning' would improve literacy skills, if only the subpopulations came to the classes – which they do not (Viol, 2010). The underlying implication is that individuals cause their 'deficits' by not continuing to learn.

Stereotypes via Media and Practice

Beliefs, misconceptions and stereotypes attached to functionally illiterate adults are widespread, but seldom collected or questioned. Media reproduce the dominant narratives, as Hamilton shows from the UK discourse in the light of IALS. She concludes: "Literacy is commonly contrasted with illiteracy – a social good versus a social ill" (2012, p. 104). Stereotypes are spread in headlines like "How the British lag behind in reading, but lead the world at watching TV" (Hamilton, 2012, p. 100). However, educators' narratives differ from mass media stereotypes. They might become unintentionally paternalistic and reproduce stereotypes in quite a subtle way. One of the most well-known German practitioner booklets on illiteracy is "Ihr Kreuz ist die Schrift" (Döbert & Hubertus, 2000). While it approaches the people affected in an empowering manner, it unintentionally generalizes research results from participants to the subpopulation (Döbert & Hubertus, 2000, p. 59-72). We learn that functionally illiterate adults have negative experiences at home and at school; feel ashamed about not being able to read and write; are unemployed and isolated; and feel dependent on people they trust. Regarding lower-skilled adult learners, we automatically assume poor learning intentions, as Kyndt, Dochy, Onghena & Baert found in recent research (2013). Whilst the first cluster of stereotypes has a common idea of excusing the learners' low literacy level, the latter would be a taboo in national discussion. As long as no one has asked the subpopulation about their learning intentions thus far, it is silently viewed as unacceptable to label those affected as unwilling to learn.

Misconceptions and Facts set out by the European High Level Group of Literacy 2012

Focusing on the people behind the numbers, there are misconceptions about the notion of functionally illiterate adults throughout Europe. As the EU High Level Group of Literacy Experts states, about 80 million Europeans are functionally illiterate. However, they are not primarily immigrants and most of them are employed. The EU High Level Group contrasts common misconceptions with facts derived from international large scale assessment.

Misconceptions	The Facts
'Low literacy is something that happens in developing countries, surely not in Europe!?'	One in five European 15-year-olds and almost one in five adults lack the literacy skills required to successfully function in a modern society.
'Low literacy is a problem imported by migrants, not for those born and bred in European countries.'	The vast majority of children and adults with poor literacy skills were born and raised in the country they live in, and speak its language of instruction as their mother tongue.
'Poor literacy only affects those on the margins of society.'	One in five adults in Europe lack sufficient literacy skills and most of them are employed.

(EU High Level Group of Experts on Literacy, 2012, p. 29)

The estimate of 80 million functionally illiterate adults in Europe is largely drawn from the results of the PISA and IALS surveys, as there are only three surveys in Europe so far focusing on *adults* as well as the *lowest level* of literacy. Germany has the luxury of having two representative studies (LEO and AlphaPanel) using the same background questionnaire for many variables and using the same level one test items. This provides more detailed information on functionally illiterate adults as a subpopulation as well as in comparison with other participants.

German Level-One Survey and AlphaPanel – Methodological Decisions

The “German story” is quite different from countries who started earlier with level one research. LEO and AlphaPanel are based on several methodological decisions that affect their outcomes. We aim to show that large scale research depends on such decisions and sometimes even on political necessities. Research does not provide ‘empirical proof’ or ‘definitive truth’ but always follows interests that should be reflected and made transparent. Therefore, we will firstly try to explain the political and research situation leading up to the LEO and the AlphaPanel before we compare their results in the next section.

As in the USA in the early 90s (Pugsley, 2011, p. 2), adult education in Germany has traditionally been given second-class treatment by policy makers, who instead focus their attention on school education in response to results from the PISA studies. The IALS results have not been discussed

seriously. Moreover, the definition of a suitable minimum is for the most part unknown in Germany and therefore has never been linked to the nationwide discussion on functional illiteracy. The IALS definition of Level three as a suitable minimum at which adults can function effectively was difficult to communicate within countries like Germany and Norway (Gabrielsen & Egil, 2011, p.: 3). Despite some thirteen, fourteen or even fifteen percent of the adult population being located on IALS level one, German policy makers were not alarmed. On the other hand, UNESCO estimates of 3 million functionally illiterate adults in Germany were adjusted after the fall of the Berlin Wall to about 4 million in eastern and western Germany. This vague estimate was launched in large campaigns by the Bundesverband Alphabetisierung (an association to combat illiteracy). Germany did not join the ALL study, instead, in 2008 the German Federal Ministry of Education and Research decided to launch a 30million Euro research program focusing on adult basic education. This program raised the question of the number of adults affected.

leo.- Level-One Survey: A Representative Household Survey and Assessment

One of the results of the research program was a detailed formative assessment based on theoretically and consensually developed *Alpha-Levels*. Five Alpha-Levels divide level one into smaller units (Grotlüschen, Kretschmann, Quante-Brandt & Wolf, 2011). They follow the so-called 'lower rungs approach' (Brooks/Davies/Duckett et al. 2001) and split level one, which might theoretically be comparable to PIAAC level one, into smaller rungs of the ladder. This approach was also used in England, where *Entry Levels* were developed for the "Skills For Life"-Strategy (DfES 2003, pp. 10-11). The Alpha-Levels are based on different theories regarding reading and writing and refer to the length of a word or text, different strategies of reading and writing (Frith, 1985; Frith, 1986, p. 72) as well as the frequency of a word and its typography.

The Alpha-Levels helped to operationalize the definition given by UNESCO: up to Alpha-Level 3 we speak of functional illiteracy, from Alpha-Level 4 onwards we speak of literacy (Grotlüschen & Riekmann 2011, p. 2). They add *writing* to the domains measured, but ignore document literacy or numeracy. The competing 'component approach', tested earlier in the US (Strucker, 2007) and integrated into PIAAC will be interesting to interlink. Two pretests were carried out. The first (n=513) was performed by the international survey company (TNS Infratest Sozialforschung) on a household basis in order to check the interviewers' readiness to take part in competence testing. The second (n=321) was performed by the research team in order to scale the items and externally validate them towards known reading and writing tests used for primary school purposes. 92 items were produced and 72 proved usable (MNSQ below 1.33, Grotlüschen, Riekmann & Buddeberg, 2012b, p. 63; Wilson 2005, p. 129). To keep average testing times short, a filter approach was used with 10 items presented to all 8.436 interviewees and lasting 15 minutes on average. The lowest 20 percent of this

filtering procedure were directed to a second test booklet lasting another 15 minutes. After having received eight thousand booklets and the data file from TNS Infratest, the data were scaled and normed using item response theory. The tests used were classical pen and paper (testing orally would have been cheaper and logistically easier – the French survey *Information et Vie Quotidienne* is a good example of this approach (Jeantheau, 2007b)).

The main survey led to the core result of 14.5 percent of the adult population (aged 18-64) being functionally illiterate, which equals 7.5 million people. About 28 percent of this group participates in adult and further education, but less than one percent participate in ABE (Grotlüschen & Riekman 2012).

AlphaPanel: A Representative Learner Study and Assessment

The second study is the AlphaPanel (Lehmann, Fickler-Stang & Maué, 2012), a learner study similar to Brooks' "Progress in Adult Literacy" (Brooks et al., 2001). It is representative for the ABE courses carried out by the German 'Volkshochschulen' (adult education centres) with a sample size of n=524.

Germany does not have a tradition of testing in adult education centres, so the idea of integrating a level one test into the panel was subject to intense discussions within the field. The fear of being tested does not primarily affect the learners but the educators. They fear that their classes might not progress visibly enough to assure further funding. Reders' discussion regarding recent longitudinal and controlled studies (2011) shows that the educators' reservations tend to match research results. Reder states that *literacy practices* improve due to program attendance, while *proficiency* increases or decreases without a statistically significant link to the ABE program.

Without going into too much detail, the definition of 'functional illiteracy' as an equivalent to Alpha-Levels 1-3 was a question of consensus and benchmarking, not of statistical evidence. There were times when the comparison to the UNESCO definition of literacy as well as the comparison to IALS level three as a 'suitable minimum' led to the conclusion that the cut-off line should be moved higher. Caution as a young team in the research community and fear of verbal attacks questioning the seriousness of the survey led to the decision to report the number of functionally illiterate adults according to Alpha-Levels 1-3 rather than Alpha-Levels 1-4.

Another decision was to change from the formerly used estimation method (weighted likelihood estimates) to a more cautious approach (plausible values) in order to estimate the test-takers' proficiencies. Both techniques estimate the probability of ones' score according to the response pattern, taking into account that people probably do not complete all the items they can (Yamamoto, 2006). The difference regarding the normal distribution generated is especially relevant at the top and lower ends of the curve. Weighted likelihood estimates overestimate the variance, which is

irrelevant if one compares the statistical means of different countries. But as the survey focuses on the lowest level only, the difference is extremely relevant, so we chose the more cautious estimation method.

Comparison of Core Results in Relation to Stereotypes

In Germany, according to the LEO survey an accumulated 14.5 percent of the working-age population aged 18 to 64 (Alpha-Level 1-3) is functionally illiterate. This figure translates to 7.5 million functionally illiterate adults nationwide. Poor writing skills account for another 25 percent of the working-age population, particularly with regard to spelling (Alpha-Level 4). This figure represents over 13 million people in Germany. This is the case at sentence and text level, even with commonly and frequently used words; people read and write slowly and/or with many mistakes. The people concerned typically often avoid reading and writing.

Survey data help to explain part of the reasons for functional illiteracy. Regression analysis (see Table on page 12) showed the strongest predictors: the level of completed formal education and first language acquisition in early childhood. The crucial importance of education and schooling had been demonstrated earlier by the IALS (OECD & Statistics Canada, 2000, p. 22). Gender and age are far weaker predictors. Data also show that educational background within families serves as predictor for functional illiteracy. The impact of being a child of parents without a school degree is even stronger than the impact of age or gender (Grotlüschen, Riekmann & Buddeberg, 2012a, pp. 39–42).

IALS stated that it was able to clarify about 25 percent of the variance (OECD & Statistics Canada, 2000, p. 55); the leo.-survey is able to explain just over 30 percent, which still leaves a great deal for further investigation. However, survey data are anonymous and lead to questions about the everyday situation of functionally illiterate adults. In order to answer these questions, policy makers, media and practitioners often rely on participants in courses. This leads to conclusions about the subpopulation being drawn from participants in courses. In order to figure out whether these conclusions are biased or not, we now look at the descriptive data from the AlphaPanel (that represents courses) and go on to check whether the subpopulation which also includes nonparticipants, is similar or different from the courses. Our concern is that course members and teachers inform the public but reproduce stereotypes that do not match the figures from the LEO survey.

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Regression (loglinear)	Reading and Writing Skills
Constant	52.223 ¹⁾
Gender (Reference group: men) Women	2.576***
Age group (Reference group 40-49 years) 18-29 years 30-39 years 50-64 years	0.373** 0.432 -0.850
Highest formal qualification (Reference group: average qualifications) no qualifications lower qualifications high qualifications still school pupils no information provided	-9.503*** -3.888*** 2.711*** 1.609* -3.350
Parents' highest qualification (Reference group: average qualifications) without qualifications lower qualifications high qualifications other qualifications unknown or no information provided	-3.858*** -1.408*** 0.156*** -3.606*** -2.396
First language in childhood (Reference group: German) other first language	-8.208***
Occupational status (Reference group: employed) unemployed inactive in vocational training other or no information provided	-2.921*** -0.908** 0.328 1.864

$R^2 = 0.315 \rightarrow$ about one third of the variance can be explained by the observed parameters.

*** = statistical significance $p < 0.01$; ** = statistical significance $p < 0.05$; ¹⁾ This score is reached by a person with the following characteristics: male, between 40 and 49 years, first language German, employed, average qualifications, Parents with average qualifications as highest qualification.

LEO and AlphaPanel: Gender

The AlphaPanel reports that 56 percent of course participants are men, 44 percent are women. This fits quite well to the subpopulation values of the LEO survey: About 60 percent of functional illiterate adults are men and 40 percent are women. The proportion of functionally illiterate adults is higher within the male population (17.4 percent) than within the female population (11.6 percent). This result however should not be seen as a law of nature. The ALL-Survey in Switzerland shows on the

contrary that men can read better than women. Moreover regression analysis shows that the effect of gender is weaker if demographic variables are controlled (see above).

LEO and AlphaPanel: Age

The AlphaPanel shows that two subgroups are less represented in the courses than others: the youngest age group (below 25 years old) and the oldest subgroup (above 55 years old). The 45-54 year olds are the largest group with 37 percent of participants (Rosenblatt & Bilger 2010, p.13).

The leo.-survey compared four age groups. Within the 18 to 29-year-old age group the smallest proportion of functional illiteracy can be found with 12.9 percent. The highest proportion has been found within the eldest group, those being 50 to 64 years of age (Buddeberg, 2012, pp. 200–201).

The IALS had reported comparable results. According to IALS, “in every participating country when only age is considered, younger adults aged 26-35 have higher literacy scores than adults closer to retirement aged 56-65” (OECD & Statistics Canada, 2000, p. 33). The recently published second *Information et Vie Quotidienne* in France interprets the decrease in functionally illiterate adults from 9 to 7 percent to a cohort effect, as people born before 1946 were not questioned (Jonas 2012).

LEO and AlphaPanel: First Language Spoken

The AlphaPanel evaluates courses that address natives or those whose language skills are good enough to follow a course in German. Therefore results regarding migrants are not comparable to the results from the LEO survey. The LEO random sample also only included people whose verbal command of German was good enough to participate in the interview. If immigrants without verbal German skills had been included and this group had had a proportionate number or a disproportionately large number of functionally illiterate adults, these people would have had to be added to the 7.5 million figures. Of the 7.5 million functionally illiterate adults, 4.4 million (58 percent) had learned German as their first language. A further 3.1 million (42 percent) had learned another language first.

Thus – as expected – the ratio is significantly higher within the population with another first language than German than within the group of those having learned German as their first language in early childhood.

The relation between first language acquisition and literacy in the German written language is not easy to determine. Is it adequate to label those who learned German during adolescence or adulthood as functionally illiterate? Would it not be applying double standards to compare these two groups, which clearly started from different points? Following the idea of *strategic essentialism* (see above), it was decided to maintain the term functional illiteracy for native speakers as well as for

people with a first language other than German. But of course this perspective continues to consolidate the linguistic-cultural dominance of German and could therefore be subject to criticism. The discussion can be followed in Grotlüschen et al. (2012a).

In addition to the above-mentioned basic results some findings should be highlighted, as they are contradictory to some stereotypes concerning functionally illiterate adults.

LEO and AlphaPanel: School Degrees

The vast majority of participants in adult education centres who attend literacy courses, represented by the AlphaPanel, did *not* finish regular formal education: 76 percent of the 524 persons attended special education (so-called 'Sonderschule'). The remaining 24 percent attended regular schools but not all of them succeeded there. Only about 20 percent out of this population holds a formal educational degree (Rosenblatt & Bilger 2010, S. 17). When mass media comment on functional illiteracy and ask participants about their lives and school experiences, they tend to generalize their experiences.

However, according to the LEO survey the structure of the subpopulation regarding formal education is quite the opposite from the structure of participants: Among the group of functionally illiterate adults some 80 percent have school qualifications. About 47.7 percent completed basic education. 12 percent of functionally illiterate adults also have higher qualifications. The Skills for Life survey found similar results at Entry Levels (DfES, 2003, p. 67). This phenomenon can partly be explained by the migration of persons with formal school degrees acquired abroad. It must also be taken into consideration that there could be a considerable degree of competence loss during adulthood (Wölfel, Christoph, Kleinert & Heineck, 2011, p. 3). Among the reasons for such loss might be acquired disabilities, chronic diseases or drug abuse. Moreover the 'impact of time out of work on literacy and numeracy skills' must be taken into account, as Bynner and Parsons show based in their analysis of data from the 1970 British Cohort Study BCS70 (1998).

These results contrast strongly with former misconceptions triggered by research on participants that the majority of functionally illiterate adults do not hold any type of formal school degree.

LEO and AlphaPanel: Negative School Experiences

Functionally illiterate adults must have had negative school experiences, otherwise they would have learned to read and write properly – according to the stereotype. But if we compare the results of the learner study with the level-one survey, we find once more substantial differences between subpopulation and participants. 72 percent of the participants in courses agree that they had learning difficulties in school, 41 percent agree that they always felt that they were bad in school and 30 percent were afraid of some teachers. In comparison, only 26 percent of the subpopulation stated

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that they had had learning difficulties, only 11 percent had always felt bad in school and only 15 percent had been afraid of some teachers¹.

The numbers of the functionally illiterate subpopulation differs widely from the functionally illiterate participants, but they do not differ widely from the population as a whole. Thus functionally illiterate people outside courses report better school experiences than those attending courses.

So, if mass media or policy makers talk to course participants about their school experiences, the latter are likely to be taken as representative of the subpopulation. This reproduces the myth of school experience as an origin of poor literacy. The contrast between LEO and AlphaPanel was discussed with both learners and teachers from courses and all agree that within the courses school experiences are reflected and external reasons for poor performance are blamed in order to encourage a fresh start. This might be an explanation of the results.

LEO and AlphaPanel: Employment

The AlphaPanel states that some 29 percent of participants are unemployed (Rosenblatt & Bilger 2010, p.37) and 48 percent are employed. The figures vary in the LEO data regarding the overall subpopulation of functionally illiterates in Germany: Just fewer than 17 percent are unemployed, about 57 percent of the functionally illiterate adults are gainfully employed and a further 10.1 percent are at home. This comparison contrasts sharply with former assumptions concerning the majority of functionally illiterate adults as being unemployed. Such misconceptions might be a result of the courses recruiting process via unemployment offices.

As IALS pointed out, literacy and employment form a two way relationship. Literacy serves to improve job opportunities. "At the same time, the workplace is a factor in literacy acquisition and maintenance, a place where a considerable amount of reading, writing and arithmetic takes place"(OECD & Statistics Canada, 2000, p. 36).

LEO and AlphaPanel: Single or Married

The AlphaPanel data as well as trainers' experiences show the social isolation of course participants. An indicator is the question of living alone or being with a partner or family. The AlphaPanel reports that only 38 percent of participants live with their partner (either married or not), while the remainder are single, divorced or widowed. So, it could be concluded from the participants' study

¹ As we compare two studies with two different basic populations, it does not make sense to check the statistical significance of the differences. Both studies claim to be representative for their basic population so we compare the descriptive data, taking into consideration that standard deviations in LEO regarding the school experience questions lie between 0,7 percent and 1,9 percent while the AlphaPanel did not report standard deviations. The standard deviation regarding employment status between 0,3 percent and 2,3 percent.

that there is an association between functional illiteracy and social isolation. But the LEO survey reports a different picture. Some 68 percent of the subpopulation are married and/or live with their partner. This is comparable to the whole German population (Riekmann 2011, p.176). In other words, the LEO data do not indicate levels of social isolation that are different from the overall population.

From that perspective, reference to studies on participants as a single source of data would lead to misconceptions which serve to maintain existing stereotypes concerning functionally illiterate adults.

Qualitative Research: Fear of Being Discovered

Stereotypes and policy papers describe functionally illiterate adults as feeling ashamed of their deficit and not telling anybody about it. But recent studies carried out by Nienkemper and Bonna (2010) show that coming-out of the illiteracy closet should not be conceptualized as a dichotomous category. They describe the coming-out of functionally illiterate people as a '*partial coming-out*'. This means that most of them have one or two confidantes, who help them manage everyday life. They give support in all areas where reading and writing are unavoidable. Biographical research also confirms that functionally illiterate adults do have at least one confidante: spouse, children or friends (Döbert & Hubertus 2000, p. 70).

There are some more stereotypes that are considered to be true for functionally illiterate adults, for example that they live in poor neighborhoods or have difficulties in financial matters. Although these misconceptions cannot be refuted with our data, they may very well lead to new stereotypes. If – for example - recruitment for ABE courses takes place via financial literacy education, this would lead more people with financial problems into courses supporting the stereotype that functionally illiterate adults are unable to organize their finances.

Participation and Non-Participation in Adult Basic Education

As the sub-population of functionally illiterate adults are clearly not well represented via participants in courses, one might ask whether nonparticipants should be encouraged to improve their skills or not. However, perhaps the overall narrative of lifelong learning is not relevant for those functionally illiterate adults who do not feel excluded from the labor market, from finding a partner and starting a family, who felt fine at school and today feel integrated with their confidantes and friends.

Industrialized countries may have to accept that many functionally illiterate adults do not see their literacy as a problem. Norway reports that 60 percent of those with literacy level one in the ALL feel satisfied with their literacy skills (Gabrielsen & Egil 2011, p. 8). The core challenge seems to be convincing members of the subpopulation to enroll in ABE classes.

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However, on the other hand, the link between the LEO and the underlying Adult Education Survey allows a glance at the participation rates in adult education. The average participation rate in Germany used to be 42 percent and recently increased to 49 percent of the adult population, strongly correlating with formal education (Bilger, 2013). While less than 1 percent of functionally illiterate adults participate in literacy classes, some 28 percent participate in other adult education classes. This might include: security training on the job, getting a forklift license, or even 'German as a second language' classes provided by the authorities and necessary when applying for naturalization (Bilger, Jäckle, & Rosenblatt, 2012). Most of these courses have to be attended either because of security standards or because of national law and labour office regulations. It can be concluded that de-regulation of the adult education sector would lead to decreasing participation rates.

Our assumption that everybody must want to be able to read and write or brush up their skills might be a misconception. The Church has historically supported literacy development as a tool in building unquestioning religious faith (Gee, 2008, p. 56), literacy is necessary for governance (Lankshear & Knobel, 2011, p. 13) and for teaching the low-skilled to follow written instructions instead of critically reflecting on the instructions or anything else (Gee, 2008, p. 60).

"The most striking continuity in the history of literacy is the way in which literacy has been used, in age after age, to solidify the social hierarchy, empower elites, and ensure that people lower on the hierarchy accept the values, norms, and beliefs of the elites, even when it is not in their self-interest or our group interest to do so" (ibid., Gee is referring to Gramsci).

So why should functionally illiterate adults want to learn? Countries with successful, sustainable literacy campaign programs usually follow large-scale, sometimes revolutionary, changes such as those that took place in Cuba in the 1960s, Nicaragua in the 1980s and possibly currently in the Arab spring countries. This leads to the question of why adults in industrialized countries with stratified inequalities should improve their skills? The discussion is strikingly economic, as Scottish critics stated (St. Clair, 2011). If there is nothing else to gain than the ability to follow instructions, why learn?

Functional illiteracy is more widespread than expected in many industrialized countries, but it is still possible for functionally illiterate adults to make a living under these conditions. Misconceptions about school drop-outs, unemployment, social isolation and helpless illiterates fearing discovery, cannot be confirmed by the results of current research. They do however confirm the experiences of educators, but educators only meet less than one percent of those affected. Thus, their experiences

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should not be generalized as the subgroup of adult education participants among functionally illiterate adults is structurally different from the non-participant subgroup.

This raises the question as to whether the educational approach to increasing participation in ABE programs makes sense or not. Many countries have introduced national strategies to improve literacy within the adult population. France has just recently put it onto the political agenda as the 'grande cause nationale 2013'; Germany started a national strategy in 2011. PIAAC as well is used for focusing on improved literacy among the adult population.

Adults' reasons for participation in ABE courses may vary. One could argue that today's world and everyday life are ever changing and therefore such adults might want to be prepared for future challenges, but at the lower end of the earnings distribution life is often unpredictable and preparing for an uncertain future seems senseless. Regarding relatives and children, nonparticipants might at some point become aware of the fact that they have a certain responsibility towards them: Elderly adults might want to brush up their skills in order to meet the challenges of decreasing health and mobility, while adult family members might want to act as role models for their children and help them with their homework. Perhaps experienced employees, especially those working with apprentices and younger employees might feel a certain responsibility towards their team members and would like to act as role model as well. These and similar situations could be important reasons that encourage adults to address their functional illiteracy – not for their own sake, but for the sake of others, those whom they care for.

In order to better understand what literacy means for adults outside ABE classes, future studies should not only ask if someone is satisfied with his or her level of literacy. This question might lead to socially desirable answers – who wants to admit that he or she is not satisfied with his or her performance? A more interesting question would be to ask if anyone among the interviewees' friends, family and colleagues would directly or indirectly benefit from the interviewee improving his or her skills.

This approach would on the one hand acknowledge that the everyday life of nonparticipants should not be judged from a deficit perspective. On the other hand, it would encourage reflection on the worth of maintaining already acquired skills.

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