# The Value of Literacy Practices

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**Abstract:**

*The concepts of literacy events and practices have received considerable attention in educational research and policy. In comparison, the question of value, i.e. 'which literacy practices do people most value?' has been neglected. In this paper we argue that measuring preferences and weighting of literacy practices provides an empirical and democratic basis for decisions in literacy assessment and curriculum development, and could inform rapid educational adaptation to changes in the literacy environment. The paper examines the methodological basis for eliciting preferences and exploring the correlation between individual values and respondents' socio-economic and demographic characteristics. The argument is illustrated with primary data from Mozambique.*

**Keywords**: literacy practices, values, weighting, multidimensionality, Mozambique

## 1. Introduction

In recent years the concepts of literacy events and practices have received considerable attention in educational research and policy, particularly in ethnographic research. The New Literacy Studies has championed the idea of literacy as a plural phenomenon involving heterogeneous practices, texts and events (see Street 1993; Collins and Blot 2003; Blommaert 2008). Barton and Hamilton describe literacy practices as the '*basic unit of a social theory of literacy*' (2000, p. 7). They are understood to involve the social uses of literacy in '*recurrent, goal-directed sequence of activities'* (Scribner and Cole, 1981, p. 236). Though literacy practices are shaped by globalised technologies and institutions (Gee 2004; Kress 2003), they nevertheless retain immense diversity within and between societies and over time. This has had significant implications for literacy teaching and assessment, which must recognise diverse and changing uses of literacy. This includes investigation into literacy use in educational settings and how that relates to wider social uses of literacy (e.g. Heath 1983; Barton, Hamilton and Ivanic 1998; Street 2006). Politically speaking the study of literacy practices has involved what can be called 'advocacy projects'. That is, educational research that seeks to 'represent' the heterogeneity of literacy practices within and between social groups, and to question the privilege that is awarded to dominant literacies in literacy teaching and assessment (Blommaert 2008; Hamilton 2001; Street 2011). As Street (2011) has recently argued, the power to 'name' and 'define' literacy practices is an integral part of literacy policy and practice. It is therefore surprising that comparatively little empirical attention has been given to questions of value – 'Which literacy practices do people most value?' This, after all, is one of the questions that should shape any political process of advocacy.

This paper builds on interdisciplinary collaboration between ethnographers and economists that integrate the ethnographically informed practice model of literacy into quantitative research (Basu, Maddox and Robinson-Pant, 2009, Maddox and Esposito, 2011, Esposito, Kebede and Maddox, 2011). Building on Street's (2011) argument, the aim of the paper is to make a step towards the quantitative investigation of the importance people attach to different literacy practices. Our belief being that a better understanding of how literacy practices are valued can provide an empirical and democratic basis for improved decisions in educational policy and practice. We show that the

value people attach to literacy practices can be elicited by means of a simple technique which we implement in a context of low education in the poorest region in Mozambique. Further, we illustrate how statistical analysis of observed importance scores can shed light on the relationship between personal characteristics of respondents and the importance attached to different literacy practices – e.g., the valuation of the ability to help children with homework decreases with respondents' age and increases with number of children.

The paper is organised as follows. In Section 2 we present current debates over methods for examining value and make the case for the adoption of the so-called Budget Allocation Technique. In Section 3 we describe the implementation of this approach with 286 adults in a context of low levels of education in Mozambique. The case study employs an innovative and practical approach to weighting involving simultaneous valuation of multiple literacy practices. Section 4 describes our primary data using bivariate and multivariate statistical analysis.

## 2. Eliciting value

Ethnographic research on literacy tends to approach questions of value in terms of description of people's literacy practices, and their testimony about such practices. In that way, for example, we can come to conclusions about the status of letter writing and religious literacy practices of the Nukulaelae in Polynesia (Besnier 1995), or Vai economic correspondence in Liberia (Scribner and Cole 1981). However, in many cases, people are involved in multiple types of literacy practices in their daily lives. In those cases it is useful to be able to distinguish between those practices that are most highly valued, and those that are viewed as less valuable. In practice, educationalists and policy makers often make such decisions implicitly, so for example, to rank engagement with Shakespeare more highly than reading comic books.

Social and medical sciences employ a variety of methods for ranking multidimensional characteristics associated with wellbeing, quality of life, deprivation and capabilities. Knowing which dimensions of wellbeing are more important to people can provide policy makers with valuable information on how to allocate scarce resources among education, health, security, etc. In terms of wellbeing assessment, at least since John Rawls' (1971) influential 'Theory of Justice' it is clear that

any multidimensional index is faced with a choice over the relative weights to be attached to different domains – this is known as the 'index problem' (for details see Hockett and Risse, 2006). The rationale for using unequal weights in a multidimensional index is indeed to capture variation in the importance of the different dimensions of the phenomenon under study. That the more important dimensions should be recognised, and be given more weight in composite indexes have a straightforward appeal.[1] How can we apply these ideas to investigate the importance people attach to different literacy practices?

The customary approach to eliciting value is to use Likert Scales, where respondents are asked to sequentially rate the importance of different dimensions (one after another). Respondents rate each dimension along a numerical or a verbally described scale - for example, from 1 to 10 or from 'not at all important' to 'extremely important'. When these types of methods are used importance scores for each dimension are provided in isolation, in the sense that the value attributed to previous dimensions can serve as a benchmark only insofar the respondent is able to keeps them in mind – an onerous task for many, and in particular for respondents with low education. This way of eliciting value is far from ideal since importance scores make little sense on their own. This is most evident when domain-specific indicators are combined into a multidimensional additive index: as illustrated by Decancq and Lugo (2013) weights directly affect the marginal rate of substitution among dimensions within the index. As a consequence, not only the cardinal content of reported scores may be inaccurate, but also the resulting ranks among dimensions may turn out to be flawed. Further, it is well known that scores picked up by respondents on such scales are affected by scale biases; in other words, different individuals may systematically choose scores up or down the Likert Scale even in the case of similar valuation (see Holland and Wainer 1993; Kahneman 2004).[2] Aware of these problems, we use the methodology known as *Budget Allocation Technique* – see Moldan and

[1] The decision to use equal or unequal weights has been the subject of academic debate. Hsieh (2004) suggest the usefulness of unequal weights, while opposite conclusions are reached by Trauer and Mackinnon (2001); Wu and Yao (2006a, 2006b); Stapleton and Garrod (2007) and Wu (2008); mixed evidence is provided by Russell et al. (2006) and Philip et al. (2009). Decancq and Lugo (2013) provide a review of weighting methodologies.

[2] Recent papers have tried to correct for this through the 'anchoring vignettes' methodology, where personal valuations are set against a standard in order to increase interpersonal comparability – see King et al. (2004), Salomon et al. (2004), Kaypten et al. (2007), Kristensen and Johansson (2008), Angelini et al (2009) and Beegle et al. (2009).

Billharz (1997) and Mascherini and Hoskins (2008) – where the respondent is invited to allocate a fixed amount of tokens across a predetermined set of dimensions. Two aspects of this approach are worth mentioning. First, the respondent is presented at once with the whole set of dimensions to be assigned value; in this way, the attribution of importance scores takes place simultaneously. Second, since the amount of tokens to be allocated is fixed across subjects, the problem of individual scale biases does not apply: differences in revealed importance scores can be ascribed to different relative importance attached to the selected domains – Similar considerations motivated the approaches used by Ruta et al. (1994, 2004), Hickey et al. (1996), Wagner (2004) and Camfield and Ruta (2007) for the evaluation of quality of life. It must be acknowledged that the budget allocation technique is not without limitations. While the fixity of the number of tokens enables to elicit differences in the relative importance attributed to different domains, it does not enable to distinguish, for example, between a person with moderate values on all domains from a person with high values. Further, this approach would encounter pragmatic difficulties when applied to a large number of domains. Since we are interested in a restricted number of literacy practices which have emerged as being highly valued in the context we targeted, we believe the above limitations do not affect greatly our work.

While the Budget Allocation Technique has been so far used only to elicit the value judgements of 'experts' (academics, policy makers and educationalists), the case study below is based on an instrument devised for a context with low levels of education in Mozambique – in particular, we used flashcards with visual representations of literacy practices. In this way, we follow the invitation of Copestake and Camfield (2011) to devise approaches that are adapted for less educated respondents.

## 3. A Case study from Mozambique

A literacy survey of 286 adults was conducted in spring 2008 in the city of Maxixe, located in the poorest region of Mozambique according to the first and second National Survey of Household Groups on Living Conditions (IAF, 2002-2003, 1997-1998). The interviews were conducted in Portuguese and/or Xitsua according to the preference of the interviewees. The sample coverage was designed to have clear-cut occupational sub-groups and occupations with low expected educational

levels. Half of the sample was from people whose primary occupation was as market or street traders; farmers were the next largest group, followed by fisherfolk and porters (cart pullers). The sample also contained a small number of cobblers and sailors (ferry workers). Approximately three fifths of our sample were males and aged from 17 to 66. The average years of schooling is 3.6 and this included 51 individuals who had never attended school.

The first part of the interview gathered information on an array of demographic information. The valuation activity took part at the end of each interview. Respondents were presented with five flashcards, each representing one of the selected literacy practices, and were asked to apportion fifty beans among them according to the value that these practices had in their life. In this way valuation of the five domains took place simultaneously, with the respondents having the whole spectrum of domains in front of them when attributing scores. Trade offs were made explicit since the amount of beans was fixed and beans allocated to one domain could not be allocated to another.

The literacy practices to be addressed in the valuation exercise were identified through a process of interviews and focus groups discussions carried out prior to the main survey. These targeted members of the occupational categories mentioned above. The six focus group discussions involved 6-8 participants, which, for each focus group, were homogeneous in terms of occupational category. Interviewees and participants were first invited to mention literacy practices in which they engaged in their everyday life and which they valued. Around a dozen literacy practices were mentioned, and from these we selected the five most valued. The five most valued literacy practices are; i) signing ones name (SIGN); ii) performing simple calculations (CALC); iii) dealing with official documents (DOC); iv) using mobile phones (MOB) and; v) helping children with homework (HELP) – for the relation between the ability to perform these literacy practices and formal education see (Esposito, Kebede and Maddox 2011). The selected categories of literacy practices are deliberately left abstract and under-specified. We did not distinguish for example, between the different contexts in which people might sign their name, or the kind of official documents they might have to deal with. This is in keeping with the theoretical understanding of literacy practices as more abstract than specific events and texts, and enabled aggregation within the categories of practice. The risk that the identification of the most valued literacy practices was restricted to those that people felt

happy to discuss must be acknowledged. For example, Ahearn's (2001) work in Nepal school identified private love letters as a highly valued practice. Maddox's (2005) work in Bangladesh describes private forms of literacy practice that are not freely discussed or displayed in public. Ethnographic research to obtain a deeper understanding of people's most valued literacy practices (and extended list of practices) would certainly have been useful – and this must be taken into account as one of the limitations of the data. We should note however, that the key principle is that the above literacy practices have been identified as distinctive and important literacy domains by the participants rather than by the researchers.

## 4. Empirical analysis

In this section we provide a description of the data gathered through the valuation exercise and an analysis of the possible impacts of formal education, occupation, gender, and housing (as a proxy for wealth). Table 1 presents the mean, median and standard deviations of the valuations of the five literacy practices as well as statistical tests aimed at determining 'how strong' differences in valuations across the five literacy practices are.

**Table 1: Mean, median and standard deviations of valuations of literacy practices and statistical tests of differences**

| | HELP | SIGN | MOB | DOC | CALC |
|---|---|---|---|---|---|
| Mean | 11.97 | 9.78 | 6.31 | 9.25 | 12.68 |
| Median | 12.00 | 10.00 | 6.00 | 9.00 | 12.00 |
| St. dev. | 4.30 | 4.18 | 4.91 | 5.04 | 4.76 |
| | t-tests for pair-wise differences | | | | |
| | HELP | SIGN | MOB | DOC | CALC |
| SIGN | 6.13*** | | | | |
| MOB | 14.58*** | 9.06*** | | | |
| DOC | 6.89*** | 1.36 | -7.03*** | | |
| CALC | -1.87* | -7.69*** | -15.66*** | -8.31*** | |

Note: HELP = help children with homework; SIGN = sign ones name; MOB = use mobile phones; DOC = deal with official documents; CALC = perform simple calculations; *** p<0.01, ** p<0.05, * p<0.1

Both in terms of mean and median, people attach the highest values to helping children with homework and doing calculations. Signing ones name, and use of documents are in the middle, and the least valued is use of mobile phones. Pair-wise t-tests indicate that in all cases, except one, these differences are statistically significant; that is, the surveyed individuals value the five literacy

practices significantly differently. That performing simple calculations (CALC) is valued highly probably reflects that most of the surveyed individuals are involved in self-employed market activities. The high valuation given to helping children with homework (HELP) tallies with the fact that all except 16 individuals (only 6% of the sample) have children, some as many as twelve.

The way in which people value their literacy practices might be systematically different across years of formal education. Table 2 presents Pearson's chi-square and correlation coefficients between the valuations of each literacy practice and years of schooling (which varies between 0 and 12 years). As can be seen from the table, the chi-square statistics show statistical significance only for HELP (significant at 10% level and positive), indicating that more educated people tend to value this literacy practice more than less educated people. Hence, with the exception of HELP, people's valuation of literacy practices does not seem to be significantly affected by years of schooling.

**Table 2: Tests for differences and correlation coefficients of valuations of literacy practices to years of schooling (0-12 years of schooling)**

| | Pearson's chi-square | p-value | Correlation | p-value |
|---|---|---|---|---|
| HELP | 381.42 | 0.000 | 0.11 | 0.071 |
| SIGN | 306.45 | 0.218 | -0.03 | 0.570 |
| MOB | 241.33 | 0.838 | 0.01 | 0.906 |
| DOC | 247.61 | 0.959 | -0.02 | 0.786 |
| CALC | 343.28 | 0.221 | -0.06 | 0.335 |

Note: HELP = help children with homework; SIGN = sign ones name; MOB = use mobile phones; DOC = deal with official documents; CALC = perform simple calculations

The question of whether people's valuations systematically vary with occupations is tackled in Table 3 where mean, median and standard deviation of valuations are disaggregated by occupations.

**Table 3: Mean, median and standard deviations valuations (number of beans) of literacy practices by occupation**

| | | HELP | SIGN | MOB | DOC | CALC |
|---|---|---|---|---|---|---|
| Market sellers | Mean | 12.70 | 8.82 | 6.61 | 7.94 | 13.93 |
| (n=84) | Med | 12.00 | 9.00 | 6.00 | 8.00 | 4.00 |
| | SD | 3.60 | 3.21 | 4.28 | 4.01 | 4.55 |
| Street sellers | Mean | 11.54 | 10.40 | 6.01 | 8.10 | 13.94 |
| (n=63) | Med | 12.00 | 10.00 | 5.00 | 8.00 | 14.00 |
| | SD | 4.69 | 5.20 | 4.90 | 4.70 | 4.71 |
| Fishermen | Mean | 11.77 | 10.58 | 7.39 | 8.00 | 12.26 |
| (n=30) | Med | 11.00 | 10.00 | 6.00 | 8.00 | 12.00 |
| | SD | 5.25 | 5.37 | 6.62 | 4.94 | 4.02 |
| Cobblers | Mean | 11.91 | 10.00 | 7.00 | 11.36 | 9.73 |
| (n=10) | Med | 10.00 | 10.00 | 6.00 | 9.00 | 7.00 |
| | SD | 6.96 | 3.79 | 6.00 | 6.98 | 4.76 |
| Sailors | Mean | 10.40 | 13.60 | 2.00 | 11.00 | 13.00 |
| (n=6) | Med | 8.00 | 14.00 | 0.00 | 10.00 | 10.00 |
| | SD | 6.19 | 4.39 | 3.08 | 5.00 | 5.05 |
| Cart pullers | Mean | 11.15 | 9.15 | 5.00 | 10.38 | 14.31 |
| (n=25) | Med | 11.00 | 9.00 | 5.00 | 10.00 | 13.50 |
| | SD | 3.82 | 2.96 | 4.73 | 5.37 | 5.31 |
| Farmers | Mean | 11.96 | 10.06 | 6.46 | 12.43 | 9.09 |
| (n=51) | Med | 12.00 | 10.00 | 6.00 | 12.00 | 9.00 |
| | SD | 3.63 | 3.65 | 4.64 | 5.01 | 3.02 |
| Statistical tests for difference of valuation (Pearson's chi-square) | | | | | | |
| Occupations | | 207.07*** | 202.41*** | 141.44 | 182.62** | 211.72*** |
| Residential areas[1] | | 23.70 | 24.04 | 34.75 | 51.63 | 51.15 |
| House type[2] | | 41.58 | 35.45 | 24.42 | 51.66 | 47.97 |

[1] Residential area of the sampled individuals is divided into city centre, suburban area and rural area. [2] The house types are divided into straw, straw with steel roof and cement. HELP = help children with homework; SIGN = sign ones name; MOB = use mobile phones; DOC = deal with official documents; CALC = perform simple calculations *** p<0.01, ** p<0.05, * p<0.1

It is possible to see that while the importance given to HELP and CALC is still relatively high for most occupations and MOB is still the least valued for all of them, there are some interesting differences by occupation, which the Pearson's chi-square statistics indicate as statistically significant. This suggests that variations in the day-to-day activities of people in different occupations are likely to generate variations in the valuation of literacy practices. For example, the values attached by market and street sellers to CALC are 57% higher than the one by farmers, who, in turn, highly value DOC.

Residential locations and types of houses in which respondents live can be used as proxies for income/wealth of respondents. Residential locations are categorised into city centre, suburban and rural areas and three types of houses were identified: houses with straw wall and thatched roof, houses with straw wall but steel roof and houses made of cement. The Pearson's chi-squares at the last two rows of Table 3 show that there are no significant statistical differences. These results suggest that within our sample valuations of literacy practices do not seem to vary by economic status.

The results so far presented should be interpreted with caution as they do not control for potential confounding effects; in order to control for that, a multivariate framework is employed. Note that more beans for one literacy practice automatically means less for the others. Because of this linear dependence (the values on all the literacy practices add-up to fifty), we use Zellner's 'seemingly unrelated regressions' – SUR (see Zellner, 1962). CALC is used as baseline. In this multivariate framework the value attached to each literacy practice (represented by the number of beans) is regressed on different socio-demographic characteristics (see Table 4).

**Table 4: Zellner's seemingly unrelated regressions (SUR) of relative importance of different literacy practices**

| Coefficient | (1) HELP | (2) SIGN | (3) MOB | (4) DOC | (5) Joint tests (chi-2) |
|---|---|---|---|---|---|
| Male | -0.579 | -1.238* | 2.004*** | 0.0659 | 8.74* |
| | (0.681) | (0.739) | (0.749) | (0.807) | |
| Age | -0.733*** | -0.203 | 0.463 | 0.501 | |
| | (0.266) | (0.289) | (0.293) | (0.315) | 16.01** |
| Age squared | 0.00805** | 0.00287 | -0.00547 | -0.00521 | |
| | (0.00339) | (0.00368) | (0.00372) | (0.00401) | |
| Type of house (straw as reference) | | | | | |
| Straw with steel roof | -0.162 | 0.0605 | -0.725 | 0.582 | 1.70 |
| | (0.608) | (0.660) | (0.669) | (0.720) | |
| Cement | 2.454* | 0.817 | -2.528 | 0.424 | 4.87 |
| | (1.419) | (1.540) | (1.560) | (1.681) | |
| Area of residence (city centre as reference) | | | | | |
| Suburban area | 4.430 | -0.753 | -2.253 | 0.853 | 1.52 |
| | (3.907) | (4.241) | (4.297) | (4.628) | |
| Rural area | 1.988 | -0.0669 | 0.789 | -0.810 | 0.48 |
| | (3.941) | (4.277) | (4.335) | (4.668) | |
| Occupation (market sellers as reference) | | | | | |
| Street sellers | -1.565** | 1.515* | 0.586 | 0.298 | 7.91* |
| | (0.753) | (0.817) | (0.828) | (0.892) | |
| Fishermen | -1.871 | 4.134*** | 1.505 | -1.753 | 14.72*** |
| | (1.210) | (1.313) | (1.331) | (1.433) | |
| Cobblers | 0.505 | 1.151 | -2.288 | 5.906*** | 17.78*** |
| | (1.508) | (1.637) | (1.659) | (1.786) | |
| Sailors | -2.522 | 7.422*** | -5.573** | 1.323 | 12.06** |
| | (2.290) | (2.485) | (2.519) | (2.713) | |
| Cart pullers | -0.483 | 0.402 | -1.113 | 1.902 | 1.93 |
| | (1.284) | (1.393) | (1.412) | (1.521) | |
| Farmers | -0.628 | 1.560 | -1.410 | 3.287 | 4.52 |
| | (1.739) | (1.887) | (1.913) | (2.060) | |
| Joint test for all occupations | | | | | 52.58*** |
| Number of children | 0.530*** | -0.279 | -0.440** | -0.110 | 19.77*** |
| | (0.161) | (0.175) | (0.177) | (0.191) | |
| Value literacy for its own sake | 0.908 | 0.267 | 0.710 | -1.144 | 4.72 |
| | (0.711) | (0.772) | (0.782) | (0.843) | |
| Years of schooling | 0.229 | 0.105 | 0.401* | -0.563** | 9.07* |
| | (0.202) | (0.220) | (0.222) | (0.240) | |
| Desired years of schooling | -0.157 | -0.213 | -0.365** | 0.292* | 19.83*** |
| | (0.138) | (0.150) | (0.152) | (0.163) | |
| Capacity to do the literacy practices | | | | | |
| HELP | 1.425 | -1.662 | -0.477 | 1.407 | 5.56 |
| | (0.967) | (1.049) | (1.063) | (1.145) | |
| SIGN | 0.0491 | -2.164* | 0.687 | 1.583 | 4.52 |
| | (1.065) | (1.156) | (1.172) | (1.262) | |
| MOB | -1.375 | -0.875 | 0.889 | 2.262 | 4.24 |
| | (1.227) | (1.332) | (1.350) | (1.454) | |
| DOC | -1.082 | 0.0898 | 1.082 | 2.172** | 14.55*** |
| | (0.778) | (0.844) | (0.855) | (0.921) | |
| CALC | 0.555 | -0.492 | 3.380* | -5.270*** | 8.29* |

| Coefficient | (1) HELP | (2) SIGN | (3) MOB | (4) DOC | (5) Joint tests (chi-2) |
|---|---|---|---|---|---|
| | (1.673) | (1.816) | (1.840) | (1.982) | |
| Frequency of use of literacy practices | | | | | |
| HELP | 0.720 | 2.195*** | -1.650** | -1.514* | 12.58** |
| | (0.751) | (0.815) | (0.826) | (0.890) | |
| SIGN | -2.521 | 3.653* | -1.509 | 0.164 | 5.51 |
| | (1.721) | (1.868) | (1.893) | (2.039) | |
| MOB | 0.493 | 2.781*** | -1.084 | -2.201** | 17.61*** |
| | (0.725) | (0.787) | (0.798) | (0.859) | |
| DOC | 0.489 | -1.524** | 0.666 | 1.526** | 10.96** |
| | (0.657) | (0.713) | (0.723) | (0.779) | |
| CALC | -0.781 | 2.005** | -0.899 | -1.768* | 10.07** |
| | (0.874) | (0.948) | (0.961) | (1.035) | |
| Constant | 23.48*** | 13.77* | -0.469 | 1.978 | |
| | (6.853) | (7.438) | (7.538) | (8.118) | |
| Observations | 191 | 191 | 191 | 191 | |
| Chi-2 | 51.94*** | 50.35*** | 46.64** | 69.37*** | |
| R-squared | 0.2138 | 0.2086 | 0.1963 | 0.2664 | |
| Breusch-Pagan test of independence: chi2(6) = 81.152, P = 0.0000 | | | | | |

**Note**: The relative importance of each literacy practice is represented by the number of beans individuals assigned to each practice from a total of fifty beans; types of house are: straw, straw with metal roof and cement (straw is the omitted category); areas of residence are: city centre, sub-urban and rural (city centre omitted); the omitted regression is on the value attached to CALC; standard errors in parentheses; HELP = help children with homework; SIGN = sign ones name; MOB = use mobile phones; DOC = deal with official documents; CALC = perform simple calculations *** p<0.01, ** p<0.05, * p<0.1

The explanatory variables in this model include age, gender, residence, type of house, number of children, years of schooling, and occupations; additional variables closely related to literacy, such as the capacity of people to perform the literacy practices and the frequency with which they use them, are also added. Further, desired years of schooling – up to what level of schooling individuals would like to study – and valuation of literacy for its own sake are also included. The first is included to examine if the desire to attain higher levels of education systematically affects the value people attach to literacy practices. Individuals that value literacy for its own sake are those who gave more abstract reasons for why they value literacy as opposed to valuing literacy for more instrumental reasons (e.g. acquiring a job); some of the abstract reasons for valuing literacy provided by our respondents were the ability to see things in a different way, to get knowledge and to understand the world better.

General statistics on the model are reassuring; the Breusch-Pagan test of independence and the four equations estimated are all highly significant ($p < 0.00$). The last column in Table 4 presents joint significance tests (whether the relevant coefficients are jointly zero in all the regressions). Gender and age are rather weakly significant. While males compared to females attach a significantly higher value on MOB they give lesser value for SIGN. HELP has a significant and negative correlation with age: the older the respondent the lower the importance attributed to HELP. This is highly intuitive; older people tend to have older children whose need for help with homework is likely less. Reinforcing the results from the previous section, type of house and area of residence are not significant correlates even in this multivariate framework.

The coefficient on the number of children in the equation for HELP is positive and highly significant, confirming that individuals with more children value HELP more. While street sellers attach less value on HELP, fishermen and sailors and to some extent street sellers value SIGN significantly more than market sellers (used as reference). While sailors value MOB less, cobblers give more importance to DOC. The higher the desired years of schooling the more respondents are likely to value complex tasks such as DOC; the opposite holds for MOB, while the valuation of HELP and SIGN does not show significant correlation.

Do literacy capacities influence values? Is the importance attributed to different literacy practices influenced by the capacity to perform them? Generally, we find that the capacity to perform a specific literacy practice is not significant. However, two results are worth mentioning. A priori it is difficult to predict how the capacity to perform a literacy practice will affect its valuation. If people value more what they have already achieved rather than what they have not, the coefficients would be positive, while the opposite would happen if people have diminishing appreciation for what they already have. Both stories emerge from our data: the value attached to SIGN is negatively correlated to the ability to sign while the ability to deal with documents increases the value attached to DOC. As to frequency of use, in four out of the five cases the joint tests are significant. However, only in the case of SIGN and DOC is there a clear pattern, with the value attached to the practice increasing with the frequency of its use.

## 5. Conclusion

The concept of literacy practices is of central importance to New Literacy Studies, and has informed extensive ethnographic description of literacy within, and beyond educational settings. This paper extends that literature, by illustrating a practical and statistically rigorous way to quantitatively investigate the value that people attribute to literacy practices. By using the Budget Allocation Technique, the respondent is simultaneously presented with the whole spectrum of dimensions to be valued and all respondents' valuations are anchored to a common metric. As we have shown, this methodology can be successfully applied to a context of low education. We focused on a restricted sample (low educated groups in an area of severe deprivation in Mozambique) and on literacy practices identified through the eyes of the participants themselves.

In this exploratory study we showed the viability of quantifying the importance attached to diverse literacy practices and unveiling valuation patterns which may otherwise be under-recognised. Our statistical results indicate people's valuation of different literacy practices is significantly correlated to their characteristics. In other words, the value attached to different literacy practices varies across individuals and this heterogeneity in valuation can in part be explained by respondents' characteristics. For example, valuable insights emerge regarding a key activity such as helping children with homework. As shown in Table 2, the importance attributed to this practice increases with the number of years the respondent has spent in formal education; this points to an important channel through which the benefits of formal education can 'spill over' and benefit crucial members of society such as children. Moreover, the day-to-day activities in which people engage seem to play a role in people's valuations: as we have shown, significant correlation patterns emerge between job and frequency of use of literacy practices. Interestingly, we do not find any correlation between valuation of literacy practices and economic status as reflected in area of residence and type of house. This means that people's values for literacy practices do not seem to be shaped by their income and wealth. Other influences on valuation like gender, age and number of children have also been described.

With our work, we hope to provide encouragement for the application of our methodology to other contexts as well for the search of new methodologies. It is important to stress that statistical

methods are not intended to replace, but rather to complement, qualitative research into literacy practices. They are in fact open to critique, particularly from the socio-cultural perspective of the New Literacy Studies. They may, for example, fail to capture aspects of diversity that are critical to our understanding of literacy, or the extent to which values are dependent on 'situated', domain-specific and temporal characteristics. Research into how people value practices certainly merits ethnographic investigation in order to provide nuanced descriptions of literacy practices, or to explain the reasons why people attribute more or less value to different literacy practices.

If, as researchers highlight, literacy is an irreconcilably heterogeneous and constantly changing phenomenon, this suggests scope for quantified, aggregated and disaggregated analysis of preferences for literacy use to inform democratic projects within education including literacy curriculum and assessment, such as decisions over which literacy practices and associated texts to include in large-scale literacy assessment. Numerous other possibilities come to mind such as management of rapid change in the literacy environment, where educational systems embrace democratic reform, or where culturally or linguistically diverse populations wish to express aspirations for literacy learning, or contest the 'dominant' literacy values of educational regimes.

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