The validity of the Southam News 1987 survey of literacy in Canada was questioned relative to its content and structure. The survey viewed literacy as a set of complex information processing skills and adopted a hierarchical view of these skills. This hierarchy model set up illiteracy as a deficiency. The Southam study's underlying assumption was that literacy was a necessary condition for functioning in Canadian society. To assess the validity of the survey, both the questionnaire content and the survey environment were examined. Content validity was assessed by looking at the questionnaire tasks and deciding whether they were important for functioning in Canadian society. Findings showed the inability to answer the questions correctly did not reflect the inability to get by in life because no allowance was made for solving the problems in other ways. Construct validity was judged by determining whether the questionnaire measured ability to function in life rather than ability to do something else. Cases showed that the survey tasks measured reading ability, not ability to get by in life. The study assumed unwisely that the survey had predictive validity—that if someone could answer a survey question, he or she would be able to cope with the same problem in life. The validity of the survey could also have been affected by other factors: time constraints placed on participants; use of only printed materials; print size; isolation; and interpretation of responses. (YLB)
Literacy in Canada:
A Look at the Southam Study

submitted to: Dr. William Griffith
Adult Education 500

by: Patricia Sackville
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Abstract

This critical look at the Southam News, 1987 report on literacy in Canada explores the implications of the criteria used to determine literacy. It identifies several problems with the validity of the survey in terms of its content and structure and questions the study's underlying assumption that literacy is a necessary condition for functioning in Canadian society. Also, it points out the importance of looking at the issue from the perspective of illiterate people.
Introduction

This paper will take a critical look at the literacy tasks and explore the assumptions implied by the criteria for literacy adopted in the Southam study. It will look in detail at problems with the validity of the study questionnaire and with its implicit assumption that illiteracy prevents functioning. Finally, it will point out the importance of looking at the role of literacy for coping in life from the perspective of illiterate people.

Background

In 1987, Southam News commissioned a literacy survey based on face-to-face interviews of approximately two thousand randomly selected Canadians over eighteen years of age. The study was undertaken in order to assess the literacy performance of adult Canadians and to establish a performance-based criterion measure of functional literacy for Canadian society. This was to provide public policy makers with a practical measure of the degree of literacy required to function in Canadian society in order to assist them in making legislative and funding decisions (Creative Research Group, 1987).

In the 1980s, the issue of literacy drew the attention of provincial and national governments in Canada as illiteracy was seen in terms of its cost to the labour market (Selman & Dampier, 1991). The Southam study included a survey (Southam survey) which focused on a practical meaning of literacy and the findings had tremendous impact nation wide. Five million Canadians were found
to be functionally illiterate according to the criteria developed for the study, and illiteracy existed among university graduates (Selman & Dampier, 1991).

Due to the impact of this study, the criteria it used to determine literacy need to be examined.

**Definitions of Literacy**

The purpose of a definition is to restrict a concept sufficiently to make it useful for a certain purpose at a certain time (Griffith, 1994). Audrey Thomas described literacy as a social construct that changes as society changes (Thomas, 1976). Therefore, any definition of literacy is only relevant in a particular context.

In the report, the Southam study described previous research in literacy as typically using grade-level achievement as a measure of literacy. For example, people with less than grade nine education were functionally illiterate according to Statistics Canada (Creative Research Group, 1987). In order to avoid the problem of fluctuating standards for different grade levels, the Southam study attempted to define an acceptable level of literacy by looking at people's performance on literacy tasks chosen for their relevance to functioning in our post-industrial information society (Creative Research Group, 1987).
Definition Used in Southam News Report

The Southam survey viewed literacy as a set of complex information processing skills and adopted a hierarchical view of these skills. This view placed simple decoding skills on the bottom of the hierarchy, literal comprehension skills in the middle and evaluative and aesthetic appreciation skills at the top (Creative Research Group, 1987).

One problem with this hierarchical view is that it judges skills at the top as being superior to skills at the bottom and assumes that people need to use all the skills in order to function successfully. A further assumption is that literate people would have access to a wider range of skills than illiterates.

However, after reviewing the literature, Roger Clark (1992) concluded that it was unlikely that literacy insures superiority in thinking. Dr. Sparks of the UBC Language Education Department challenged the hierarchical view in her comment that "good skills are those that work for a particular individual in a particular context" (Dr. Elizabeth Sparks, lecture on Integrated Language Arts Programs, October 26, 1994).

Instead of adopting a hierarchy, one could view all literacy skills as being on the same level and recognize that there are a variety of skills that help someone to function. One person could get by in life by using only certain skills when another would use different ones; both are functioning in spite of their limited use
of skills by specializing in certain ones.

The hierarchy model, therefore, sets up illiteracy as a deficiency. Clark noted this problem in his study "Successful Illiterate Men": "Illiteracy becomes the opposite of literacy rather than an entirely different and often helpful means of perceiving the world" (Clark 1992, 8).

With this deficiency view of illiteracy in mind, the Southam study defined "basic illiterates" as people who could barely read and write, and "functional illiterates" as those whose reading and writing and numbers skills were not sufficient to get by in everyday life (Creative Research Group, 1987). These labels were determined solely by people's ability to use printed and written information to answer questions during the interview.

It is important to look at the validity of the Southam survey in terms of the tasks participants were asked to do, the environment in which they did them, and at the issue of whether illiteracy actually impairs people's ability to function in life.

**Questionnaire Validity**

Validity of an instrument refers to whether it measures what it intends to (Rivera, 1984). In order to assess the validity of the Southam literacy survey, both the questionnaire content and the survey environment will be examined. The questionnaire will be assessed by looking at three kinds of validity: content, construct and predictive validity. The survey environment will be assessed
by looking at the following factors: time, printed material and print size, isolation, and interpretation of responses.

Content Validity

Judging the content validity of the literacy survey involves looking at the questionnaire tasks and deciding whether they are important for getting by in life, for functioning in Canadian society.

Questionnaire Tasks

The Southam study asked participants to complete various tasks involving reading and writing. In section one, participants read simple documents in order to perform certain tasks (i.e. circle the expiry date on a driver's licence, determine how much medicine to give to a seven-year-old-child by looking at the medicine bottle label, and sign a given name on a social insurance card). In section two participants read short articles or more complex documents and answered different questions by selecting one of the four answers provided (Creative Research Group, 1987).

Relevance of Tasks

The tasks involved in the questionnaire may not have been relevant to getting by in life for all participants and this could have made it difficult for them to answer questions correctly.

In section one, a question asked participants to read a medicine label and determine the correct dosage of medicine
suitable for a seven-year-old child (Creative research Group, 1987:34). Many medicine bottles are quite small and their labels contain a variety of information about indications, directions, cautions, warnings, and ingredients. For someone who had never read a medicine label, either because he had never taken medicine or had relied on a doctor or pharmacist's recommendation on the correct dosage, the label in the survey might have been confusing and it could have been difficult to determine the correct answer. However, he could get by in life without having to read a medicine label by relying on verbal instructions.

Similarly, in section two, there were four questions requiring participants to use a bus schedule (Creative Research Group, 1987:40). If a person had never used a bus schedule before, he may have found it difficult to determine when a certain bus was supposed to leave a particular station not because he was a poor reader but because he was unfamiliar with bus schedule formats. This person may never need to read bus schedules because he gets by in life by driving everywhere.

These two examples show that the inability to correctly answer the questions on the survey does not reflect the inability to get by in life because there is no allowance made for solving the problems in ways other than reading.

**Construct Validity**

To judge the construct validity is to determine whether the
questionnaire measures ability to function in life rather than ability to do something else. As was mentioned above, lack of familiarity with the tasks could interfere with someone's ability to answer correctly, but does not indicate if they could actually function in the real world using different coping strategies.

In addition, answering correctly could be the result of an ability to read but in real life the person may not be able to get by because of some other factor. For example, just because someone can read a bus schedule, does not mean that he is not going to miss the last bus.

These cases show that the survey tasks measured reading ability rather than the ability to get by in life and that the researchers assumed that reading at a certain level is a necessary condition for functioning in life.

**Predictive Validity**

This brings up the issue of predictive validity. Can the questionnaire results be used to predict how people will perform in the future? The study assumes that if someone can answer a question on the survey, then he will be able to cope with the same kind of problem in life by relying on his reading and writing ability, and that the inability to answer the question correctly means he will not cope with the problem in life. These are unwise assumptions.

For example, being able to correctly identify the amount of
tax due from a tax table on the survey (Creative Research Group, 1987:55) does not predict that someone will be able to cope with his own tax return. In addition, being unable to solve this correctly on the survey does not mean that a person will not be able to successfully file his tax return each year since he could hire someone to do it.

A further consideration that could affect predictive validity of the Southam survey is the issue of whether participants were literate in languages other than English or French. The study reported that twenty-seven percent of the sample had "many materials in home written in languages other than English or French, when growing up" (Creative Research Group 1987, appendix 9). Some of these people may not have been able to answer the question that required them to read a menu written in English or French (Creative Research Group, 1987:23), but could have performed the required task with a menu that included another language. Many menus are written in more than one language, and if these people understand the language associated with the food being served, they can function. Their performance on the questionnaire will not predict their ability to cope successfully with menus.

Environment Factors

Time

The validity of the survey could also be affected by the time constraints placed on participants. There was a five minute
allowance for answering each question. If a person did not answer a question within five minutes, he was asked whether he wanted to go on to the next one (Creative Research Group, 1987:14). Although a person could have refused to go on and taken more time to answer the question, he might have felt under pressure which would have made answering the question even more difficult.

A second time consideration is the length of the interview with individual participants. Interviews took approximately eighty minutes and progressed from easier reading tasks being done first to more difficult ones being done last (Creative Research Group, 1987). Fatigue could have affected people's ability to answer questions correctly.

Printed Materials

The Southam survey required that participants complete tasks while only relying on the printed word. The assumption was that one could only get by in life with an ability to read and write; in reality, information can be found through conversation, observation or other ways.

In his research on successful illiterate men, Clark (1992) found that in order to learn something, they relied on television, telephone, asking an expert, and observation. Clark (1992) also cited a study by James and Galbraith (1985) that found that adults ranked print fifth in a list of perceptual learning preferences and Fingeret's (1982) work, in which illiterate adults referred to
using the skill of "common sense" to solve problems more often than "book learning". The Southam study did not recognize a variety of ways to solve problems.

Print Size

The small print in some of the documents participants had to read in order to answer questions could have made it difficult for them to answer successfully within the time constraints. For example, the names of stations on the bus schedule used were in a very small print (Creative Research Group, 1987:40). This could have influenced the study's finding of a consistent decrement with age: those fifty-five and older had a lower percentage of correct answers than other age groups (Creative Research Group, 1987:28-30).

These lower scores may not indicate a lesser ability to get by in life because if someone finds bus schedules cumbersome to use because of their small print, he may rely on phoning the bus company to get information.

Isolation

Another point to consider when determining validity is to decide whether people's ability to work on their own to solve the survey problems reflects their ability to solve these same problems in the real world. Someone who performed poorly on the test might perform well in life by collaborating with others. In his work on successful illiterate men, Clark (1992) confirms this in his citing
of Arlene Fingeret’s (1982) work that found many illiterate adults had an extended social group that shared tasks.

**Interpretation of Responses**

The questionnaire was set up so that certain answers were correct and "wrong" answers were interpreted as indicating an inability to function. However, in the real world, if someone makes a mistake, he can adjust his choices in order to function in the future. For example, regarding the bus schedule questions on the survey (Creative Research Group, 1987:40), in the real world, if someone misses the last bus one day, he could ask when the bus leaves the station, and in future, having learned from his error, catch the bus.

On the survey, the participant was only allowed one choice and did not get feedback about whether he was correct. A wrong answer on the questionnaire was seen as a failure, while in the real world it is a form of feedback that could allow future functioning. Getting a question wrong on the survey showed a failure to use the printed word to perform a task at that point in time, but it does not indicate whether this failure prevents functioning.

**Does Illiteracy Prevent Functioning?**

Clark’s (1992) work referred to the Southam survey report as promoting the idea of illiteracy as a national disgrace since the report spoke openly about costing Canada billions of dollars a year in unnecessary unemployment insurance payments, inflated prices to
cover mistakes, subsidies for industrial retraining, lost taxes and international competitiveness. However, the same author’s literature search found no evidence that increases in literacy levels led to increases in employment or economic growth (Clark, 1992).

There are two possible reasons for this finding: illiteracy does not prevent people’s ability to function in life and literacy programs do little to improve the lot of the illiterate person. Clark’s (1992) literature review cited several studies that confirm the latter, and his own research on successful illiterate men confirms that some illiterate individuals have various coping strategies that allow them to be successful in life.

False Illiterates and False Literates

The Southam study discussed the issue of false illiterates, people who had very little education yet measured as literate on the questionnaire. This was interpreted to mean they were "over-achievers". The false literates, people who had a high level of schooling yet did poorly on the questionnaire, were described as "under-achievers" (Creative Research Group, 1987).

These two groups were treated as interesting anomalies but they were not given serious consideration since they did not fit with the deficiency model of literacy that the study was committed to and challenged its assumption that "education is the most important factor affecting literacy" (Creative Research Group 1987,
Overview).

Without the inclusion of false literates, the finding of functional illiteracy among university graduates would not have been possible, (twenty-eight percent of the false illiterates had post-secondary schooling), and the total number of illiterate Canadians would have been greatly reduced since fifty-four percent of them were false illiterates (Creative Research Group 1987, 187).

Without consideration of the false illiterates, the study fails to understand the real-world application of literacy by overlooking the importance of coping mechanisms used by "over-achievers" as alternatives to literacy; it fails to recognize what Clark (1992) found: that some illiterate people live quite normal lives and are unconcerned about becoming literate because it takes other things besides literacy to be successful.

Conclusion

This paper has questioned the validity of the Southam literacy survey in terms of its content and structure. It has also discussed the study's underlying assumption that literacy is a necessary condition for functioning in Canadian society.

Implications for Future Research

Clark (1992) criticized the narrow, literate world-view of literacy that has informed research and practice and suggested focusing on the illiterate person's perspective. Additionally, Clark (1992) suggested that literacy programs be aligned with what
illiterate people want instead of what the literate world thinks they want.

This raises an interesting question about the Southam study. The jury panel who determined the criterion of minimum functional literacy was made up of well-known authors and publishers, educational experts, business-men, one union leader, one native Indian, one farmer, one physically handicapped individual, one adult literacy instructor and two of her classes who gave an aggregate opinion (Creative Research Group 1987, appendix Development of Key Items Scale). Although it attempted to include the illiterate perspective, students in a literacy class were not a fair representation of illiterate individuals. What would have happened if the study had included successfully illiterate people on their panel?

Perhaps, if the study had looked at the role of literacy for coping in life from their perspective, its structure would have been much different and its findings more useful for designing programs to meet the needs of the illiterate.
Works Cited


Sparks, Elizabeth, UBC English education instructor. 1994. Lecture on integrated language arts programs, October 26, Vancouver.