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LITERACY IN ENGLAND, 1718-1759 " INDENTURE CONTRACTS AS A SOURCE

A Thesis

Presented to

The Faculty of the Department of History

The College of William and Mary in Virginia

In Partial Fulfillment

Of the Requirements for the Degree of

Master of Arts

by
Dorothy Hagberg Cappel
1980

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APPROVAL SHEET

This thesis is submitted in partial fulfillment of the requirements for the degree of

Master of Arts

Dorothy Hagberg Cappel

Approved, August 1980

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Russell R. Menard

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TO MY PARENTS

For their constant encouragement and support

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ABSTRACT

This essay, which uses signatures on indenture contracts as a measure for studying literacy in England from 1718 to 1759, has three principal purposes: 1) to explore the relationship of sex, occupation, place of residence, and age to literacy over time; and to determine if, how, and to what extent these factors affected the level of literacy during this period; 2) to compare the findings of this study with those of Lawrence Stone and Michael Sanderson, scholars who disagree about the direction of literacy in the eighteenth century; and 3) to raise a question about the use of signatures as a reliable measure of literacy.

In preparing this essay the variables on the indenture contracts have been coded and subjected to computer analysis. The relationship of sex, occupation, place of residence, and age to literacy as well as the relationships among the several variables and literacy have thus been determined. As background to the presentation of the data, the implications and measurement of literacy have been discussed, Stone's and Sanderson's studies on literacy have been summarized, and the validity of indenture contracts as a source for the study of literacy in England has been examined.

This study suggests that literacy in England increased from 1718 to 1748 and decreased slightly between 1748 and 1759; it further reveals that men were more literate than women, that the level of literacy increased with the level of skill and/or education required for jobs in certain skill-specific categories, that urban areas generally had a higher rate of literacy than rural areas, and that the ability to sign increased with age.

The analysis of the relationship of age to literacy, which shows the impact of increasing age on literacy, raises a question about the reliability of signatures as a measure of literacy. If grown men, especially those between the ages of 20 and 21 (where the greatest percentage increase is observed), were suddenly learning to write their names years after the usual school-leaving age, then the ability to sign appears not to have been a function of basic education in the childhood years. This finding brings into question the assumption of many historians that the ability to sign indicates an "acceptable" level of elementary reading and writing skills.

Whereas this study confirms some aspects of Stone's and Sanderson's studies, it also uncovers some different patterns of literacy and raises some new questions for future research.

LITERACY IN ENGLAND, 1718-1759

INDENTURE CONTRACTS AS A SOURCE

CHAPTER I

THE IMPLICATIONS OF LITERACY

According to Peter Laslett "the discovery of how great a proportion of the population could read and write at any point in time is one of the most urgent of the tasks which faces the historian of social structure." Since literates are more directly capable than illiterates of participating in society and politics, and of contributing to economic development, the discovery of the proportion and character of literates in a particular society at a given time may reveal much about the political and social awareness of that society and its potential for economic growth; it may also indicate if, how, and to what extent variations in the rate of literacy contributed to significant changes in attitudes and activities that may have effected the course of history.

To understand fully the impact of the extent of literacy on a society a distinction must be made between an oral and literate culture. In an oral culture traditions and everyday communications are transmitted by word-of-mouth. Much of what transpires in that society is lost forever, and even that which passes down as tradition by word-of-mouth from one generation to the next can be distorted or forgotten; in such a society there is no written record that can be challenged or interpreted. In contrast, in a literate culture, where transactions and traditions are

committed to writing, persons "cannot discard, absorb, or transmute the past in the same way." ² Rather they "are faced with permanently recorded versions of the past and its beliefs; and, because the past is thus set apart from the present, historical enquiry becomes possible. This in turn encourages scepticism . . . not only about the legendary past, but about received ideas about the universe as a whole." ³ Thus, once a society commits its transactions and traditions to writing and persons acquire the ability to read, the written record becomes subject to interpretations that may subsequently give rise to widespread changes in the way a society views itself and that may even transform the structure and values of that society. ⁴

What does this distinction have to do with a study of literacy in eighteenth-century England? By the eighteenth century political life in England had been carried on in writing for centuries; obviously some segment of the population could read and write. But the ordinary Englishman of this time lived in a predominantly oral culture. The fragmentary evidence of literacy for this period that has already been examined indicates that nothing near universal literacy had been achieved in eighteenth-century England; yet some scholars suggest that England was becoming an increasingly literate society at this time. ⁵

Assuming that the number of persons acquiring reading and writing skills was increasing in eighteenth-century England, several interesting historical questions arise. First, to what extent were persons in this society making the leap from a predominantly oral to literate form of communication? Furthermore, what was the social context of this increase in literacy skills? Finally, what was the impact of the expansion of literacy on the social, political, economic, and religious events in

eighteenth-century England?

The wide-ranging effects of an increase in the rate of literacy on the structure and character of a society are, no doubt, many and varied. For example, Lawrence Stone has suggested that increases in mass literacy are directly related to the expansion of intellectual. cultural, and political activity often associated with great revolutionary changes in a society. He mentions that three great revolutions in Western society--the English, French, and Russian revolutions--occurred at times when the rate of literacy was between one-third and two-thirds of the adult male population. 6 Economic historians have pointed out that the possession of literacy skills is an important factor in economic development, since it fosters the formulation of "human capital," which is crucial to economic growth. ⁷ Some historians have suggested that literacy was essential to the development of early industrialization in the West, although they do acknowledge that literacy alone neither initiated this process nor sustained its growth. 8 Also, clearly evident among the effects of an increase in literacy is the emergence of the "modern man" 9 who through the acquisition of literacy skills gains "an openness to new experiences, an assertion of independence, a belief in the efficacy of science, an ambition for one's self and one's children in education and work, a dependence on planning, an interest and involvement in politics, and an effort to be aware of issues larger than local ones"; 10 consequently this type of individual may bring about or participate in the social, political, or economic aspects of the process of modernization.

Thus we can see that as persons acquire literacy skills they become liberated from their "literate betters" (in the case of eighteenth-century

England the local parson or landlord--who usually was literate) for their knowledge of those events that may have been committed to the written record; they also become less dependent on other sources of information such as itinerant ballad singers, actors, or orators. Because literates are no longer solely dependent on other individuals' interpretations of written reports of ideas and events, they are thus no longer subject to the ideas and, consequently, to the will of others. Whereas illiterates may remain attached to the past and rooted in tradition, persons with literacy skills may more readily become aware of alternative choices, new opportunities, and new and improved ways of doing things. Literate individuals may therefore be more likely to initiate or accept change. Because they are able to make judgments based on their own interpretations of the written record, as well as express their opinions in writing, literate persons also have a greater facility for evaluating, criticizing, and changing the old order of society.

The wide-ranging implications of literacy in any society are therefore so immense that certainly no attempt can be made within the scope of this paper to describe the impact of literacy on eighteenth-century English society. This paper will, however, explore some evidence of literacy that provides information about the extent, social structure, and regional variations of literacy in early eighteenth-century England. Perhaps this information and that of other similar studies will eventually help to shed light on how literacy—its extent, expansion, sources, and social structure—influenced the course of history in England.

CHAPTER II

THE MEASUREMENT OF LITERACY

How does the historian go about studying literacy? What types of sources are available for the study of a phenomenon which is, at best, vague; and how does the historian define and measure literacy?

Some historians have attempted to learn about literacy by studying the volume of material being printed at a particular time and its geographic distribution. ¹ These historians believe that by studying the proliferation and dissemination of literature in a society they can learn about reading habits and, subsequently, the extent of literacy in that society. One historian who has studied the printing and distribution of newspapers, pamphlets, books, and magazines in eighteenth-century England, as well as the establishment of lending libraries, has concluded that this period was certainly not marked by extensive illiteracy. ²

But surveying the kinds of literature available to the reading public, the number of copies of books or magazines that were printed, and the areas to which such material was distributed, although interesting in itself, tells little about the actual extent or social structure of literacy. Changes in the kind, number, or distribution of publications are not a precise measure of the extent of literacy in a

society because there is not necessarily a relationship between the number and distribution of publications and the actual number of persons reading this material. Increases in the volume of printed material may be attributed to such factors as technological advances in printing techniques or to the lifting of restrictions on the number of printers and distributors of literature, as happened in the latter half of the seventeenth century. Other factors, such as variations in the amount of the stamp tax imposed on newspapers, could also have affected the sale and distribution of that form of literature. Circulation figures for various kinds of printed material are therefore not an adequate or particularly useful proxy for literacy.

Other historians have studied the number and establishment of facilities available for formal education in an attempt to learn about literacy. Whereas a study of the curricula of schools and the areas in which schools were located is an extremely important facet of any literacy study, since it helps explain the nature of the skills being taught and where they were being taught, such research again reveals little about the actual extent or social structure of literacy. quality of these educational institutions no doubt varied from region to region, and merely surveying the number and/or locations of schools does not indicate how effective these institutions were in teaching literacy skills. Furthermore, because many schools required fees or were established for a certain social class, this approach to the study of literacy does not allow the historian to cut across class boundaries. Finally, any examination of literacy based solely on records of educational institutions fails to account for any literacy skills acquired outside the school either informally or in some other

structured institutional setting.

Whereas these approaches to the study of literacy have helped historians learn about the types of material being read and the kinds of educational opportunities available in England, they have done little to help historians develop an objective method for measuring literacy. In the words of one historian, any measure of literacy that will "enable historical comparisons to be made . . . must meet two conditions. First, it must be applicable throughout the country to people of a wide range of ages and economic and social conditions and over a long period of time. Second, it must also be standard as a measure from one person to the next, from one group to the next, from one region to the next, and from one historical period to the next." 5

In attempting to find an unbiased measure of literacy that meets these conditions, the next question that one must ask is what, precisely, does the historian mean by the term literacy? The dictionary (Webster's Third International) defines literacy as "the quality or state of being literate," and defines one who is literate as "educated, cultured, able to read and write, versed in literature or creative writing." Obviously a problem arises here. Does literacy imply the ability to read and write on an elementary level or does it imply the ability to read and write with fluency?

Since historians have no way of discerning the extent of literacy skills, <u>literacy</u> has come to be defined <u>operationally</u> as the ability to sign one's name. Accordingly historians have accepted as a measure of basic literacy the ability to sign one's name. Historians who use this measure assume that there is s significant difference in the level of

literacy between those persons who sign their names and those who make a mark; they further assume that the ability to sign indicates the ability to read and write with some fluency.

This assumption about signatures as a measure of literacy skills is based on studies of formal education which indicate that reading was normally taught before writing; thus if a person could write his or her name it would follow that this individual had first learned how to read. Furthermore, reading and writing were usually taught in different schools. The "petty" schools of the sixteenth century and the charity schools of the eighteenth century taught writing only after an adequate level of reading had been achieved; figuring was taught after reading and writing had been mastered. 7 Thus "scholars agree that the level of signatures runs below but closely parallels reading skills and runs above but roughly parallels writing skills." 8 Although historians admit that it is impossible to determine what may be referred to as the exact or "absolute" level of either reading or writing skills, the "comparisons of the signature levels of various groups yield fairly reliable comparisons of their relative levels of overall literacy." 9 As one historian has observed, the ability to sign gives a "middle-range" measure of literacy. 10

In using signatures as a measure of literacy the historian must have available a collection of signatures that gives some information about the social background of the individuals being studied; such factors as sex, age, occupation, or place of residence are extremely useful in exploring the social context of literacy. A random signature in itself is of little worth. Especially useful is some type of census-like document that large numbers of individuals were required to sign.

English history records several occasions on which the male population over age 18 was required to approve a document by signing it. One such document is the Protestation Oath of 1642 that required men to defend the doctrines of the Anglican Church; the other is the Test Oath of 1723 whereby men were required to renounce the jurisdiction of the pope and swear allegiance to George I. Other types of signed documents that have been used for studying literacy are marriage registers, allegations and bonds for marriage licenses, wills, deeds, and depositions.

In this study signatures are used as the measure of literacy. It is important to emphasize, however, that the relationship between the ability to sign and the other accomplishments of a literate individual are unknown. It may not be true that a person capable of signing can also read and write fluently; a person may be able to sign his or her name and nothing more. Signatures, however, are the best data available for exploring literacy, and therefore we need to examine all such evidence in an attempt to assess the reliability of signatures as a proxy for literacy. In studying the ability to sign we may find that it varies by social groups, regions, and over time; we may even be able to discern some constant patterns within certain groups or regions that may help us to evaluate more clearly the reliability of signatures as a measure of literacy. Only the continued study of various kinds of sources bearing signatures may help the historian determine the validity of this measure.

CHAPTER III

TWO VIEWS OF LITERACY IN EIGHTEENTH-CENTURY ENGLAND

Lawrence Stone and Michael Sanderson have studied opportunities available for education and have analyzed information from parish registers in an attempt to make some suggestions about literacy in eighteenth-century England. ¹ They have used similar kinds of data from different regions of England, and have arrived at contrasting conclusions about the direction of literacy trends in the eighteenth century.

Stone begins his essay with a description of the various kinds of educational opportunities available in England. He contends that the structure of education in any society is largely determined by social stratification, job opportunities, religion, theories of social control, demographic and family patterns, economic organization and resources, and political theories and institutions.

Stone suggests that between 1530 and 1680 education on all levels made great strides forward. He attributes this progress to the great impact of the printing press, humanist theories that both ordinary persons and the elite should be educated, the Puritans' clamor for access to the Bible and other religious literature, the need for an educated class to administer the government and to prepare for careers

in the professions, and the generous educational grants of wealthy merchants. This growth in literacy provided enthusiastic readers for mid-seventeenth-century political pamphlets and stimulated the interest of the Puritans in Bible reading--factors that contributed to the political and religious agitation without which the challenge to the old order and values may not have occurred.

Stone continues by suggesting that the growth rate of literacy slowed during the period 1680-1780 primarily because of fear among the upper classes that education of the masses had contributed to the turmoil of the 1640s and 1650s. A middle-class reaction to classical education and the decrease in attendance of the upper classes at educational institutions also resulted in the decline of secondary education and university education in the late-seventeenth century and throughout most of the eighteenth century. The only facet of education that continued to grow during 1680-1780 was the teaching of the basic skills of reading, writing, and arithmetic to the lower-middle classes for the purpose of keeping accounts. Stone hypothesizes that because of this decline in education the masses once again became subject to the will of the literate elite who, with the masses intellectually and politically suppressed, helped ensure a period of domestic tranquility that lasted for almost one hundred years.

Stone next suggests that after 1780 there was a general increase in the education of the masses primarily because of the rivalry between Dissenters and Anglicans for the control of the religious beliefs of ordinary men and women, the hope of the upper classes that education might prevent the masses from participating in the new radicalism of the age, the demand for a better-educated workforce, and the government's

desire to educate and make productive citizens out of the children recently emancipated from the factories. But this surge in education after 1780, contrary to the wishes of those in power, resulted in the wide dissemination of radical literature that was avidly read by the masses, which contributed to the increased agitation among the lower classes for reform. ²

Of special interest to this study are Stone's findings for adult male literacy in the early eighteenth century. In an attempt to fill the gap in our knowledge of literacy between 1642 and 1754, ³ Stone cites evidence from marriage registers in the East Riding of Yorkshire and from 15 parishes in the West Midlands (evidence he claims represents rural areas); and from Penzance, and some parts of Oxford, Northampton, King's Lynn, Halifax, Bristol, and Nottingham (evidence that he believes represents urban areas). On the basis of this evidence Stone concludes that by 1760 the East Riding had a higher rate of literacy (64%) than the West Midlands (48%). Although towns retained a higher literacy rate than rural areas, between 1760 and 1800 there was a slow increase in the rate of literacy both in towns and in the rural North. In the rural areas of the West Midlands, however, there was a dramatic increase in literacy from 48 to 64%.

To provide a further link between 1642 and 1754 and to analyze the social composition of literacy Stone also examines two sets of marriage licenses from Oxford and Gloucester. He chose these registers because they provide information about the status or occupation of those who signed and because these areas are located in the Central Midlands, an area that Stone believes may provide a good indicator of general literacy trends in England because it is "neither too near nor

too far from London." Stone admits, however, that the assumption that the Central Midlands is a good indicator for England as a whole will need to be tested by additional research.

Although Stone believes that these documents are a distorted sample because they underrepresent really poor persons, servants, laborers, and agricultural classes, and overrepresent artisans and tradesmen, he is able to distinguish literacy trends among several occupational groups. He notes that almost all professionals were literate. Among yeomen and husbandmen he notes a rise in literacy until about 1700 and then no appreciable change until 1775, when their literacy rate begins to climb again; he observes a similar trend for artisans and tradesmen. ⁵ Although Stone does not have as much information for laborers, since they did not enter the records in large numbers until after 1675, he suggests that if the 1675 figures are compared with those of the Protestation Oath of 1642, a substantial increase is seen in the 1640s and 1650s, followed by no remarkable change until 1800 except for an abrupt but temporary decrease after 1775. Between 1640 and 1800 Stones contends that the literacy rate of laborers remained at about 30 or 40%. The stagnation in the literacy rate of this group and its failure to increase substantially in the early decades of the eighteenth century leads Stone to agree with Joan Simon that the charity school movement had little impact outside of London. 6 He explains the decrease in the later part of the eighteenth century in terms of the rapidly increasing population outgrowing the facilities available for education, particularly in the towns. Stone observes an increase in literacy for all social groups after 1780, when the literacy rate for husbandmen and yeomen increased from

75 to 95% and that for artisans and tradesmen from 85 to 95%. He attributes these increases to known increases in the Sunday schools and the dame schools.

Stone's analysis of these documents further confirms his findings for the period: growth in literacy slowed between 1675 and 1775. He mentions, however, that these dates may apply only to the West Midlands and that the periodization may have been slightly different in other lowland areas. Stone attributes the increase in literacy among laborers and the poor from about 40 to 60% and the increase in the literacy rate of yeoman and husbandmen from 75 to 90% to the early years of the nineteenth century.

Michael Sanderson has studied evidence of literacy in the industrial and surrounding areas of Lancashire with an eye to the relationship between literacy, the process of industrialization, and social mobility during the Industrial Revolution. He is particularly critical of Stone's suggestion that literacy declined in the early and mideighteenth century and increased in the 1780s. Sanderson suggests that England experienced a rise and peak in literacy in the first three decades of the eighteenth century, followed by a decline in the 1740s, another rise in the 1750s and 1760s, and a decline in the period 1780-1820. He bases his conclusions on a study of the endowment of schools in Lancashire, the incidence of the founding of these schools, and demographic changes—factors that he designates as "circumstantial" evidence—and on a study of information from parish registers in Lancashire, which he terms "direct" evidence of literacy.

Sanderson finds that the period 1700-1730 saw a great emphasis on investment in education reflected in the large sums of money and

gifts given to existing schools and to the formation of new schools. He disagrees with Joan Simon who has argued that there was no charity school movement in the early eighteenth century, since this seems not to apply to Lancashire and neighboring Chesire. After the peak levels of 1710-1729, however, Sanderson notes a marked decline in the formation of new schools, with a particularly low point in 1796-1816. Considering the rising population in late-eighteenth-century England, Sanderson, like Stone, suggests that there were not enough schools to provide education to all children, a factor contributing to the deterioration of literacy in this period. Sanderson also mentions that the social changes accompanying early industrialization, particularly migration to industrial areas and the need for child labor in many of the developing industries, discouraged full-time education for children, making it unlikely that children would ever receive adequate full-time education to make them permanently literate. Further, the increasing fees of endowed schools prohibited many poor persons from attending them. Sanderson also mentions that whereas the formation of Sunday schools in the 1780s may have prevented the total collapse of literacy in the late eighteenth century, it did not counteract the earlier decline of the endowed schools.

Sanderson continues his discussion with what he considers more "direct" evidence of literacy compiled from information on parish registers in Lancashire. One example he cites from registers from the northeastern part of the county shows a decline in literacy in the rural areas from the middle of the eighteenth century to the early nineteenth century. Sanderson contends that this twist--the greater decline in rural than in more industrialized areas--may reflect the

influence of the Sunday schools or the movement of enterprising literates from the country to the city.

To see if this pattern holds outside of the northeastern parts of Lancashire and in other manufacturing districts of the county, Sanderson undertook a more detailed analysis of Chorley, Preston, Kirkham, Deane, and Eccleston for the period 1750-1820. These data show a distinct decrease in literacy during this period in these areas of Lancashire where industrialization was taking place.

Sanderson contends that whereas the rate of literacy may have generally been on the rise throughout England in the latter half of the eighteenth century—as Stone argues—this was not the case in the growing industrial regions of Lancashire. He therefore objects to Stone's construction of "an index of 'English' literacy" ⁹ from those areas that Stone analyzed, especially because of what Stone's generalizations may imply about the relationship between literacy and industrialization. In particular, Sanderson takes issue with Stone's approach because, with the exception of Halifax, the regions that Stone examined were not, in Sanderson's opinion, developing industrial areas. ¹⁰

Sanderson concludes that although the increase in the rate of literacy in the early eighteenth century may have made industrialization possible, industrialization was largely responsible for the fall in the literacy rate in the latter half of the eighteenth century. This decrease did not, however, in his opinion, hinder economic growth, since many of the jobs created by industrialization did not require the ability to read and write. He observes that fewer literacy skills were required of workers in the new technology than

of their pre-industrial counterparts, and he cites this as being especially true in the textile, woodworking, and metal industries. He does point out, however, that the need for literacy did vary from occupation to occupation and that the total workforce was not composed entirely of illiterates. He especially acknowledges that entrepreneurs and overseers of the new economy needed to be literate and were often highly educated.

Sanderson ends his discussion by showing that with the decline in educational opportunities in the latter half of the eighteenth century came a surge of upward social mobility for literates that continued into the early twentieth century, when educational opportunities increased, creating a surplus of educated persons and, consequently, a decrease in social mobility.

In summarizing some aspects of these two literacy studies we can clearly see that additional research is needed to resolve these issues. In particular, there is a need for more detailed, comprehensive local studies like those now being carried out by Roger Schofield at the Cambridge Group for the History of Population and Social Structure. ¹¹ Meanwhile we must continue to explore all evidence of literacy that may help us to discern further the social composition of literacy, variations in the literacy rate in different regions, and the direction of literacy trends over time.

CHAPTER IV

INDENTURE CONTRACTS AS A SOURCE FOR THE STUDY OF LITERACY LIMITATIONS AND APPLICATIONS

This study of literacy is based on an analysis of the indenture contracts of over 3,000 indentured servants who left England between 1718 and 1759. ¹ A person who chose to become an indentured servant entered into a contract with a master by which he or she agreed to serve the master for a specified term, usually four years, in exchange for passage to America and the necessities of life during the term of service. When the contract expired the master usually gave the servant some "freedom dues" such as money, clothing, tools, or land. ²

Indenture contracts were written on printed forms as early as 1636. ³ Although two or three different styles of forms were used, most contained blank spaces for the insertion of the servant's name, age, occupation, and place of residence; there were also blanks for inserting the master's name, the term of service, the name of the ship on which the servant would sail, the name of the ship's captain, the servant's destination, the date of the contract, and the names of the magistrate or any witnesses present at the signing. On occasion, clauses were inserted in the contract specifying the type of labor to be performed or the type of freedom dues to be received. Because of some variations in the style of the forms and also because some of the

forms are damaged, information about occupation and place of residence does not appear on all of the forms. ⁴ The most significant feature of these forms, especially for this study, is that in most cases they bear the servant's signature or mark. ⁵

These contracts present certain limitations when used as a basis for a study of literacy in England. First, in relation to the entire population of England, the number of persons for whom signed or marked contracts are available is small. Furthermore, the group of individuals being studied here does not constitute what statisticians define as a random sample. Rather, this group is a universe of indentured servants. The conclusions reached in this analysis technically cannot be used to make generalizations about the entire population of England but only about this particular universe—indentured servants. Because of these limitations the reliability of these indenture contracts as a source of information about literacy in England may be challenged.

But what characteristics of indentured servants might make them so different from the population of nonservants? Some persons might argue that indentured servants are not representative of the English population because so many of them are believed to have been drawn from the lower classes of English society—vagrants, criminals, or orphans. Recent research, however, has indicated that whereas such persons certainly were represented among indentured servants (just as they were represented in the population as a whole) they by no means composed the majority of the population of servants. In fact, the group of individuals being studied here, although not constituting a random sample of the English population, is drawn from various stations in life ranging from orphans and "friendless persons"

to tradesmen, artisans, accountants, and scholars, and is thus representative of the kinds of persons who resided in England in the eighteenth century. 8 Whereas one study of the social origins of indentured servants concludes that servants were drawn predominantly from one or two occupational groupings, namely yeomen and husbandmen, and artisans and tradesmen, 9 a more recent analysis of the same data challenges this interpretation and concludes that these servants were indeed drawn from a broad cross section of the British population. 10 Neither study reports that servants were drawn predominantly from the lower classes of society or from deviant social groups. Rather, indentured servants "came from all levels of England's 'common sort,' and together made up a cross section of English society that cut from the gentry to the paupers." 11

The contention that indentured servants are representative of the population as a whole is further advanced if one compares the findings of this study as reported in Chapter V of this paper with those of historians who have studied literacy among populations of nonservants. In particular, the findings of this study concerning the relationship of literacy to sex and occupation closely parallel those based on studies of nonservants; conclusions reached concerning some regional variations and certain aspects of literacy patterns over time also coincide with viewpoints of studies of nonservants.

These indenture contracts are especially valuable for an analysis of literacy in England because they provide information about age, a variable that has not been closely examined in other studies of literacy. Historians who study literacy patterns from information on marriage registers deal primarily with individuals who are in their mid-20s. 13

In analyzing data from marriage registers historians do not have the opportunity to study literacy rates and patterns among younger individuals, especially among those who have recently completed some form of elementary instruction. ¹⁴ The ages of the indentured servants in this study range from 11 to 61, with the majority falling between the ages of 15 and 28. The availability of this information has permitted an analysis of the relationship between age and literacy and has uncovered some information that tends to question the reliability of signatures as a measure of literacy. ¹⁵

Because the servants in this study come from all levels of society, range in age from 11 to 61, and also come from all regions of England, Scotland, Wales, and Ireland, the conclusions reached here can at least suggest some generalizations about the population as a whole. Failure to view the conclusions of this study in broad terms may actually result in ignoring some interesting suggestions about literacy during a period for which evidence of literacy is scanty. The period 1642-1840, and particularly the period before 1754, when Lord Hardwicke's Marriage Act was passed, has few sources for the study of literacy. 16 The data analyzed here offer sufficient information to make some general statements about the period 1718-1759 and some more specific statements about the period 1718-1738, during which almost 90% of the contracts in this collection were registered. Unfortunately, for some of the variables studied here, particularly for place of residence and age, the period 1738-1759 does not have enough data to show how these factors influenced literacy patterns during those decades. Nevertheless, the findings of this study may help to bridge the gap in our knowledge of literacy trends in the early eighteenth century.

The analysis of the information on these indenture contracts has been facilitated by the use of statistics. Statistics have several important functions: they permit us to organize data more efficiently, to describe it with precision, and to make controlled inferences from available sources. ¹⁷ Statistics also allow us to test the significance of data and the strength of relationships between variables within the data. The use of statistics, however, should not be regarded as a method of arriving at foolproof conclusions about any collection of data, but the application of statistics to a body of data can be of great value in suggesting fairly reliable possibilities about a population that could not be discerned otherwise. Although quantitative analysis by no means answers all questions, such an approach "provides a set of tools which are of considerable help in analyzing an important but limited set of problems." ¹⁸

In an attempt to learn something about a relatively intangible topic--literacy--by using sound quantitative techniques, the information on the indenture contracts has been processed by computer. In no case have any of the statistics produced in the course of running the computer program been accepted with a confidence level of less than 0.05, which means that we can be 95% sure that an analysis of one hundred other samples of indenture contracts would yield the same results. ¹⁹ The results of this analysis are reported in the following chapter.

CHAPTER V

AN ANALYSIS OF SOME EVIDENCE OF LITERACY IN ENGLAND, 1718-1759

Of the 3,121 indenture contracts for the period 1718-1759,
3,064 bear signatures or marks for persons claiming England, Scotland,
Wales, or Ireland as a place of residence; 2,064 (67.4%) of the contracts bear signatures and 1,000 (32.6%) bear marks. Over two-thirds
of these servants could sign, but this figure means little unless something can be said about the backgrounds of these individuals and about
the rate of literacy between groups, across regions, or over time.

Among the 3,064 persons for whom signatures or marks are available, 94.5% were men and 5.5% were women. Of the total population of men, 69.1% signed, and of the total population of women, 36.9% signed (see Table 1). Thus over two-thirds of the men in this sample signed, whereas only a little over one-third of the women signed.

That the literacy rate among men in early eighteenth-century England was almost twice as high as that of women is not astonishing; other studies of literacy from the eighteenth century have reported similar findings. A study of a random sample of signatures from marriage registers in 274 parishes found that in the mid-eighteenth century the percentage of women capable of signing was about 30%, whereas the percentage of men capable of signing was just slightly more than 60%.

Another study of marriage registers from Lancashire from the 1750s to the 1820s found that the literacy rate of women over this period was about half that of men. ³ Because it is generally known that women received less education than men, and because the number of literate women in this sample is too small to produce any significant findings when examined in relation to the other variables studied here, any further analysis of factors affecting female literacy has been abandoned.

The overall literacy rate for men in the period 1718-1759 was 69.1%. During the first 30 years of this period the rate of literacy gradually improved from 62.0% in 1718-1728 to 74.6% in 1728-1738 to 78.3% in 1738-1748, showing an overall percentage increase of 26.3% from 1718 to 1748. The last 11 years of this period were marked by a deterioration in the literacy rate to 69.0%, a percentage decrease of 11.8% (see Table 2 and Figure 1).

may be attributable to the increase in the number of charity schools and other endowed schools in the early years of the eighteenth century. The charity schools, which were established at the end of the seventeenth century by the Society for Promoting Christian Knowledge, increased in number from 1700 to 1730 and experienced a decline in establishment and funding after 1730. The "high-water mark" of the movement was reached in 1723, when the society reported that there were 1,329 charity schools in England. However, the purpose of the charity schools was primarily to teach morality to the lower classes; they were not instituted for the singular purpose of teaching reading and writing skills, and they were not noted for being particularly

effective. ⁷ In the eighteenth century 1,100 endowed schools were also established, but they required fees and therefore access to them was determined by the ability to pay. ⁸

If these figures are correct, especially those for the charity schools to which children had access without paying a fee, and if what we are observing here during the first 20 years is the impact of an increase in the number of these schools on literacy, then we would expect to see a decline in the rate of literacy in 1738-1748, when these schools were decreasing in number. The continued rise in literacy in the period 1738-1748 may therefore be the result of factors other than increased opportunities for education, especially in the charity schools. The decrease in 1748-1759 may, however, reflect the decline in the founding and funding of these schools.

What we may also be observing here is the impact of a shift in the composition of the population on the percentage literate. That is, the trend over time here may possibly be reflecting changes in the age, occupations, or places of residence of the population that would cause variations in the literacy rate. If this were true then we would not necessarily be noticing a change in literacy over time. However, the findings reported later in this paper tend to reject this suggestion because we do find significant relationships between several variables and literacy over time.

Of the 3,064 contracts bearing signatures or marks, information about occupation is available on 1,082. An analysis of these occupations reveals that the ability to sign is influenced by one's status as determined by occupation. In analyzing occupation, the data were initially combined into occupational groups by type of industry or

occupation (e.g., dealing and retail trade, ¹¹ woodworkers, metalworkers, laborers). ¹² An examination of these groups provided an interesting overview of the number of individuals in each occupational classification but did not provide any significant information about the relationship between these particular categories and the ability to sign. The only exceptions were the groups comprised of gentry, official, and professional workers, which had a literacy rate of 99.2%, and of individuals in the dealing and retail trades, which had a literacy rate of 95.0%. ¹³ Most of the occupations in these two groups (e.g., accountants, scholars, schoolmasters, grocers, vinters) assume the possession of literacy skills; in this respect literacy appears to be "skill-specific." Obviously the <u>range of skills</u> among occupations in the other industries or groups was too diverse to reveal anything specific about the relationship between these occupational groups and literacy.

The occupations were next reclassified according to <u>skill</u> into four broad skill-specific groups: 1) agricultural workers; 2) unskilled workers; 3) skilled and some semiskilled workers (hereafter referred to as "skilled workers"); and 4) professionals and those individuals in the dealing and retail trades (hereafter referred to as "professionals"). An analysis of the data grouped in this way indicated a significant relationship between the level of skill and/or education required to perform jobs in these occupational categories and the ability to sign, with the ability to sign increasing in accordance with the level of skill and/or education required for occupations in the various skill-specific groups. Less than 60% of all agricultural workers signed, approximately 70% of unskilled workers signed, almost 80% of skilled workers signed,

and among professionals almost 100% signed (see Table 3).

Looking at the rate of literacy of these occupational groups over time we find a significant relationship between these variables. Whereas the professional group maintained a constant rate of literacy over the entire period, the agricultural workers, unskilled workers, and skilled workers made significant increases in the percentage of those able to sign over the first 20 years (see Table 4 and Figure 2). Only the agricultural workers made another substantial gain in literacy in 1748-1759, attaining a rate of 66.7%, a percentage increase of 16.6% from their rate of 57.2% in 1728-1738. Unskilled workers experienced a slump from 71.6% in 1728-1738 to 64.5% in 1748-1759--a percentage decrease of 9.9%--and the skilled workers' rate of literacy deteriorated only slightly from 81.9% in 1728-1738 to 78.0% in 1748-1759--a percentage decrease of only 4.8%. 15

What do these literacy rates tell us about the ability of the individuals in these occupational groups to read and write with any degree of fluency? The signatures of individuals with professional occupations indicate the ability to read and write with some fluency because the kinds of occupations in this category require literacy skills. The signatures of individuals in the skilled group may represent literacy skills learned in the course of apprenticeship or during education in childhood; likewise the signatures of unskilled and agricultural workers may represent basic literacy skills learned in childhood. This may be particularly true for the first 20 years of this period in which we may be seeing the impact of the education offered in the charity schools on individuals in all three groups.

It is difficult, however, to explain the substantial percentage

increase (16.6%) in literacy among agricultural workers in 1748-1759 at a time when educational opportunities seem to have been declining and when rural poverty may have been increasing in some areas. However, what we may be observing are the positive effects of the enclosure movement that contributed to prosperity by increasing the need for agricultural labor and thus, perhaps, even improved the status of some persons employed in agriculture. ¹⁷ This increased prosperity could thus have brought about a shift in the social composition of the agricultural class from laborers and tenant farmers to owner-occupiers and large-scale farmers that may be reflected in the literacy figures for this group.

Likewise difficult to explain is the slump among unskilled and skilled workers in 1748-1759, although it may be related to the increase in industrialization and the development of some of the new industries and technologies which, as some historians claim, created jobs that actually required fewer literacy skills and that therefore contributed to a decline in the overall rate of literacy. 18

Further examination of the data reveals that the ability to sign is also affected by where one resides. An analysis of the figures for rural versus urban areas shows that persons living in urban areas had a higher rate of literacy than those living in rural areas (see Table 5). The literacy rate in London was 76.7%, in all other cities it was 67.3%, and in rural areas it was 65.1% ¹⁹
Actually, what we are observing here seems to be the difference in the literacy rate between London and all other areas. The figure for rural areas reported here may be artificially high because included in the classification "rural" are all towns other than major

developed or port cities. Even if we were to isolate the figures for smaller cities and towns and include them in the category "all other cities" it is unlikely that the literacy rate thus produced for this category would equal that of London; however, the figure thus produced might show a greater difference in the literacy rate between rural areas and all other cities. Given this data we can conclude that the cities generally had a higher rate of literacy than rural areas, but that London had a considerably higher rate of literacy than any other area in England, including other cities.

It is not surprising to find a higher rate of literacy in cities. The best schools were located in London and in some of the larger cities such as Bristol. ²⁰ In the 1720s in London even women displayed a phenomenally high rate of literacy-66.0%—a rate equivalent to that of men in other parts of England. ²¹ The higher rate of literacy in cities could therefore have been a result of better educational opportunities, including apprenticeships.

Unfortunately there are not enough data to produce a significant study of urban/rural literacy patterns within regions or over time, but we can learn more about this urban/rural dichotomy by looking at the literacy rates of the various occupational groups in the city and the country (see Table 6). At first glance the percentage literate in all occupational groups seems to be roughly the same in both urban and rural areas (and this, again, may be caused by the manner in which the data have been grouped), but skilled and unskilled workers in urban areas had a slightly higher rate of literacy than their rural counterparts, which is understandable in light of the better opportunities for various kinds of education that we know existed in the cities.

Among professionals there was no distinction between those who lived in the city or the country; the rate of literacy in this group remained constant regardless of the place of residence because the occupations in this groups require the ability to read and write. Interestingly, agricultural workers in the country had a higher rate of literacy than those in urban areas, although there is no immediately obvious reason for this trend.

Another reason why we may find a higher rate of literacy in urban areas is because cities tended to attract literates. One historian who has studied literacy and economic development contends that migration to urban areas was "occupation-specific" and "literacy-specific." 22 We know that during the eighteenth century there was much migration from the country to the city to seek employment in nascent industries or to take up apprenticeships. 23 For example, skilled workers, many of whom possessed literacy skills, may have been particularly attracted to cities and their surrounding areas because wages there were higher. 24 Because cities were also market areas they may have attracted large numbers of merchants and small businessmen--occupations that assume the ability to read and write. Thus, what we may be observing here is the impact of increasing economic growth in the cities on literacy in eighteenth-century England. 25

Not only do we see a difference in the literacy rates in urban and rural areas, but an analysis of place of residence also shows some regional variations in literacy (see Table 7). Because not enough data were available to produce a statistically significant study of literacy on a county-by-county basis, the data were grouped and studied by geographic regions. ²⁶ Individuals from Scotland, where the Presbyterian

Church emphasized education in literacy skills for the purpose of reading the Bible, had a literacy rate of 83.7%, the highest of any region. ²⁷ The next highest rate of literacy, 73.2%, was found in Middlesex and the surrounding home counties, followed closely by the growing industrial counties in the North, which had a literacy rate of 71.2%. Next in rank order was Ireland, with a surprisingly high rate of 70.5%, perhaps because most of the Irish servants came from Dublin. 28 The South came next with a literacy rate of 69.9%, only a few percentage points behind its neighbor, the Middlesex area, followed by the wool-manufacturing region of the Southwest with a rate of 64.4%. Wales had a literacy rate of 61.5%, and the growing industrial areas in the Severn Valley region and in the Midlands had literacy rates of 59.3% and 56.2%, respectively. East Anglia concluded the list with the lowest literacy rate of all the regions, 53.3%. 29 With the exception of Scotland and Ireland, the general pattern that appears to emerge here is one of higher literacy in London, the areas immediately surrounding London, and in the North; and lower literacy in areas well removed from London, primarily rural areas, and areas of nascent industrial growth.

In all of these regions (with the exception of Ireland) we see significant improvement in literacy over the first 20 years (see Table 8 and Figure 3). Again, these trends may reflect the impact of increases in charity schools or other endowed schools on literacy or the impact of yet other opportunities for education, including apprenticeship, on the rate of literacy. Although the statistics produced here indicate that the relationship of literacy in regions over the period 1718-1738 is a significant one, we cannot dismiss

the possibility that what is being reflected here is not a rise in literacy over time but the impact of a shift in age and occupational structure within each region as the population becomes older, more educated, or more skilled. Unfortunately, given the data analyzed here we are not able to deal directly with this suggestion.

It is of interest to note that the areas in which the most remarkable improvement occurred between 1718 and 1738 were 1) the Midlands, an increase from 39.5 to 67.3%—a percentage gain of 70.4%; 2) the South, a rise from 59.2 to 79.7%—a percentage gain of 34.6%; 3) the Southwest, an increase from 56.3 to 74.1%—a gain of 31.6%; and 4) Middlesex and the home counties, a gain of 15.5% from 67.6 to 78.8%.

Although the rate of literacy in these regions may have been affected by better educational opportunities or shifts in the social composition of the population, it may be possible to offer a few other tentative suggestions for the trends we are observing in these particular regions. Increase in literacy in Middlesex and the home counties may be attributable to continued economic and population growth in the major port city and government center of London; the increase in the South may well have been a result of its proximity to London. Increases in literacy in the Midlands and the Southwest, however, areas in which we previously noted a generally lower rate of literacy, are far more difficult to explain.

The great improvement in these two regions may be related to a combination of several complex economic and demographic factors, including the enclosure movement, the general growth of and shift in population, and the development of industry. The impact of the

enclosure movement was greatest in the 1760s and 1770s and between 1793 and 1815; ³¹ yet 67 enclosure acts were passed between 1721 and 1740, and 205 acts were passed between 1741 and 1760. 32 Although many contemporaries of the movement claimed that it increased rural poverty by displacing so many agricultural workers and small tenant farmers, we now know that the movement actually contributed to rural prosperity by increasing the demand and opportunities for agricultural labor. The cause of rural poverty in some areas seems to be more attributable to the population growing more rapidly than the need for labor, thus resulting in the migration of many agricultural laborers and small farmers to the towns and cities, especially to areas of developing industry, in search of employment. 33 The growth of industry took place primarily in the Midlands (including the region classified here as Severn Valley), the Southwest, and the North. 34 Therefore, the shift in population density between 1700 and 1750 from a line south of Bristol to the coast of Suffolk to the areas of England northwest of a line drawn from Bristol to Durham could be a result of a combination of the effects of enclosure, population growth, and developing industrialization. By 1802 the population of the northwestern region of England would actually have exceeded that of the southern portion had it not been for the great concentration of population in and around London. 35

What we therefore may be seeing in the Midlands and the Southwest is a rise in the rate of literacy in nascent urban-industrial regions in such cities as Worcester, Birmingham, Hereford, Shrewsbury, Derby, or Coventry. We have already discovered that urban areas hada higher rate of literacy than rural areas and tended to attract literates.

Perhaps the remarkable increases in literacy in the Midlands may have been caused by the migration of enterprising literates from the country, some of whom may have been seeking employment in the developing metal industries or in the smaller, more traditional industries essential to supporting the new industrial economy. The increases in literacy in the Southwest may likewise have been influenced by the influx of enterprising literates seeking employment in the wool-manufacturing industries or attempting to establish new farms in the predominantly agricultural areas of Somerset, Devon, and Cornwall, which were relatively untouched by the enclosure movement.

In considering these possibilities we must keep in mind that these suggestions are speculative, and that although the relationship between literacy and these regions over the period 1718-1738 is significant, we could also be noticing the impact of a shift in the composition of the native population of these areas as they became better educated, older, and more skilled. Also, any immigration to the industrial areas of these regions may certainly have come from rural areas within these regions, not only from outside these areas; such an occurrence would support the suggestion that this trend is being affected by a shift in the composition of the native population, causing it to become more literate.

An analysis of literacy among occupational groups in the various regions confirms some of our earlier findings of higher literacy in urban areas but also brings into question the finding of higher literacy in nascent industrial regions. If we look at the incidence of literacy among the occupational groups in regions we find the most significant relationship between occupation and literacy in Middlesex and the home

counties, the Southwest, North, and Midlands (see Table 9). of these regions the professional group maintained a fairly constant rate of literacy. The agricultural, unskilled, and skilled groups in Middlesex and the North displayed a rate of literacy higher than the overall literacy rates of these occupational groups, which is perhaps not so surprising since we have already noted higher rates of literacy in urban Middlesex and in the North (cf. Table 3). Also, better opportunities for education in the cities, particularly in London, and the proximity of the North to Scotland, which emphasized education and may have positively influenced the quality of education in the North, may be responsible for the higher rates of these groups. But, in contrast, we find that the literacy rates of agricultural and unskilled workers in the Southwest and in the Midlands ran considerably below the overall literacy rates for these groups, and that whereas the rate of skilled workers in the Southwest was slightly higher than the overall rate for that occupational group, literacy among skilled workers in the Midlands ran as much as 13% below the average literacy rate of that group (cf. Table 3).

What factors could be responsible for the discovery of a lower percentage of literacy among these occupational groups in these regions, particularly among the skilled workers in the Midlands, that seems to contradict the findings of higher literacy rates in growing urban-industrial areas? One possible explanation is that the nature of the industries in the Midlands may have required fewer literacy skills, in which case we would have to agree with historians and economists who have found lower literacy in developing urban-industrial districts. ³⁶ The lower percentage of literacy among the agricultural

and unskilled workers in the Southwest may reflect the worsening state of the economy in this region caused in part by northern competition for the wool trade. ³⁷ This lower rate of literacy may also be the result of an influx of displaced <u>illiterate</u> agricultural workers and unskilled laborers in search of employment in the farming areas of the Southwest or in the new industries.

The finding of lower literacy rates among occupational groups in the Midlands and the Southwest, particularly that among the skilled workers in the Midlands, casts some doubts on the previously reported finding of higher literacy in developing urban-industrial regions. The literacy figures for these two regions over time (1718-1738) may be indicating a general improvement in literacy throughout the region or a dramatic increase in rural literacy (as noted by Stone in his study of the Midlands). Such a pattern could have existed alongside a decrease in literacy only among persons directly engaged in industry. Again, we could merely be seeing a shift in the social composition of occupations in these regions over time, but this cannot be ascertained given the data we have here. In studying these figures we must also remember that we are looking at conflated figures compiled from data from the entire period, 1718-1759, and from entire regions without taking urban/rural differences into consideration. More detailed local studies are definitely needed to resolve these issues.

So far we have noted the relationship of sex, occupation, and place of residence to literacy. The last factor to be examined, age; is perhaps the most interesting and significant factor because of its relation to the other variables that have been examined and because of what the findings about the relationship of literacy and age reveal

about the reliability of signatures as a measure of an acceptable level of reading and writing skills.

The analysis of the data for age available on 2,896 of the contracts provides evidence that the ability to sign increases with age, with the most remarkable improvement in the percentage of individuals capable of signing occurring between the ages of 20 and 21, and with the strongest relationship between age and literacy appearing at age 21 (see Table 10 and Figure 4). 38 After the age of 21 the percentage of those capable of signing leveled off at roughly 83.7% of the total population. An analysis of literacy by age over time shows that this trend appeared in 1718-1728 and in 1728-1738; unfortunately there were not enough data to produce any significant findings for the impact of age on literacy in the period 1738-1748 and 1748-1759 (see Table 11 and Figure 5).

This finding about the impact of advancing age on literacy suggests that the ability to sign appears not to be a function of education in the early years; or, to state it another way, the inability to sign with greater frequency at an earlier age appears to be a function of a lack of education in the childhood years.

This raises questions about the relationship of the ability to sign to the ability to read and write. The average age at which a child normally left school was between 10 and 13 years of age. ³⁹ If the ability to sign were a function of some form of education in the childhood years—in a school or even in the parish or the home—then the percentage of those able to sign should be higher at an earlier age. What is seen here instead is the impact of advancing age on the ability to sign and a dramatic increase in the ability to sign long after the

age at which a child normally terminated any kind of formal education. Factors other than education in the childhood years must therefore be responsible for this phenomenon.

This discovery about the relationship of literacy and age raises several interesting and important historical questions. How and why are grown men learning to sign their names? Are there any particular factors that motivate grown men to learn to sign? Do signatures of men in this age group merely reflect the ability to sign and nothing more or do they reflect the ability to read and write with some fluency, as we would expect signatures of those who received education in childhood to indicate? An examination of the relationship of age to literacy in the various occupational groups and regions of England, as well as in the cities and the country, may offer some explanations for this phenomenon or may at least help to develop possible suggestions for this finding about literacy and age.

We have already seen that there is a significant relationship between occupation and the ability to sign, with the ability to sign increasing with the amount of education or skill needed to perform a particular job. If individuals within the various occupational categories who can sign are studied by age, some interesting patterns emerge (see Table 12 and Figure 6). Among agricultural, unskilled, and skilled workers, we see the impact of advancing age on literacy. Among individuals in the agricultural group the greatest increase in the percentage capable of signing took place between the ages of 20 and 21; among unskilled workers the same was true. However, among skilled workers who signed the greatest increase in the percentage that signed occurred between the ages of 18 and 19, and another

increase of almost the same magnitude was noted between the ages of 20 and 21. 40 In contrast, individuals in the professional group did not experience this same surge in the ability to sign with increasing age; there was no impact of advancing age on literacy among members of this group because, as previously noted, the nature of these occupations demanded literacy skills and therefore professionals were almost 100% literate. Regardless of age they displayed a constant ability to sign, and the signatures of individuals in the professional group thus indicate the ability to read and write with some fluency, if not with a high degree of fluency. Their literacy skills were obviously the result of education in the early years.

What phenomenon are we observing here among the agricultural, unskilled, and skilled workers who displayed this increased ability to sign as they matured? What caused the increase in the ability to sign at approximately the same time in life? Among agricultural and unskilled workers, who, because of the nature of their employment probably had less formal education than skilled workers or professionals, the great increase in the percentage of those capable of signing between the ages of 20 and 21 may reflect the ability to sign and nothing more. What we may be noticing here is an increase in the percentages of signatures that is related to the social need to sign. These individuals may have had no formal education, but they may have learned to make the letters that formed their names as the need to sign arose. 41 The same observation may also apply to those in skilled occupations in which we see a similar improvement in literacy at the same age. The increase among skilled workers may, however, reflect some skills acquired later in life in the course of apprenticeship.

If we examine the relationship of age to literacy by region we find yet another interesting trend that further supports the hypothesis that not all signatures may indicate an acceptable level of reading and writing skills (see Table 13 and Figure 7). In Scotland, the region in which the largest percentage of individuals could sign, there was no impact of increasing age on literacy. Of the population age 16 or under, 79.2% could sign. Regardless of age persons in Scotland could sign. Because of the program of universal elementary education, and because of the relationship we observe here, these signatures may well indicate the ability to read and write with some fluency. But when we look at the relationship between age and literacy in Middlesex and the home counties, in the Southwest, and in the Midlands--regions in which we have noted urban and/or industrial growth--we notice a rise in the percentage literate as age increases with the greatest percentage increase in the ability to sign occurring between the ages of 20 and 21. In Middlesex and the home counties there was a 19.5% increase in the ability to sign between the ages of 20 and 21, in the Southwest there was a gain of 29.0%, and in the Midlands the improvement noted between these ages was 65.5%. As noted earlier, it is possible that these increases were the result of the influx of literate persons into these areas; however, what we may be observing here is also the influx of illiterate persons into these regions who may be entering into social contracts--marriage, indenture, business arrangements, and so forth--in which they experienced the need to sign, or the occurrence of the social need to sign among native residents of these areas as they matured. In such cases the signatures of these individuals would probably not reflect the ability to read

or write with some fluency. However, if what we are observing here among these maturing illiterate migrants or illiterate residents of these regions is motivation on their part to acquire some education in reading and writing, then their signatures may reflect the ability to read and write at an acceptable level.

An analysis of literacy by age in urban and rural areas again demonstrates the impact of advancing age on literacy (see Tables 14, 15, and Figure 8). In both the urban and rural groups we see a gradual increase in the ability to sign with age, with the greatest single gain occurring between the ages of 20 and 21. In the London group alone the percentage of literates jumped from 78.5 to 91.9% between these crucial ages, an increase of 17.0% with a subsequent leveling off of the literacy rate at approximately 88.0% after age 21. In urban areas in general the same pattern is observed, with the percentage increase shifting 16.4% from 76.6 to 89.2% from age 20 to 21 and stabilizing at about 87.0% after age 21. Perhaps not surprisingly we find the same impact of increasing age on literacy in the rural group, with a percentage increase of 22.8% from 63.6 to 78.1% between the same ages and a leveling off of the rate of literacy at approximately 80.0% It is especially interesting to note that among individuals 16 years of age or younger the literacy rate is approximately 10% higher in the cities than in the country. The higher percentage of literates age 16 and under living in urban areas may be the result of more and better educational opportunities in the cities.

This pattern is obviously the result of a complex social phenomenon that cuts through occupational groups and urban/rural boundaries. Whether one is an agricultural, unskilled, or skilled worker or whether one comes

of age in the city or the country, the need to learn how to sign (or the motivation or need to learn how to read and write) increases at approximately the same age. The greater percentage of persons able to sign in the urban areas may merely reflect the possibility that in the cities one had more frequent opportunities to enter into business or personal contracts and that therefore the need to sign was greater in the city than in the country, or that in the cities there were more opportunities for mature illiterates to acquire literacy skills.

If we do not accept the suggestion that the increase in signatures between the ages of 20 and 21 is indicative of the social need to sign, what of the suggestion that grown men were motivated by other factors to learn basic literacy skills at this age? Perhaps there actually were other kinds of opportunities for young men to learn to read and write; apprenticeship has already been mentioned as one of these opportunities, and because most apprenticeships lasted until the age of 24 it is possible that the master did not instruct some apprentices in literacy skills until after they had mastered basic aspects of the trade. An example from Wales, however, shows that grown men did, in fact, seek out ways to learn to read and write. In this case young men in Wales were motivated to acquire basic literacy skills for the purpose of reading music and writing songs. W.G. Williams notes that before the spread of Methodism

into these parts, the bards occupied a respectable position in the esteem of the rural population, and these bards not only produced songs (of varying excellence) for the people, but also instructed many of the younger men in the rules of poetry and in the simpler but more useful arts of reading and writing. The cobbler's workshop, the village smithy and the weaver's hut became the rendevous of men eager to overcome the difficulties of the arts of reading

and writing. As these men were mainly of the labouring class and consequently of poor circumstances, it is highly probable that they never received any schooling beyond that obtained from the village poetaster and rhymester. . . . I learned from two old workmen who had cultured their minds to a greater degree than most of their fellows, that the tavern connected with the parish church in many places . . . was nightly patronised by two classes of men--those that came for drinking purposes and those that gathered thither to meet the village sage who led them along the fields of mental culture with which he was acquainted. Most of the young men seem to have been filled with a desire to possess copies of the songs of their own days as well as those of former times. . . . All kinds of songs were transcribed into convenient manuscript books, and the desire to obtain a copy seems to have been the chief inducement for young men to endeavour to master the art of writing. The segregation of men in barns and stable-lofts during the long and inclement winter evenings seems also to have been the means of the further dissemination of knowledge, and it was not uncommon for the farmer's son who had received some town education to become the tutor among his fathers employes[sic]. 42

As this passage illustrates, grown men were seeking out ways in which to acquire literacy skills. If such men were motivated to learn to read and to write for the mere purpose of reading music and composing songs, how much more would they not have been motivated to acquire some literacy skills because of the increased earnings, occupational gains, and increased status that might result from the acquisition of such skills. The changing economic situation in the country may also have stimulated the curiosity of some individuals in reading and writing in order to participate more fully in this transforming society. As Some men may thus have been motivated to acquire literacy skills for the purpose of reading the flood of printed literature—newspapers, pamphlets, magazines, and books—that abounded in eighteenth—century England. At Particularly in the cities where reading material was in greater supply than in the country. As and where newspapers and magazines were readily

available, usually in the coffeehouses, 46 one can understand why young men, perhaps especially those from the country experiencing the intellectual atmosphere of the city for the first time, would have had the desire to learn to read. The spread of Methodism in the 1740s with its promotion of the reading of religious material may also have inspired persons who had no formal education to learn to read. 47 If young men were seeking out opportunities to acquire literacy skills, then it is possible that the increase in signatures in the age group 20-21, while not a function of education in the early years, may indicate some level of literacy skills, especially the ability to read a little and sign one's name.

But what we have been discussing here is primarily the desire to read, not write. One could certainly acquire the ability to read a little and still not be able to write. Perhaps some of the indentured servants in this sample who made a mark, especially those from the cities where educational opportunities were greater and where printed material was more readily available, may have been able to read on an elementary level, especially if they had had some education as a child but had left school before learning to write; or, as just mentioned, they had sought out other ways of acquiring literacy skills later in life. If this were to prove true then the actual literacy rate of the group of servants being analyzed in this study may actually have been much higher than that indicated by the numbers produced using signatures as a measure of literacy, especially in terms of their ability to read a little. It is precisely for reasons such as these that historians view signatures as indicative of an acceptable level of literacy.

Having just made a case for the validity of signatures as a measure

of literacy, the suggestion that some signatures merely indicate the ability to sign and nothing more may seem absurd. But the nagging question posed by the finding of the impact of increasing age on literacy comes back to haunt us and challenge the use of signatures as a reliable measure of literacy. We have noted that the increase in the literacy rate in the early twenties cuts across occupational and urban/rural boundaries except among professionals and persons who resided in Scotland. Whereas it is possible to conjecture that those young men in the cities in whom we see an increase in the ability to sign between 20 and 21 may have learned to read some words through the absorption of some knowledge from printed materials or through having actively sought out someone who was able to teach them to read, they may have never learned to write anything more than their names as the social need to sign arose in an increasingly complex society. Because we do not know what factors are actually responsible for this increase in signatures among young men in the cities and because we see this same trend occurring in signatures in the same age group in the rural areas where individuals, especially in the lower classes, had much less access to educational facilities, printed material, or to persons who could teach them to read and write, we must conclude that not all signatures indicate the possession of adequate literacy skills.

Until we are able to uncover and test additional evidence of literacy that may provide more information about the occupations of these individuals who are acquiring the ability to sign as grown men, as well as more information about their place of birth, where they spent their childhood years, and whether or not they were migrating

to urban areas, we must conclude that the hypothesis that signatures are a reliable measure of the ability to read and write with some fluency is unproven.

CONCLUSION

Having analyzed these data we seem to be left with more questions than answers. Although we have confirmed the findings of some other historians by observing that 1) men are about twice as literate as women; 2) that literacy is skill-specific and increases with the level of skill and/or education required to perform a certain job; and 3) that urban areas tend to have a higher rate of literacy than rural areas, we have also made some interesting, yet disturbing, observations about the direction of literacy in the period 1718-1759, about the literacy levels of certain occupational groups in developing industrial regions, and about the impact of increasing age on literacy, all of which are difficult to explain given the findings of the research we have to date.

The analysis of these data has revealed that the rate of literacy in England increased between 1718 and 1748 and decreased slightly from 1748 to 1759. We have already suggested that the increase in the rate of literacy over the first 20 years may have been the result of the impact of the education offered in the charity schools, which increased in number up to 1730; the decrease in literacy after 1748 therefore could have been related to the decrease in the number of charity schools

after 1730. However, the charity school movement alone appears not to have been responsible for this pattern since we have observed a continuing increase in the rate of literacy in 1738-1748, when the charity schools were supposedly beginning to decline in number. Other factors must therefore have been responsible for the trend we have observed during this period. This pattern may be reflecting the impact of several complex demographic and economic changes on literacy and on society.

The growth in literacy from 1718 to 1748 and its slight decline from 1748 to 1759 may also have been related to the effects of the enclosure movement, general population growth, the beginnings of the growth of industry, and the general continued growth in and around major cities that England was experiencing at this time. The possibility that the trend is attributable to shifts in the composition of the population also exists. If we look at the rate of literacy in cities we find that it is considerably higher than the rate in rural areas, particularly in London, and that persons in unskilled and skilled occupations generally were more literate in urban than in rural areas. Also, in Middlesex and the home counties, the Midlands, Southwest, South, and North--regions that we know were experiencing urban and/or industrial growth--we have observed an increase in the overall rate of literacy. As already mentioned the increase in literacy in these regions, particularly in the Midlands and in the Southwest -- areas of nascent industrialization -- may have come about as a result of the enclosure movement and general population growth that initiated a period of demographic drift that resulted in a shift in population density from the southeastern to the northwestern region

of England. The improvement in literacy in these regions therefore may have occurred as the result of an influx of displaced literates from the areas most effected by enclosure and the population outpacing the need for agricultural labor seeking jobs in the newly developing industries in these areas or establishing new farms in the rural districts of these regions; or it could be that these developing urbanindustrial regions merely attracted more literates. Finally, we must also keep in mind that improvement in literacy in these areas may also reflect shifts in the social composition of the native population of these regions.

But while noticing this trend that supports the contention that cities and developing urban-industrial areas have higher rates of literacy than primarily rural areas and areas well-removed from London, we also make an observation that tends to confirm the suggestion that the jobs created by the new technology, because they required fewer literacy skills, may have contributed to the collapse of education in these areas or encouraged the immigration of illiterates. The literacy rates of unskilled workers in the Southwest and in the Midlands were lower than the rates for these occupational groups overall, and the literacy rate for skilled workers in the Midlands was lower than the literacy rate for skilled workers overall. What this may indicate is that certain industries, particularly those such as the textile and metal industries in these regions, may have required workers who did not necessarily have to be literate.

We seem to have uncovered a paradox. While noticing an overall higher rate of literacy in cities and in developing urban-industrial areas we are also observing a decrease in literacy among unskilled

and skilled workers in regions of nascent industrialization. What we need to do to discern if the decrease among these occupational groups occurs only in developing industrial towns or throughout the regions is to regroup the data so that we can observe the rate of literacy of skilled and unskilled workers in such growing industrial cities as Shrewsbury, Derby, or Coventry. By comparing these figures with those for the same occupational groups in nonindustrial districts of these regions we may be able to discover if industrialization has any impact on the literacy rates of skilled and unskilled workers who may be engaged in jobs in the developing industries.

What we seem to be observing here is a generally higher rate of literacy in the major developed cities (particularly London), especially in market economies, where one finds greater numbers of literate persons in professions, dealing and retail trades, and in skilled labor in smaller traditional industries; and a lower rate of literacy in those areas where the developing industries with their new technologies may be contributing to the collapse of literacy by attracting fewer literate persons, where the types of jobs may not require literacy skills and therefore decrease the emphasis placed on education, and where the market economy may not yet be fully developed. We must remember that although industrialization was beginning to bud in England in the period studied here, England was still very much an agricultural and rural economy at this time. ² The Industrial Revolution as we normally think of it was not well advanced until the second half of the eighteenth century. The slight decrease that we are noticing in the rate of literacy after 1748 may actually be just the tip of the iceberg. We may be observing just the beginnings of the impact of an increase in

industrialization on literacy, especially in the towns in these regions where industry was just being established and among those individuals employed in the new technologies.

The most perplexing finding of this study, however, and one, unfortunately, that we are not able to study over time using these data, is the impact of increasing age on literacy and the question it raises about the reliability of the use of signatures as a measure of literacy. As noted in Chapter V, this is a phenomenon that cuts through most occupational and regional boundaries. The dramatic increase in the rate of literacy between the ages of 20 and 21 thus cannot be explained simply in terms of the impact of urbanization on literacy or the impact of being a member of a certain occupational Whereas this phenomenon may be related to demographic changes such as the migration of mature illiterates to cities, where they encountered the need to sign or the actual need to learn to read and write, or to the coming of age of illiterates regardless where they resided who encountered the same need or motivation, this pattern may also be related to other social, economic, or demographic occurrences that we may never fully discover. Because at this stage in our research we do not know if these signatures actually represent the ability to read and write, at this point we have to conclude that this finding about the impact of increasing age on literacy raises some doubts about the reliability of signatures as a measure of what we could consider an acceptable level of literacy skills.

Having elaborated upon the major findings of this research, we are now in a position to compare the findings of this study with those of Stone and Sanderson. Unfortunately, however, neither Stone nor

Sanderson has analyzed the period 1718-1759 in great enough detail to make a comparison particularly fruitful.

A comparison of these data with Stone's data prior to 1760 confirms Stone's finding of a higher rate of literacy in the North and a lower rate of literacy in the West and the Midlands. But what Stone does not observe is the dramatic increase in literacy in the Southwest and Midlands, in particular, over the first few decades of the eighteenth century. He does, however, mention that a spectacular increase in the rate of literacy took place in the rural areas of the West Midlands over the period 1640-1760. He also points out that towns retained a higher rate of literacy than rural areas during the entire period 1640-1760, and that between 1760 and 1800 there was a slow increase in literacy both in the towns and in the rural areas of the North. In the only major industrial city that he analyzes he finds a tremendous decrease in the rate of literacy, but this is for the period 1800-1835.

Stone also reports information about the relationship of occupation and literacy, but his findings span the period 1700-1775 during which he notices no appreciable gains among most occupational groups, thus rendering no basis for comparison with these data over time. He does, however, observe that the literacy rate among professionals for the entire period was almost 100%, thus coinciding with the findings of this study. He also finds that skilled workers, artisans and tradesmen, had a higher rate of literacy than laborers or agricultural workers.

The findings of this study for the direction of literacy trends in the period 1718-1759 closely parallel those found by Sanderson in

his study of Lancashire evidence. The data reveal, as do Sanderson's, an increase in literacy in the period 1710-1730. Although Sanderson bases his findings on a study of the incidence of the founding and funding of schools, whereas this study is based on a quantitative analysis of signatures on indenture contracts, the findings coincide. This study thus confirms Sanderson's suggestion that the charity school movement may have had some positive effect on the rate of literacy outside of London in this period. However, where he notices a decline in literacy in the 1740s and an increase in the 1750s and 1760s, this study indicates that a continued increase took place in the 1740s followed by a decrease in the 1750s. Unfortunately, the major portion of Sanderson's essay deals with the period after 1760, thus making it invalid for a comparison with these data. However, the deterioration in the literacy rate observed in this study from 1748 to 1759, and the suggestion offered here that this may indicate the beginning of the impact of industrialization on literacy, may foreshadow Sanderson's finding of a decrease in literacy in the latter half of the eighteenth century, which he attributes to an increase in industrialization.

The most important contribution of this essay lies, perhaps, not in any specific conclusions it may have reached but in the kinds of questions it has raised. What we now need is to investigate and in some cases perhaps first to uncover evidence that will answer several important questions. First of all, what causes the increase in the ability to sign as one matures and what does this finding reveal about the use of signatures as a reliable measure of literacy? Since this study uses signatures as a measure of literacy, some aspects of the

findings reported here as well as in other studies cited in this paper may have to be discarded if the assumption about signatures proves false. Furthermore, is there an impact of increasing industrialization on literacy, and if so how does this impact differ from the impact of developed urban areas on literacy? Finally, in addition to the charity school movement and the possibility of an impact of urbanization on literacy, are they any other factors that contribute to the increase of literacy in the early part of the eighteenth century and its decline after 1750?

TABLE 1
LITERACY BY SEX

	Si	gn	Ma	rk	
Sex	%	No.	%	No.	Total No.
Male	69.1	2002	30.9	894	2896
Female	36.9	62	63.1	106	1 68
Total	67.4	2064	32.6	1000	3064

TABLE 2

LITERACY BY DECADE OF INDENTURE

	Si	gn	Mai	rk	
Decade	%	No.	%	No.	Total No.
1718-1728	62.0	729	38.0	446	11 75
1728-1738	74.6	1044	25.4	355	1399
1738-1748	78.3	54	21.7	1 5	69
1748-1759	69.0	171	31.0	7 7	248
Total	69.1	1 998	30.9	893	2891

TABLE 3
LITERACY BY OCCUPATION

	Si	gn	Maa	rk	
Occupation	%	No.	%	No.	Total No.
Agriculture	56.3	1 39	43.7	108	247
Unskilled	67.9	239	32.1	113	352
Skilled	78.8	754	21.2	203	957
Professional	96.7	238	3.3	8	246
Total	76.0	1370	24.0	432	1802

TABLE 4
LITERACY BY OCCUPATION BY DECADE OF INDENTURE

							Ŏ	Occupation	tion								
	Ā	gricu	Agriculture			Unskilled	11ed			Skilled	1ed		Ţ	Professional	onal		
	Sign	Į Į	Mark	놙	Sign	g	Mark	الح	Sign	и	Mark	<u>~</u>	Sign	ď	Mark	<u></u>	
Decade	<i>P</i> %	No.	<i>P6</i>	No.	1%	No.	<i>P</i> 6	No.	R	No.	<i>K</i>	No.	pe	No.	<i>1</i> %	No.	Total No.
1718-1728 45.9 28 54.1 33 61.9 65 38.1	45.9	28	54.1	33	61.9	65		047	40 73.4 240 26.6 87 94.3 50	240	9,92	87	94.3	50	5.7	\sim	945
1728-1738 57.2 83 42.8	57.2	83	42.8		62 71.6 144	144	28.4	57	81.9 447	244	18.1	66	99 97.5 153	153	2,5	7	1049
1738-1748 ^a 75.0 6 25.0 2	75.0	9	25.0	N	2.99	10	33.3	\mathcal{L}	7.48	27	27 15.6		5 100.0	6	0.0	0	179
1748-1759		22	66.7 22 33.3 11	11	64.5	20	35.5	11	78.0	39	22.0	11	0.96	772	0.4	₩	139
Total	56.3	139	56.3 139 43.7 108	108	67.9 239	239	32.1 113	113	78.9 753	753	21.1 202	202	96.7 236	236	3.3	ω	1798

 $^{
m a}$ Data for 1738-1748 are not significant at the 0.05 level.

TABLE 5

LITERACY BY URBAN/RURAL RESIDENCY
(Showing London, All Other Cities, and Rural Areas)

	Si	gn	Man	ck	
Residency	%	No.	%	No.	Total No.
London	76.7	744	23.3	226	970
All other cities	67.3	1 36	32.7	66	202
Rural	65.1	1122	34.9	602	1724
Total	69.1	2002	30.9	894	2896

TABLE 6
LITERACY BY OCCUPATION BY URBAN/RURAL RESIDENCY

TABLE 7
LITERACY BY REGION

	Si	.gn	Ma	rk	
Region	%	No.	%	No.	Total No.
Scotland	83.7	108	16.3	21	129
Middlesex and home counties	73.2	1 025	26.8	375	1400
North	71.2	230	28.8	93	323
Ireland	70.5	43	29.5	18	61
South	69.9	86	30.1	37	123
Southwest	64.4	179	35.6	99	278
Wales	61.5	40	38.5	25	65
Severn Valley	59.3	54	40.7	37	91
Midlands	56.2	1 <i>5</i> 0	43.8	117	267
East Anglia	53.3	65	46.7	57	122
Total	69.3	1980	30.7	879	28.59

(continued)

LITERACY BY REGION BY DECADE OF INDENTURE TABLE 8

Sign Mark Mark <th< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>Deca</th><th>de of</th><th>Decade of indenture</th><th>ture</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></th<>								Deca	de of	Decade of indenture	ture							
no Mark Sign Mos	, ,		1718-	1728			1728-	1738			1738-:	1748 ^a		•	1748-	1759 ^a		
No. % % No. % No. % No. %		Sig	T.	Mar	눆	Sig	Ħ	Marl	אַ	Sig	ď	Mark		Sigr	r.	Mark	l u	
36 20.0 9 84.1 53 15.9 10 100.0 2 0.0 0 89.5 17 10.5 2 129 374 32.4 179 78.8 567 21.3 153 78.1 25 21.9 7 60.4 55 39.6 36 1396 86 32.8 42 71.2 111 28.8 45 81.8 9 18.2 2 85.7 24 14.3 4 323 13 31.6 6 67.9 19 32.1 9 100.0 2 0.0 0 75.0 9 25.0 3 61 29 40.8 20 79.7 47 20.3 12 66.7 2 33.3 1 66.7 8 33.3 4 123 71 43.7 55 74.1 83 25.9 79.0 7 30.0 3 62.1 18 37.9 11	1	1%	No.	<i>P</i> 6	No.	%	No.	8%	No.	1%	No.	1%	No.	%	No.	1%	No.	Total No.
374 32.4 179 78.8 567 21.3 78.1 25 21.9 7 60.4 55 39.6 36 1396 86 32.8 42 71.2 111 28.8 45 81.8 9 18.2 2 85.7 24 14.3 4 323 13 31.6 6 67.9 19 32.1 9 100.0 2 0.0 0 75.0 9 25.0 3 61 29 40.8 20 79.7 47 20.3 12 66.7 2 33.3 1 66.7 8 33.3 4 123 71 43.7 55 74.1 83 25.9 70.0 7 30.0 3 62.1 18 37.9 11 277		80.0	36	20.0	0	84,1	53	15.9		100.0	8	0.0		89.5	17	10.5	8	129
86 32.8 42 71.2 111 28.8 45 81.8 9 18.2 2 85.7 24 14.3 4 323 13 31.6 6 67.9 19 32.1 9 100.0 2 0.0 0 75.0 9 25.0 3 61 29 40.8 20 79.7 47 20.3 12 66.7 2 33.3 1 66.7 8 33.3 4 123 71 43.7 55 74.1 83 25.9 70.0 7 30.0 3 62.1 18 37.9 11 277		9.49	374	32.4	179	78.8	567	21.3	153	78.1	25	21.9	~	4.09		39.6	36	1396
13 31.6 6 67.9 19 32.1 9 100.0 2 0.0 0 75.0 9 25.0 3 61 29 40.8 20 79.7 47 20.3 12 66.7 2 33.3 1 66.7 8 33.3 4 123 71 43.7 55 74.1 83 25.9 29 70.0 7 30.0 3 62.1 18 37.9 11 277		67.2	98	32.8			111	28.8	45	81.8	6	18,2	8	85.7	77	14.3	7	323
29 40.8 20 79.7 47 20.3 12 66.7 2 33.3 1 66.7 8 33.3 4 123 71 43.7 55 74.1 83 25.9 29 70.0 7 30.0 3 62.1 18 37.9 11 277		4.89	13	31.6			19	32.1	6	100.0	8	0.0	0	75.0	0	25.0	ω	61
71 43.7 55 74.1 83 25.9 29 70.0 7 30.0 3 62.1 18 37.9 11 277		59.5	53			79.7	47	20.3	12	66.7	~	33.3	-	66.7	∞	33.3	7	
		56.3		43.7		74.1	83	25.9	53	70.0	2	30.0	\sim	62.1	18	37.9	11	

(Table 8 continued)

LITERACY BY REGION BY DECADE OF INDENTURE

							Deca	le of	Decade of indenture	ure							
		1718-1728	1728			1728-1738	1738			1738-1	1738-1748 ^a			1748-	1748-1759ª		
	Sign	ц	Mark	눆	Sign	g.	Mark	بح	Sign	7	Mark	يد ا	Sign		Mark	بح	
Region	K	No.	P6	No.	R	No.	18	No.	Ъ%	No.	<i>1</i> %	No.	<i>₽</i> %	No.	<i>₽</i> %	No.	Total No.
Wales	53.8	14	53.8 14 46.2 12 63.6	12	63.6	21	36.4 12	12	0.0	0	0.0	0	0. 83.3	7	16.7	√	65
Severn Valley	58.3		21 41.7 15 60.5	15	60.5	56	39.5	17	0.0	0	0 100.0	ᆏ	63.6	2	36.4	7	91
Midlands	39.5	647	39.5 49 60.5 75	25	67.3	92	32.7	37	83.3	2	16.7	↔	83.3	20	16.7	1	267
East Anglia 51.7 30 48.3 28	51.7	30	48.3	28	54.2	35	45.8	27 :	100.0	←	0.0	0 .	50.0	23	50.0	8	122
Total	62.1	723	62.1 723 37.9 441	441	74.7	1035	25.3 351	351	77.9	53	22.1	15	69.9 165	165	30.1	71	2854

^aData for this decade are not significant at the 0.05 level.

TABLE 9

LITERACY BY OCCUPATION BY REGION

			No.		-	10		65	
			Total No.	81	874	215	017	96	173
		쳐	No.	0	70	₩.	₩	₩	0
	ional	Mark	<i>P</i> 6	0.0	0.4	3.1	11.1	14.3	0.0
	Professional	и	No.	23	120	31	ω	9	18
	꿉	Sign	<i>P</i> %	4 100.0	0.96	6.96	88.9	85.7	17 100.0
		৸	No.	7	104	13	7	2	17 1
	led	Mark	<i>P</i> %	29 12.1	20.1	13.8	20.0	21.2	19.8
	Skilled	덛	No.	29	413	81	16	56	69
tion		Sign	PC	87.9	79.9 413 20.1	86.2	80.0	78.8	80.2
Occupation		.بر	No.	↤	51	13	\sim	9	17
Ō	lled	Mark	<i>P</i> 6	10.0	29.7	29.5	42.9	23.1	44.7
	Unskilled	ď	No.	6	121	31	7	20	21
		Sign	<i>P</i> 6	3 90.0	70.3	70.5	57.1	76.9	55.3
		.54	No.	3	22	17	₩	ω	15
	Lture	Mark	PC	80.0 12 20.0	38 36.7	37.8	3 25.0	30.0	51.6 16 48.4 15 55.3
	Agriculture	l.	No.	12	38	28	\sim	~	16
	AÉ	Sign	%	80.0	63.3	62.2	75.0	70.0	51.6
			Region	Scotlanda	Middlesex and home counties	North	Irelanda	South	Southwest

(continued)

(Table 9 continued)

LITERACY BY OCCUPATION BY REGION

			_					6
			Total No.	7/1	55	157	89	1783
			No.	0	0	0	0	8
	onal	Mark	%	0.0	0.0	0.0	0.0	3.3
	Professional	d:	No.	7	\sim	14	6	236
	Pro	Sign	1%	3 100.0	7 100.0	26 100.0	16 100.0	96.7 236
		<u>~</u>	No.	3.1	7 1	26 1	16 1	
	pə-	Mark	1%	14 17.6	24.1	34.2	39.0	21.2 201
	Skilled	ď	No.	14	22	50	25	745
cion		Sign	<i>P</i> %	82.4	4 75.9	65.8	61.0	32,3 113 78,8 745
Occupation			No.	↤	7	16	₹∺	113
0	 ed	Mark	%	11.1	50.0	51.6	20,0	32.3
	Unskilled	u	No.	ω	7	15	7	237
	Un	Sign	%	88.9	10 50.0	th. 8th	80.0	67.7
		.ي.	No.	9	10	20	ω	105
	lture	Mark	1%	8 42.9 6 88.9	5 66.7	16 55.6	5 61.5	56.8 138 43.2 105 67.7
	Agriculture	ជ	No.	ω			2	138
	A	Sign	<i>1</i> %	57.1	33.3	77.777	38.5	56.8
			Region	Wales ^a	Severn Valley	Midlands	East Anglia 38.5	Total

aData for this region are not significant at the 0.05 level.

TABLE 10
LITERACY BY AGE

	Si	.gn	Ma	rk	
Age	%	No.	%	No.	Total No.
≤16	55.9	292	44.1	230	522
17	60.3	144	39.7	95	239
18	66.2	241	33.8	1 23	364
1 9	64.4	275	35.6	1 52	427
20	68.4	308	31.6	142	450
21	83.2	149	16.8	30	179
22	86.5	1 09	13.5	17	126
23	80.9	76	19.1	1 8	94
24	85.5	65	1 4.5	11	76
≥25	81.9	343	18.1	76	419
Total	69.1	2002	30.9	894	2896

68

TABLE 11
LITERACY BY AGE BY DECADE OF INDENTURE

			. I						00	1
			Total No.	522	239	363	427	674	179	126
			No.	647	9	∞	\sim	10	0	0
	1748-1759 ^a	Mark	<i>P</i> 6	31.4	45.9	0.04	16.7	35.7	0.0	0.0
	1748-	ı.	No.	107	ω	12	15	18	⊣	0
	, ,	Sign	1%	9.89	57.1	0.09	83.3	64.3	100.0	0.0
			No.	8	9	7	↤	0	0	0
	1738-1748ª	Mark	160	50.0	0.09	25.0	16.7	0.0	0.0	0.0
ture	1738–1	J	No.	8	7	12	7	0	\sim	0
Decade of indenture	•	Sign	<i>P6</i>	50.0	40.0	75.0	83.3	58 100.0	23 100.0	0.0
le of			No.	53	33	111	58	58 1	23 1	16
Decad	1738	Mark	<i>P6</i>	38.4	37.5	33.1	29.3	31.2	18.1	15.0
	De 1728-1738	d	No.	85	55	8	140	128	104	91
		Sign	<i>K</i>	61.6	62.5	6.99	70.7	8.89	81.9	85.0
		~	No.	126	50	29	8	72	~	+
	1728	Mark	<i>P6</i>	43.8 98 56.3 126 61.6	39.4 50	34.5	43.9	32.7	14.6	94.7 18 5.3
	1718-1728	g.	No.	98	77	127	115	152	141	18
		Sign	<i>P</i> 6	43.8	60.6 77	65.5 127	56.1	67.3 152	85.4	94.7
			Age	5 16	17	18	19	50	21	22

(continued)

(Table 11 continued)

LITERACY BY AGE BY DECADE OF INDENTURE

		1718-1728	1728			De 1728-1738	Deca 1738	Decade of indenture 738 1738	יי	ture 1738-:	1738-1748 ^a			1748-	1748-1759 ^a		
	Sign	Ħ	Mark	ير ا	Sign	и	Mark		Sign	٦.	Mark	۲۲	Sign	я	Mark	14	
Age	<i>P</i> 6	No. %	86	No.	166	No.	p6	No.	<i>P6</i>	No.	100	No.	166	No.	<i>P6</i>	No.	Total No.
23	9,48	22	84.6 22 15.4 4 78.5	7	78.5	51	51 21.5 14 100.0	14	0.001	8	0.0		0 100.0	₩	0.0	0	16
77	83.3 10	10	16.7	8	84.5	647	15.5	0	9 100.0	\sim	0.0		0 100.0	2	0.0	0	75
2 25	73.4	73.4 69	26.6 25	25	84.3	252	15.7	47	15.7 47 87.5 14	14	12.5		2 87.5	~	12.5	ᆏ	417
Total	62.0	729	62.0 729 38.0 446	1476	9,47	1044	25.4 355		78.3	25	21.7 15	15	0.69	171	69.0 171 31.0 77	77	2891

aData for this decade are not significant at the 0.05 level.

TABLE 12

LITERACY BY AGE BY OCCUPATION

ļ			<u>.</u> 1						70		1.
			rotal No.	121	62	142	727	343	164	124	
		ل ا	No.	₩	न्न	0	\sim	₩	Ħ	0	
	Professional ^a	Mark	₽%	8.4	10.0	0.0	7.6	3.0	% *	0.0	
	fessi		No.	20	6	77	53	32	20	25	
	Pro	Sign	<i>P</i> %	95.2	0.06	100.0	9.06	0.79	15 95.2	9 100.0	
		بد. ا	No.	9	11	23 1	37	47	15	9	
	led	Mark	%	13.6	36.7	34.3	25.7	24.1	16.1	14.1	
	Skilled	c	No.	38	19	#	107	148	78	55	
tion		Sign	1%	13 86.4	63.3	65.7	74.3	75.9	83.9	85.9	
Occupation		يد	No.		7	∞	30	27	7	7	
ŏ	lled	Mark	<i>P6</i>	39.4	33.3	26.7	44.1	39.1	14.8	18.2	
	Unskilled	ď	No.	20	œ	22	38	745	23	18	
		Sign	Ъ%	9.09	66.7	73.3	55.9	6.09	85.2	81.8	
		ᅜ	No.	11	2	10	16	30	.6	7	
	lture	Mark	1%	52,2 12 47,8 11	20.0	47.6	53.3	65.2	39.1	30.8	
	Agriculture	g	No.	12	∞	11	17	16	14	9	
	A _Ł	Sign	<i>P</i> %	52.2	80.0	52.4	1.94	34.8	6.09	69.5	
			Age	≤ 16	17	18	19	20	21	22	

(continued)

LITERACY BY AGE BY OCCUPATION

(Table 12 continued)

Total No. 73 804 1802 91 No. ∞ Mark Professional^a 0.0 2.0 3,3 Ы 15 <u>\$</u> 16 238 Sign 7 100.0 98.0 10 100.0 2.96 Ы 8 203 . હ Mark19.2 17.1 16.7 21.2 Ы Skilled 34 189 77 754 No. Sign 83.3 82.9 78.8 80.8 Occupation 19 03 16 113 5 No. Mark25.0 22.9 38.5 32.1 Unskilled 98 9 太 ω 239 No. Sign 75.0 Ы 73 108 \sim Ñ. Mark 22,2 30.0 33.9 43.7 Agriculture 16 14 139 ^ No. Sign 77.8 70.0 66.1 56.3 Ы Total Age225 23 72

 $^{
m a}$ Data for this occupational group are not significant at the 0.05 level.

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TABLE 13 LITERACY BY AGE BY REGION

	1							1	/2
	б	g	No.	9	5	~	9	10	2
	Treland	Sign	%	50.0	100.0	87.5	54.5	83.3	2.99
	ಣ	-	No.	19	۷	17	16	20	ς,
	Scotland	Sign	<i>%</i>	79.2	77.8	77.3	88.9	80.0	75.0
	™	ر	No.	7	₩.	₩.	7	6	7
	sə1sW	Sign	%	50.0	33.3	25.0	44.44	52.9	66.7
	ಹ	ď	No.	6	ω	10	12	ω	3
	East Anglia	Sign	1%	42.9	57.1	45.5	57.1	50.0	50.0
	ಣೆ ∵	ď	No.	14	\sim	14	11	17	٦,
Region	dtuo2 g∴	Sign	<i>P</i> %	60.9 14	33.3	73.7	2.49	66.7	12 100.0
Re		ч	No.	30	17	23	33	77	12
	Иотен	Sign	1%	57.7	58.6	60.5	68.8	80.0	75.0
		n T	No.	21	10	25	17	7₹	15
	spus[biM	Sign	<i>P</i> %	38.9	56.7	62.5	9.84	45.3	75.0
	<i>∵</i>	ជ	No.	6	9	<u>~</u>	~	∞	2
	Severn Valley	Sign	<i>P</i> %	52.9	54.5	58.3	50.0	53.3	11 100.0
		E.	No.	56	16	25	33	27	11
	genthwest	Sign	1%	51.0	47.1	65.8	0.99	71.1	91.7
	səijnnoə əшоц	T.	No.	146	71	109	133	143	89
	Middlesex and	Sign	1%	59.8 146	65.1	69.9 109	66.2	73.0 143	87.3
			Age	≤ 16	17	18	19	50	21

(continued)

(Table 13 continued)

LITERACY BY AGE BY REGION

									Re	Region									
	Middlesex and home counties		1səmu1nog	Severn Valley	ಣ	Midlands		Мохth		d Yanog	ಡ	silgnA tas¤ q		wales p	,	brattoo'S a	ď	bnsleri 9	ಹ
	Sign	മ	Sign	Sign	и	Sign	ا ہے ا	Sign	ជ	Sign	ť,	Sign	ď	Sign	g l	Sign	и	Sign	u;
Age	% No.	Ъ6	No.	БС	No.	%	No.	<i>p</i> %	No.	<i>P</i> 6	No.	%	No.	<i>P</i> %	No.	<i>1</i> %	No.	160	No.
22	88.1 59	6.88 6	8	50.0	₩.	88.9	ω	92.9	13	92.9 13 66.7 4	4	71.4 5	N		3.1	75.0 3 100.0 7	~	0.0	0
23	87.3 48	3 75.0	9 0	2.99	7	25.0	√ -1	0.06	6	9 100.0	9	2.99	03	100.0	4	100.0	7	0.0	0
772	86.7 39	9 100.0	9 0	100.0	↔	71.4	7	66.7	4	50.0	↤	1 100.0	-	1 100.0	4	100.0		4 100.0	8
2 25	83.6 188	3 65.7	7 23	72.7	ω	80.0	77	81,0	47	7,46	17	63.6	~	7 100.0	12	91.7	11	83.3	7
Total	73.2.1025 64.4 179	5 64.	4 179	59.3	75	56.2 150	.50	71.2 230	230	6.69	98	53.3	65	53.3 65 61.5 40	047	83.7 108	108	70.5	43

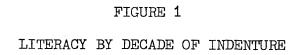
^aData for this region are not significant at the 0.05 level.

TABLE 14
LITERACY BY AGE IN LONDON

					
	Si _{	gn	Ma:	rk	
Age	%	No.	%	No.	Total No.
≤1 6	64.2	102	35.8	57	1 59
17	63.5	47	36.5	27	74
18	69.1	76	30.9	34	110
19	73.3	96	26.7	35	131
20	78.5	102	21.5	28	1 30
21	91.9	68	8.1	6	74
22	89.3	50	10.7	6	56
23	88.6	39	11.4	5	44
24	90.6	29	9.4	3	32
≥25	84.4	135	15.6	25	160
Total	76.7	744	23.3	226	970

TABLE 15
LITERACY BY AGE BY URBAN/RURAL RESIDENCY

				Resid	dency				
		Ur	ban			Ru	ral		
	Si	gn	Ma	rk	Si	g n	Ma	rk	
Age	%	No.	%	No.	%	No.	%	No.	Total No.
≤16	62.6	117	37.4	70	52.2	1 75	47.8	1 60	522
17	64.2	61	35.8	34	57.6	83	42.4	61	239
18	68.9	93	31.1	42	64.6	148	35.4	81	364
1 9	71.9	123	28.1	48	59.4	152	40.6	104	427
20	76.6	128	23.4	39	63.6	180	36.4	103	450
21	89.2	74	10.8	9	78.1	75	21.9	21	179
22	88.9	56	11.1	7	84.1	53	15.9	10	126
23	86.8	46	13.2	7	73.2	30	26.8	11	94
24	89.2	33	10.8	4	82.1	32	17.9	7	76
≥25	82.3	149	17.7	32	81.5	194	18.5	44	419
Total	75.1	880	24.9	292	65.1	1122	34.9	602	2896



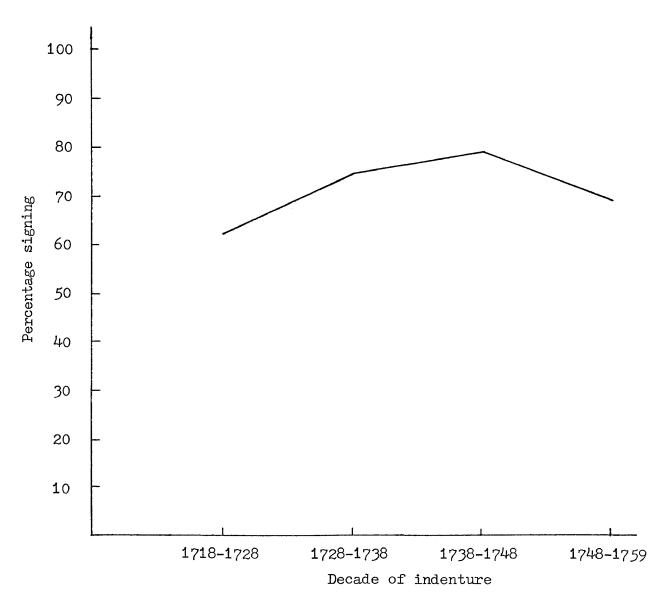
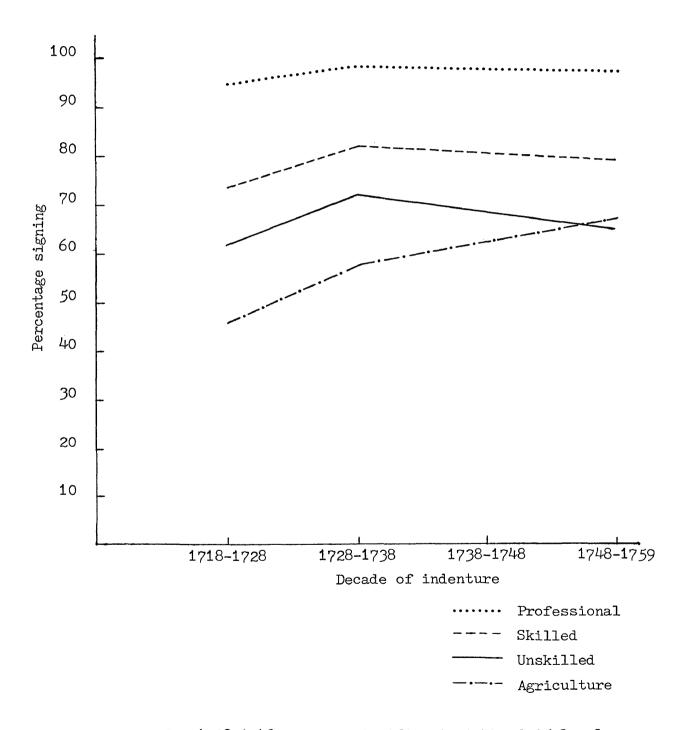


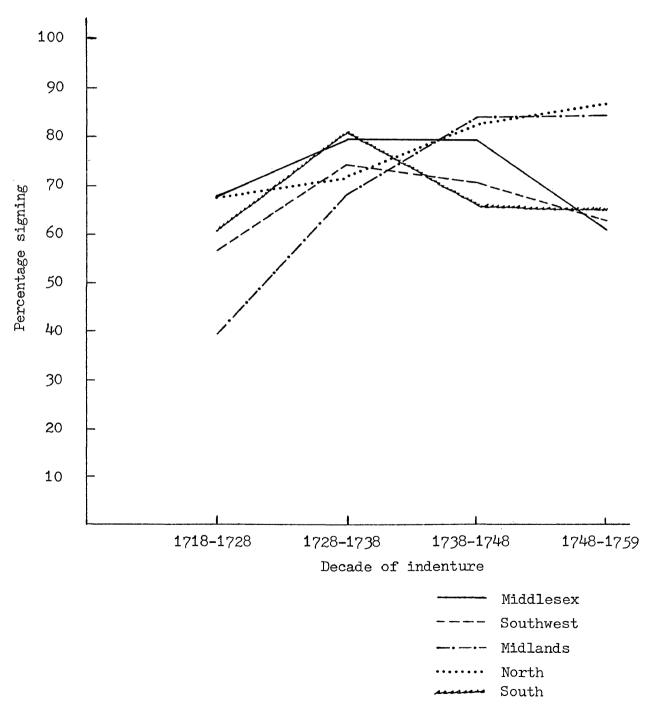
FIGURE 2
LITERACY BY OCCUPATION BY DECADE OF INDENTURE



Note: Data for 1738-1748 are not significant at the 0.05 level.

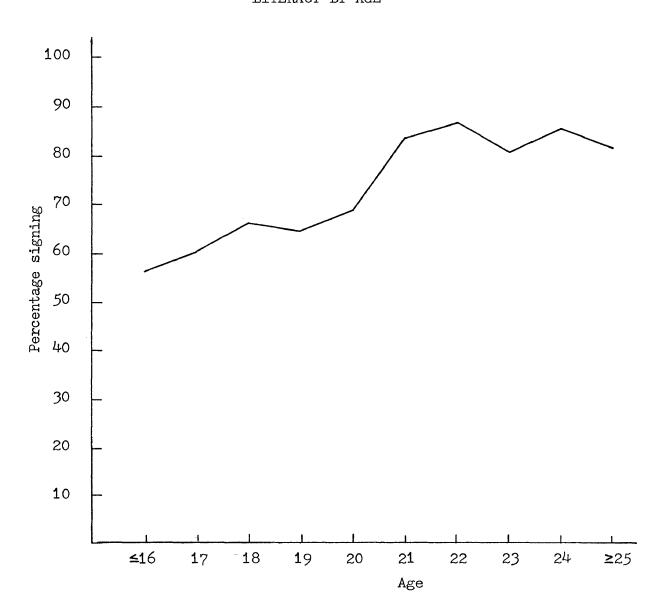
FIGURE 3

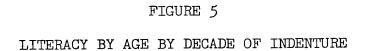
LITERACY BY REGION BY DECADE OF INDENTURE

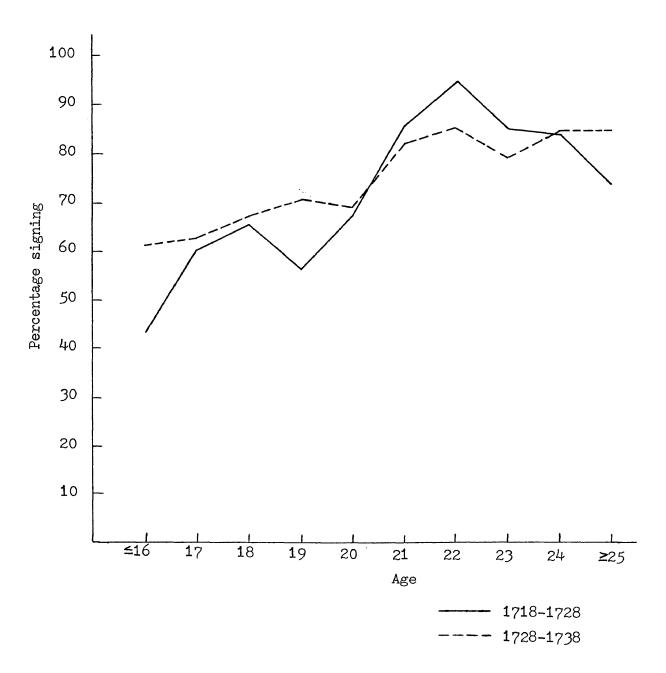


Note: Data for 1738-1759 are not significant at the 0.05 level.

FIGURE 4 LITERACY BY AGE







Note: Data for 1738-1759 are not significant at the 0.05 level.

Agriculture

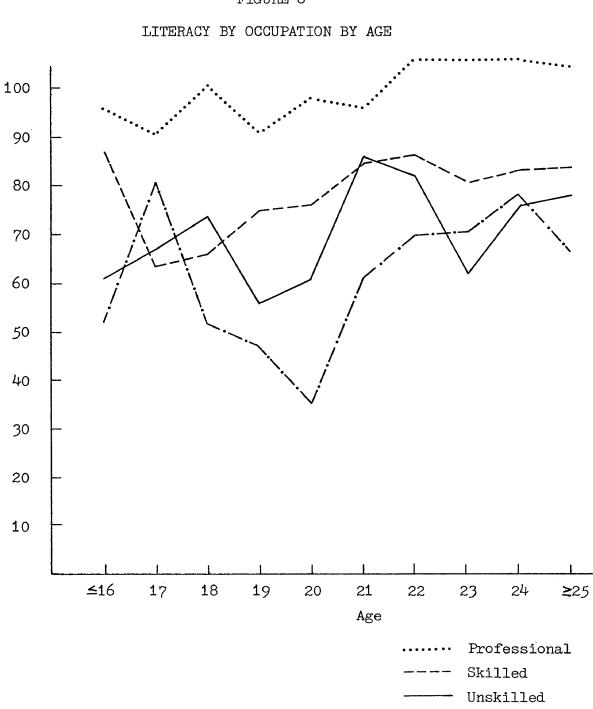


FIGURE 6

Note: Data for professional are not significant at the 0.05 level.

FIGURE 7
LITERACY BY AGE BY REGION

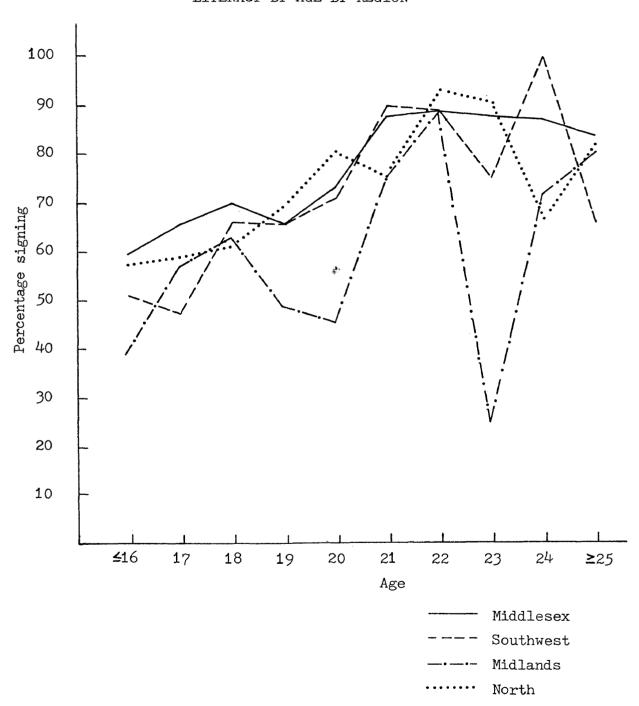
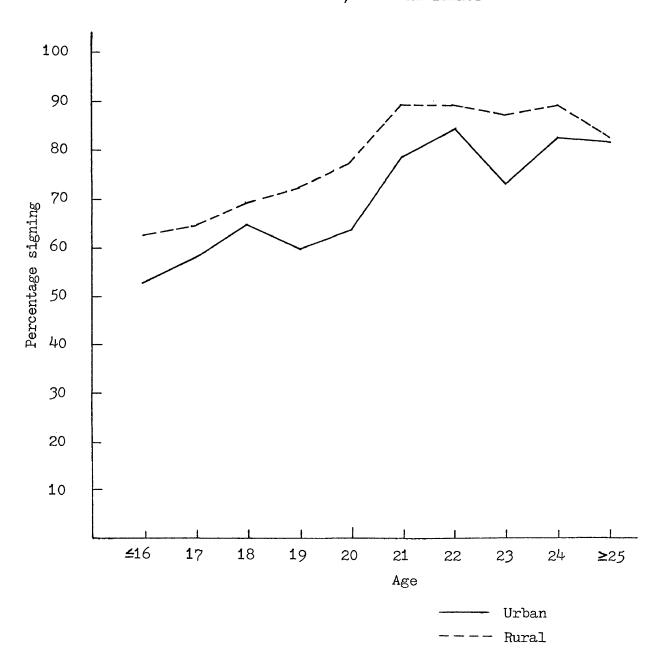


FIGURE 8
LITERACY BY AGE BY URBAN/RURAL RESIDENCY



APPENDIX A

LIST OF OCCUPATIONS IN SKILL-SPECIFIC GROUPS

Agriculture

Husbandman

Farmer

Plowboy/Plowman

Farowster

Unskilled

Laborer

Servant

Tapster

Chimney sweeper

Carter

Waggoner

Postillian

Woolcomber

Fisherman

Curryer

Valet de chambre

Butler

Footman

Coachman

Hostler

Gardener

Kitchen gardenér

Skilled/Semiskilled

Weavers(silk, wool, linen)

Twine spinner

Cloth worker

Felt maker

Packthread spinner

Throwster

Rope maker

Line maker

Hemp dresser

Callico printer

Calendar

Dyer

Saddler

Tanner

Collar maker

Leather dresser

Coach harness maker

(APPENDIX A continued)

(Skilled/Semiskilled, continued)

Taylor Hatter

Britches maker
Shoemaker
Cordwainer
Glover
Stay maker
Buckle maker
Stocking maker

Framework knitter Button maker

Button maker Skinner

Watch chain maker

Clogg maker Patten maker Girdler

Carpenter Joyner Coach maker Sawyer

Sawyer
Wheelwright
Cooper
Chair maker
Cabinet maker
Shipwright
Carver
Box maker
Gilder

Scale beam maker

Slooper Mason

Turner

Stone mason Plaisterer Pavior Painter Smith Blacksmith

Cutler
Farrier
Wire worker
Gunsmith

Silversmith Sword cutter Coppersmith Watch maker Ore maker Needle maker Brazier

Fork maker

Watch case maker

Plumber Engraver Locksmith Nail maker Baker Distiller

Sugar baker Malster Pastry cook Sailor/mariner

Toy maker
Brush maker
Pipe maker
Class polisher
Glass grinder
Dancing master
Upholsterer
Cork cutter
Whip maker
Broom maker
Soap boiler

Diamond cutter Potter Hot presser Starch maker

Drawer

Block maker Ivory turner Water gilder Basket maker Comb maker

Looking glass maker

Golf beater Jeweler

Tin plate worker

Pin maker

(APPENDIX A continued)

Professional

Barber and peruke maker

Butcher

Apothecary

Vinter

Grocer

Ironmonger

Haberdasher

Barber surgeon

Tobacconist

Chandler

Mercer

Victualer

Bookkeeper

Surgeon

Writer

School master

Scholar

Clerk

Musician

Gentleman

Writing master

Printer

Accountant

Doctor

APPENDIX B

LIST OF ALL OTHER CITIES

Birmingham
Worcester
Bristol
Hull
Newcastle upon Tyne
Canterbury
Manchester
Chester
Liverpool
Norwich
Nottingham
Leeds
Cambridge
Oxford
Edinborough

APPENDIX C

LIST OF COUNTIES IN REGIONS

Middlesex and Home Counties

Middlesex

Kent

Essex

Buckingham

Hertford

Surry

Bedford

Southwest

Somerset

Gloucester

Wilts

Devon

Dorset

Cornwall

Severn Valley

Hereford

Shropshire

Worcester

Midlands

Oxford

Stafford

Warwick

Leicester

Northampton

Cambridge

Derby

Huntington

Rutland

North

__Chester

York

Lancaster

Lincoln

Northumberland

Cumberland

Westmoreland

Durham

(APPENDIX C continued)

South

Berks

Hampshire (and Isle of Wight

Sussex

East Anglia

Norfolk

Suffolk

NOTES

CHAPTER I

- 1. Peter Laslett, The World We Have Lost (New York, 1965), p. 195.
- 2. Jack Goody and Ian Watt, "The Consequences of Literacy," in Jack Goody, ed., <u>Literacy in Traditional Societies</u> (Cambridge, 1968), p. 67.
 - 3. Ibid., pp. 67-68.
- Perhaps the most outstanding example of the impact of literacy on society that comes to mind immediately is that brought about by the Protestant Reformation of the 16th century with its emphasis on mass education. Prior to the Reformation only the religious elite and others who could read Latin or Greek had direct access to the "proof texts" of the Christian religion, the Scriptures. Religious reformers, however, encouraged each person to read and interpret the Scriptures on an individual basis. This movement, along with the almost simultaneous invention and widespread use of the printing press, did much to transform Europe from an "image-culture" to a "word-culture." See Lawrence Stone, "Literacy and Education in England, 1640-1900," Past and Present, XLII (1969), pp. 77-78. Economic historians have also pointed out that "a map of vernacular versions of the Bible resembles a map of early modern centers of trade." C. Arnold Anderson and Mary Jean Bowman, "Education and Economic Modernization in Historical Perspective," in Lawrence Stone, ed., Schooling and Society: Studies in the History of Education (Baltimore, 1976), p. 6.

- 5. Among those scholars who have studied literacy in 18th-century England are Lawrence Stone, "Literacy and Education in England, 1640-1900," Past and Present, XLII (1969), 69-139; Roger Schofield, "Dimensions of Illiteracy, 1750-1850," Explorations in Economic History, X (1973), 437-454; and Michael Sanderson, "Literacy and Social Mobility in the Industrial Revolution in England," Past and Present, LVI (1972), 75-104. Whereas Stone argues that the growth of literacy in England slowed during the period 1680-1780, Sanderson argues that an increase in literacy took place in the early 18th century followed by a decline in the period 1780-1820. The studies of Stone and Sanderson are summarized in Chapter III of this essay.
 - 6. Stone, "Literacy and Education in England," pp. 84-88, 137-138.
- 7. See Anderson and Bowman, "Education and Economic Modernization," p. 3.
- 8. <u>Thid.</u>, pp. 3-19. Carlo M. Cippola, <u>Literacy and Development in the West</u> (Baltimore, 1966) is also among those historians who believe that literacy contributed to the emergence of a modern economy in Europe. On the basis of an analysis of the world's countries in the 1950s, Bowman and Anderson have concluded that a literacy rate of approximately 40% is a prerequisite for a country to sustain economic growth. See Mary Jean Bowman and C. Arnold Anderson, "Concerning the Role of Education in Development," in Clifford Geertz, ed., <u>Old Societies and New States: The Quest for Modernity in Asia and Africa</u> (New York, 1963), pp. 247-279. The relationship between literacy and industrialization will be developed further in Chapter V of this essay.
 - 9. For a discussion of the concept of the "modern man," see

Alex Inkeles, "Making Men Modern: On the Causes and Consequences of Individual Change in Six Developing Countries," <u>American Journal of Sociology</u>, LXXV (1969), 208-225; Alex Inkeles and David H. Smith, Becoming Modern (Cambridge, Mass., 1964), passim.

- 10. Harvey J. Graff, The Literacy Myth: Literacy and Social Structure in the Nineteenth-Century City (New York, 1979), p. 8.
- 11. There is no intention here of implying that illiterates had no access to the written record outside of what they heard about it from their "literate betters." All that was needed to bridge the gap between illiterates and literates in a community was for one individual to learn how to read and then to read aloud to his or her friends. Some examples of such "public reading" date from the time of the Reformation. See Roger Schofield, "The Measurement of Literacy in Pre-Industrial England," in Jack Goody, ed., Literacy in Traditional Societies (Cambridge, 1968), pp. 312-313, 313 n. 1. Illiterates also had access to information via the itinerant ballad singers, streetcorner actors, and orators. Occasionally men would travel many miles to listen to a particular orator. See E.P. Thompson, The Making of the English Working Class (New York, 1963), pp. 712-713. The point being made here, however, is that literates had a more direct way of obtaining information than illiterates, and thus they had a better basis for evaluating events and ideas that had been committed to writing.

CHAPTER II

1. See, for example, Roy McKeen Wiles, "The Relish for Reading in Provincial England Two Centuries Ago," in Paul J. Korshin, ed.,
The Widening Circle: Essays on the Circulation of Literature in

Eighteenth-Century Europe (Philadelphia, 1976), pp. 85-115; Richard D. Altick, The English Common Reader: A Social History of the Mass Reading Public, 1800-1900 (Chicago, 1957), esp. pp. 33-66 on the 18th century; and Peter Clark, "The Ownership of Books in England, 1560-1640: The Example of Some Kentish Townfolk," in Lawrence Stone, ed., Schooling and Society: Studies in the History of Education (Baltimore, 1976), pp. 95-111.

- 2. Wiles, "The Relish for Reading in Provincial England," p. 88.
- 3. Roger Schofield, "The Measurement of Literacy in Pre-Industrial England," in Jack Goody, ed., <u>Literacy in Traditional Societies</u> (Cambridge, 1968), p. 314. Much of the discussion that follows on the measurement of literacy bears on Schofield's outline of the subject, ibid.
- 4. See, for example, Altick, The English Common Reader; M.G. Jones, The Charity School Movement in the Eighteenth Century: A Study of Eighteenth Century Puritanism in Action (Cambridge, 1938); and Robert K. Webb, The British Working Class Reader (London, 1955).
 - 5. Schofield, "Measurement of Literacy," pp. 318-319.
- 6. Among historians of both European and American civilization who have used signatures to study literacy are Carlo M. Cippola, David Cressy, Kenneth Lockridge, Michael Sanderson, Roger Schofield, and Lawrence Stone. See Cippola, <u>Literacy and Development in the West</u> (Baltimore, 1966); Cressy, "Levels of Literacy in England, 1530-1739," The Historical Journal, XX (1977), 1-23; Lockridge, <u>Literacy in Colonial New England</u>: <u>An Inquiry into the Social Context of Literacy in the Early Modern West</u> (New York, 1974); Sanderson, "Literacy and Social Mobility in the Industrial Revolution in England," <u>Past and Present</u>, LVI (1972), 75-105; Schofield, "Dimensions of Illiteracy, 1750-1850," <u>Explorations in</u>

Economic History, X (1973), 437-454; Stone, "Literacy and Education in England, 1649-1900," Past and Present, XLII (1969), 69-139.

- 7. Schofield, "Measurement of Literacy," p. 317
- 8. Lockridge, Literacy in Colonial New England, p. 7.
- 9. Ibid., p. 7.
- 10. Schofield, "Dimensions of Illiteracy," p. 440.
- 11. See David Cressy, "Literacy in Pre-Industrial England,"

 Societas, IV (1974), 229-240, for a description of some of the sources for studying literacy in England.

CHAPTER III

1. Lawrence Stone, "Literacy and Education in England, 1640-1900," Past and Present, XLII (1969), 69-139; Michael Sanderson, "Literacy and Social Mobility in the Industrial Revolution in England," ibid., LVI (1972), 75-102. These articles were selected for review because they present contrasting views of literacy in 18th-century England and because they include some remarks about the period 1718-1759. Although these articles do not deal with the period 1718-1759 in detail, and thus do not permit us to make specific comparisons on a variable-byvariable basis, these discussions do provide a starting point for this analysis of literacy and may offer some bases for comparison. In the Conclusion to this essay an attempt will be made to integrate any findings of these studies that are relevant to this essay with the findings presented in Chapter V of this paper. Since all of the material discussed in the following section is summarized directly from the articles, no page numbers have been given for each specific point except where material has been directly quoted.

- 2. For a discussion of the profusion of literacy in early 19th-century England and the impact of the Radical press on the working classes, see E.P. Thompson, The Making of the English Working Class (New York, 1963), pp. 712-723.
- 3. Stone admits that evidence of literacy in England is scanty between 1642, the date of the Protestation Oath, and 1754, when Lord Hardwicke's Marriage Act was passed. See n. 16 in Chapter IV of this paper for a more detailed discussion of Lord Hardwicke's Marriage Act.
- 4. Stone, "Literacy and Education in England," p. 103. Stone does not explain his reasoning here, but I believe he may think that this area is a good indicator of general trends in England because it had the advantage of being near the major cultural and intellectual center of England, London, while also possessing the qualities of rural life. Therefore it may possibly provide an "average" literacy rate for England. Sanderson takes issues with Stone on this point. See p. 17 of this paper.
- 5. Stone mentions that separate curves were drawn for 1) unskilled laborers and servants; 2) artisans and shopkeepers; and 3) husbandmen, yeomen, and farmers for both Oxford and Gloucester; but since the curves were close they were conflated to give an overall pattern for the Midlands. However, in Gloucester in the 1630s, yeomen and husbandmen were 68% literate, whereas in Oxford the rate of this group was under 40%—a great discrepancy that remains until 1675, after which date Oxford catches up with Gloucester. Stone admits that he is unable to explain this difference in these adjacent areas at the same time, and he cannot discern which county more reliably illustrates the trend. See Stone, "Literacy and Education in England," pp. 108-109.

- 6. Joan Simon, "Was There a Charity School Movement?: The Leicestershire Evidence," in Brian Simon, ed., Education in Leicestershire, 1640-1940 (Leicester, 1968). M.G. Jones contends that there was a charity school movement in 18th-century England. See M.G. Jones, The Charity School Movement in the Eighteenth Century: A Study of Eighteenth Century Puritanism in Action (Cambridge, 1938).
- 7. Sanderson points out that Louis W. Moffitt, England on the Eve of the Industrial Revolution (London, 1925, reprinted 1963), pp. 139-140, noted the same rise in education at the same time in Cheshire.
- 8. Claude Birtwistle, "A History of the Education of Children in the Blackburn Hundred to 1870," M. Sc. thesis, University of London, 1952, cited in Sanderson, "Literacy and Social Mobility," p. 82.
- 9. Sanderson, "Literacy and Social Mobility," p. 86. Sanderson does point out, however, that his findings do not invalidate Stone's findings for literacy in the Central Midlands.
- 10. Stone's figures for Halifax, however, are calcuated from early 19th-century data and thus have not been given in the summary of Stone's discussion of literacy in the 18th century because they are not relevant to the period 1718-1759.
- 11. Schofield is studying the abundance of information on literacy available on marriage registers after 1754.

CHAPTER IV

1. These indentures contracts, preserved in the Middlesex Guildhall in London under the title, "Agreements to Serve in America," have been abstracted and published by James and Marion Kaminkow, <u>A List of Emigrants from England to America, 1718-1759</u> (Baltimore, 1966).

Because these forms are located in the Guildhall and most were witnessed by a London official, the Kaminkows assume that these indenture contracts were issued at the Guildhall. We do not know why these contracts exist only for the period 1718-1759, but the Kaminkows conjecture that they may have been kept only by one official during his lifetime. For a discussion of the kind of information that appears on the forms and for some illustrations of them, see ibid., pp. ix-xix. The analysis of literacy in this paper is based on the information from these indenture contracts as abstracted by the Kaminkows.

- 2. For a discussion of indentured servitude, see Abbott Emerson Smith, Colonists in Bondage: White Servitude and Convict Labor in America, 1607-1776 (New York, 1947), esp. pp. 16-20.
- 3. See Mildred Campbell, "Social Origins of Some Early Americans," in James Morton Smith, ed., Seventeenth-Century America: Essays in Colonial History (Chapel Hill, N.C., 1959), p. 69 n. 11.
- 4. Information about occupation for males appears on 1,082 of the contracts; information about place of residence for males appears on 1,984 of the contracts. (Because women constitute only 5.5% of the total sample, their ability to sign or mark has not been examined in relation to the other variables. See the discussion of this in Chapter V of this essay.)
- 5. Of the 3,121 contracts 2,064 bear signatures or marks for individuals claiming England, Scotland, Wales, or Ireland as a place of residence. The signatures of foreigners have been eliminated from this study.
- 6. For a discussion of independence and random sampling, see Hubert M. Blalock, Jr., Social Statistics (New York, 1960), pp. 142-145.

- 7. See David W. Galenson, "'Middling People' or 'Common Sort'?:
 The Social Origins of Some Early Americans Reexamined," <u>William and</u>
 Mary Quarterly, 3d Ser., XXXV (1978), p. 518.
- 8. Occupations listed on the 1718-1759 contracts fall into the following categories: agriculture and fishing, textiles, leather work, making of clothing and other articles of dress, woodworking, building, metal work, making of food and drink, dealing and retail trade, transportation, professional occupations, servants, and laborers. See Appendix A for a complete listing of occupations grouped according to skills.
- 9. See Campbell, "Social Origins of Some Early Americans," pp. 63-89.
- 10. See Galenson, "'Middling People' or 'Common Sort'?," pp. 499-524.
 - 11. Ibid., p. 522.
- 12. See the discussion of the data in Chapter V as well as in the Conclusion of this paper.
- 13. Lawrence Stone, "Literacy and Education in England, 1640-1900," Past and Present, XLII (1969), p. 99.
- 14. Boys in 18th-century England normally left school between the ages of 10 and 13. Ibid.
- 15. The impact of increasing age on literacy and the question it raises about the reliability of signatures as a measure of literacy is discussed in Chapter V and the Conclusion of this paper.
- 16. Lord Hardwicke's Marriage Act (26 George II, c. 33) specified that only marriages registered in Anglican parishes and signed by both the bride and bridegroom and two witnesses were valid. Only Jews,

Quakers, and members of the royal family were exempt from this law.

Lawrence Stone admits that evidence of literacy in the period 1642-1840, between the date of the Protestation Oath and the date when reliable national figures were published, is scanty and fragmentary. See Stone, "Literacy and Education in England," pp. 102-112.

- 17. For a description of statistics, see Blalock, <u>Social Statis</u>tics, pp. 3-7.
- 18. Robert William Fogel and Stanley L. Engerman, <u>Time on the</u>

 <u>Cross: The Economics of American Negro Slavery</u> (Boston, 1974), p. 9.
- 19. All of the information on these contracts was coded and subjected to computer analysis using the SPSS computer program at the Computer Center of the College of William and Mary. See Norman H. Nie et al., SPSS: Statistical Package for the Social Sciences, 2d ed. (New York, 1970) for a description of the program and instructions for its use. In almost all cases the data were significant at the 0.0001 level.

CHAPTER V

- 1. As mentioned in the discussion of the data in Chapter IV, some of the individuals for whom indenture contracts are available in this collection resided outside of Great Britain. Some of these persons came from France, Italy, Holland, Portugal, and Sweden. These foreigners have been eliminated from the statistical analysis so that the figures here speak only to literacy in Great Britain.
- 2. Roger Schofield, "Dimensions of Illiteracy, 1750-1850," Explorations in Economic History, X (1973), p. 446.

- 3. Michael Sanderson, "Literacy and Social Mobility in the Industrial Revolution in England," Past and Present, LVI (1972), p. 83.
- 4. An analysis of literacy on a year-by-year basis did not produce significant findings. The data were thus regrouped and analyzed in 5-year intervals, but this also failed to produce significant findings. Only when the data were studied in 10-year intervals were any significant results noted. At best, what we are observing here are extremely general trends; there may be considerable variations in the literacy rate within these 10-year intervals that are being blurred by the conflation of the data. In examining the other variables over time the only cases in which significant findings were produced were for occupational groups, regions, and age. For the most part, however, these findings were significant only over the first 20 years. Therefore, a discussion of the impact of time on other factors affecting literacy will be noted only when statistically significant results were produced.
- 5. For the standard work on charity schools in the 18th century, see M.G. Jones, The Charity School Movement in the Eighteenth Century:

 A Study of Eighteenth Century Puritanism in Action (Cambridge, 1938).
- 6. See Thomas W. Laqueur, "Working-Class Demand and the Growth of English Elementary Education," in Lawrence Stone, ed., Schooling and Society: Studies in the History of Education (Baltimore, 1976), p. 203 n. 2. Laqueur mentions that this may be a high figure. He points to Joan Simon's study of schools in Leicestershire, "Was There a Charity School Movement?: The Leicestershire Evidence," in Brian Simon, ed., Education in Leicestershire, 1640-1940 (Leicester, 1968), in which she concludes that many small private schools were included in the reports

of the established subscription schools, thus inflating the figure. Laqueur suggests that if these conclusions can be applied to other parts of England, then the 1723 figure would have to be revised downward.

- 7. Richard D. Altick, <u>The English Common Reader: A Social History of the Mass Reading Public</u>, 1800-1900 (Chicago, 1957), pp. 32-34.
 - 8. Jones, The Charity School Movement, p. 25
- 9. The general decrease in this period may also be related to increasing industrialization, the effects of which on literacy will be discussed later in this chapter.
- 10. See n. 4, immediately above. Worth mentioning here is that this pattern over time may also be affected by the basic fact that we are analyzing a group of indentured servants. Although there are good reasons for accepting these individuals as representative of the general population of England (see Chapter IV), the trend being observed here may be being influenced by changes in the social composition of indentured servants. For example, with the general increased prosperity of the mid-18th century, perhaps only those in marginal occupations or regions who may not have shared in the increased prosperity were now willing to become indentured servants. To determine if this is the cause of the trend being observed here we would need a great deal more information. We would have to begin attacking this question by reexamining the whole question of occupational classifications and regional distinctions.
- 11. The category "dealing and retail trade" includes such occupations as merchants, pedlars, shopkeepers, and so forth. Perhaps

a more appropriate term for this group would be "merchants and other small businessmen." However, "dealing and retail trade" is the term used by the Tawneys in their census of occupations in the 17th century. See n. 12, immediately following.

- 12. Other occupational groups by type of industry are making of food and drink; making of articles of dress; building and works of construction; agriculture and estate management; textiles; fishing, mining, and quarry workers; servants (household and unspecified); transport workers (road and water); leather workers; and miscellaneous and unidentified occupations. These occupational groups are those used by A.J. Tawney and R.A. Tawney in "An Occupational Census of the Seventeenth Century," Economic History Review, V (1934), pp. 35-64.
- 13. Of a total of 124 gentry, professional, and official persons, 123 (99.2%) signed and 1 (0.8%) marked; of a total of 121 persons in the dealing and retail trades, 115 (95.0%) signed and 6 (5.0%) marked.
- 14. See Appendix A for a complete listing of the occupations in each skill-specific category.
- 15. The data for the period 1738-1748 are not significant at the .05 level and therefore are not discussed here.
- 16. This is a possibility, but such a cause is difficult to ascertain without taking age into consideration. What we are observing here is a general increase in literacy among workers of all ages in these groups. To discover if this increase is related to the effects of the charity schools or other educational institutions, we would need to undertake an analysis of age by occupation over time lagged to take into account the average age of those in school. The lag should be equal to the difference between the average age of those in school

and the average age of the servants in these groups. Such an analysis has not been done in this study.

- 17. J.D. Chambers and G.E. Mingay, The Agricultural Revolution, 1750-1880 (New York, 1966), p. 99. Chambers and Mingay contend that the growth of rural poverty in 18th-century England was not primarily attributable to the enclosure movement but to the great surge in population that increased more rapidly than jobs in agriculture. They propose that the enclosure movement actually contributed to prosperity by increasing the need for agricultural labor. The effects of enclosure and population growth will be discussed in greater detail later in this chapter when considering the relationship between literacy and regions.
- 18. Sanderson, "Literacy and Social Mobility," p. 89.

 The impact of industrialization on literacy will be discussed later in this chapter.
- 19. See Appendix B for a complete listing of cities included in the classification "all other cities."
- 20. Basil Williams, <u>The Whig Supremacy</u>, <u>1714-1760</u> (Oxford, 1939), p. 26.
- 21. David Cressy, "Literacy in Pre-Industrial England," <u>Societas</u>, IV (1974), pp. 233-234.
 - 22. Schofield, "Dimensions of Illiteracy," p. 453.
- 23. See L.A. Clarkson, <u>The Pre-Industrial Economy in England</u>, <u>1500-1750</u> (New York, 1971), p. 32; Chambers and Mingay, <u>The Agricultural Revolution</u>, p. 103.
 - 24. Williams, Whig Supremacy, p. 123
 - 25. Schofield, Dimensions of Illiteracy," p. 454. Schofield

contends that increases in literacy in England were brought about by cultural changes that occurred as a result of economic growth and that a high rate of literacy was not one of the causes of economic growth.

- 26. See Appendix C for a complete listing of the counties in each region.
- 27. This high rate of literacy in Scotland is undoubtedly attributable to the influence of the Presbyterian Church, which developed a network of schools open to rich and poor alike that were funded by taxes on landlords and tenants. By the early 18th century Scotland had a system of elementary, secondary, and university education that far excelled that in any other country. See Lawrence Stone's discussion of this in "Literacy and Education in England, 1640-1900," Past and Present, XLII (1969), pp. 80-81.
- 28. Almost two-thirds of the servants from Ireland came from Dublin. The high rate of literacy for Ireland was, no doubt, produced by the large numbers of servants from the city in this sample.
- 29. For a study of literacy in East Anglia, see David Cressy, "Levels of Illiteracy in England, 1530-1730, The Historical Journal, XX (1973), 1-23.
- 30. To determine, however, if better educational opportunities are responsible for these increases a detailed study of facilities available for education as well as apprenticeship opportunities in these regions would have to be undertaken; this has not been done in this study.
 - 31. Chambers and Mingay, The Agricultural Revolution, p. 77.
- 32. See Williams, Whig Supremacy, p. 103; see also Martin Gilbert, British History Atlas (Toronto, 1968), p. 74 for a map of enclosures

in 18th-century England.

- 33. Chambers and Mingay, The Agricultural Revolution, pp. 99-103.
- 34. For a map of industrial development in England beginning in 1715 on which the populations of the largest towns are given, see Gilbert, British History Atlas, p. 75.
- 35. See Williams, Whig Supremacy, p. 119 for information about this shift in population.
- 36. Schofield, "Dimensions of Illiteracy," p. 453; Sanderson, "Literacy and Social Mobility," p. 89.
 - 37. Williams, Whig Supremacy, p. 123.
- 38. In studying age, ages 11 through 16 were studied as a group; ages 17 through 24 were studied individually; and ages 25 through 61 were studied as a group.
 - 39. Stone, "Literacy and Education in England," p. 99.
- 40. Although the trend for skilled workers by age is not as clear as that for the other groups, it still indicates a general increase in literacy at approximately the same age. However, skilled workers may have encountered the need to sign at an earlier age.
- 41. David Cressy and Roger Schofield, in making their cases for the use of signatures as a measure of literacy, suggest that it was unlikely that persons would have mastered the "trick" of writing since there were so few occasions in life on which a signature was required. See Cressy, "Levels of Illiteracy," pp. 2-3; Schofield, "Dimensions of Illiteracy," p. 441.
- 42. Quoted in A.E. Dobbs, Education and Social Movements, 1700-1800 (New York, 1969 [orig. publ. London, 1919]), pp. 75-76.
 - 43. See C. Arnold Anderson and Mary Jean Bowman, "Education and

Economic Modernization in Historical Perspective," in Lawrence Stone, ed., Schooling and Society: Studies in the History of Education (Baltimore, 1976), pp. 10-12; Schofield, "Dimensions of Illiteracy," p. 451.

44. See Roy McKeen Wiles, "The Relish for Reading in Provincial England Two Centuries Ago," in Paul J. Korshin, ed., The Widening Circle: Essays on the Circulation of Literature in Eighteenth-Century Europe (Philadelphia, 1976); Altick, The English Common Reader, esp. pp. 30-66.

- 45. Altick, The English Common Reader, p. 40.
- 46. <u>Ibid</u>., pp. 36-38.
- 47. Ibid., p. 42.

CONCLUSION

- 1. Growing industrial cities have not been isolated and studied separately in this study. Even if such an analysis were undertaken with this data, chances are that the numbers would be so small that no significant findings would be produced. Also, it must be remembered that the classification "city" or "urban" in this study does not include any of these smaller, yet growing, industrial towns but only the more major and already well-developed cities such as Bristol, Birmingham, Manchester, or Leeds. Therefore, the literacy rate in these growing industrial cities is not at all reflected in the figures produced for urban areas.
- 2. Clarkson, <u>The Pre-Industrial Economy in England</u>, p. 116. For developments in agriculture and industry up to 1750, see <u>ibid</u>., chaps. 3 and 4.

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ATIV

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