MONETARY CONCEPTS OF RURAL KINDERGARTEN CHILDREN: VALIDATION OF A TEST

By

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CHAPTER I

THE PROBLEM AND ITS IMPORTANCE

This study was concerned with obtaining information on the monetary concepts expressed by rural kindergarten children. As part of a larger study of the monetary concepts of young children, McCarty (1967) obtained evidence of the validity of a test on four monetary concept tasks to be used with preschool children. Dunkin (1972) obtained evidence concerning the validity of this same test on urban kindergarten age children as did Masters (1972) for low-income black preschool children and West (1971) for three- and four-year olds; however, the information has not been obtained concerning the validity of this test for rural children as recommended by McCarty.

Need for the Study

McNeal (1964) indicated that even five-year old children are involved in the consumer process. Grojean (1972) reported that some basic knowledge about the consumer's role in our monetary system is needed by children. The importance of monetary experience is reflected in the fact that advertisers view young people as a 50 billion-dollar-a-year market (Changing Times, 1972); furthermore, children are credited with significantly influencing the way adults spend their money.

The complexity of our economic structure has prompted educators and parents to devise methods for explaining and interpreting economic

phenomenon; however, few steps have been taken to evaluate the comprehension of young children concerning monetary concepts. Changing Times (1972) termed the present preparation of children for money management "educated guesswork." Gavian (1938) reported over 30 years ago that parents did not adequately prepare their children to handle money. This suggests that educators need to consider ways to provide for some type of monetary experiences. A valid test to measure monetary concepts of young children would enable a teacher to estimate a child's competency in dealing with money and provide a basis for planning economic experiences.

The Purpose of the Study

The major purpose of this study was to obtain information concerning the validity of a test of monetary concepts developed by McCarty (1967) on a group of rural kindergarten age children. This was recommended by McCarty (1967). The following monetary tasks were measured: (1) the ability to identify coins as money, (2) the ability to identify coins by name, (3) the ability to identify the value of the coin, and (4) the ability to determine equivalent value.

Hypothesis

The hypothesis to be examined is that there is no significant difference between the monetary concepts of urban kindergarteners and rural kindergarteners.

Definitions

Rural in this study is defined from the United States Census

Reports which means areas or communities which have a population of 2,500 or fewer people. Several other characteristics as listed by Sorokin (1926) were taken into consideration before children were selected to represent the rural areas. Those differences between urban and rural societies listed by Sorokin (1926) include: (1) occupation, (2) environment, (3) community size, (4) population density, (5) homogeneity, (6) social mobility, and (7) direction of migration. According to Sorokin (1926, pp. 16-18) occupational activities in rural areas include, "collection and cultivation of plants and animals, but not their transformation into various products . . ." His description concerning the size between urban and rural communities states, "There is a negative correlation between the size of the community and the percentage of the population engaged in agriculture . . ."

Kindergarteners in this study are defined as children who are at the first level of public school and were five years of age before November 2, 1971. The age for each child was calculated from the date of testing.

CHAPTER II

RELATED LITERATURE

The literature related to young children's development of monetary concepts may be classified into four areas: (1) Development of Monetary Concepts; (2) Young Children's Knowledge of and Experiences With Money; (3) The Need for Consumer Education; (4) Implications for the Present Study.

Development of Monetary Concepts

Parental Influence

As with many other behaviors, children learn how to handle money through example and experience (Lindberg, 1968). Changing Times (1972) reported that parental example of money management is the prime determinate of children's money habits. Wohlner (1967) stated that attitudes toward money, such as generosity or tightfistedness, caution or lightheartedness are absorbed from the examples parents set for their children. Robison and Spodek (1965) suggest that many experiences such as marketing and shopping trips, making small purchases on their own, becoming aware of family occupations, of budget problems, and of advertising add to children's conceptions surrounding the use of money.

Realistic Experience

Numerous authors (Andrews, 1932; Eliot, 1932; Gruenberg and Gruenberg, 1933; Marshall and Magruder, 1963; and Ojemann, 1933) have stressed that the most effective means for teaching children responsible monetary behavior is by providing them with money. This theory provides a basis for advocating the desirability of a regular allowance for children. Eliot (1932) suggests that allowances even for children as young as three will have educative values if the child is allowed to make his own choices and his own mistakes.

A beginning responsibility for the care of clothing and other property was recommended by both the New England Economic Education Council (1960) and Changing Times (1972) for even very young children, as a basis for the responsible use of money. Two authors (Lindberg, 1968; and Wohlner, 1971) suggest that a few pennies once or twice a week will not only satisfy, but will provide good learning for most four- and five-year olds.

Age As a Factor

A report by Hurlock (1946, p. 488) suggests that monetary concepts are understood only when children are given experiences to use money. She supports this assumption with the explanation, "Understanding begins when the child develops the ability to discriminate." She predicted that a five-year old could understand the relationship between money and buying; however, a child this age has no understanding of the relationship between specific coins and the products which they will buy; furthermore, she explained that the development of money concepts

lags behind many other concepts which develop during the preschool years due to preschool children's limited opportunities for experiences with money.

Three aspects of children's concepts of money which Strauss and Schuessler (1951, p. 514) hypothesized to be "consistent and cumulative" included: (1) coin recognition, (2) comparative value, and (3) equivalence. They concluded that there was no difference in the children's conceptions of money between the sexes. Marshall and Magruder (1960) reported that the knowledge of money use increased as the age of the child increased. McCarty (1967) concluded that the ability of children to identify coins as money, to identify coins by name, and to identify the comparative value of coins increases with age.

Strauss (1952) studied the stages at which money becomes meaningful and reported that the youngest subjects, aged three to four and a half years, could distinguish between money and other objects; however, they could not consistently match pairs of coins. He suggested that these children did not realize the connection between buying and money. The children with a median age of 5.4 years were able to distinguish nickels from other silver. These children designated a preference for a pile of coins which seemed to have more things in it and their preferences for single coins were usually based on the greater size of a coin; however, these children did understand the relationship between money and buying.

Young Children's Knowledge of and Experiences With Money

Most of the literature dealing with children's knowledge of and experiences with money are studies of children of elementary school age

or older. Hoffer (1949) reported that rural elementary school children had experiences with money in the areas of spending, giving, earning, borrowing, lending, and saving. She found that practically all of the children surveyed had experienced spending and almost three-fourths had experienced giving money. Almost two-thirds of the children in the study had experienced earning, while approximately one-half had experienced lending money. Two-fifths of the children had borrowed money, and one-fifth had received experience in saving.

A study by Marshall and Magruder (1960, p. 217) of rural 7, 8, 11, and 12 year olds yielded the following information concerning children and money: "If children are given wide experience in the use of money, they will have more knowledge of money and its use than children lacking varied experience." A child can learn to handle money successfully only by being free to make decisions of his own. This is the means by which children can become aware of its limitations and potentialities (Rand, 1967; Marshall, 1963; and Gruenberg and Krech, 1958). The child with money of his own will also have the opportunity to obtain experiences with the relative value of products as he is allowed to make choices (Gruenberg, 1932). Additional support for allowing children to have experiences with money is reported by Prevey (1945) whose study positively related preparation in money management in childhood to the way adults utilize finances.

The findings of a study by Hanson (1933) revealed no relationship between the occupation of parents and the children having money to control. She also reported the lack of a relationship between the age of the child and the granting of an allowance or between the amount of allowance and educational progress. She found that parents provided

few experiences for borrowing or lending, and that boys were provided more opportunities to learn investment practices, to earn money, and to learn the uses of money than girls.

Marshall (1964) made a comparison of the financial knowledge of two groups of children, one of which had received an allowance while the other group had not. Upon comparison of the two groups, she found no relationship between receiving an allowance and not receiving an allowance as to the children's financial knowledge.

Money as a means of purchasing something is usually the child's earliest experience with money, according to Gruenberg (1932). Such early experiences usually take place in the context of the family; however, some experiences with money are being incorporated into planned learning situations for schools. Economics has been successfully used in the kindergarten curriculum to enhance social studies units and this subject provides concrete examples for math concepts (Robison, 1964). Hurlock (1946) reported that the average five-year old can only name pennies; however, by the age of six he can name pennies, nickels, and dimes and possibly will know how many pennies there are in a nickel or dime.

The Need for Consumer Education

The large number and variety of products and services available in today's economy has led to confusion for many consumers. The desire to obtain these goods and services has prompted the need for consumer education with its goal, according to Natella (1968, p. 1), for consumers to be able to make "informed decisions." He emphasizes the need for education to prepare an individual for his life as a consumer, and

recommends more and better consumer education for all levels of education.

Questionable advertising has focused attention upon the need to be able to evaluate products and services. Peterson (1965) calculated that through the use of radio, television, newspapers, and magazines an average American family might be exposed to more than a thousand advertisements during a single weekend. Many of these advertisements have successfully been aimed at young children. The five-year old consumers interviewed by McNeal (1964) indicated that the consumer role provided them with an opportunity to obtain immediate satisfactions.

The need for preparation in the consumer process at the preschool level was supported by Grojean (1972) in her findings that all of the four- and five-year old subjects she interviewed had received money through some source, either allowance, dole, gift, or earnings. In addition, she made two observations which are especially pertinent to this study:

1. Children derive a great deal of satisfaction from being consumers.

2. Parents are aware of their influence on the child's ability to handle money wisely and often indicated concern about the effects of their methods of teaching their children economic competence. (p. 36)

Robison (1964) has provided meaningful experiences for young children in a preschool program. Her findings indicated that the most effective learning experiences were planned, yet unstructured. This type of learning is in harmony with Piaget (1930) who indicates that conceptual learnings are often spontaneous, independent findings of the child.

Implications for the Study

The literature revealed the following implications for this study: (1) children are entering into the role of the consumer at a young age; (2) the development of monetary concepts is dependent upon the child's experiences with money management; (3) there is a need for the development of curricula to aid in the presentation of monetary experiences for preschool children; (4) there is a need for a valid instrument to determine the knowledge of monetary concepts of young children; and (5) children receive experiences with money in the areas of spending, giving, earning, borrowing, lending, and saving.

CHAPTER III

METHOD AND PROCEDURE

The Monetary Concepts Task Test developed by McCarty (1967), and utilized by West (1971) with three- and four-year olds, and by Dunkin (1972) with urban kindergarteners, was used to determine the monetary concepts of the rural children for this study. The score sheet used for the four tasks is included in the Appendix.

Subjects

The sample was composed of 95 kindergarten children from rural Oklahoma communities. The six communities selected corresponded to the definition for rural populations as set by the United States Census Bureau; however, the accessibility to the researcher was a factor in the selection of these particular communities. The children in the sample were of legal kindergarten age and ranged in age from 5.5 years to 6.5 years at the date of testing.

A letter of introduction describing the purpose of the study was sent to the principal of each school selected for the study. Permission for the testing of each class was obtained from the principal and kindergarten teacher and a date for the testing was established. The Monetary Concepts Task Test was administered individually; therefore, arrangements for the investigator to test each child in such a manner was made with the principal and teacher.

Monetary Tasks

Test I--Money-Sorting Task

The purpose of the money-sorting task is to investigate children's ability to differentiate coins as money.

Materials needed: A small purse containing coins (half dollar, quarter, dime, nickel, and penny) and non-money objects (a plastic fifty-cent piece, a bracelet charm resembling money, a plastic dime, a tin dime, a bus token, and a plastic penny).

Procedure: The child is shown the purse and told, "I have some real pieces of money for a real store and some 'pretend pieces' for a 'pretend store.'" The coins and non-money objects are then taken from the purse and shown to the child. He is then instructed to sort them by saying, "Put the real pieces of money for a real store over here [investigator indicates a place for the coins] and put the 'pretend pieces' for a 'pretend store' over here." (Investigator indicates a place.)

The manner in which the child sorts the objects is recorded.

Test II--Coin-Identification Task

The purpose of the coin-identification task is to investigate children's ability to identify coins by name.

Materials needed: Two quarters, two half dollars, two dimes, three nickels, and two pennies.

Procedure: The coins are placed before the child in the following

pattern:

25-10-50

10-5-1-5-25

1-50-5

The investigator says, "I have some real pieces of money on the table. Can you put your finger on a penny?" When the child responds, the investigator says, "Good." In this manner, the investigator directs the child either to put his finger on (a penny) or on a piece that is (one cent), in the following order:

1. A penny
2. A nickel
3. A dime
4. A quarter
5. A half dollar
6. One cent
7. Five cents
8. Ten cents
9. Twenty-five cents
10. Fifty cents
11. Ten cents
12. A nickel
13. Twenty-five cents
14. A half dollar
15. One cent
16. A dime
17. Fifty cents
18. A penny
19. Five cents
20. A quarter

The child's correct responses are recorded. The child is credited with identifying the coin if both his responses are correct, e.g., two responses for a penny or two responses for one cent.

Test III--Comparative Value Task

The purpose of the comparative value task is to investigate children's ability to identify coins of greater and lesser value.

Materials needed: The half dollar, quarter, dime, nickel, and penny are paired twice in all possible combinations. The pairs are mounted on three by five cards so that the coin of greater value in each pair will appear once on the left and once on the right.

Procedure: The investigator asks the child, "Do you go to the store with your mother sometimes?" (Child responds.) "What do you buy?" (If candy is not mentioned, the investigator again asks, "Do you buy candy sometimes?") The child is then shown the first card of paired coins. The investigator instructs the child to choose the coin of greater value by saying, "Show me the coin that would buy the most candy at the store." In this manner, the investigator instructs the child to choose the coin of greater value in each of the following pairs:

1. Half dollar--quarter
2. Dime--nickel
3. Penny--half dollar
4. Dime--quarter
5. Nickel--penny
6. Half dollar--dime
7. Quarter--nickel
8. Penny-dime
9. Nickel--half dollar
10. Quarter--penny
11. Nickel--dime
12. Quarter--Half dollar
13. Dime--penny
14. Half dollar--nickel
15. Penny--dime
16. Dime--half dollar
17. Penny--nickel
18. Quarter--dime
19. Half dollar--penny
20. Nickel--quarter

The child's choices are recorded on the score sheet.

Test IV--Equivalent Value Task

The purpose of the equivalent value task is to investigate

children's ability to match coins with coins of equivalent value.

Materials needed: (1) A variety of small inexpensive toys; four were used for each child, and (2) a four-shelf rack on which the toys could be placed. A coin was glued to each shelf to indicate the price of the toy on that shelf (top shelf, nickel; second shelf, dime; third shelf, quarter; fourth shelf, half dollar); (3) four small purses or containers; one containing seven pennies and one dime for matching the nickel; one containing three nickels and eleven pennies for matching the dime; one containing five nickels, three dimes, and a half dollar for matching the quarter; and one containing three quarters, seven dimes, six nickels, and a penny for matching the half dollar. (It is helpful to match the color of the shelf to the color of the purse.)

Procedure: The child is shown four toys and the investigator instructs him to choose one by saying, "These are the toys I have in my store. You may choose one that you would like to buy." The investigator places the toy chosen by the child on the top shelf and puts the other toys out of sight.

The purse to be used in matching the nickel is given to the child. The investigator points to the toy saying, "Let us pretend that the (toy) costs this much" (indicating the coin on the shelf). "You may buy it with the money in this purse. Give me the money you would need to buy the (toy)." (The investigator holds out her hand as if to accept the coins.) When the child chooses his coins, the investigator records his choice and says, "Good. You could buy it with that purse, couldn't you? Now let us see if this purse will buy the (toy)." (The purse for the dime is given to the child.) The investigator then moves the toy to the next shelf and says, "Now let us pretend that the (toy)

costs this much" (indicating the dime). In this manner, the child is requested to match the quarter and the half dollar with coins of equal value. The child's choices are recorded on the score sheet.

Treatment of Data

The chi square test was utilized in an item analysis of the Monetary Concepts Task Test in order to ascertain which items differentiated high and low scoring children, i.e., those children who scored in the upper and lower quartiles in terms of their total scores on the test.

CHAPTER IV

ANALYSIS OF DATA

The purpose of this study was to investigate the validity of the Monetary Concepts Task Test (McCarty, 1967) utilizing rural kindergarten children, and to test the hypothesis that there is no significant difference between the monetary concepts of urban kindergarteners and rural kindergarteners. The four monetary concepts were: (1) the child's ability to identify coins as money, (2) the child's ability to identify coins by name, (3) the child's knowledge of comparative value of coins, and (4) the child's knowledge of the equivalent value of coins. These four tests were administered to 95 rural kindergarteners.

The majority of the items on the money-sorting task were correctly identified by the rural kindergarten-age children (Table I). This finding coincides with the data presented in Masters' (1972) study of low socioeconomic, black five-year olds and Dunkin's (1972) study of urban kindergarteners. This indicates that this task was too easy for this age group (5.5-6.5). Previous studies by McCarty (1967) and West (1971) did not find this with three- and four-year olds.

Table II reveals that 9 out of the 10 items involving the identification of money were discriminating, suggesting the usefulness of these tasks in assessing the monetary concepts of five-year old rural children. The number of correct responses would indicate that money-identification experiences should be included in the kindergarten

curriculum.

TABLE I

ITEM ANALYSIS OF THE MONEY-SORTING TASKS AS REFLECTED BY CHI SQUARE ANALYSIS OF RESPONSES OF RURAL KINDERGARTEN CHILDREN*
(N = 95)

	Correct Responses	X^2	Level of Significance
Money Items			
(1) Half Dollar	91	n.a.**	
(2) Quarter	94	n.a.	
(3) Dime	89	n.a.	
(4) Nickel	94	n.a.	
(5) Penny	95	n.a.	
(6) Penny	93	n.a.	
Non-Money Items			
(7) Plastic Half Dollar	84	n.a.	
(8) Bracelet Charm	94	n.a.	
(9) Plastic Dime	93	n.a.	
(10) Tin Dime	94	n.a.	
(11) Bus Token	92	n.a.	
(12) Plastic Penny	93	n.a.	

*df = 1

**n.a. = not applicable

TABLE II

ITEM ANALYSIS OF THE MONEY-IDENTIFICATION TASKS AS REFLECTED BY CHI SQUARE ANALYSIS OF RESPONSES OF RURAL KINDERGARTEN CHILDREN
(N = 95)

	Correct Responses	X^2	Level of Significance
Coins			
(13) Half Dollar	52	33.28	.001
(14) Quarter	37	15.50	.001
(15) Dime	56	18.12	.001
(16) Nickel	50	24.13	.001
(17) Penny	88	n.a.	
Cents			
(18) 50¢	17	14.52	.001
(19) 25¢	23	21.11	.001
(20) 10¢	24	23.60	.001
(21) 5¢	40	27.00	.001
(22) 1¢	41	29.16	.001

Table III reveals that only 2 of the 20 items involving tasks of recognizing coins of comparative value were discriminating. The majority of the children tested made incorrect responses when asked to select the most valuable coin of the 10¢-5¢ and 5¢-10¢ pair of coins. Incorrect responses were frequently given to the 10¢-1¢ and 1¢-10¢ combination, suggesting the reliance of the children on the size of the coin as the determinate of the value of the coin. The explanation that the

TABLE III

ITEM ANALYSIS OF THE COMPARATIVE VALUE TASK AS REFLECTED BY CHI SQUARE ANALYSIS OF RESPONSES OF RURAL KINDERGARTEN CHILDREN
(N = 95)

	Correct Responses	X^2	Level of Significance
Paired Coins			
(23) 50¢-25¢	88	n.a.	
(24) 50¢-10¢	80	11.11	.001
(25) 50¢-5¢	83	n.a.	
(26) 50¢-1¢	89	n.a.	
(27) 25¢-10¢	83	n.a.	
(28) 25¢-50¢	88	n.a.	
(29) 10¢-50¢	87	n.a.	
(30) 5¢-50¢	88	n.a.	
(31) 1¢-50¢	89	n.a.	
(32) 10¢-25¢	87	n.a.	
(33) 25¢-5¢	87	n.a.	
(34) 25¢-1¢	86	n.a.	
(35) 10¢-5¢	17	.10	n.s.
(36) 10¢-1¢	66	20.50	.001
(37) 5¢-1¢	86	n.a.	
(38) 5¢-25¢	87	n.a.	
(39) 1¢-25¢	86	n.a.	
(40) 5¢-10¢	18	.36	n.s.
(41) 1¢-10¢	73	n.a.	
(42) 1¢-5¢	92	n.a.	

size of the coin was indicative of the value was given by the children when questioned as to the reason for their choice. This misconception suggests that comparative value experiences with coins should be included in curriculum designed for five-year-old children.

Two items on the equivalent value task section of the test successfully discriminated high and low quartile groups (Table IV). The majority of the children gave incorrect responses to this section of the test. Because of this, the equivalent value task would seem to be inappropriate in terms of differentiating high and low scoring children. It seems apparent that material included in this section of the test should be included in curriculum designed for five-year-old children since the majority of children of this age are unfamiliar with these concepts.

TABLE IV

ITEM ANALYSIS OF THE EQUIVALENT VALUE TASK AS REFLECTED BY CHI SQUARE ANALYSIS OF RESPONSES OF RURAL KINDERGARTEN CHILDREN (N = 95)

		Correct Responses	X^2	Level of Significance
Coin				
(43)	Half Dollar	9	n.a.	
(44)	Quarter	6	n.a.	
(45)	Dime	20	21.76	.001
(46)	Nickel	14	16.00	.001

Urban and Rural Differences

Table V reveals that only four items were significant at the .05 level between the responses of urban kindergarteners and rural kindergarteners to the Monetary Concepts Task Test. According to the four tasks, the discriminatory items included a plastic penny in the money-sorting task, the twenty-five cent piece and the five cent piece in the coin-identification task, and the 1¢-50¢ paired coins in the comparative value task. Although there was not a significant difference revealed on the equivalent value task, only a small percentage of both urban and rural children made correct responses, suggesting that equivalent value experiences with money should not be omitted from a kindergarten curriculum. The findings of the task tests suggest that the curriculum for urban and rural kindergarteners need not be different.

A comparison of the percentages of correct responses of urban kindergarteners and rural kindergarteners indicates that the rural kindergarteners had a higher percentage of correct responses on 33 of the 46 items while the percentage of correct responses was the same on two items. The hypothesis that there was no significant difference between the responses of urban and rural kindergarteners was supported.

TABLE V

PERCENTAGES AND CHI SQUARE VALUES REFLECTING DIFFERENCES BETWEEN URBAN AND RURAL KINDERGARTENERS TO MONETARY CONCEPTS TASK TEST

Item	Percentage of Correct Responses		X^2	Level of Significance
	Urban (N = 120)	Rural (N = 95)		
MONEY-SORTING TASK				
Money Items				
(1) Half Dollar	93	96	1.04	n.s.
(2) Quarter	98	99	n.a.	
(3) Dime	93	95	.17	n.s.
(4) Nickel	98	98	n.a.	
(5) Penny	96	100	n.a.	
(6) Penny	94	98	n.a.	
Non-Money Items				
(7) Plastic Half Dollar	83	88	1.93	n.s.
(8) Bracelet Charm	92	100	n.a.	
(9) Plastic Dime	98	98	n.a.	
(10) Tin Dime	94	99	n.a.	
(11) Bus Token	93	98	n.a.	
(12) Plastic Penny	88	98	5.50	.05
COIN IDENTIFICATION TASK				
(13) Half Dollar	85	55	.47	n.s.
(14) Quarter	30	39	2.45	n.s.
(15) Dime	63	60	.32	n.s.
(16) Nickel	63	53	2.50	n.s.
(17) Penny	94	93	.21	n.s.

TABLE V (Continued)

Item	Percentage of Correct Responses		X^2	Level of Significance
	Urban (N = 120)	Rural (N = 95)		
(18) Fifty Cents	13	18	1.04	n.s.
(19) Twenty-Five Cents	13	24	4.39	.05
(20) Ten Cents	28	26	.10	n.s.
(21) Five Cents	28	42	4.46	.05
(22) One Cent	38	45	.36	n.s.
COMPARATIVE VALUE TASK				
Paired Coins				
(23) 50¢-25¢	92	93	.07	n.s.
(24) 50¢-10¢	85	84	.00	n.s.
(25) 50¢-5¢	86	87	.02	n.s.
(26) 50¢-1¢	86	94	2.84	n.s.
(27) 25¢-10¢	80	87	.05	n.s.
(28) 25¢-50¢	90	93	.00	n.s.
(29) 10¢-50¢	87	92	.92	n.s.
(30) 5¢-50¢	90	93	.00	n.s.
(31) 1¢-50¢	88	94	4.03	.05
(32) 10¢-25¢	88	92	.35	n.s.
(33) 25¢-5¢	83	92	.92	n.s.
(34) 25¢-1¢	92	91	.00	n.s.
(35) 10¢-5¢	23	18	.95	n.s.
(36) 10¢-1¢	63	69	1.14	n.s.
(37) 5¢-1¢	95	91	1.64	n.s.

TABLE V (Continued)

Item	Percentage of Correct Responses: Urban (N = 120)	Percentage of Correct Responses: Rural (N = 95)	X^2	Level of Significance
(38) 5¢-25¢	87	93	2.19	n.s.
(39) 1¢-25¢	88	91	.02	n.s.
(40) 5¢-10¢	18	19	.07	n.s.
(41) 1¢-10¢	66	78	1.92	n.s.
(42) 1¢-5¢	92	97	3.14	n.s.
EQUIVALENT VALUE TASK				
(43) Half Dollar	6	9	1.02	n.s.
(44) Quarter	7	6	.01	n.s.
(45) Dime	20	21	.15	n.s.
(46) Nickel	18	15	.30	n.s.

CHAPTER V

SUMMARY AND RECOMMENDATIONS

This study was designed to obtain information concerning the validity of the Monetary Concepts Task Test developed by McCarty (1967) on rural kindergarten age children (5.5-6.5), and to test the hypothesis that there were no significant differences between the monetary concepts of urban kindergarteners and rural kindergarteners.

The four tasks used in this study were: (1) the ability to identify coins as money, (2) the ability to identify coins by name, (3) the ability to identify the value of the coin, and (4) the ability to determine equivalent value.

The subjects for this study were 95 kindergarteners who attended one of six rural Oklahoma public schools selected for the study. Testing was conducted during the spring semester, 1972.

The researcher followed the procedures developed by McCarty (1967) for use of the four monetary concepts tasks which were: Test I--Money-Sorting Task; Test II--Coin-Identification Task; Test III--Comparative Value Task; and Test IV--Equivalent Value Task.

The data were reported by number of correct responses. A chi square analysis was utilized to determine the items on the Money Concepts Task Test which differentiated high and low scoring children.

Findings

1. The majority of the items on the money-sorting task tests were correctly identified by the rural kindergarten children. This finding coincides with the data presented in Masters' (1972) study of low socio-economic five-year olds and Dunkin's (1972) study of urban kindergarten children, suggesting that this section is inappropriate for use with kindergarten children.

2. Nine out of the ten items involving money identification were discriminating, suggesting the usefulness of this test in assessing the monetary concepts of kindergarten children.

3. The paired coins 50¢-10¢ and 10¢-1¢ were the 2 of the 20 items involving tasks of recognizing coins of comparative value that were discriminating.

4. Two items on the equivalent values tasks section of the test successfully discriminated high and low quartile groups. The majority of the children gave incorrect responses to this section, suggesting that material in this section would be valuable to include in the programs designed for kindergarten children.

5. Only four of the items, the plastic penny on the money-sorting task, the twenty-five cent piece and the five cent piece on the coin-identification task, and the 1¢-50¢ paired coins on the comparative value task revealed significant differences between the responses of urban and rural kindergarteners at the .05 level, suggesting that the same curriculum could be used for urban and rural kindergarteners.

6. Rural kindergarteners had a higher percentage of correct responses on 33 of the 46 items.

Recommendations for Further Research

The following suggestions are made on the basis of the findings of this study.

1. Study children older than those in kindergarten to determine at which level each of the monetary concepts on the Monetary Concepts Task Test is accomplished.

2. Omit Test I--Money-Sorting Task, and begin the testing with Test II--Coin-Identification Task, when testing children over five years of age.

3. The curriculum in consumer education should be examined in pre-schools and elementary schools to determine what monetary concepts are being taught, as well as what should be included in the educational programs.

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APPENDIX

SCORE SHEET

NAME

AGE

DATE

TEST I--MONEY-SORTING TASK

50	25	10	5	1	1	p50	C	p10	t10	BT	p1
Money Items						Non-Money Items					

*Check each object correctly sorted as a money-non-money item.

TEST II--COIN-IDENTIFICATION TASK

Half Dollar	Quarter	Dime	Nickel	Penny	50	25	10	5	1

*Step one - Check each coin correctly identified.
Step two - Circle each coin correctly identified.

TEST III--COMPARATIVE VALUE TASK

50	25	25	50	25	5	5	25
50	10	10	50	25	1	1	25
50	5	5	50	10	5	5	10
50	1	1	50	10	1	1	10
25	10	10	25	5	1	1	5

*Check the coin chosen in each pair.

TEST IV--EQUIVALENT VALUE TASK

COIN	CORRECT RESPONSE	INCORRECT RESPONSE
Half Dollar		
Quarter		
Dime		
Nickel		

VITA

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