

THE EFFECTS OF TELEVISION VIEWING
AND FAMILY ORIENTATION ON
COMMUNICATION APPREHENSION

By

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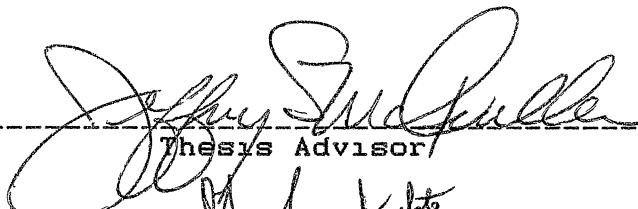
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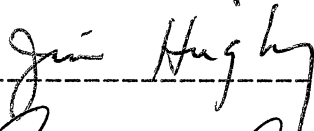
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TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Background	1
The Critics Viewpoint	7
Statement of the Problem	8
II. REVIEW OF LITERATURE ON COMMUNICATION APPREHENSION, TELEVISION VIEWING AND COMMUNICATION SUPPRESSION	9
Background of Communication Apprehension	9
Etiology of Communication Apprehension	14
Previously Tested Casual Agents	17
Television Viewing as a Correlation to CA	36
Family Interaction as a Correlation to CA	41
Purpose of the Research	47
Hypotheses	49
III. RESEARCH METHODOLOGY	50
Subjects	50
Variables	50
Pilot Instrumentation	52
Current Instrumentation	54
Procedures	56
Data Analysis	57
IV. RESULTS	59
Data Analysis	59
Reliability	59
Descriptive Statistics	61
Inferential Statistics	62
V. DISCUSSION	69
Benefits	74
Limitations and Weaknesses	75
Future Research	77
REFERENCES.	79

APPENDIXES.	90
APPENDIX A - PERSONAL REPORT OF COMMUNICATION APPREHENSION	91
APPENDIX B - CORRELATIONAL FACTORS OF CA SURVEY	95
APPENDIX C - SELF-REPORT SURVEY FOR FIRST PILOT	99
APPENDIX D - SELF-REPORT SURVEY FOR SECOND PILOT	102
APPENDIX E - SELF-REPORT SURVEY FOR THIRD PILOT	105
APPENDIX F - 1970 TELEVISION PROGRAMS	108

LIST OF TABLES

Table		Page
I.	Reliability Coefficients for Variables	60
II.	Reliability Coefficients for Test/Retest	61
III.	Descriptive Statistics	65
IV.	Correlation Matrix for Total Sample	66
V.	Correlation Matrix for Male Sample	67
VI.	Correlation Matrix for Female Sample	68

CHAPTER I

INTRODUCTION

Background

Giving a public speech is the number one fear in America; some people fear public speaking more than financial ruin or even death (Times, 1973). Philip Zimbardo (1977) asserts that shyness, a fear of communicating, is reaching epidemic proportions and can justifiably be called a social disease. Whether or not one agrees that fear of communicating has reached epidemic proportions, it must be acknowledged that communication apprehension (CA) affects a significant number of people, especially students in the nation's classrooms.

Surveys of almost twenty thousand college students from three universities over an eight-year period indicate that between fifteen and twenty percent experience communication apprehension to the degree that their functioning in everyday encounters is impaired (Adler, 1980, p. 215).

Research concludes that the impact of high CA on the probability of the students' survival in college is substantial. McCroskey, Booth-Butterfield, & Payne's (1989) research indicates that CA is conceptualized as a causal agent in student success, both academic and interpersonal. Academic and interpersonal success have

been identified by prior research as primary predictors of persistence in college. A four year longitudinal study of the impact of CA on grade point average and persistence at the university level was conducted. The results indicated that high CA students were more likely to drop out of college and to attain lower grade point averages than low CA students.

If high CA reduces the probability of student success, methods should be found to prevent CA. Research and implementation must deal with prevention of CA in order to reduce the probability of the students' arriving at universities with high levels of CA.

Although research has shown that CA has major social and personal consequences for adults, little is known about its causes. Daly and Friedrich (1981) state that while the literature on CA is replete with "effects-oriented" research, little attention has been devoted to the etiological foundations of CA. Without understanding the causes of CA, there is little hope of preventing it. Prevention of CA could improve the quality of life for students in the classroom, and adults in the workplace. As a result of prevention, people would be freer to interact interpersonally, enhancing their communication skills, not only one-on-one, and in groups, but in public speaking situations. Increased awareness of some of the causes of CA can help caregivers avoid subjecting children to those situations which put them at risk of developing CA. If

prevention of CA can be achieved, remediation of CA symptoms would be less necessary. Students who do not manifest high CA do not need treatment(remediation). Those students are able to function normally in a college setting. Therefore, the object is to prevent, rather than treat, the malady of CA. The research data from communication and other social sciences indicate that there are multiple influences on child development. It would be inaccurate to imply that any one influence is the sole determinant of what a child is to become. Within the framework of multiple influences, however, one must consider the manner in which CA develops and make all efforts to identify the possible causes. An area considered to have an impact is the interpersonal influences of television and parental communication style (Lull, 1980). TV and parental communication affect the preschool child and may result in CA as that person reaches college age. Up to this time etiological studies of CA have relied on heredity and environment (McCroskey, 1981). Since social scientists are powerless to affect changes in the hereditary factors that may cause CA, intervention must concentrate on addressing environmental factors that affect CA. Two causal environmental factors seem to have logical ties. Those factors are TV viewing (Dorr, 1972) and communication suppression (Griffin & Heider, 1967; Bugental, Love, & Kaswan, 1972; Kubey, 1990; Lemish, 1987; Lull, 1980; Lyle & Hoffman, 1972). TV veiwing and commuincation suppression are linked because they both

occur in the home and involve children. TV viewing and suppression of communication occur when children are of preschool age. Studies on TV viewing indicate that children sometimes use TV as a para-social activity (Greenberg, 1974); that is, they watch TV for social gratification because vicarious participation in a social activity is easier and less threatening than interacting with people. TV viewers are rewarded emotionally, without having to expend the effort or take the risk to talk directly and respond to "real" persons.

It is when para-social relationships begin to replace actual social relationships that we can observe people falling into a para-social life because of the ease and lack of effort required. The television viewer does not have to undergo the strain of adaptation, does not have to self-disclose, and does not have to verbalize. These factors expose people to risk of evaluation; it is the risk of evaluation which causes fear. It is the possibility of evaluation and the unknown or uncertain consequences associated with "live" interaction that creates CA. Therefore, to reduce the uncertainty associated with social communication is to reduce the likelihood of CA. The second environmental factor the present research addresses is communication suppression. Communication suppression is the discouragement of communication by an authority figure; sometimes a parent, older sibling, teacher, or other adult. Griffin & Heider's (1967) studies have shown that

communication suppression is a factor which keeps a child from learning interpersonal interaction. If a child is encouraged to be quiet at an early age, the child may miss opportunities to learn how to communicate. In order to communicate effectively a child must model and practice speaking and listening. If communication suppression is prevalent in the home, the child has little opportunity to practice speaking and listening. Therefore the necessary skills are not developed, and again uncertainty results.

Lull's (1980) studies deal with family communication patterns and the uses of television. He divides families into two types: socio-oriented and concept-oriented. Socio-oriented families stress harmonious social relations at home; while concept-oriented families stress the independent expression of ideas. Lull finds that the socio-oriented family watches a high level of television, and watches it for social purposes: companionship, entertainment, regulating talk patterns, reduction of conflict, behavior modeling, and argument facilitation. In addition, the socio-oriented parents encourage their children to avoid controversy; and to get along with others. In contrast, the concept-oriented family watches less TV than the socio-oriented family and does not use this medium as a social resource. The concept-oriented parents prod their children to express ideas. Lull's (1980) findings, might indicate that the socio-oriented children are potential apprehensives since they are oriented to passive

activities and minimized communication practices. A hypothetical situation involving two different children will illustrate the contention: One child grows up in a home where she is encouraged to express controversial ideas and to talk at will. She watches very little TV and instead plays with older siblings and neighbor children. She observes parents interacting with one another and with others outside the home, sometimes seeing conflict in the conversations. Chaffee et al (1973) would label this child concept-oriented.

A second child grows up in a more placid home. He is taught to get along well with other family members and friends. He gives in on arguments, represses anger, and stays out of trouble. This child watches TV frequently, alone and with family members. He tends to use TV as an escape. This is the socio-oriented child.

It is argued that the concept-oriented child is less likely to develop CA since she is taught how to interact with adults and those outside her family in an assertive manner. She is not using TV as a para-social outlet but is playing and communicating with others instead, which provides practice time in communication skills.

The socio-oriented child is more likely to develop CA since he is taught to interact with others by getting along: "peace at any price". He has less practice in communication since he watches more TV. He uses TV in a para-social fashion which causes him to think he needs

fewer companions. The TV keeps him company, so the need for real friends is not emphasized. Therefore, because he has fewer friends, he is deprived of the opportunity to practice communication skills. As a result, uncertainty of how to communicate occurs.

Accordingly, the present study explores the independent and interactive influences that communication suppression by parents and television viewing may have on the development of anxiety.

The Critics Viewpoint

Freidman (1980) acknowledges that shy, reticent children do not live pleasant or successful lives, and that this reticence is a problem worthy of investigation, prevention and remediation. Freidman (1980) argues that genetics is a possible cause of shyness, stating that a trait related to "susceptibility to threat" is relatively consistent throughout one's life (Comrey & Jamison, 1966). Some children are more vulnerable to change, experience more stress, and withdraw from events that others endure more resiliently (Freidman, 1980). Acknowledging Freidman's (1980) genetics explanation, McCroskey (1977) states that a hereditary trait toward apprehension has been perceived in the early childhood years, and that certainly CA is often established in children before they enter kindergarten. But, Friedman and McCroskey agree that given the proper environment, this hereditary predisposition can be modified.

Heredity may be one cause of CA, but it should not be accepted as the sole cause. Unless the field of communication investigates the potential causes of CA, the field will be forced to content itself with continually addressing the results of CA. In fact, that hopelessness of establishing causality has permeated CA research over the last twenty years. In an effort to break this non-causal paradigm, the present study investigates two potential causal factors of CA, television viewing and communication suppression, acknowledging that they are two of numerous factors which could be attributed to the etiology of CA.

Statement of the Problem

This study proposes that children of preschool age who spend more time watching television and interacting mainly with parents and siblings, learning harmonious relations in a socio-oriented manner are more at risk of developing CA than the concept-oriented child who watches less TV and is allowed an independent expression of ideas. This relationship exists because socio-oriented children have not had the opportunity to learn the means for interacting with others outside the family group.

CHAPTER II

REVIEW OF LITERATURE ON COMMUNICATION APPREHENSION, TELEVISION VIEWING AND COMMUNICATION SUPPRESSION

Background of Communication Apprehension

Research linking fear and anxiety to oral communication has been conducted under a number of labels: stage fright (Clevenger, 1959), reticence (Phillips, 1968), shyness (Zimbardo, 1977), audience sensitivity (Paivio, 1964), audience anxiety (Buss, 1980) social anxiety (Glaser, 1981), unwillingness to communicate (Burgoon, 1976), and communication apprehension (McCroskey, 1970). The differences in naming the phenomenon are more a function of the academic discipline from which they are formulated, than theoretical distinctions. Social psychology used "shyness"; developmental psychology used "audience sensitivity"; and speech communication coined "communication apprehension" (McCroskey, 1977). The broader label, communication apprehension, incorporates the other labels including fears and anxieties that are associated with any form of oral communication. CA is defined by McCroskey (1977) as an individual's level of fear or anxiety associated with either

real or anticipated communication with another person or persons. (p. 78).

High communication apprehensives are those persons for whom the apprehension of participating in communication exchanges outweighs the possible gain from communicating (Phillips, 1968; McCroskey, 1970). High apprehensives anticipate negative feelings and outcomes from communication, and will avoid communication, or suffer from a variety of anxiety feelings when forced to communicate (McCroskey, Sorensen, & Daly, 1976). The anxiety seems to stem from lack of skill in a communication situation. A person who is unskilled, or perceives herself as unskilled, in any situation is more reluctant to attempt the situation. If that person is forced to function in the position for which she lacks skills, she will find herself quite uncomfortable. That discomfort is based on uncertainty about success or perceived certainty of failure.

The image of the highly apprehensive person is mainly a negative one. Such a person is likely to exhibit many of the following tendencies: low interaction, aloofness, rigidity, quietness, stiffness, dissatisfaction, lack of leadership, submissiveness, seriousness, slowness, undependability, withdrawal, rulebound, restrained, permissive, moody, lack of self-control, unconscientious, indecisiveness, tension, and impatience.

In contrast, the person with low communication apprehension, generally exhibits positive characteristics

such as: high interaction, joiner, stability, calm, maturity, leadership, independence, self-assuredness, assertiveness, competitiveness, cheerfulness, expressiveness, talkativeness, responsibility, innovativeness, impulsiveness, resilience, and security. (McCroskey, Sorensen, & Daly, 1976).

Spielberger (1966) and Lamb (1973) have made a distinction between what they call "trait" and "state" apprehension. Trait apprehension is characterized by fear or anxiety with respect to many different types of oral communication encounters: talking to a single person, speaking within a small group, or giving a speech before a large crowd (McCroskey, 1981). Trait CA is not characteristic of normal, well-adjusted individuals. People with high levels of trait CA characteristically experience high levels of apprehension about almost all oral communication encounters, those which could be described as truly threatening, and those which rationally would not be described as threatening (McCroskey, 1977).

In contrast, state apprehension is specific to a given oral communication situation, such as giving a particular speech to a group of strangers or interviewing with an important person for a new job at a given time and place (McCroskey, 1977, p. 79).

The most common example of state CA is the phenomenon known as "stage fright". Stage fright is the anxiety a person experiences when communicating in a situation in which other persons are observing and evaluating the

communication attempt. Giving a public speech, is a common situation which causes people to experience stage fright. McCroskey's (1977) research has indicated that stage fright is experienced by most people at one time or another in their lives. State CA is a normal response that people experience when they are confronted with communication in a public setting, and is in no way pathological (McCroskey, 1977).

Both state and trait anxiety produce negative effects. Of the numerous negative effects of CA, one of the most deleterious, studied by Comadena and Prusank (1988) is the correlation between CA and academic achievement. Comadena and Prusank (1988) showed that students high in CA demonstrated the lowest levels of learning, as compared to students low and moderate in CA. According to Comadena and Prusank's (1988) results, students low in CA had mathematics achievement scores that were 23% higher than students high in CA.

As children grow older, they become increasingly more self-conscious of their social image (Buss, 1986; Elkind & Bowen, 1979).

An increase in self-consciousness and concern for interpersonal evaluation causes them to experience more fear or anxiety about communicating with others (Comadena & Prusank, 1988 p. 275).

Since CA increases with grade level, CA can be expected to have a more negative effect on academic achievement in the higher grade levels than in the early grade levels.

Etiology of Communication Apprehension

While the causes of CA are not... fully known, both case study analyses (Phillips and Butt, 1966) and broader surveys... suggest the development of CA during early childhood. It is clear that many children enter kindergarten with high levels of CA already established (McCroskey, 1977 p. 80).

McCroskey (1977) believes CA is a learned trait, one that is conditioned through reinforcement of the child's communication behaviors.

The etiology of CA has received comparatively little attention in the literature. Throughout the social sciences only two major explanations of the differential trait-like behaviors of individuals hold sway: heredity and environment. Simply put, we can be born with it or we can learn it. (McCroskey, 1981, p. 14).

Social biologists do not argue that heredity is the only cause of sociability or CA, but suggest that heredity may be one of the contributing causes. Research on fraternal and identical twins (Freedman, 1965; Gottesman, 1966; Plomin, 1974; & Scarr, 1969) shows that children are born with personality predispositions that are not unchangeable. The social biologists' research indicates that the child's environment will have impact on the predispositions the child carries over into later life. Because children are born with different predispositions, they will react differently to the same environmental conditions. This interaction of heredity and environment is seen as the precursor of adult predispositions and tendencies such as CA.

A second notable explanation of CA, beyond heredity, is

environment. The three environmental conditions suggested in literature are: reinforcement, skills acquisition, and modeling (Daly, 1977). It is essential to recognize the obvious overlap among these conditions and to understand that they combine to create the development and maintenance of CA (Daly & Friedrich, 1981). McCroskey (1981) states that most writers allege that reinforcement patterns in a person's environment, particularly during childhood, are the dominant elements in the development of CA. The underlying structure of the reinforcement model is that expectations will lead a person to seek situations or to engage in behaviors predicted to result in favorable consequences. So, for some people, avoiding social activities is rewarding since participation is expected to lead to punishment. For other people, engaging in the activity is rewarding; avoidance punishing. Such learning would be expected to become internalized early in a child's life (Aronfreed, 1968) and subsequently, difficult to modify. In short, the positive and negative consequences associated with oral communication performance become internally mediated without the support of external events such as reward and punishments (Daly & Friedrich, 1981).

An explanation based on skill acquisition suggests that the apprehensive child becomes so because of a failure to acquire the necessary skills for social interaction. In many cases, this failure is not one of absence, but one of relative acquisition rate: the high CA child fails to

develop the necessary skills as rapidly as the low CA child. A skills explanation for CA would suggest that an anxious child has not developed these skills as acutely as the nonapprehensive child (Daly & Friedrich, 1981).

The final explanation of the development of CA, modeling, is based upon the child's imitation of others whom he or she observes in social interaction (Daly & Friedrich, 1981). It would stand to reason that a young child might imitate the communication style of his parents or primary care givers. The roles of the parents and siblings and the teachers and peers have been studied with some consistency in terms of the child's social development. The home environment and the role of the parents in eliciting sociable responses from children is significant. Homes associated with high social anxiety in children tend to lack both interaction (Walberg & Marjoribanks, 1973) and in some cases, stimulation for interaction (Schiefelbusch, 1951). Such homes appear tense, disorganized, and confused (Daly & Friedrich, 1981). Taken together, these three environmental explanations for the development of CA share certain emphases. All suggest the predominance of positive communication environments for discouraging apprehension in a child. These environments, and the significant others who occupy them should provide a high level of positive reinforcement for interaction attempts, offer good skills training, and present adequate models of communication and sociability (Daly & Friedrich, 1981).

This study focuses on the non-genetic, environmental elements of the etiology of CA, considering that the child will experience reinforcement, skill acquisition, and modeling in the home environment before arriving at school.

Previously Tested Causal Agents

There are a myriad of possible causes of CA. This multiplicity of cause-effect theories is common in examining human behavior. The many theories imply that individuals need to be viewed as unique and that several factors in their life experience must be explored before assuming that the etiology of their reticence is understood (Freidman, 1980). The etiological research in CA points to numerous causal agents. Some researchers specify fear, anxiety, and apprehension about communicating as the central focus (McCroskey, 1970); others identify the problem as avoidance, nonparticipation, and withdrawal from communication related to inadequate communication skills (Phillips, 1968). Although CA and communication avoidance may be viewed as two subcategories of dysfunctional communication (Page, 1980), oral communication apprehension and avoidance are multidimensional in nature (Glaser, 1981).

Although multidimensional, most of the etiological agents which have been implicated in CA have one concept in common. That concept is uncertainty. When an individual is uncertain of how to act in public, due to lack of knowledge or experience, he she becomes uncomfortable or anxious.

Berger (1987) states that uncertainty is a potential hobgoblin of interpersonal relations. The task of interacting with a stranger, who in theory can behave in a large number of alternative ways, presents interactants with complex predictive problems. These problems pertain both to understanding the other person in an interaction and understanding oneself. To interact in a smooth coordinated and understandable manner one must be able to do two things: first, predict how one's interaction partner is likely to behave, and second, based on those predictions, select from one's own repertoire those responses that will optimize outcomes in the encounter. Uncertainty reduction is a function of both the ability to predict and the ability to explain the actions of the other person and of one's self. The uncertainty can breed both stress and anxiety. What is being argued here is that stress and anxiety will be greater when the results of the interaction are unknown. Not knowing how a person will react deprives one of the ability to adapt to the situation. To reduce anxiety, one must reduce uncertainty. CA research encompasses three general categories: genetic, psychological and environmental. Each category contains several theories which will be examined in conjunction with the research supporting the theories. With the exception of the genetic factors, all of the variables in the following studies can be related to uncertainty. Those students who were able to reduce uncertainty in their social interchanges had lower CA; those

who were unable to reduce uncertainty had higher CA. Genetic factors have been examined as causal agents of CA since etiological research began. Scarr's (1969) study of twin girls indicated that the tendency for social introversion-extroversion was inherited. Social introversion-extroversion was defined to include sociability, social anxiety, friendliness to strangers, and social spontaneity. Therefore, social anxiety can be equated to CA due to the fact that high CAs are anxious in social situations, i.e., those involving other people. The behavior continuum of introversion-extroversion extended from shy, introspective, anxious withdrawal to friendly, extroverted, self confident engagement with the interpersonal environment. Social introversion-extroversion is a basic dimension of responsiveness to the environment. Individual differences are observable in the first years of life; social introversion-extroversion is relatively stable over the developing years. Twin studies find significant genetic contributions to it; and it is constantly rediscovered as a source of individual differences in behavior. Scarr (1969) goes on to state that temperamental styles of behavior are produced by genotypes that predispose the individual to react in relatively outgoing or withdrawn manner in the environment.

However, the environment still plays a factor even in the genetic causes of CA. Scarr (1969) observes that by tracing developmental sequences, a moderately withdrawn

unresponsive infant with a stimulating responsive mother will develop phenotypically less withdrawn behavior than a similarly introverted infant under less stimulating maternal conditions. A more extroverted child would be less affected by a lack of maternal stimulation. In summary, twin data suggest that social introversion-extroversion is a basic way of responding to the environment, produced by polygenic inheritance and environmental interaction (Scarr, 1969). The study demonstrates a high correlation between inherited introversion extroversion and CA.

Another factor which has been examined as a causal agent of CA is birth order, or ordinal position of birth. Although birth order is genetic, by virtue of birth, it is affected by what happens to the child after birth, therefore, environmental. Miller and Maruyama (1976) conducted a study to determine whether first, middle, or last born children were more popular among their friends, had better social skills, were higher achievers in school, more intelligent, and had anxiety, high self concept, and dependence. Miller and Maruyama (1976) theorized that firstborns are perceived as dominant in sibling interactions (Sutton-Smith & Rosenberg, 1968). Therefore, if later born children are to obtain a fair share of positive outcomes, they must develop their interpersonal skills: powers of negotiation, accommodation, tolerance and a capacity to accept less favorable outcomes, to a degree not typically found in firstborn children. Conversely, firstborn

children, by virtue of the higher status implicit in age, possess greater power and may simply take or achieve what they want quite arbitrarily. If so, they need not develop these social skills. While middle born children may need to develop interpersonal skills to deal effectively with their older siblings, they are in a position of power when interacting with younger siblings. Although their birth order might result in more flexibility in their interaction strategies to the extent that they model and apply strategies similar to those of their older siblings, middle born children will be less interpersonally skillful than last born children (Miller & Maruyama, 1976).

The results of Miller & Maruyama's (1976) test show that later born children demonstrate a greater popularity than their early born peers upon entering school and throughout the grade school years. An explanation based upon greater development of interpersonal skills by later born children as a necessity for achieving positive outcomes in interactions with older siblings seems logical and persuasive. The differences in popularity appear by kindergarten and persist throughout the grade school years.

However, the Miller and Maruyama (1976) tests failed to confirm that measures of achievement and intelligence, and personality dimensions such as anxiety, self concept and dependence were linked to birth order. So, even though popularity is a correlation of birth order, CA does not appear to be.

A study on family size, falls in the genetic category, but is affected by environment. Proportionately more subjects high in CA were raised in large families than in moderate sized families (Randolph & McCroskey, 1976). It is believed that children in larger families get less parental attention and training. Later born children get still less attention than those born first. And less attention is given to those in families where children are closer in age than in families where they are spaced more widely in years.

The disparate findings from the family size testing (Randolph & McCroskey, 1976) and the birth order testing (Miller & Maruyama, 1976) can be integrated by hypothesizing that children who interact primarily with siblings and friends when young learn skills needed to get along better with other children; but children with more opportunities to talk with their parents are less shy in school when dealing with adult authority figures (Freidman, 1980). The children who have interacted more with their parents have reduced the uncertainty about dealing with other adults; as a result, they are less fearful, less anxious.

There seems to be no conclusive evidence that either birth order or family size are etiologically sound predictors of level of CA. If genetics play a role, as prior research suggests, the possibility of affecting genetic change by external intervention hinges on future developments in genetic engineering. To the extent that environmental causes can be identified, some thoughtful

social engineering can take place (Miller, 1984). The probable psychological and environmental causes of CA have more possibility of change. The next step is to examine some possible psychological causes of CA.

A general state of helplessness, or the unavailability of task or situation relevant behavior is one particular set of cognitive and environmental conditions that turns arousal to the emotion called anxiety (Mandler, 1972). In a state of arousal, the organism who has no behavior available to him, who continues to seek situationally or cognitively appropriate behavior, is "helpless" and also may consider himself as being in a state of anxiety. Thus helplessness is not defined by an objective situation, but by the organism and his/her repertory of behavior.

One of the conditions that leads frequently to states of helplessness is the interruption of plans or behavior. When an organized sequence of behavior or an organized plan is interrupted, the person may not complete the plan either behaviorally or cognitively; the person is then in a state of arousal. When interruption leads to arousal and no appropriate behavior is available either to substitute for the original plan or to find alternate ways to the original goal, the person is in a typical state of anxiety. Interruption is probably sufficient for arousal and emotion to occur; it is however not necessary. Furthermore, interruption will lead to helplessness if and only if no adequate continuation behavior or substitute is available

(Mandler, 1972).

Freidman (1980) proposes traumatic experiences as causal factors of CA. In the course of children's lives isolated incidents that have a marked effect on their approach to speaking can occur. These traumatic experiences can cause emotional scars that are long lasting. And the experiences increase the uncertainty of communication outcomes in the mind of the child. They might happen during the Oedipal period when children yearn for extraordinary parental intimacy that must be denied, causing them to blame themselves for the rejection they perceive (Kaplan, 1972). One psychoanalyst has reported that in his shy patients these fears of being unwanted or ignored are displaced by grandiose fantasies of having an enormous effect on others, and by preoccupation with self. These are traits which are commonly found in reticent individuals (Kaplan, 1972).

Another psychological factor to consider in the etiology of CA is schizophrenia. Phillips' (1968) study indicates that because of the low verbal output of the reticent person, the possible association with schizophrenia must be considered. Most authorities on schizophrenia regard low verbal output as part of the system. It seems however, that while verbal problems are among many indications of schizophrenia, it would be irrational and impractical to consider inept speakers as suffering from schizophrenia. It is more fruitful to approach reticence as a problem of social personality which may or may not be

associated with deeper psychological problems (Phillips, 1968).

Reticence, like other personality deviations, is associated with emotionally disturbed methodology in social behavior. The reduction or distortion of verbal output is a symptom generally found in emotional disturbances. The quantity and quality of verbalization must be considered in any diagnosis of personality pathology. Any failure to use speech for conventional purposes may be considered a sign of impending mental illness. Such observations appear sound but should not be interpreted to mean that reticent behavior is an infallible sign of mental illness. Rather it should indicate that there is a potential for personality involvement to greater or lesser degrees in any person whose speech output can be classified as deviant. It is not clear whether learning a defective speech pattern impels a personality toward illness, or whether the illness occurs first and is reflected in communicative problems. It seems reasonable to assume that causation may occur in both directions (Phillips, 1968).

Practicality dictates that whatever its cause reticence is best considered a problem of "normal" speakers and understood in that context. Its etiologies are therefore best sought in the experiences to which generally "normal" persons are exposed (Phillips, 1968). As simple withdrawal from participation, reticence poses few problems in early childhood. Some adults tend to regard a quiet child as

preferable to a noisy one. The tendency to regard quietness as a virtue instead of a convenience and to reward it accordingly tends to support reticent patterns adopted in childhood. Such a pattern of reward for what may be a disability could lead the child to seek similar rewards in other social settings. On the other hand, the child may not know that adult society expects him to participate and for this reason be unable to cope with what appear as sudden demands that he/she express ideas orally to others. The normal adult is expected to participate with skill in a variety of communication situations. But the reticent person may continue to seek social rewards by using the pattern of silence found useful in childhood, or may come to perceive society's demands as unfairly contradictory to the social norms he/she was first taught (Phillips, 1968). The social norms he/she first used successfully helped to reduce the uncertainty and therefore he/she continued to use them. However, when the new demands for oral communication began, the uncertainty increased, causing more apprehension.

Environmental causes, the third etiological category of CA, have the greatest potential for social engineering, remediation, or prevention. The environment is more easily manipulated than the psyche or hereditary tendencies.

Reticence may emerge from environments. Withdrawal from participation in communication may be fostered by homes in which talk has no apparent use other than a vehicle for abuse. There is evidence that low value of oral

communication is common in lower socio-economic groups and that limited verbal experience is associated with at least some speech retardation (Phillips, 1968).

Phillips' (1968) survey of reticent college students indicated that many came from lower socio-economic or ethnic nationality homes. These reports indicate the same reticence can be attributed to "not knowing the rules" of social behavior. Not knowing the rules engenders uncertainty.

Parental emulation may also be a factor. In homes where children observe hostility of family members toward each other it may be difficult to learn that there are social rewards to be reaped from communication. It is easy for a child who perceives speech as an aggressive weapon to misinterpret the suggestions and directions of teachers and the normal discourse of peers (Phillips, 1968).

Elliott's (1968) research indicates that socio-economic background may be a significant factor associated with chronic shyness. Children from lower socio-economic backgrounds compared with peers in higher socio-economic circumstances experience more constricting child rearing practices, spend less time with their parents, have to compete with a larger number of siblings for parental attention, have less living space, and may do less oral communicating at home (Elliott, 1968). Each condition may contribute to the causation of CA because of the uncertainty of how to behave and/or communicate.

Elliott's (1968) research further indicates that the shy child in the middle grades (four, five and six) may be isolated. Social exclusion by peers would tend to further crystallize the shy child's reticence to speak by reducing opportunities as well as the need to speak. The study does not show why the lower socio-economic children began school with a reluctance to speak. It is suggested that the status of these children with its implications for child rearing practices and familial attitudes toward expression of feeling and thought played a role in the development of the non-communicative behavior pattern (Elliott, 1968). The child with fewer opportunities to speak, should demonstrate more uncertainty about how to speak, therefore demonstrate more anxiety when placed in a speaking situation.

The place where a person is born and grows up has been investigated by several researchers as a contributory cause of CA. Phillips & Butt (1966) found that a significant percentage of the college students they identified as reticent were from first and second generation ethnic families. Those students would have more uncertainty about communication expectations in an English speaking society; therefore more anxiety.

Grutzeck (1970) studied the communication of urban and rural children in an attempt to identify characteristics of reticent children. While she was unable to determine that rural children were consistently more reticent than urban children she did find rural children had more difficulty

than others in communicating according to the norms of expectancy of their schools. As a follow up to the Grutzeck (1970) study, Richmond and Robertson (1977), speculated that children from rural environments would develop higher levels of CA than children from urban environments. Their results indicated that college students who came from rural areas, farms, or small towns had significantly higher CA than students who came from medium sized towns and urban areas. The authors concluded that community size is likely a contributing cause of the development of CA in young people.

McCroskey and Richmond (1978) found, however, that community size does not affect CA in all age groups. In their research on community size for kindergarten through college age, it was found that the younger groups of rural children did not demonstrate high CA. The difference between rural and urban environments is significant at the junior high level and above, and not significant before that age level. Grades K-3 show no interpretable pattern. It would appear that the impact of community size on CA development is not one which occurs in the pre-school period of the child's life. Rather, it appears that the impact gradually increases as the child progresses through school (McCroskey & Richmond, 1978). Peer pressure, which demands conformity to social rules, probably comes to bear more strongly as the child reaches junior high school age. The child from a rural area meeting peers from even a small

community would be likely to have more uncertainty about how to act. This uncertainty would lead to anxiety about communication.

Geographic mobility has been investigated as an environmental cause of CA. The study by (Ziller, 1973) considered the role of self-esteem as it was impacted by family mobility. Since low self-esteem is a component of high CA (McCroskey, 1970), the self-esteem studies are correlational to CA. Ziller (1973) reported that no significant differences between mobile and non-mobile children were found on the measures of self esteem. The results do not warrant an interpretation of maladjustment of the mobile child. The mobile children are more acutely aware of the significance of friends, teachers, and parents. Having experienced social deprivation, the perpetual newcomer realizes the significance and value of friends. The mobile child reflects more social interest, yet is more self-centered. For the mobile child, the self is the point of reference. For the less mobile child others constitute the point of reference (Ziller, 1973). Children who are less self-absorbed should tend to have less CA because they are accustomed to interacting with others. Their practice in interacting, reduces uncertainty.

Zimbardo (1981) posits a number of different origins of shyness rooted in early childhood experiences. Some shy children report failures in social settings: difficulties in school, unfavorable comparisons with older siblings,

relatives, or peers. Others suffer from the loss of social supports that results from frequent family moves. Some suffer from sudden changes in social bonding due to divorce, death, or going to a new school.

Parents who are from cultures that downplay public displays of affection, emotion, and active discussion and debate between parents and children frequently produce children who are shy (Zimbardo, 1981).

Sheer lack of experience in social settings contributes to shyness. Living in isolated areas or being raised in restricted environments that deny access to a variety of social experiences makes for awkwardness and fear of the unknown (Zimbardo, 1981).

Another variable in shyness, and low self esteem is shame. Zimbardo's (1981) research demonstrates that in the culture in which shyness is the most prevalent, Japan, shame is used as a tool for getting people to perform or behave the way society says they should. The Japanese grow up with the notion that they are not to bring disgrace to the family. Disgrace may be seen as not performing well in school, making an error in a Little League game, or any failure. There is an important comparison between the cultural values of Japan, and Israel. In Israel shyness is least prevalent of any country Zimbardo (1981) has studied. In Japan, failure falls entirely upon the shoulders of the person who erred while his or her success gets credited to parents, grandparents, teachers, coaches, or Buddha. Such a

system suppresses individual risk taking and solitary initiative.

Israeli children typically experience exactly the opposite of Japanese child-rearing practices. Any success is attributed personally to the individual, while failures are externalized: blamed on inadequate teaching, unfair competition, or prejudice. There are rewards for achieving something, with few sources of punishment for failure. The Israeli child has nothing to lose by trying and everything to gain. The Japanese child who has little to gain from trying and much to lose, holds back, defers, and passes up the chance (Zimbardo, 1981).

In our culture, children raised under parental values that are similar to the Japanese will avoid situations of uncertainty or novelty and take few chances in social settings. These are the hallmarks of the shy person's approach to life. Zimbardo (1981) believes that shyness is caused by a combination of feelings of low self-worth, labeling (being told one is shy by an authority figure), and shame.

In a similar study, Paivio (1964) determined that childrearing has a direct impact on "audience sensitivity" (another term for state CA). The least audience sensitivity was manifested by children who were favorably evaluated and infrequently punished by their parents; especially if the parents attached high importance to proper social behavior and achievement. There was evidence that audience

sensitivity is negatively related to parental rewards. In other words, a child whose parents withheld rewards for communication and achievement was more likely to experience high CA.

Comadena and Prusank (1988) have linked CA with academic achievement (AA). They found CA and AA to have a significant negative relationship. On three tests of achievement (mathematics, language, and reading), students high in CA demonstrated the lowest levels of learning. This inverse relationship is based on the notion that students high in CA avoid or fail to participate meaningfully in classroom communications with teachers and peers in order to avoid experiencing anxiety associated with communication. Since the essence of instruction is communication, fear or anxiety about participating in classroom communication results in low levels of learning (Bloom, 1976; Lysakowski & Walberg, 1982).

There are two reasons why one would expect a negative relationship between CA and AA among elementary and middle school students. First, research concerning the development of CA indicates that one's level of CA is established early in childhood. A study by McCroskey, Andersen, Richmond, and Wheelless (1981) revealed that substantial changes in self-reported CA occurs in kindergarten and between grades three and four; CA remains relatively stable from grade four through college. Reinforcement patterns for communication received at home and school appear to be the primary causal

factors in development of CA in children (Beatty, Plax, & Kearney, 1984; Daly, & Friedrich, 1981; McCroskey & Beatty, 1986).

A second reason why CA may be related to AA among elementary school students concerns the teachers' expectations. A study by McCroskey and Daly (1976) indicated that student level of CA may influence teacher achievement expectations. Results indicated that teachers expected the student low in CA compared to the student high in CA to have higher achievement, better relationships with others, and greater success in future education.

To summarize the probable causes just elucidated, here is the design which Zimbardo (1977) created for a society in which shyness is likely to exist:

1. Valuing rugged individualism (making it on one's own, going it alone, doing it my way).
2. Promoting a cult of the ego (narcissistic introspection, self absorption and self consciousness).
3. Prizing individual success and making failure a source of personal shame in a highly competitive system.
4. Setting limitless aspirations and ambiguous criteria for success, while not teaching ways of coping with failure.
5. Discouraging expression of emotions and open sharing of feelings and anxieties.

6. Providing little opportunity for intimate relations between the sexes and strict taboos on most forms of sexual expression.
7. Making acceptance and love contingent on fluctuating and critical social standards of performance.
8. Denying the significance of an individual's present experience by making the comparisons to the unmatched glories of past times and the demands of future goals.
9. Fostering social instability through mobility, divorce, economic uncertainty and any other way possible.
10. Destroying faith in common societal goals and pride in belonging to the group (Zimbardo, 1977).

Berger (1987) asserts that uncertainty is a function of both the ability to predict and the ability to explain the actions of others and of self. Considering Zimbardo's (1977) list of probable causes of CA, it can be understood that the principles of ambiguousness, fluctuating standards, and instability dominate the list. Each of those principles fosters uncertainty, because they deny the individual the ability to predict or explain one's own actions or those of others. As the uncertainty increases, so does the anxiety. If the uncertainty is about communication, then communication apprehension is the result.

Television Viewing as a Correlation to CA

It has been argued that CA is mainly environmental, and is developed in the years before school, or shortly thereafter; the home environment seems to be the most influential on the child, given that is where the preschool child spends the bulk of his/her time. Two of the most factors ever present in the home are the parents, and the television set. Lyle and Hoffman's (1971) study of preschool children's television viewing habits reveal that television does play an important part in the life of the three to five year old. Even the youngest children watch television regularly on a daily basis, especially during the afternoons and on Saturday mornings. Children's viewing time reported by the mother, revealed that 47.3 percent of preschoolers watch one and one half to two hours of TV on weekday afternoons, plus more on weekday mornings, evenings, and on Saturday and Sunday mornings. Thirty-six percent of the subjects reported two and one half hours or more of TV viewing on weekday afternoons and approximately the same amount of time on Saturday mornings. The preschoolers had favorite programs and showed high ability to identify television characters. Nine of ten mothers interviewed in the study said their children had learned commercial jingles from television, and the children were stimulated by commercials to ask for food and toys which they saw on television commercials. Sex and ethnic

differences were apparent in the program choices of these preschool-age youngsters. Generally, then, the responses of these children and their mothers support the notion that much of the child's patterns of television use has already begun taking shape before the child begins formal education in the first grade.

Lemish (1987) stated that babies watch television as early as six to eight weeks of age. TV is part of a modern baby's life, "an environment within an environment" (Lemish 1987, p.34). Babies develop a grasp of TV as a source of messages before they are potty trained; by two and a half years they are regular viewers with clear habits and expectations (Lemish, 1987).

A study by Zimbardo (1977) argues that children who watch a lot of television are missing opportunities to experience social interaction. This phenomenon could be referred to as para-social interaction (Hart & Burks, 1972). The contention is that para-social interaction is a way to realize the advantages of social interaction without the accompanying difficulties. Although interpersonal relationships can be rewarding, few would deny that they can be difficult to develop and maintain. They require a certain amount of maintenance: in part, regular meetings, exchange of dialogue, avoidance or resolution of conflict, strain of adaptation, and self disclosure, among other issues. At times one may find the strain of developing and maintaining an interpersonal relationship to be too much

trouble, too time consuming, too emotionally costly.

A convenient, readily accessible manner of maintaining a form of social interaction is through television or radio, and involvement with the performers. Although this is a one-sided interpersonal relationship, because there is no reciprocity, it does serve some of the same functions of a normal social interaction.

There are certain characteristics of rhetorical sensitivity as posited by Hart & Burks (1972) which can help people make the most of their social interactions. Three of these characteristics give clues to the reasons behind the substitutions of para-social interaction for true social interactions. The characteristics are: willingness to adapt; distinguishing between all information and information acceptable for communication; verbalization.

The first characteristic of rhetorical sensitivity that helps a person be successful in social interaction is willingness to adapt. But adaptation does not come easily. Adaptation implies a change, a kind of existential risk; and stress and strain is often concomitant with rhetorical acts. So people often seek respite in situations of discourse which require minimal adaptation (Hart & Burks, 1972). What could require more minimal adaptation than para-social interaction where the performer is the only adaptor. The listener has no responsibility to adapt. It is easier to carry on a para-social interaction than a social interaction because one does not have to undergo the strain of

adaptation.

Another characteristic of rhetorical sensitivity is deciding which information is acceptable for communication. One of the most basic communication decisions is whether or not to say anything in an interaction (Hart & Burks, 1972). Any interaction which requires specific guidelines and decisions about how much, when, and if to disclose requires mental and emotional effort. If one is not prepared to or capable of putting forth that effort, it is easier to engage in para-social interaction in which one receives a similar reward of companionship, reliability, or emotional gratification without the strain of decisions about self-disclosure.

A final characteristic of rhetorical sensitivity which applies to para-social interaction is verbalization. Rhetorical invention involves determination of which ideas are to be made known, and consideration of how such information is to be presented. These decisions are difficult to make. It is not difficult to decide that one is angry; but deciding whether or not to express the anger, and if so, how to express the anger is much more challenging, mentally and emotionally (Hart & Burks, 1972). It is less challenging, in fact, requires no decisions if one becomes angry with a television performer. The decision in that case is whether or not to turn the program off; but does not require verbalization, or decisions about which ideas to make known and how to present those ideas. It is

easier to engage in para-social interaction in which the verbalization is all done by the performer than to engage in more challenging social interactions which require engaging mind and emotions of the listener.

A report to the Surgeon General on Television and Social Behavior presents one of the single strongest indicators that television viewing might be dysfunctional to social activity (Dorr, 1972). The report states that low-TV-user-first-graders reported higher levels of daily play with other children compared to high-TV-user-groups.

Greenberg (1974) studying British children's TV viewing habits categorized eight different reasons that children watch TV: To pass time, to forget, to learn about things, to learn about themselves, for arousal, for relaxation, as a habit, and for companionship. One of the most frequent answers was for companionship. When asked about watching for companionship, the children stated such explanations of its companionship quality as:

Because it's almost like a human friend;
So I won't be alone;
(I watch) when there's no one to talk to or play with;
Because it makes me feel less lonely.
(Greenberg, 1974, p. 73-4).

Those children in Greenberg's study were using the TV in a para-social interaction (Horton & Wohl, 1979) manner; they were substituting TV for people with whom they could interact. The time spent in a non-interacting environment, such as in front of the TV, takes time away from learning social interaction skills. TV viewing leaves the child less

capable of coping with people in social situations, such as interpersonal or public speaking settings, and eventually results in CA.

There is evidence to suggest that heavy television viewing may reduce the likelihood that one will engage in active pursuits, such as interaction with other people. Kubey and Csikzentmihalyi (1990) propose that subjects in their study engaged in heavy television viewing, in part, to escape solitude and negative experiences. Heavy viewing allows subjects to avoid other more demanding activities. The high passivity of viewing has been shown to linger for one to two hours after viewing (Kubey, 1984). These viewers are engaging in para-social activities which seem to replace the interactive pursuits that encourage communication skills.

Family Interaction as a Correlation to CA

Friedrich and Daly (1981) argue that the two most significant environments for children are the home and the school; children spend the bulk of their time in those two environments. Home environments vary in the amount of interaction: some families have high incidence of talk; others are more quiet (Friedlander, Jacobs, Davis, & Wetsone, 1972).

A prominent factor in the home environment is the style parents employ to interact with their children. In many cases, the parental style of child rearing can be

marked by "communication suppression" (Griffin & Heider, 1967). Mothers of anxious children tend to interact less with the child; are rigid, restrictive, and dominant; often criticize; and provide little variety for the child (Becker et al., 1962). Fathers of anxious children have been noted to be withdrawn themselves and usually are neutral and nondirective (Bugental, Love & Kaswan, 1972). Children who are frequently rewarded and seldom punished for communication have less anxiety than others (Paivio, 1964).

In Daly and Friedrich's (1981) study, it was shown that the most important parent/home factor was the amount of perceived encouragement and reward the individual received for communication. CA is a learned trait, that is conditioned through reinforcement of the child's communication behavior. It is well established that a child will learn to repeat behaviors that are reinforced, while behaviors that are not reinforced generally will be extinguished over a period of time (Bugelski, 1971). If a child is reinforced for being silent and is not reinforced for communicating, the probable result is a quiet child. Additionally, if the child often experiences some aversive experience e.g. parent shouting, big brother hitting when attempting to communicate, the quiet child result is even more probable. Such a quiet child is likely to enter school with a well-established, high level of CA (McCroskey, 1977).

Bernstein (1972) has stressed that differences in parental orientation have considerable impact on the language skills developed by children. He noted that children from position-oriented families (those in which each family member has a strict role to maintain), are more likely to develop a restricted language code. These families using restricted language code, are likely to employ communication as a weapon. On the other hand, children from person-oriented families, where communication is open, are more likely to develop elaborated language codes. These codes are the most likely to generate reinforcement from others.

Bernstein's concept of family interaction is carried further by Lull. Lull's (1980) study on the social uses of television characterizes the differences between concept-oriented families and socio-oriented families. He characterizes their viewing habits, and the resulting personality traits of the children from each type of family. In socio-oriented families, parents encourage their children to get along with other family members and friends. The child is advised to give in on arguments, avoid controversy, repress anger, and stay away from trouble. In contrast, concept-oriented families create a communicative environment in which parents stimulate their children to express ideas and challenge others' beliefs. The child is encouraged to discuss or debate controversies with adults. In general, the difference between the family types is a preoccupation

with others' feelings (socio) compared to an emphasis on presenting and discussing ideas (concept) (Chaffee et al., 1973).

Socio-orientation correlates positively with all forms of parental control, verbal and restrictive punishment, and with affection (McLeod et al., 1972). Concept-orientation correlates positively with a communicative environment where parents stimulate their children to express ideas and challenge others' beliefs (Chafee et al., 1973).

These styles of family communication contribute to the child's "cognitive mapping" of situations encountered outside the family context (Chaffee et al, 1966). These socializing influences of concept vs. socio-orientation persist into adulthood and become part of the person's personality (McLeod et al, 1967). The child from a socio-oriented family is more likely to develop CA due to the restrictive nature of parental control and verbal punishment. As was stated earlier, if a child is punished for communication or is discouraged from attempting communication he is receiving negative reinforcement. The negative reinforcement of communication inhibits his/her learning communication skills.

In Lull's (1980) study, family members with socio and concept orientations also differ in their uses of television. Socio-oriented families had high levels of TV viewing, while concept oriented families had low TV viewing levels. In general, socio-oriented persons were more likely

than concept-oriented persons to employ television for social purposes. Lull's (1980) findings indicate that not only did socio-oriented families watch more TV, they used it for a variety of social purposes not so used by their concept-oriented counterparts. Concept-oriented families reported that, with few exceptions, they do not use TV as a social resource. However, the socio-oriented family apparently accepts TV as an important part of the communication environment and uses the medium to further interpersonal goals. Family members admit that it plays significant roles in their interpersonal behavior, and that they use it as resource for constructing their desired social realities at home (Lull, 1980).

Complimentary to the results reported by Lull (1980) a study by Stowell (1989) found that excessive TV viewing in early childhood is linked to CA. College students reporting high TV viewing (i.e. over two hours per day) during preschool and early elementary school years reported higher CA scores than those students who watched less than two hours of TV per day in childhood.

The present study suggests that the socio-oriented family uses television viewing as a para-social activity; giving family members interpersonal satisfaction without efforts to learn interaction skills outside the family group. This insular behavior may prevent children from learning skills which help them avoid CA. TV viewing may be commended for bringing families together. However, for

those families who wish to develop interpersonal communication skills, it is desirable to spend less time viewing TV and more time in direct interaction with one another, or to engage in active pursuits. Low TV viewing and high direct interaction develops communication skills which allow individuals to function with less anxiety in the world beyond the home environment.

Missing from the etiological CA research are specific environmental elements that cause CA. Although "reinforcement" is a plausible explanation for causing CA, the literature does not go far enough in stating how a child must experience the reinforcement in order to avoid CA. Ickes (1971) proposes a classical conditioning model to demonstrate the effectiveness of the reinforcement approach in the modification of social withdrawal in children. There are no statements about the situations from which the children are withdrawing. Nor does the research state how they withdraw.

Circular reasoning is another troubling factor in etiological research. The assertions of etiology researchers to date have sometimes failed to go far enough in dealing with causality. McCroskey (1980) lists seven factors resulting in a quiet child:

1. low intellectual skills
2. speech skill deficiencies
3. social introversion
4. social alienation

5. ethnic/cultural divergence
6. communication apprehension
7. low social self-esteem

Holbrook (1987), commenting on this list states that "general personality traits such as quietness, shyness, and reticence frequently precipitate CA" (p.554). It could certainly be argued that CA precipitates quietness, shyness, and reticence. But to state that speech skill deficiencies, social introversion, social alienation, communication apprehension and low social self-esteem result in a quiet child is similar to stating that low income people are poor because they do not have any money. CA research must not be bound by a hopelessness perpetrated by researchers who say that since direction of causality is difficult to demonstrate, there is no need to try.

Purpose of the Research

This present research sought to demonstrate that excessive television viewing coupled with communication suppression by parents (socio-orientation) during preschool years has a distinct impact on the development of CA in children. This study proposes that children who spend more time watching television and interacting only with parents and siblings are at-risk of developing communication apprehension because they have not learned the appropriate means for interacting with others. The time the children should be learning to interact, (speak and listen

appropriately) is consumed with TV viewing. Although TV viewing provides children with social gratification it does not provide practice in communication with those outside the family group.

In addition, the study proposes that socio-oriented family interaction is harmful during the years when the child should be learning interpersonal communication skills. Socio-interaction denies the child time and practice in communication needed to become a competent communicator. Consequently, socio-interaction contributes to the development of a shy, quiet, withdrawn adolescent, and CA becomes more firmly established as attempts to communicate publicly are unsuccessful. Furthermore, due to lack of practice, the probability of unsuccessful public communication increases. With this increase comes the desire to avoid these failure events. Uncertainty of how to communicate is in place; accordingly, CA becomes more firmly established. By the time the person reaches the required interaction request of a college course, the pattern of CA is so firmly established that difficulty is encountered.

Considering all the etiological possibilities, whether they occur first, or high CA occurs first, is not known. But as in the case of the chicken and egg, we hypothesize that the presence of either will be highly predictive of the other (McCroskey, Daly, Richmond, & Falcione, 1977).

Hypotheses

H1: Subjects reporting high levels of TV viewing during preschool years will report higher levels of CA than other groups.

H2: Subjects reporting socio-oriented family style will report higher levels of CA than subjects reporting concept oriented family style.

H3: Subjects reporting high levels of TV viewing and socio-oriented family style during preschool years will report higher levels of CA than subjects reporting low levels of TV viewing and concept-oriented family style.

CHAPTER III

RESEARCH METHODOLOGY

Subjects

The sample for this study consists of two hundred students taken from required Political Science, History, and English Composition classes at a junior college. This sample was selected in order to give a broad spectrum of apprehension from low to high CA scores. The average age of the students is 21.8 years. There are a small percentage of non-traditional students ranging in age from thirty to fifty. The majority of these students are traditional eighteen year old freshmen taking their general education requirements in a university parallel program. Most are from a moderate to high socio-economic bracket. Ninety-nine percent are Caucasian; the remainder are black and Oriental.

Variables

The degree of communication apprehension (CA) is the dependent variable. CA is measured by the Personal Report of Communication Apprehension (PRCA). The PRCA is a 24 item version of the Personal Report of Communication Apprehension..., which assesses the anxiety by summing

the individual's responses to five-step, Likert-type scales. The measure, developed by McCroskey (1970, 1975)..., has traditionally maintained high reliability in terms of internal consistency (Daly, Friedrich, 1981 p. 246-7).

It has strong indications of both concurrent and predictive validity (McCroskey, Sorenson, & Daly, 1976). The PRCA was chosen over other similar measures since, it incorporates most other measures of the individual difference while maintaining high reliability (Daly, Friedrich, 1981). It was used to determine the level of CA present in each student when giving a speech.

The co-variates are: Birth order, family size, nationality, parents' nationality, size of community, mobility, home stability, grade point average, TV viewing time and family orientation.

For the purposes of this study, birth order is operationalized as the order in which the child was born (first, middle, or last) in the family. Family size refers to the number of children in the family: Large (5 or more children), moderate (3-4 children), and small (1- 2 children). Nationality is operationalized as the ethnic group to which the student belongs. The parents' nationality is the ethnic group to which the student's parent/s belong. Size of community refers to the place in which the student spent most of the growing up years: Rural area, community of 5000 or less, town of 5000 to 50,000, or urban environment of over 50,000 (McCroskey & Richmond, 1978). Mobility is operationalized as the number of times a

student moved in his/her lifetime, whether from town to town or within the same town. Home stability refers to broken homes vs. stable nuclear families. It is operationalized as the loss of a parent due to divorce or death. Grade point average is operationalized as the overall grade point average achieved thus far in college.

Excessive television viewing is operationalized as self report of viewing more than four hours of TV per day. TV viewing time is divided into three levels, high, moderate, and low: Low viewing (under two hours), moderate viewing (two to four hours), and high viewing (above four hours). Family orientation is represented by concept-oriented families which encourage challenging interaction with those outside the family group, and socio-oriented families which encourage passive interaction mainly within the family group. Family orientation is operationalized as the degree to which a family is socio-oriented or concept-oriented (Chaffee, 1973).

Pilot Instrumentation

Three pilot tests were conducted: For the first pilot test, three speech classes at a southwestern junior college were pretested with the PRCA (McCroskey, 1970, 1975) (Appendix A) and a self report survey developed to measure TV viewing and communication suppression by parents, called Correlational Factors of CA (Appendix B). The self report consisted of eight questions: two dealt with viewing

time, one with type of programs watched, one with whom the subjects watches, three with parental style of communication, and one with number of siblings in the home. The answers were forced choice. The results were inconclusive, possibly because of the lack of refinement of the questionnaire, possibly because the students were tested in the 14th week of a 16 week speech class in which they had learned to cope with CA. The questionnaire was rewritten using Likert type scale to make it consistent with the PRCA. For the second pilot the survey was administered during the second week of the semester. The self report questionnaire (see Appendix C) and the last six questions of the Personal Report of Communication Apprehension (PRCA) which dealt with speech giving were used as instruments. Only the public speaking portion of the PRCA was used because this present study focuses on CA manifested by college students in a public speaking situation.

The results of the second pilot were significant (see Appendix D). A one-way ANOVA run on CA by TV confirmed H1 (the preschool/elementary child who watches more than two hours of TV per day will be more likely to develop CA). The analysis of the TV viewing scores differed significantly according to the level of CA ($F(1/18) = 4.9508, p < .05$).

For the third pilot the students answered a self report survey designed to ascertain how much television they watched between ages three and eight, and what type of conversational reinforcement they received from their

parents during those same years (see Appendix E). The memory of the students was prompted by handing them a list of television programs from 1970 (Appendix F), their preschool era. By seeing the selection of TV shows from their childhood, they could calculate daily viewing time more readily than trying to recall their viewing time without the prompt.

Current Instrumentation

As a result of the three pilot studies the instrumentation for the present inventory has been refined. For the current study a new survey has been prepared: Correlational Factors of CA (Appendix B). The complete version of the PRCA was employed due to high reliability and validity. The self report questionnaire was changed to employ an instrument with demonstrated reliability and validity, since reliability and validity had not been established for family orientation in the pilot studies. The questions posed by Chaffee et al.(1973) were employed (Appendix B) to determine the degree of concept-orientation or socio-orientation present in the home. Chaffee's questionnaire demonstrated the following characteristics: Within the socio- and concept-orientation dimensions, the average correlation between items was .30; between the two dimensions, the average correlation was .04. Chaffee has replicated his measures, with some variations in wording and the number of items, with samples of 256 U.S. college

students and 200 Indian college students. In all cases, the mean correlation between items across dimensions ranged between zero and $+0.08$; within dimensions the mean correlations ranged between $.22$ and $.36$. Each dimension was dichotomized at the median.

The survey questions were adapted to be used by the adult child rather than the parents and children. This was done simply by deleting "you" (meaning parents) from the original wording of the question. The adapted question now reads "How often did your parents say that getting ideas across is important even if others don't like it?", rather than the original "How often do you (your parents) say that getting ideas across is important even if others don't like it?". The questions were also changed to past tense to fit more accurately the retrospective account.

The current self-report questionnaire was also modified to report weekly TV viewing instead of daily viewing. This was done to acknowledge the difference between weekend and weekday viewing, and summer vs. school year viewing. The revised questionnaire permits differences between accounts of summer vs. school; weekend vs. weekday viewing.

The survey was further modified to include correlational factors which have been previously studied by other researchers. They will provide comparisons to the new variables (TV viewing and family orientation) in determining which variables account for more of the CA.

Procedures

The subjects were surveyed in groups of ten to forty in a regularly scheduled class period. After a brief explanation of how to use the Likert scale, the subjects were asked to complete the PRCA. After completion of the PRCA, they were asked to complete the self-report survey. To aid in calculating TV viewing time, the students were given a list of TV shows from the 1970s which should have stimulated their memory. The 1970s are the years when most of the students were in preschool or elementary school. The students received no reward, grade, or extra points for answering the survey, but were given class time to do so. Students were given instructions on scoring the PRCA so that they could ascertain their own apprehension scores. The PRCA was rescored by the researcher to catch potential errors.

Subjects tested were asked to recall some information such as family communication patterns and amount of TV viewing. Although recall testing is not ideal, some precedent has been established for its use. For this study, it is acceptable because the recall is scheduled, scripted, and salient. It is scheduled in that the TV shows and family behavior were reinforced over a long period of time. Exposure learning posits that a person will remember more easily a program watched each week over a period of months or years, just as the child will remember repeated parental

behavior.

The salience of recall testing is represented by the importance of the subject. Anderson and Pichert's (1978) study demonstrates that important elements are more likely to be learned and remembered than unimportant elements. We recall more effectively if the subject is important to us at the time we are exposed to it. For the children watching TV, the programs they watch are of great importance to them (Lyle & Hoffman, 1971).

The scripting of recall testing provides construct validity. Anderson and Pichert (1978) explain the retrieval process of "inferential reconstruction". Subjects remember more effectively when placed in a scenario and recall other elements in that scenario. The present study uses inferential reconstruction by giving the subjects a list of 1970s TV shows to help them reconstruct their own viewing patterns. Furthermore, subjects were given directions to reconstruct the TV shows they watched before and after school, on Saturdays, and Sundays, so that they were dealing only with small periods of time in particular settings.

Data Analysis

Regression analysis was performed to predict the average level of CA of a student, as a function of family orientation and TV viewing. This model was modified through the use of the following residual variables: birth

order, family size, nationality, parent's nationality, size of community, mobility, broken vs. stable home, and grade point average. The variables were treated as interval data.

The first six questions dealing with family orientation were a modified Likert scale. When coded they resulted in concept-oriented or socio-oriented family orientation. Families were conceptualized on a two-dimensional basis.

Questions dealing with TV viewing time are open ended. The viewing time estimated by the students was analyzed as real time. The questions dealing with birth order, family size, urban vs. rural environment, and broken homes, are forced choice. They were compared to the questions about family orientation and TV viewing to help establish which factors have the highest correlation.

CHAPTER IV

RESULTS

Data Analysis

The data were analyzed using bivariate and multivariate regression techniques. First, the reliability of the major independent variables, TV viewing, concept orientation, and socio-orientation was examined. Descriptive statistics were computed for each variable in the study. Next, stepwise multiple regression analyses were run for the total sample, males in the sample, and females in the sample. Finally bivariate regression analyses were run for the total sample using the four separate components of the PRCA as the criterion.

Reliability

Cronbach's Alpha was computed for concept-orientation, socio-orientation, and TV viewing. The measures ranged from moderate to moderately high reliability. Each of the measures had three items and was administered to 197 respondents. The first measure, TV viewing, produced an Alpha of .87, $p < .01$. The second measure, concept family orientation, had an Alpha of .68, $p < .01$. The third

measure, socio-family orientation had an Alpha of .69, $p < .01$ (see Table 1).

TABLE I
CRONBACH'S ALPHA FOR INDEPENDENT VARIABLES

Variable	Alpha	p	# of items	# of cases
TV viewing	.87	.01	3	197
Concept-orientation	.68	.01	3	197
Socio-orientation	.69	.01	3	197

To determine external consistency of the same three measures above, Pearson Product Moment Coefficients between Test/retest reliability was calculated on the twenty-one subjects (11% of the total sample). The Pearson Product Moment Coefficients were as follows: on TV viewing, the r was .87, $p < .01$; on concept orientation, the r was .84, $p < .01$; on the socio orientation, the r was .33, $p > .05$ (see Table 2). Overall, two of the three scales were deemed acceptable for the purposes of this study. However, because estimates for socio-orientation ranged from .69 to .33, conclusions regarding socio-orientation must be regarded with extreme care. These results indicate high test/retest

reliability for the concept-orientation, and TV viewing measures, and unacceptable test/retest reliability for the socio-orientation measure.

TABLE II
TEST/RETEST RELIABILITY FOR INDEPENDENT VARIABLES

Variable	r	p	# of items	# of cases
TV viewing	.87	< .01	3	21
Concept-orient.	.84	< .01	3	21
Socio-orient.	.33	> .05(N.S.)	3	21

Descriptive Statistics

Before the regression was run, descriptive statistics were obtained for each variable (see Table 2). For the dependent variable, the PRCA mean was 63.5 with a standard deviation of 17.5, and a range of 29-116.

Of the three major independent variables, TV viewing time produced a mean of 58.4 hours with a standard deviation of 33.26, and a range of 0-154; concept orientation produced a mean of 4.80 with a standard deviation of 2.48, and a range of 0-12; socio-orientation produced a mean of 5.64

with a standard deviation of 3.69, and a range of 0-12.

Of the 197 subjects, 64% or 126 were females and 36% or 71 were males. The student subjects had a mean age of 24.6 with a SD of 8.17, range of 18-53. On the average, they were from families of 2.87 children and born second in the birth order. Community size was a mean of 1.84 with a range of 1 to 4, indicating most subjects were from communities of over 5,000. The subjects had moved an average of 6 times, had an average GPA of 3.13, and 39% had lost a parent due to death or divorce. None of the subjects spoke English as a second language, and only 5 of the 197 subjects (2.5%) had a parent who spoke English as a second language. Because of the limited representation of ESL subjects in the sample, these variables were omitted from the analysis (see Table 3, pg. 64).

Inferential Statistics

Stepwise Multiple Regression was used to assess the three research questions: 1) To what extent does TV viewing in early childhood covary with communication apprehension? 2) To what extent does concept-orientation covary with communication apprehension? 3) To what extent does socio-orientation covary with communication apprehension? The .05 level was set as the criterion that a variable must meet in order to be entered into the regression equation. First, bivariate regression solutions were computed for each independent variable using the

apprehension scores as the criterion (see Table 4, pg. 65). Second, the stepwise multiple regression was conducted. Regression models were computed for (1) the total sample, (2) males in the sample, and (3) females in the sample. Because women comprised nearly two thirds of the sample, men and women were analyzed separately (see Tables 5 & 6, pgs. 66 & 67). Third, bivariate regression solutions were computed for three independent variables: TV viewing, concept-orientation, and socio-orientation, using the four components of the PRCA, which are meetings, group discussion, interpersonal, and public speaking, as the criterion.

The stepwise regression for the total sample failed to detect any variable meeting the criterion for entry into the equation. Therefore, H1, Subjects reporting high levels of TV viewing in early childhood will report high levels of CA; H2, Subjects reporting socio-oriented family style will report higher levels of CA than those reporting concept-oriented family style; and H3, Subjects reporting high levels of TV viewing in early childhood years, and socio-oriented family style will report higher levels of CA than other groups, were not confirmed at a significant level.

Because there is a precedent for using the four separate components of the PRCA singly in CA studies (Miller, 1987), we theorized that the public speaking portion of the PRCA might yield more significant results

than the PRCA as a whole. The public speaking scores are usually higher than the other three scores; in this study, with a range of 6 to 30, the public speaking mean was 19.02, while the mean for meetings was 16.24, for group discussion was 14.58, and for interpersonal was 13.98. Therefore, as a final effort to test comprehensively, bivariate regression solutions were computed for the three independent variables new to this study: TV viewing, concept-orientation, and socio-orientation. The four separate components of the PRCA, apprehension in meetings, apprehension in group discussions, apprehension in interpersonal exchanges, and apprehension during public speaking became the criterion. One at a time, the scores of each of the four components was run on a bivariate regression against TV viewing, concept-orientation, and socio-orientation. The results however, were non significant.

TABLE III
DESCRIPTIVE STATISTICS

Variable	Mean	S.D.	Range	R
PRCA	63.50	17.53	29-116	
TV viewing	58.40	33.26	0-154	.0150
Concept	4.80	2.48	0-12	.1251
Socio	5.64	3.69	0-12	.0347
Gender	.36	.48	0-1	.0176
Age	24.60	8.17	18-53	.0602
Children	2.87	1.30	1-11	.0170
Birth order	2.01	1.08	1-5	.0468
Community	1.84	1.06	1-4	.0556
Moved	6.01	9.94	0-100	.0490
GPA	3.13	.52	1.9-4.0	.0240
Lost parent	.39	.49	0-1	.0026

TABLE IV

CORRELATION MATRIX FOR TOTAL SAMPLE

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	(Numbers correspond to those on Y axis)													
1 DV PRCA														
2 gender	-0.01													
3 age	0.06	-0.05												
4 # child	-0.01	0.00	.23**											
5 birth	-0.04	0.00	0.00	.53**										
6 commun	0.05	0.00	0.06	-0.03	0.00									
7 moved	-0.04	0.04	.30**	0.05	-0.04	-0.02								
8 lostpar	0.00	-0.11	.31**	0.02	-0.13	0.05	.21*							
9 GPA	0.02	-0.13	.34**	0.14	-0.04	0.10	0.12	0.09						
10 pre TV	0.00	.30**	-.37**	-0.13	-0.03	-0.02	-0.11	-.28**	-0.15					
11 sch TV	-0.05	.23**	-.43**	-0.13	0.07	-0.07	-0.13	-.29**	-.25**	.70**				
12 sum TV	0.01	.18*	-.38**	-0.16	0.00	-0.09	-0.08	-.22**	-0.15	.64**	.82**			
13 concept	-0.12	-0.09	-0.10	-0.09	-0.08	0.05	-.20*	-0.04	0.06	0.11	0.09	0.00		
14 socio	-0.03	0.11	.34**	0.13	0.04	-0.05	0.14	0.06	0.03	-.17*	-0.14	-0.06	-.24**	
15 tot TV	-0.01	.26**	-.43**	-0.16	0.00	-0.07	-0.11	-.29**	-.20*	.84**	.92**	.93**	0.06	-0.13

** p < .01

* p < .05

TABLE V

CORRELATION MATRIX FOR MALE SAMPLE

	1	2	3	4	5	6	7	8	9	10	11	12	13
	(Numbers correspond to those on Y axis)												
1 DV PRCA													
2 age	-0.10												
3 # child	-0.01	0.20											
4 birth	0.06	0.14	.66**										
5 commun	0.04	-0.02	0.12	0.15									
6 moved	-0.08	.38**	0.17	-0.06	-0.15								
7 lost par	-0.11	0.27	0.11	-0.07	0.14	.49**							
8 GPA	0.05	.33*	0.21	0.06	0.00	0.25	0.14						
9 pre TV	-0.09	-.30*	0.10	-0.03	-0.12	-0.08	-0.13	-0.10					
10 sch TV	-0.06	-.42**	0.01	0.00	-0.06	-0.23	-.29*	-.27*	.80**				
11 sum TV	0.07	-0.26	-0.01	-0.09	-0.21	-0.07	-0.13	-0.13	.72**	.71**			
12 concept	-.35*	-0.22	-0.03	-0.02	0.03	-0.18	-0.10	-0.11	0.02	0.09	-0.11		
13 socio	0.01	0.17	0.01	0.02	-0.17	0.08	-0.14	0.02	-0.07	-0.10	0.03	-0.16	
14 tot TV	-0.01	-.35*	0.02	-0.05	-0.15	-0.13	-0.19	-0.18	.91**	.90**	.91**	-0.10	-0.04

** p < .01
* p < .05

TABLE VI

CORRELATION MATRIX FOR FEMALE SAMPLE

	1	2	3	4	5	6	7	8	9	10	11	12	13
	(Numbers correspond to those on the Y axis)												
1 DV PRCA													
2 age	0.13												
3 # child	-0.02	.25*											
4 birth ord	-0.11	-0.08	.46**										
5 commun	0.06	0.10	-0.11	-0.08									
6 moved	-0.03	.28**	0.02	-0.04	0.02								
7 lost par	0.05	.32**	-0.01	-0.17	0.01	0.13							
8 GPA	0.00	.35**	0.11	-0.11	0.17	0.09	0.04						
9 pre TV	0.06	-.42**	.29**	-0.03	0.02	-0.16	-.36**	-0.12					
10 sch TV	-0.04	-.44**	-.22*	0.11	-0.07	-0.12	-.27**	-0.19	.60**				
11 sum TV	-0.01	-.44**	-.24*	0.04	-0.02	-0.11	-.26*	-0.13	.55**	.88**			
12 concept	-0.01	-0.05	-0.12	-0.11	0.06	-.21*	-0.03	0.14	.23*	0.14	0.10		
13 socio	-0.05	-.43**	0.20	0.05	0.00	0.16	0.19	0.06	-.32**	-.22*	-0.16	-.26*	
14 tot TV	0.00	-.48**	-.28**	0.04	-0.02	-0.14	-.32**	-0.16	.77**	.94**	.94**	0.16	-.25*

** p < .01
* p < .05

CHAPTER V

DISCUSSION

None of the hypotheses were confirmed. Let us look at each variable in order, beginning with the dependent variable and demographic variables, moving to the previously tested variables, and ending with the three new variables proposed by this study.

The PRCA scores seemed consistent with means and standard deviations found in other investigations of CA (McCroskey, Booth-Butterfield, & Payne, 1989). The subjects in the present study did not deviate from previously established norms.

The age of subjects had no effect on the PRCA scores. Although the instrument was designed for traditional age college students, the sample in this study contained a number of non-traditional students who, due to age, did not have TV in their homes as children. The presence of non-traditional students in the sample could have affected the posed relation between TV viewing and CA.

The number of children in the home did not correlate with PRCA scores. Studies examining the impact of family size on CA by Randolph & McCroskey (1976) found that proportionally more subjects high in CA were raised in large

families than in moderate sized families. The literature has shown that children from large families are more apt to have high CA because their parents do not have much time to devote to each child. The inconsistent results with the previous studies may be due to the small number of siblings recorded by our subjects. Perhaps because our sample had so many children from small families (2.87), it was skewed.

The birth order did not correlate with CA as birth order had correlated with popularity in the Miller & Maruyama study (1976). The literature demonstrates that second children are more adaptable and well socialized than first children because they have to cope with their older siblings and compete on a more sophisticated level to get attention from adults. The mean birth order in this study is 2.01. Therefore our abundance of second children may have skewed the results.

The size of community in which the students grew up did not affect CA either. A study by McCroskey & Richmond (1978) showed that rural children do not demonstrate a difference in the CA until junior high school, when they do become more apprehensive than their city counterparts. Our sample had a preponderance of urban students. So the urban born students' scores may have suppressed the few rural born ones. This study did not account for the junior high age and up, which the earlier study had done; another possibility of error.

The geographic mobility factor, represented by the

times a student had moved showed no correlation with CA, which is not unexpected since the earlier study (Ziller, 1973) showed no significance either. The measure was included to provide a baseline for the regression analysis.

The variable dealing with the loss of parents was inspired by Zimbardo's (1977) treatise on creating shyness. To date there seem to have been no other studies examining broken homes, so it was included as another baseline measure to examine correlation with CA. No expectations were held, nor realized.

The Zimbardo (1981) research on cultural differences as they affect shyness unfortunately could not be tested. The lack of foreign nationals enrolled at the campus where the testing was done, precluded our employing that measure.

The academic achievement factor studied by Comadena & Prusank (1988) did not show a correlation here. The probable reason is that the earlier study was done with elementary and junior high students, while the present study was done with college age students, reflecting a college GPA. Our mean GPA was 3.13, much higher than would be expected in elementary and junior high school. Our college students are a self-selected sample; we are not dealing with any great numbers of low grade point averages, which might reflect correlation with CA. A second reason why the academic achievement might have shown no correlation with CA is reflected in McCroskey & Daly's (1976) study of teacher expectation. Their results indicate that teachers expected

the student low in CA to have higher achievement, better relationships with others, and greater success in future education. It seems likely that the grade school and junior high teacher would know better and interact more with his/her students than the college teacher would. Therefore the elementary and junior high school teachers may have set up expectations that the college teacher would fail to do. The college student is more likely to be operating from his/her internal motivation rather than from some set of expectations from an external source like the teacher.

The television variables have not been tested before and were used to explain the para-social interaction theory (a one-sided interpersonal relationship with TV which functions in place of normal social relationships) posited by Hart & Burks (1972). Evidently the para-social influence of TV viewing was not as marked as expected. Perhaps as Kubey (1990) suggests, some television programs actually enhance social interaction. Kubey (1990) maintains that heavy TV viewing among family members is beneficial because it brings the family together. In addition, some family members who enjoy being together watch more TV together. Perhaps while doing so, family members are interacting verbally, thus learning verbal skills which serve them well outside the home.

The family orientation measures were expected to be the most likely to have an affect on CA based on Lull's (1980) study on family orientation and TV use. He has shown that

families which stress harmonious social relations at home (socio-orientation) differ in many attitudes, activities, and media habits from families which stress the independent expression of ideas (concept-orientation). The concept-orientation scale showed the strongest relationship with CA, especially among the male subjects. The results are consistent with the socialization process of males and females discussed by Tannen (1990; Maltz & Borker, 1982). Boys tend to play outside in large groups that are hierarchically structured. Their groups have leaders who tell the others what to do. It is by giving orders that high status is negotiated. Another way boys achieve status is by challenging the stories of others. In contrast, girls play in small groups in which intimacy is the key. In their most frequent games such as jump rope, everyone gets a turn. Many of their activities do not have winners or losers. Girls don't give orders, but express preferences as suggestions. They don't take center stage, so they don't challenge each other directly as boys do. Girls are not accustomed to jockeying for status, but are more concerned that they be liked (Tannen, 1990).

The concept oriented family stresses independent expression of ideas. One would expect that males are encouraged to express independent ideas by their family members, so that they will fit into the expected socialization pattern. Because of their ability to express ideas and give orders in the society at large, after being

taught at home, they should be less apprehensive interacting with all people. If a male child did not learn concept orientation, he would be at a disadvantage when functioning in the world outside his home. He might experience uncertainty which could bring on CA. On the other hand, female children are not necessarily expected to express independent ideas as readily, nor are all females taught to challenge others' beliefs, which is part of the concept orientation. The females should not feel at a disadvantage then, when functioning in the society. The concept and socio-oriented females might operate on the same level where CA is concerned. The socio-oriented male, however, would operate at a distinct disadvantage compared to the concept-oriented male, because of the expectations society has that males should be able to challenge others. The fact that we did not find significance in the family orientation variable until we scored the males and females separately would indicate that the preponderance of female subjects' scores in the study tended to suppress the scores of the male subjects.

Benefits

One benefit from the study occurs in the writing of an instrument to test retrospective accounts of TV viewing. The test/re-test reliability was high, and the internal reliability was strong. Compared to other studies on TV viewing which were not retrospective, but done at the time

of occurrence, our scale holds up well. In a composite of five studies drawn by Roberts (1978), the TV viewing time for pre-schoolers was 2.2 hours per day. Dividing our mean of 15.03 for the week by 7 days, gives us 2.14 hours per day. The original study gave an average of 2.3 hours per day for 6 year olds to 3.5 hours per day for 10 year olds. Dividing our mean of 18.80 hours per week for school year TV viewing gives 2.6 hours per day; and dividing the mean of 24.58 hours per week for summertime viewing gives 3.51 hours per day. Our retrospective account of first through fourth grade, 6 to 10 years of age is drawn very closely to that of the Roberts composite of studies.

Limitations and Weaknesses

Some concluding comments are in order about the limitations of the study. First, the nature of our data collection prohibits the drawing of causal conclusions about the etiology of communication apprehension. Future research should explore the likely causal or correlational agents in more experimental ways. The nature of CA, however, may limit such probes. While apprehension may be experimentally modified through laboratory manipulation, the change is likely to be on "state" rather than "trait" characteristics of the construct which we are attempting to examine. Therefore, retrospective accounts for studying "trait" apprehension must remain an acceptable method for gathering data. Fortunately, our demonstrated reliability for the

retrospective account scales in this study give some credence for using retrospective data.

A second limitation of the study deals with the saliency of CA in the sample of students. What began as an attempt to randomize the sample by gathering data from students taking required classes (history/political science/English) may have been counter-productive. The pilot studies, which showed significance, used data gathered from Speech students who had an immediacy about their CA. The non-speech students may have not had the same immediacy over CA, since they had no immediate prospect of giving a speech. Therefore, their apprehension may have been lower.

A third limitation deals with the sample in general. Our study found no correlation between CA and the variables which had been studied before with significant results: size of community, size of family, birth order, and grade point average. Expectations would lead one to believe that some of the test results would be consistent with past studies. Since none of our results were consistent with other studies, it creates suspicion of the sample; we may have had an aberrant sample. Our study was done in a different part of the country from many of the others, at a junior college, rather than a university.

Finally, the present research fails to take into account the interactive nature of human development. Family interaction, TV viewing, and social factors must have an affect on apprehension. The child, however, also affects

the way in which these sources react to him or her. There is not a singular, one-way effect. Instead, the child affects his or her environment, as much as this environment in turn affects the child (Daly & Friedrich, 1981).

Future Research

The large number of variables tested provide a richness of possibilities for future research. Variables which showed correlation to one another might be investigated. Several of the correlations involved TV viewing. The first, the affect of gender on TV viewing is appropriate for study, especially in the preschool years. Our findings indicate that preschool boys watch more TV than their female counterparts.

The correlations in our study indicate a strong correlation between TV viewing and age. The younger the students, the more TV they watched in their formative years. The pursuit of this study coupled with past studies of viewing time, could indicate how TV viewing has increased/decreased over a period of years.

The correlations indicate that students who lost a parent due to death or divorce watched more TV in preschool and elementary school years. The pursuit of this information could help reveal patterns of behavior in children from broken homes.

TV watching and GPA were negatively correlated, indicating that students who watch more TV have lower grade

point averages. Pursuing this information in a study could help add to the profiles of student success.

A final indication for future research involves data collection from students who speak English as a second language. Based on the Zimbardo (1981) theory concerning the cultures which downplay family controversy producing children who are shy, there may be a link between those cultures and CA. This is a theory which deserves exploration with the appropriate sample of students.

REFERENCES

- Adler, R.B. (1980). Integrating reticence management into the basic communication curriculum. Communication Education, 24, 215-221.
- Anderson, R.C. & Pichert, J.W. (1978). Recall of previously unrecallable information following a shift in perspective. Journal of Verbal Learning and Verbal Behavior, 17, 1-12.
- Aronfreed, J. (1968). Conduct and Conscious, New York: Academic Press.
- Beatty, M.J., Plax, T.G., & Kearney, P. (1984, Nov.). Reinforcement vs. modeling theory in the development of communication apprehension: A retrospective analysis. Paper presented at the annual meeting of the Speech Communication Association, Chicago.
- Becker, W.C., Peterson, D.R., Luria, Z., Shaemaker, D.J., Hellmer, L.A. (1962). Relations of factors derived from parent interview ratings to behavior problems in five year olds. Child Development, 43, 397-411.
- Becker, W.C., & Krug, R.S. (1964). A circumplex model for social behavior in children. Child Development, 35, 371-396.

- Bernstein, B. (1972). A sociolinguistic approach to socialization: With some reference to educability, in J. Gumperz & D. Hymes (Eds.), Directions in Sociolinguistics. New York: Holt, Rinehart & Winston.
- Bloom, B.S. (1976). Human Characteristics and School learning. New York: McGraw-Hill.
- Bond, B.D. (1984). Silent Incarceration. Contemporary Education, 55:2, 95-100.
- Bronson, G.W. (1966). Central orientations: A study of behavior organization from childhood to adolescence. Child Development, 37, 125-155.
- Bugelski, B.R. (1971). The psychology of learning applied to teaching. Indianapolis: Bobbs-Merrill.
- Bugental, D.E., Love, L.R. & Kaswan, J.W. (1972). Video taped family interaction: Differences reflecting presence and type of child disturbance. Journal of Abnormal Psychology, 79, 285-290.
- Buss, A. H. (1980). Audience Anxiety. In Self consciousness and social anxiety. (pp. 165-183). San Francisco: Freeman.
- Buss, A.H. (1986). A theory of shyness. In W.H. Jones, J.M. Cheek, & S.R. Briggs (Eds.), Shyness: Perspective on research and treatment, (pp. 39-46). New York: Plenum Press.

Chaffee, S.H., J.M. McLeod, and D.B. Wackman (1973).

Family communication patterns and adolescent political participation, in J. Dennis (Ed.) Socialization to Politics. New York: John Wiley.

Chaffee, S.H. (1966, Feb.). Family communication and political socialization. Presented to the annual meeting of the Association for Education in Journalism, Iowa City.

Clevenger, Jr. T. (1959). A synthesis of experimental research in stage fright. Quarterly Journal of Speech, 4, 134-145.

Comadena, M. E., & Prusank, D. T. (1988). Communication apprehension and academic achievement among elementary and middle school students. Communication Education, 37, 270-278.

Comrey, A. & Jamison, K. (1966). Verification of six personality factors. Educational and Psychological Measurement, 26, 945-53.

Daly, J.A. (1977, Oct.). The development of social-communicative anxiety. Paper presented at the Annual Convention of the International Communication Association, Berlin, Germany.

Daly, J. A., Friedrich, G. (1981). The development of communication apprehension: A retrospective analysis of contributory correlates. Communication Quarterly, 29, 243-255.

- Dorr, A. (1972). Television and affective development and functioning. In J.P. Murray (Ed.), Television and Social Behavior, II, (pp.68-77). Rockville, Md.: National Institute of Mental Health.
- Elkind, D. & Bowen, R. (1979). Imaginary audience behavior in children and adolescents. Developmental Psychology, 15, 38-44.
- Elliott, R. (March, 1968). Shy middle-graders. The Elementary School Journal, 296-300.
- Freedman, D.G. (1965). An ethological approach to the genetic study of human behavior. In S. Vandenberg (Ed.). Methods and goals in human behavior genetics. New York: Academic Press, 141-161.
- Freidman, P. G. (1980). Shyness and reticence in students, Washington D.C.: NEA. (ERIC Document Reproduction Service No. ED 181 520)
- Friedlander. B.Z., Jacobs, A.C., Davis, B.B., & Wetsone, H.S. (1972). Time sampling analysis of infants' natural language environments in the home. Child Development, 43, 730-740.
- Friedson, E. (1953). The relation of the social situation of contact to the media in mass communication. Public Opinion Quarterly, 17, 230-38.
- Glaser, S.R., (Oct, 1981). Oral communication apprehension and avoidance: The current status of treatment research. Communication Education, 30, 321-341.

- Gottesman, I.I. (1966). Genetic variation in adaptive personality tests. Journal of Child Psychology and Psychiatry, 7, 199-208.
- Greenberg, B.S. (1974). Gratifications of television viewing and their correlates for British children. In J.G. Blumler & E. Katz (Eds.) The Uses of Mass Communications. (pp. 71-93). Beverly Hills: Sage.
- Griffin, K., & Heider, M. (1967). The relationship between speech anxiety and the suppression of communication in childhood. The Psychiatric Quarterly Supplement, Part 2.
- Grutzeck, L.F. (1970). A search for invariant characteristics of reticent elementary school children. Unpublished M.A. Thesis Harris, L. & Associates, Inc. (1988). The Harris Poll, Washington, D.C.
- Hart, R.P. & Burks, D.M. (1972, June). Rhetorical sensitivity and social interaction. Speech Monographs, 39, 74-91.
- Horton, D., & Wohl, R.R. (1979). Mass communication and para-social interaction: Observations on intimacy at a distance. In G. Gumpert & R. Cathcart (Eds.), Inter-media: Interpersonal Communication in a media world, (pp. 32-55). New York: Oxford University Press.
- Ickes, W.K. (1971). A classical conditioning model for reticence. Western Speech Communication Journal, 35, 48-55.
- Kagan, J., & Moss, H.A. (1962). Birth to maturity: A study in psychological development. New York: Wiley.

- Kanner, L. (1953). Child psychiatry. Springfield, Il:Thomas.
- Kaplan, D.M. (1972). On Shyness. International Journal of Psychoanalysis, 53, 439-53.
- Kubey, R., (1990, Fall). Television and the quality of family life. Communication Quarterly, 38:4, 312-324.
- Kubey, R.W. & Csikszentmihalyi, M. (1990). Television as escape: Subjective experience before an evening of heavy viewing. Communication Reports, 3:2, 92-100.
- Lamb, D.H. (1973). Speech anxiety: Towards a theoretical conceptualization and preliminary scale development. Speech Monographs, 39, 62-67.
- Lemish, D. (1987). Viewers in diapers: The early development of television viewing. In T.R. Lindlof (ed), Natural Audiences: Qualitative research of Media Uses and Effects, (pp. 33-57). Norwood, N.J.: Ablex.
- Lull, J. (1980). Family communication patterns and the social uses of television. Communication Research, 7:3, 319-334.
- Lyle, J., Hoffman, H.R. (1972). Explorations in patterns of television viewing by preschool-age children. In E.A. Rubinstein, G.A. Comstock, & J.P. Murray (Eds.), Television and Social Behavior: Reports and Papers, Volume IV: Television in Day-to-Day life: Patterns of Use, (pp.257-273). Rockville, Md: National Institute of Mental Health.

- Lysakowski, R.S., & Walberg, H.J. (1982). Instructional effects of cues, participation, and corrective feedback: A qualitative synthesis. American Educational Research Journal, 19, 559-578.
- Maltz, D. N., & Borker, R. A. (1982), A Cultural approach to male-female miscommunication. In J. J. Gumperz (Ed.) Language and Social Identity, (pp 196-216). Cambridge: Cambridge University Press.
- McCroskey, J.C. (1970). Measures of communication-bound anxiety. Speech Monographs, 37, 269-277.
- McCroskey, J.C. (1973). Special Reports: Measures of communication bound anxiety. Speech Monographs, 40, 269-277.
- McCroskey, J.C. (1977). Oral communication apprehension: a summary of recent theory and research. Human Communication Research, 4 (1), 78-95.
- McCroskey, J.C. (1980). Quiet children in the classroom: On helping not hurting. Communication Education, 29, 239-44.
- McCroskey, J.C. (1981). Oral communication apprehension: Reconceptualization and a new look at measurement. Paper presented at annual CSSA conference, Chicago, Ill. (ERIC Document No. 199788)
- McCroskey, J.C. (1990, October). Telephone Interview.

- McCroskey, J.C., Andersen, J.A., Richmond, V.P. & Wheelless, L.R. (1981). Communication apprehension of elementary and secondary students and teachers. Communication Education, 30, 122-132.
- McCroskey, J.C., & Beatty, M.J. (1986). Oral communication apprehension. In W.H. Jones, J.M. Cheek, & S.R. Briggs (Eds.), Shyness: Perspective on research and treatment, (pp. 279-293). New York: Plenum Press.
- McCroskey, J.C., Booth-Butterfield, S., & Payne, S.K. (1989). The impact of communication apprehension on college student retention and success. Communication Quarterly, 37 (2), 100-107.
- McCroskey, J.C., & Daly, J.A. (1976). Teacher's expectations of the communication apprehensive child in the elementary school. Human Communication Research, 3, 67-72.
- McCroskey, J.C., Daly, J.A., Richmond, V.P., & Falcione, R.L., (1977). Studies of the relationship between communication apprehension and self-esteem. Human Communication Research, 3 (3), 269-275.
- McCroskey, J.C., & Richmond, V.P. (1978). Community size as a predictor of development of communication apprehension: Replication and extension. Communication Education, 27, 212-219.

McLeod, J.M., C.K. Atkin, & S.H. Chaffee (1972).

Adolescents, parents and television use: self-report and other report measures from the Wisconsin sample, in G.A. Comstock and E.A. Rubinstein (Eds.) Television and Social Behavior. Washington, D.C.: Government Printing Office.

McLeod, J.M., S.H. Chaffee, & D.B. Wackman (1967). Family communication: an updated report. Presented to the annual meeting of the Association for Education in Journalism, Boulder.

Mandler, G. (1972). Helplessness. In C.D. Spielberger(Ed.). Anxiety V.II: Current Trends in Theory and Research. New York: Academic Press.

Miller, G.R. (1984). Some (moderately) apprehensive thoughts on avoiding communication. In J.A. Daly & J.C. McCroskey (Eds.) Avoiding Communication, (pp. 237-246). Beverly Hills: Sage Publications.

Miller, N., & Maruyama, G. (1976). Ordinal position and peer popularity. Journal of Personality and Social Psychology, 33:2, 123-131.

Paivio, A. (1964). Childrearing antecedents of audience sensitivity. Child Development, 35, 397-416.

Pekarsky, A. (1952). Maternal attitudes toward children with psychogenetically delayed speech. Unpublished doctoral dissertation. New York University.

Phillips, G.M. (1968). Reticence: Pathology of the normal speaker. Speech Monographs, 35, 39-49.

- Phillips, G.M. & Butt, D. (1966). Reticence re-visited. Pennsylvania Speech Annual, 23, 40-57.
- Plomin R.A. (1974). A temperament theory of personality development. Unpublished doctoral dissertation, University of Texas.
- Randolph, F.L. & McCroskey, J.C. (1976). Oral communication apprehension as a function of family size. Unpublished monograph, West Virginia University.
- Richmond, V.P., & Robertson, L.D. (1977). Communication apprehension as a function of being raised in an urban or rural environment. Paper presented at the annual convention of the Western Speech Communication Association, Phoenix.
- Roberts, D.F. (1978). In G. Comstock, et. al.(Eds.) Television and Human Behavior. New York: Columbia Press.
- Rosenfeld, L.B., & Plax, T.G. (1976, Winter). Personality discriminants of reticence. Western Speech Communication, 22-31.
- Scarr, S. (1969). Social introversion-extroversion as a heritable response. Child Development, 40, 823-832.
- Schiefelbusch, R.L. (1951). A study of the development of speech in retarded children. Unpublished doctoral dissertation, Northwestern University.
- Spielberger, C.D. (Ed.) (1966). Anxiety and behavior. New York: Academic Press.

- Stowell, J. (1989). The Effects of Television Viewing and Parental Discipline on Communication Apprehension
Unpublished Manuscript.
- Sutton-Smith, B. & Rosenbery, B.G. (1968). Sibling consensus on power tactics. Journal of Genetic Psychology, 112, 63-72.
- Tannen, D. (1990). You Just Don't Understand. New York: Wm. Morrow & Co.
- Walberg, H.J., & Marjoribanks, K. (1973). Differential mental abilities and home environment: A canonical analysis. Developmental Psychology, 9, 363-8.
- Ziller, R.C. (1973). The Social Self. New York: Pergamon Press.
- Zimbardo, P.G. (1977). Shyness: What It Is, What to do about it. Reading, Ma: Addison-Wesley.
- Zimbardo, P.G. (1981). The Shy Child. New York: McGraw Hill.
- Zimbardo, P.G., Pilkonis, P.A., & Marnell, M.E. (1977). Shyness. Reading, Ma: Addison- Wesley.

APPENDIXES

APPENDIX A
PERSONAL REPORT OF COMMUNICATION
APPREHENSION

PERSONAL REPORT OF COMMUNICATION APPREHENSION

Directions: This questionnaire is composed of 24 statements concerning your feelings about communication with other people. Please indicate in the space provided the degree to which each statement applies to you by marking whether you (1) Strongly Agree, (2) Agree, (3) Are Undecided, (4) Disagree, or (5) Strongly Disagree with each statement. There are no right or wrong answers. Do not be concerned that many of the statements are similar to others. Work quickly, recording your first impression.

1. I dislike participating in group discussions.
1 2 3 4 5
2. Generally, I am comfortable while participating in group discussions. 1 2 3 4 5
3. I am tense and nervous while participating in group discussions. 1 2 3 4 5
4. I like to get involved in group discussions. 1 2 3 4 5
5. Engaging in a group discussion with new people makes me tense and nervous. 1 2 3 4 5
6. I am calm and relaxed while participating in group discussion. 1 2 3 4 5
7. Generally, I am nervous when I have to participate in a meeting. 1 2 3 4 5

8. Usually I am calm, and relaxed while participating in meetings. 1 2 3 4 5
9. I am very calm and relaxed when I am called upon to express an opinion at a meeting. 1 2 3 4 5
10. I am afraid to express myself at meetings. 1 2 3 4 5
11. Communicating at meetings usually makes me uncomfortable. 1 2 3 4 5
12. I am very relaxed when answering questions at a meeting. 1 2 3 4 5
13. While participating in a conversation with a new acquaintance, I feel very nervous. 1 2 3 4 5
14. I have no fear of speaking up in conversations
1 2 3 4 5
15. Ordinarily I am very tense and nervous in conversations. 1 2 3 4 5
16. Ordinarily I am very calm and relaxed in conversations.
1 2 3 4 5
17. While conversing with a new acquaintance, I feel very relaxed. 1 2 3 4 5
18. I'm afraid to speak up in conversations. 1 2 3 4 5
19. I have no fear of giving a speech. 1 2 3 4 5
20. Certain parts of my body feel very tense and rigid while giving a speech. 1 2 3 4 5
21. I feel relaxed while giving a speech. 1 2 3 4 5
22. My thoughts become confused and jumbled when I am giving a speech. 1 2 3 4 5

23. I face the prospect of giving a speech with confidence.
1 2 3 4 5.
24. While giving a speech I get so nervous I forget facts I
really know. 1 2 3 4 5

APPENDIX B
CORRELATIONAL FACTORS
OF CA SURVEY

CORRELATIONAL FACTORS OF CA SURVEY

Last four digits of social security number_____

sex: M_____ F_____

age: _____

Please relate the following questions to your childhood.

circle one answer for each statement

1. Your family talked at home about things like politics or religion where one person took a different side from the others.

never rarely sometimes often very often

2. Your parents said that getting ideas across is important even if others didn't like it.

never rarely sometimes often very often

3. Your parents encouraged other family members to challenge each other's ideas and beliefs.

never rarely sometimes often very often

4. Your parents said that children should give in on arguments rather than make people angry.

never rarely sometimes often very often

5. Your parents said that children shouldn't show anger in discussions.

never rarely sometimes often very often

6. Your parents said that children shouldn't argue with adults.

never rarely sometimes often very often

Using the list of TV shows from the 1970s you have been given, please estimate the amount of time each week you watched TV during the following time periods:

7. Before first grade _____ hours per week

8. First to fourth grade _____ hours per week during the school year

9. First to fourth grade _____ hours per week during the summer

10. How many children were in your family, including yourself? _____

11. In what order were you born in your family?

first _____ second _____ third _____ fourth _____ later _____

12. Do you speak English as a second language? Yes No

13. Do your parents speak English as a second language?

Yes _____ No _____

14. Where did you spend most of your childhood?

in a city over 50,000 _____ like Tulsa

in a town of 5,000 to 50,000 _____ like Enid

in a small town of under 5,000 _____ like Coweta

in a rural area _____

15. Approximately how many times have you moved in your lifetime? _____

16. Have you lost a parent due to divorce or death?

yes _____

no _____

17. What is your approximate overall grade point average?

APPENDIX C
SELF-REPORT SURVEY
FOR FIRST PILOT

COMMUNICATION APPREHENSION SURVEY

Directions: This questionnaire concerns your feelings about communication with other people. Please indicate in the space provided the degree to which each statement applies to you by marking whether you (1) strongly agree, (2) agree, (3) are undecided, (4) disagree, or (5) strongly disagree with each statement. There are no right or wrong answers. Many of the statements are similar to other statements. Do not be concerned about this. Work quickly, just record your first impression.

1. As a preschooler I watched less than two hours of television per day. 1 2 3 4 5
2. As a preschooler I watched more than two hours of television per day. 1 2 3 4 5
3. From kindergarten through the third grade I watched less than two hours of television per day. 1 2 3 4 5
4. From kindergarten through the third grade I watched more than two hours of television per day. 1 2 3 4 5
5. As a preschooler my parents carried on conversations with me often. 1 2 3 4 5

6. When I was a preschooler, my parents encouraged quiet behavior. 1 2 3 4 5

7. After I started school, between 5 & 8 years of age, my parents encouraged me to talk to them at the dinner table. 1 2 3 4 5

8. I have no fear of giving a speech. 1 2 3 4 5

9. Certain parts of my body feel very tense and rigid while giving a speech. 1 2 3 4 5

10. I feel relaxed while giving a speech. 1 2 3 4 5

11. My thoughts become confused and jumbled when I am giving a speech. 1 2 3 4 5

12. I face the prospect of giving a speech with confidence. 1 2 3 4 5

13. While giving a speech I get so nervous I forget facts I really know. 1 2 3 4 5

APPENDIX D
SELF-REPORT SURVEY
FOR SECOND PILOT

TELEVISION/CONVERSATION SURVEY

1. As a preschooler how much TV did you watch per day?

none

1-2 hours

2-4 hours

4 or more hours

2. As a kindergartener through third grader how much TV did you watch per day?

none

less than one hour

1-2 hours

2-4 hours

4 or more hours

3. What were your favorite types of programs?

cartoons

Sesame Street/Mr. Rogers

Situation comedies

Adventure (police, spy, westerns, Batman)

Soap operas

4. When you watched TV did you usually watch:

alone

with parents

with siblings

with friends

at a day care center

5. As a preschooler did your parents carry on conversations with you:

very infrequently

sometimes

often

very often

6. As a preschooler did your parents encourage you to:

be very quiet

talk to them occasionally

talk to them frequently

7. Between the ages of 3 & 8, at the dinner table were you encouraged by your parents to be:

quiet

moderately talkative

talkative

8. How many brothers and sisters did you have living in the home when you were under 8 years of age?

0 1 2 3 4 or more

APPENDIX E
SELF-REPORT SURVEY
FOR THIRD PILOT

TELEVISION/COMMUNICATION SURVEY

Circle one male female

Last 4 digits of social security number_____

A. As a preschooler how much TV did you watch per day?

1. none to less than one hour
2. 1-2 hours
3. 2-4 hours
4. more than 4 hours

B. In kindergarten through third grade how much TV did you watch per day?

1. none to less than one hour
2. 1-2 hours
3. 2-4 hours
4. more than 4 hours

C. What was your favorite type of program? Choose one

1. cartoons
2. Sesame Street/Mr. Rogers
3. Situation comedies
4. Adventure (police, spy, westerns, Batman)
5. Soap operas

D. As a preschooler did your parents carry on conversations with you:

1. very infrequently
2. sometimes
3. often

E. As a preschooler did you parents encourage you to:

1. be very quiet
2. talk to them occasionally
3. talk to them frequently

F. Between the ages of 3 & 8, at the dinner table were you encouraged by your parents to be:

1. quiet
2. moderately talkative
3. talkative

APPENDIX F

1970 TELEVISION PROGRAMS

1970 TELEVISION PROGRAMS

Mannix	Bonanza	Hawaii-Five-0
Ironside	Virginian	Walter Cronkite
Gunsmoke	The FBI	High Chaparral
Name of the Game	Mission Impossible	Dragnet
Marcus Welby	Medical Center	Bold Ones
Newlywed Game	Ironside	Lawrence Welk
Jimmy Durante	Let's Make a Deal	Star Trek
Outcasts	It Takes a Thief	Hogan's Heroes
Peyton Place	Family Affair	My Three Sons
Julia	Walt Disney	Big Valley
I Spy	Hondo	Debbie Reynolds
My Favorite Martian	I Love Lucy	Laugh-In
Bill Cosby	Bewitched	Glenn Campbell
Daniel Boone	Mod Squad	That Girl
Beverly Hillbillies	Hee Haw	Governor & JJ
Red Skelton	Mayberry RFD	Doris Day
Wonderama	Flintstones	Batman
Gilligan's Island	Munsters	Abbott/Costello
Brady Bunch	Adam-12	Eddie's Father
Beat the Clock	Popeye	Gumby
Carol Burnett	Jackie Gleason	Lassie
Flying Nun	Get Smart	Good Guys
Green Acres	I Dream of Jeannie	Lancer
Petticoat Junction	Dating Game	Gomer Pyle
McHale's Navy	Muppets	Dukes of Hazard
Sesame Street	Mr. Rogers	Capt. Kangaroo
Charlie's Angels	Little House...	Scooby Doo
Electric Co.	Spiderman	Green Hornet
Dennis the Menace	Mighty Mouse	Speed Racer
Planet of the Apes	Happy Days	Andy Griffith
Laverne & Shirley	Flying Circus	Jetsons
Addams Family	Noah's Ark	Romper Room
Mickey Mouse Club	Little Rascals	Three Stooges
Barnaby Jones	Dallas	Fantasy Island
Love Boat	Mr. Ed	Wonder Woman
Bionic Woman	\$6 Million Man	Lost in Space
Leave it to Beaver	Three's Company	Lone Ranger
Land of the Lost	Jeffersons	Maude
Eight is Enough	Hazel	Donnie & Marie
American Bandstand	Howdy Doody	Mr. Wizard
Welcome Back Kotter	Cartoons	

VITA

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