

COVERT MODELING AS A COGNITIVE MEDIATOR
IN ADOLESCENT SELF-CONSCIOUSNESS

by

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ABSTRACT

Covert modeling was used as a treatment to reduce self-consciousness in adolescents ages 13 to 15. The hypothetical construct of the Imaginary Audience as conceived by Elkind is discussed, and a distinction made between it and self-consciousness. For the purpose of this study, Imaginary Audience is hypothesized to be a developmental stage that can be altered through covert modeling and observational learning using videocassette recordings. The hypothesis is not supported. The Adolescent Social Behaviour Scale and the Fenigstein Self-Consciousness Scale were administered to 47 grade nine junior high school students as dependent variables. Significant correlations were noted in several subscales of the two tests which indicate a relationship between self-consciousness and Imaginary Audience. Overall, however, Imaginary Audience is perceived as a separate construct. The age of greatest concern for the Imaginary Audience differs between boys and girls.


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CHAPTER 1

INTRODUCTION TO THE STUDY

Statement of the Problem

Elkind (1967) has hypothesized that one characteristic of early adolescence is the sense of heightened self-consciousness which appears with the advent of formal operational thinking. This new level of cognitive development not only allows adolescents to consider their own thinking, but it also allows them to conceptualize the thoughts of others, and it is this capability that creates difficulties for the adolescent.

At times, adolescents fail to differentiate between what others are thinking about and their own mental preoccupations. With the emergence of abstract thinking, adolescents come to believe that others are paying more attention to them, and they assume that others are perceiving the world from the same point of view as the adolescent: "It is this belief that others are preoccupied with his appearance and behaviour that constitutes the egocentrism of the adolescent" (Elkind, 1967, p. 1029). Adolescents at this time of development anticipate the reactions of others to themselves, and this anticipation is based on the notion that others are being as admiring or as

critical of them as are the adolescents themselves. Elkind refers to this as concern for an **imaginary audience** (IA). Since the imaginary audience is a mental projection of the adolescent, it knows all of the secrets of the adolescent. It knows what the adolescent's thoughts are and can, therefore, either admire or chastise the adolescent. The imaginary audience construct places adolescents at the centre of their world, continually on stage and, therefore, constantly being observed. It has been suggested by Elkind that the imaginary audience probably plays a large part in the self-consciousness that is so typical of this developmental stage.

The adolescent gradually modifies this concern for the imaginary audience. By the age of 15 or 16 the adolescent has shifted to an awareness of the response from the real world. Elkind suggests that the imaginary audience can be regarded as a background for a series of hypotheses which adolescents use for reality testing. As a consequence of this testing, they gradually come to recognize the difference between their own preoccupations and the concerns and interests of others.

Elkind and Bowen's definition of self-consciousness as a "concern with what others think of them" (1979, p. 38) is very close to the definition given to imaginary audience behaviour and the definition of egocentrism. There is little to differentiate between this hypothetical construct

of the imaginary audience and the construct of self-consciousness. As pointed out by Lechner and Rosenthal (1984): "if it can be demonstrated that one can differentiate between egocentrism and self-consciousness, the S's response may be due to reasons of either an egocentric or self-conscious nature" (p. 296).

Purpose of the Study

One of the purposes of this study was to compare and contrast the effects of self-consciousness and egocentrism on adolescent behaviour. If the concern of the adolescent for the opinions of others is due to egocentrism, then this is theoretically related to cognitive development (Elkind, 1967), and one would not expect that a learning package would have any effect on the adolescent's behaviours and attitudes. If, on the other hand, the imaginary audience is a consequence of self-consciousness (Elkind & Bowen, 1979), then this behaviour might be modifiable through learning with modeling.

Fenigstein has identified three distinct kinds of self-consciousness (Fenigstein, 1974) and has suggested that it is possible to modify self-consciousness through a change of focus for the individual from self-awareness to task-awareness. Thus, a second purpose of the present study was to test the premise that shifting the focus of the

individual through the intervention of cognitive mediation would have an effect on self-consciousness.

The hypothesis was that the awareness of imaginary audience is a consequence of self-consciousness, and that a change in cognitive perception could alter the individual's awareness of self and concern for the thought of others. It was hypothesized that the use of covert modeling would be an effective learning technique in producing this change.

CHAPTER 2

REVIEW OF RELEVANT LITERATURE

Elkind (1967) regards IA behaviour as a consequence of the increasing intellectual capacities that accompany puberty and adolescence. Research by Kissel (1975) found that adolescents gave significantly more self-focus responses than any other age groups. This study used the Self-Focus Sentence Completion (SFSC) as a measure. Devised by Exner (1973), the SFSC measures the ratio of the individual's interest or concern in himself to his interest in external things, including other people. Kissel suggested that subjects who have a self/external ratio about equal appear reasonably successful in their behaviours. When the ratio is disproportional in either direction, however, pathology results and there is less appropriate behaviour. Kissel stated that the SFSC could be a useful diagnostic in determining pathology by examination of the self/external ratio. Using this research as a basis, Elkind and Bowen (1979) devised the Imaginary Audience Scale (IAS) as an instrument to measure what they consider to be the IA factor in adolescents.

Imaginary Audience Scale

The IAS consists of 12 items which measure aspects of the abiding self and the transient self. The abiding self deals with longstanding characteristics or personality traits regarded as part of the permanent or core self which the adolescent is reluctant to reveal, while the transient self refers to those momentarily embarrassing characteristics or behaviours which the adolescent does not consider to be representative of his true self. In order to measure these aspects, the IAS was divided into two subscales: the Abiding Self (AS) and the Transient Self (TS). The TS scale is designed to assess reactions of the subject to six specific embarrassing situations, and the AS scale evaluates reactions to six situations that have the potential to reveal enduring characteristics of the self to other people. The TS scale reflects the individual's concern about the IA in short, embarrassing situations, while the AS scale mirrors the person's anxiety over how others perceive his or her enduring traits which are revealed in every situation the individual encounters. High total scores for the abiding, transient, and total IAS scales indicate a greater concern for the imaginary audience. Elkind and Bowen (1979) found that this concern peaked for early adolescents aged 13:9, and then showed a marked decline in its influence upon thought by age 17. Their findings indicated that girls scored significantly higher on both

scales than males at all ages. It was concluded in this study that females were more self-conscious than males. Elkind and Bowen's investigation of the IA construct focuses on the individual's reaction to socially embarrassing situations and, as such, seems to relate to self-consciousness.

From this point of origin, there is a confounding of self-consciousness with that of the imaginary audience construct. Kissel's testing was a measure of self-consciousness. Elkind and Bowen, however, have used the study to support a hypothetical construct which the authors state to be theoretically related to cognitive development (Elkind, 1975), since the IA concern peaks at about the same time that formal operations are thought to emerge. The study by Adams and Jones (1981) was unable to replicate this peak effect. While there have been a few studies relating IA to formal operation development (Gray & Hudson, 1984; Elkind & Bowen, 1979; Enright et al., 1979), little has been done to more clearly differentiate between the IA construct and self-consciousness. The terms seem to be quite confounded within the research, although it appears that Elkind considers the IA construct to be a product of self-consciousness (Elkind & Bowen, 1979).

Adolescent egocentrism can certainly be seen to be a contributing factor to the common characteristic of adolescent disagreement with adult opinion, particularly

when adult norms are externally imposed for, in addition to the significance attached to the issue of autonomy at this time, the early adolescents' egocentrism prevents them from understanding and accepting any similarities which may exist between their own opinions and those of adults, particularly those of their parents, whom they view as having opinions very unlike their own (Douvan & Adelson, 1966).

Elkind has stated that adolescents who indicate a high concern for the IA may be inclined to exhibit delinquent behaviour. Support for this premise has come from Chandler (1973), who found that delinquent adolescents show a significantly greater degree of egocentrism than non-delinquents. The study indicated that adolescents who are taught to distinguish actual thoughts from the imagined thought of others are able to demonstrate a reduced level of social egocentrism and a greater awareness of the effects of their behaviour on an audience.

Anolik (1981), in a study of egocentrism and parental support among delinquent and nondelinquent adolescents, found that the former expressed greater concern about the IA, and had more negative perceptions of their fathers. He based his investigation on the assumption that adolescent egocentrism is associated with a critical view of interpersonal relationships. The adolescent, in defense against feelings of inferiority, lashes out at those around him in

order to bolster feelings of self-worth. This study places IA concern within the context of social relationships.

Another study, by Adams and Jones (1982), made comparisons between male and female adolescents' reported egocentrism and perceived parental conduct. The research found that perceived maternal rejection-control was associated with heightened egocentrism for boys, while display of parental physical affection for both boys and girls was negatively associated with reported egocentrism.

Adolescent Social Behaviour Scale

The Adolescent Social Behaviour Scale (ASBS) was designed by Lechner and Rosenthal (1984) to overcome the limitations and deficiencies which they saw in the IAS. It distinguishes between adolescent concern for peer approval from an audience that is present, and peer approval and concern from an imagined audience which is not present. The authors claim that the IAS is an imprecise instrument because it has not clearly measured an imagined audience since the items in the IAS do not show that the adolescent's behaviour is necessarily a consequence of thinking about others' thoughts of himself - which is Elkind's definition of egocentrism. In the Imaginary Audience Scale, half of the test items make the subject the actual, rather than the imagined, focus of the audience attention.

Serious doubt has been raised regarding the psychometric properties of the IAS. Adams and Jones (1981) concluded that one should use caution in using the scale, especially if one wished to perform data analyses on the subscale forms of the TS and the AS. They found that the IAS lacked construct validity, although it did have reasonable internal consistency. Correlations between individual TS and AS items and total scores were not distinct. TS items correlated highly with the TS totals, but also correlated with the AS totals to the same extent, and this was found to be the case for AS items as well.

The ASBS was developed to measure the imaginary audience construct and varied aspects of adolescent self-consciousness in social situations. Items were derived from measures already in existence, such as the IAS, or created by the authors. These 22 items were designed to distinguish between focus situations - where the individual is the actual focus of the audience's attention, and non-focus situations - where the individual is not the focus of attention. An example of the focus items would be having the individual speak before his class; a non-focus item would involve the individual attending a social gathering. All retest reliability coefficients of the ASBS are significant at $p < .05$. Other reliability coefficients were comparable to those obtained by Elkind and Bowen (1979) for their Abiding and Transient Self subscales on the IAS.

The ASBS has attempted to refine the inventory so that one is certain that imagined audience response is being measured. It differentiates between self-consciousness and imaginary audience behaviour by making a distinction between focused attention, non-focused attention, and imaginary audience attention.

The ASBS study distinguishes two kinds of self-consciousness: one arising from a self-perceived lack, incompetence, or weakness, which the authors have defined as internal self-consciousness (SCI); and the second, which is termed external self-consciousness (SCE), arising from embarrassment or self-consciousness because of the actual presence of others. A distinction is made between external self-conscious and imaginary audience responses, which the authors define as occurring when the individual is influenced by the presence of others even when not the focus of their attention. They state that it is important to make this distinction since, while self-consciousness may be an aspect of adolescent egocentrism, it should be differentiated from IA behaviour, which is said to arise from cognitive development.

If egocentrism is related to a cognitive developmental stage, it is hypothesized that perhaps this cognitive developmental stage could be hastened through the teaching of a technique of cognitive mediation.

Adolescent Egocentrism - Sociocentrism Scale

Enright, Shukla, and Lapsley (1980) have examined the relationship between self-consciousness and egocentrism in adolescents. Their study measured the three aspects of egocentrism defined by Elkind and Bowen (1979) - the imaginary audience, the personal fable, and self-focus. The personal fable is defined as the belief that the self is special and unique: self-focus refers to the inward focusing of thoughts to the self, rather than outward toward other people. Using an instrument called the Adolescent Egocentrism Scale (AES), they interpreted their results as showing support for the Elkind and Bowen notion that subjects who think that others are watching them are also concerned about how they present themselves to others. However, the items used to judge egocentrism were quite different from the examples used by Elkind and Bowen, which confounds the results.

The study indicated that while the IA and personal fable measure decreased significantly with age, general self-focus increased. The study shows that different components of egocentrism are dominant at different stages of adolescent development. The IA declines with late adolescence, and a more general focus on the self increases, although the belief in one's uniqueness or the conscious expectation of others' reactions declined. The study noted that there was a consistent difference in scores between the

sexes for every egocentrism subscale, which raises some doubts about the Piagetian model of adolescent egocentrism, since no sex differences should be expected to occur. The fact that there was a difference led the authors to assume that certain aspects of egocentrism are sex specific and occur as a result of the differences in the socialization process for boys and girls.

The part of the AES concerned with self-consciousness used the scale designed by Fenigstein (1975) as the measure of that dimension for the study. The AES divides self-consciousness into private self-consciousness, public self-consciousness, and social anxiety. The study suffers because some examples used to measure the factors are extraordinary and unusual in their nature, such as "becoming famous", while Elkind and Bowen used more ordinary examples. Despite this limitation, the study nevertheless found that there was a lack of association between any of the egocentrism subscales and social anxiety, which, according to Fenigstein, Scheier, and Buss (1974), is a reaction to self-focused attention. Enright et al. suggest that this shows that while adolescent egocentrism is related to self-consciousness, it is not necessarily related to anything stressful.

Fenigstein Self-Consciousness Scale (SCS)

A study by Fenigstein, Scheier, and Buss (1974) gives a straightforward definition of self-consciousness. Self-consciousness is defined as the consistent tendency of persons to direct attention inward or outward. It is perceived as a trait, whereas self-awareness is considered a state of self-directed attention occurring either as a result of the immediate situation or because it is a chronic disposition, or both. Buss (1980) makes a distinction between the trait, which he sees as the person's reasonably stable disposition to focus his or her attention on the self, and the state, which is situationally induced and transient. The study shows that there may also be differences between high and low self-conscious persons in the susceptibility to an audience.

The Self-Consciousness Scale (SCS) which was devised by Fenigstein et al. shows seven types of behavioural criteria within the domain of self-consciousness. These are: preoccupation with the past, present, and future behaviours; sensitivity to inner feelings; recognition of one's positive and negative attributes; introspective behaviour; a tendency to picture or imagine oneself; awareness of one's physical appearance and presentation; and concern over the general appraisal of others. (This scale is listed in Appendix 2.) It should be noted here just how similar these traits are to the ones used as criteria for

defining imaginary audience concern according to Elkind and Bowen. Their study is mainly concerned with the last three criteria in the IAS.

Factor analysis of the SCS components (Fenigstein, 1975; Carver & Glass, 1976) consistently yielded two dimensions of self-consciousness: public and private. Public self-consciousness was defined by the general awareness of the self as a social object that has an effect on others. An example would be the statement: "I'm concerned about the way I look."

McKinney (1981) suggests that this aspect of adolescent egocentrism derives from the fact that with the advent of formal operational thinking, adolescents now have the cognitive ability to see themselves as objects independent from other objects in the world. It is his contention that it is the rapid growth of this period, combined with the onset of genital urges and the rapid development of primary and secondary sex characteristics, that leads adolescents to focus on what has been taken for granted during most of childhood: the physical self, or what McKinney calls the "self as object".

Private self-consciousness is concerned with regard for one's inner thoughts and feelings. An example would be the statement: "I reflect about myself a lot." It deals with internal cognitions, whilst the public consciousness focuses on the individual as a social being in the world. This

concept of the private consciousness is similar to those ideas expressed by Mead (1934), who stated that consciousness of self comes about when the person becomes aware of another's perspective. Mead saw the self as a process of interaction within oneself through the conversation between the "I" and the "me". He further went on to amplify how important role-taking is in allowing individuals to understand themselves through the vantage point of another's point of view. The emphasis is on the reactions of others to the self, and this also resembles the construct of the IA of Elkind.

Fenigstein et al. (1975) also found a third factor to self-consciousness, which they call social anxiety. The factor of social anxiety is defined by a feeling of discomfort in the presence of others, as in: "I feel anxious when I speak in front of an audience." While public and private self-consciousness refer to a process of self-focused attention, social anxiety refers to the reaction to this process.

Buss (1980) has broken down social anxiety into four categories: embarrassment, shame, shyness, and audience anxiety, which all involve discomforts due to the scrutiny of others. The study by Fenigstein et al. showed that while there was a moderate correlation of private self-consciousness with public self-consciousness, there was no correlation of private self-consciousness with social

anxiety. Public self-consciousness and social anxiety are separate factors which have a very low correlation. Their research indicated that public self-consciousness must be an antecedent to social anxiety. Given an awareness of public self-consciousness, the individual has a standard with which to evaluate himself and can thus become apprehensive. The authors suggested that while there is this correlation, "...self-awareness does not automatically imply social anxiety; a person may focus attention on himself without experiencing discomfort" (Fenigstein et al., 1975, p. 525). The study also indicated that there were no gender differences in the scores attained on the test on any of the three subscales. This is surprising in light of the popular belief that girls have a higher level of self-awareness. The measurement used was the SCS designed by the authors. The scale, as a whole, has considerable discriminant validity (Carver & Glass, 1976; Scheier & Carver, 1977).

Anxiety Factors

It appears from the results of Elkind and Bowen that anxiety may play a part in self-consciousness. Therefore, as well as the social anxiety subscale of Fenigstein, it was decided in the current study to use a shortened form of the Taylor Manifest Anxiety Scale (Taylor, 1953), which is a more global anxiety scale.

Duval & Wicklund (1972) have shown that self-awareness is a variable that can be manipulated. Angered S's who were exposed to a mirror reflection of themselves aggressed more than a no-mirror control group. Another study (Duval and Wicklund, 1973) showed that S's facing mirrors were more likely to perceive themselves as causal agents than were the controls S's. This self-attribution has been found in self-conscious persons. According to their theory, any stimulus that causes a person to take himself or herself as an object of attention will lead to self-awareness, as in seeing oneself in a mirror, or appearing before a camera. The study indicated that causality for an event can be attributed to the stimulus that is the focus of attention. This study concluded that in interpersonal contexts there is a correlation between an individual's public self-consciousness and his focus of attention.

Modeling and Learning Theory

According to Bandura (1970), there are four inter-related processes in modeling phenomena. These are: attentional processes, retention processes, motor reproduction processes, and motivational and reinforcement processes.

For learning to occur, the observer must attend to the modeled behaviour and select the important elements on which to focus. He must perceive the cues to which his attention has been directed.

Retention is the encoding of the acquired information in a symbolic form. The information is encoded, organized, or rehearsed to enhance retention in memory. Bandura (1971) suggests that this rehearsal may be covert or overt.

Performance of the observed or modeled behaviour occurs when the observer is guided by the encoded symbolic representations stored in memory to perform the desired behaviour. Bandura suggests that the observer may acquire and retain the modeled behaviour but be unable to reproduce it. This may be due to either the complexity of the required skill or physical limitations.

Motivation and reinforcement are the fourth stage of the modeling phenomena. The observer may choose not to do the observed modeled behaviour, although he has the ability, if unfavourable consequences are likely to follow. The target behaviour is maintained not only by external reinforcement, but also by self-reinforcement and vicarious reinforcement. If there are favourable consequences, the model is more likely to perform the desired modeled skill. There are several studies in which modeling has been shown to be an effective tool for behavioural change (Bandura, 1971; Bourdon, 1970; Flanders, 1968).

Overt modeling is the procedure whereby the observer is exposed to someone else performing the behaviour which the observer wishes to develop. Typically, it involves observation of live, videotaped, or audiotaped models. It

has been shown (Kunce, Bruck, Thelen, 1974) that levels of academic achievement of disadvantaged adults could be improved by a series of videotapes presenting a model demonstrating a specific skill habit.

Modeling

Bandura (1970) defines modeling, not in terms of the mode through which information is presented, but rather, as the cognitive and representational processes which guide behaviour. Such an explanation suggests that overt models are not the only viable form of modeling phenomena. It has been suggested (Cautela, 1971) that modeling effects can also be obtained by having the individual imagine the modeled situation. This is referred to as covert modeling (CM).

Covert modeling has been used with individuals who want to increase, decrease, or acquire new behaviours. It has been used extensively in assertion training (Kazdin, 1974b, 1975; Rosenthal & Reese, 1976), as well as in decreasing fear avoidance behaviours (Cautela, Flannery & Hanley, 1974; Kazdin, 1973, 1974). Results from these studies have indicated that covert modeling is an effective modeling procedure.

Imagining a model performing the target behaviour is the major component of covert modeling treatment. Subjects imagine a number of specific treatment scenes which are

given to them via live, audio, or video recorded instruction. Each treatment scene contains two major ingredients. The first is a description of the situation in which the modeled behaviour is about to occur. The second is a modeled demonstration of the desired behaviour. The addition of a third ingredient - reinforcement of the model for the behaviour, has been found to enhance the efficacy of covert modeling (Kazdin, 1974b, 1975, 1976). Treatment scenes are imagined twice. Duration of each scene has been reported to be from 15 seconds (Kazdin, 1973, 1974, 1974b; Scott et al., 1980) to 40 seconds (Kazdin, 1979b, 1982).

CHAPTER 3

METHOD

Hypotheses

The present study examined the premises that adolescents can learn to change their perspective from self-centred to a more objective perspective and that this change can be taught using the learning principles of observational learning and modeling. By taking another perspective, and internally modeling another role in which the adolescents successfully perform a desired behaviour with the realization that others are not as concerned about them as they believe, the adolescent's self-consciousness will diminish. Through focusing on the awareness of others around them, adolescents will experience less of a focus on self and be less self-conscious.

A further purpose of the study was to compare the Adolescent Social Behaviour Scale and the Fenigstein Self-Consciousness Scale to note any similarities between the subscales of the ASBS and the SCS which reflect self-consciousness.

Hypothesis 1: IA concern will change with covert modeling training. This will be reflected by a difference

in scores between a group which is taught this skill and a control group.

Hypothesis 2: There will be a positive correlation between scores on the ASBS and the SCS.

Hypothesis 3: There will be no difference in self-consciousness between girls and boys as measured on the SCS.

Hypothesis 4: There is no relationship between anxiety and self-consciousness.

Limitations

A limitation of the study stems from the practical problems of obtaining a truly random sample. The results should not be generalized without due regard for the lack of control for some conditions necessary for external validity. Subjects in this study were volunteers, a factor to be considered in regard to generalizing the results. It should be noted that a truly random assignment of subjects to groups was not possible due to the necessity of conducting the study with as little disruption as possible to the school. The researcher had to use the circumstances as best he could.

In effect, there were two groups, and each subject had an equal possibility of being assigned to either one of the

treatment groups. Therefore, the possible biases inherent in intact groups was limited by randomly dividing the group.

A further limitation of the study is that the treatment was applied only twice. Most CM studies use four or more treatments over a period of two weeks or more.

Post-test only control group design was chosen in light of the well documented disadvantages of the interactions of pre-tests, and treatments and effects of repeated testing on reliability of self-concept measures (Campbell & Stanley, 1966; Coan, 1978).

Preliminary Study

Students in a grade nine English class at a local secondary school were interviewed to determine from them what they considered to be situations which generated feelings of self-consciousness. The students compiled a list of ten situations which they thought represented typical scenes that evoked feelings of self-consciousness. Some of these were: being called on the P.A. system to go to the office; being asked by a teacher for an answer to a homework assignment when the teacher knows that the assignment has not been done; seeing one's mother when out on a date; passing a group of kids in the hall who laugh at the individual because the kid has a funny sign pinned on his back; dropping one's books in front of a group of kids.

All of the situations mentioned by the students as being self-conscious inducing were ones in which the student was the actual focus of attention. Using these situations as a starting point, the researcher narrowed the selection down to two situations suitable for creating scenarios to be videorecorded. The videorecordings were filmed to show two perspectives of a situation: the S's perception, as well as the point of view of the audience. When the videocassette recording (VCR) was done from the student's perspective, the accompanying audio portion reflected this point of view, consisting of the student's projection of what the peer audience was thinking. The same scene shot from the perspective of the audience illustrated the actual thoughts of the audience members by having them verbalize their thoughts, and a difference in cognitions between the two perspectives was apparent - the audience gave far less significance to the performance of the individual. The audience was less concerned with the individual's appearance or attitude but displayed an equally self-centred concern. The examples used for the VCR were: being called on the school's public address system, and dropping one's books when passing a group of peers.

Subjects

The treatment group consisted of a class of grade nine students. Their average age was 14:6. There were 12 boys

and 6 girls in the group. The age range was from 14:4 to 16:0 for the boys, mean age 15:2, and 14:4 to 15:4 for the girls, mean age 14:8.

There were 30 students in the control group: 20 girls and 10 boys. The mean age of the boys was 13:8, and the mean age for girls was 13:9.

When the groups were pooled, the mean age for boys was 14:6, and for girls, 14:1.

Treatment Program

The nature of the study was presented through a VCR in which the feelings of self-consciousness which arise for adolescents were discussed. The researcher stated that the students could learn to modify their self-awareness through a program of altered cognitive processes ("talking differently to yourself"), and that they would be given a chance to learn how to do this.

A shortened version of the Taylor Manifest Anxiety Scale (TMAS) and the Fenigstein Self-Consciousness Scale (SCS) was administered to the students prior to the treatment. The Taylor Manifest Anxiety Scale (TMAS) has been in wide practise for the past 30 years. It has been judged to be indicative of manifest anxiety and is reliable. The original test consists of 50 items that have been shown to be indicative of anxiety states in test subjects. A revision was undertaken by the present author,

who reduced the test items to 28 in number. From these 28 items, the present researcher selected alternate items to arrive at a short list of 12 items which were presented to the subjects. They are listed in Appendix 1. The median score was determined, and the S's were then split into high and low anxiety categories in accordance with their test scores. This splitting of S's was done for both the test group and the control group.

The principle of covert modeling was explained to the students in the treatment group. They were told that they were going to learn to imagine themselves in the situations which they had seen on the VCR, and through this imaginary process, be better able to deal with these potentially embarrassing situations. They were then shown two video-taped recordings of situations which had been identified by peers as representing self-conscious situations. They were then instructed in the covert modeling process via VCR. They were instructed on the VCR to use all their sensory faculties to heighten the image of themselves in the particular situation, and to see themselves in the target situation as clearly as possible.

They were asked to practise the method by imagining themselves in a neutral situation, such as the living room of their home. They were tested on the clarity of the desired image by being asked: "What are you wearing in this scene?" or "What time of day is it?" or "What time of year

is it?" They were told that they could use this technique in situations that they found personally embarrassing.

The subjects were then asked to imagine the specific scenes that had been illustrated on the VCR, and to imagine themselves, or an appropriate model, exhibiting the target behaviour. The subjects were instructed to see themselves performing the behaviours just "good enough" to handle the situation, since the research indicates that a coping model is more effective than a mastery model (Sarason, 1975). Traditionally, a "mastery" model has demonstrated successful control of a situation, but Meichenbaum (1971), in a comparative study between a mastery model and a coping model, found that the coping group significantly improved, and that a coping plus verbalization group showed the greatest improvement. The subjects were asked to generate coping phrases that they considered to be helpful, since Meichenbaum (1971b) has found that self-verbalization is an effective factor in behavioural change. Some of the ones that they found most useful were: "I can handle it", "I can do it". They were asked to utilize those coping phrases that they considered personally effective. They were then asked to repeat this mental imagining and given further instruction that they should practise this during the week in any situations that came up which they found to be potentially embarrassing.

After a five-day interval, the subjects were again visited. The basic instructions were repeated and subjects were asked if there had been any difficulties in practising this method during the past few days. Questions regarding the practice were answered. Once again, the subjects were asked to imagine themselves in the specific situations which they found to be embarrassing for themselves.

After a week's interval, the subjects were met for a third time. At this time they were asked to complete the Adolescent Social Behaviour Scale (ASBS). They were then informed of the nature of the study. It was suggested that the techniques of imagining themselves in situations behaving as they would like to behave could be useful for themselves. They were then thanked for their help and dismissed.

Control Group

The control group were shown the VCR and the concept of self-consciousness was discussed. They were then requested to complete the TMAS, the SCS, and the ASBS. The researcher expressed his appreciation for their participation in the program. No further contact was made with this group.

CHAPTER 4

RESULTS

Data Analysis

A Single-Classification Analysis of Variance was used as the statistical analysis for the results of this study. The data were recorded using IBM scoring sheets which were then scanned using the NCS Sentry optical mark reading system for the results. The raw data were processed using the Statistical Package for the Social Sciences (SPSS).

After scores for subjects in the control and the treatment groups were statistically equated, mean differences between the groups were tested to determine the effects of the treatment package upon the two variables: the Adolescent Social Behaviour Scale (ASBS) and the Fenigstein Self-Consciousness Scale (SCS). Differences accruing to anxiety levels were also measured on the Taylor Manifest Anxiety Scale (TMAS). Analysis of variance was conducted for the six subscales comprising the ASBS and the three components of the SCS. Analysis of the results was done separately for the sexes following the results of Elkind and Bowen (1979), which yielded differing results for these groups. Correlation of the ASBS and the SCS was computed using the Pearson product-moment correlation.

SCS Results

Higher means for the SCS were recorded for both boys and girls in the treatment group than in the control group. The mean score for the treatment group was 36.72, and 26.40 for the control group. Means for females in the treatment group were 33.83, SD = 6.67; for boys, 38.17, SD = 11.57. Means for females in the control group were 26.45, SD = 5.98; for boys, 26.3, SD = 4.59. The ANOVA results indicate no significant differences between the sexes; however, there is a significant "interaction between the two groups" at the $F(1,44) = 15.88, p < .001$ level.

TABLE 1 Mean Scores for Fenigstein Self-Consciousness Scale (SCS) for Treatment and Control Groups

	Treatment	Control
Boys	38.17	26.30
Girls	33.83	26.45
(M)	36.72	26.40

Examination of these test scores indicated that there was a lack of homogeneity of variance in the test scores for the SCS for the treatment group, and this was found to be due to the skewed score of one individual which was not representative of the normal sample. The results of this individual were excluded in the ANOVA testing.

Since the SCS was given before the treatment was applied, the resulting difference between scores in the reverse direction to that expected implies that there was a significant difference between the two groups in self-consciousness before the treatment began, and that the groups were not equivalent on this measurement. Therefore, no further statistical evaluation was computed between the two groups. The subjects were then pooled into one sample, and the statistical information was used to make evaluative comparisons between the SCS and the ASBS between the sexes and age levels of the subjects (N = 47).

ASBS Results

After pooling, analysis of variance was applied to the data. The original design was a 3 x 2 factorial design, plotting scores of the ASBS, the SCS and the shortened TMAS against group and sex. Results of the TMAS indicate that the scores are equally divided between low and high anxiety subjects (low N = 23, high N = 24) and that there is an equal percentage of subjects in each group.

Mean scores and standard deviations for the focus and non-focus scales are recorded in Table 2. Distribution of the scores for each of the 6 response types shows no obvious deviation from normality, justifying the use of parametric analysis. A 2 (sex) x 2 (group) ANOVA was performed for the focus and the non-focus scales separately. Because the

scores on both sets of three subscales were linearly dependent, being summed to 11, only two sets could be analyzed for each scale. These were the FSCE and FSCI for the focus scale, and the NFIA and NFSCI for the non-focus scale. Nonself-conscious responses (NFNSC, FNSC) were deleted from the analysis.

TABLE 2 Mean Scores by Age

	Boys Girls Age 13 (N = 21)		Boys Girls Age 14 (N = 20)		Boys Girls Age 15 (N = 6)	
NFIA	2.63	2.38	2.25	3.91	3.60	3.00
FSCE	3.50	3.15	3.38	2.72	1.40	1.00
SCS1	14.00	14.31	17.88	15.45	22.20	22.50
SCS2	4.75	4.38	9.25	4.82	9.80	9.50
SCS3	6.75	6.47	10.25	9.27	9.40	8.00

NFIA = imaginary audience, FSCE = external self-consciousness, SCS1 = private self-consciousness, SCS2 = public self-consciousness, SCS3 = social anxiety.

For the focus items, there is a significant difference in scores between groups for the girls on external self-consciousness. Factorial analysis indicates a significant main effect between groups, $F(2,44) = 8.75$, $p < .001$, but there is no interaction for sex, nor interaction between sex and group.

There is a significant difference for overall main effects for NFIA, $F(2,44) = 3.4$, $p < .05$, and a significant

difference between groups, $F(2,44) = 5.93$, $p < .01$. The two-way interaction between group and sex is not significant. A simple effects test between females in the two groups was computed for the NFIA factor and this showed a significant difference at the $p < .05$ level. Harmonic means were then calculated to minimize the difference in group sample size; the significance was maintained.

Considering the NFIA factor, there are no significant differences between girls and boys and high and low anxiety levels that is apparent from the test results. Given a score, the observer cannot discern whether the test had been performed by a low or high anxiety subject. There is a significant difference in scores between high and low anxiety subjects on the social anxiety factor, which is to be expected, but there is no significant difference between the sexes. Public self-consciousness increases for boys with anxiety, and NFIA decreases, whereas the reverse is true for girls. The difference in scores for high anxious S's on public self-consciousness is significant, $p < .05$.

Results of a 2 (sex) x 3 (age) ANOVA indicate no difference for main effects on the NFIA subscale, but there is a significant difference between scores for sex x age $F(5,41) = 3.61$, $p < .036$. Table 2 presents these differences.

ANOVA calculations for NFIA and anxiety levels indicate no significant main effect although there is a significant difference for the interaction, $F(1,45) = 4.25$, $p < .05$.

ANOVA calculated on FSCE against age (3 levels) and sex indicates a significant overall main effect, $F(5,41) = 5.98$, $p < .002$, and an effect for age, $F(2,45) = 8.88$, $p < .001$. No difference is indicated for sex. Recalculating the FSCE for two age levels (13-14:6; 15-16:6), the main effect difference decreases somewhat, $F(3,43) = 4.24$, $p < .02$, as does the effect for age, $F(3,43) = 8.33$, $p < .006$. There is no significant difference between the sexes. Had there been more subjects for each cell, there would have been a reduction in error and, therefore, these results should be viewed with caution.

A multiple ANOVA calculated for NFIA, NFSCI, and the SCS against sex and age shows no overall significant interaction when the variables are pooled. There is no effect for NFIA or NSCI when taken singly, although two variables seem to have a strong contributing effect: public self-consciousness, $F(1,43) = 17.90$, $p < .001$, and private self-consciousness, $F(1,43) = 7.22$, $p < .01$.

A Pearson product-moment correlation was done for the overall group between the ASBS and the Fenigstein SCS, pooling the sexes. Two factors of the ASBS - the NFIA and FSCE - were considered, as well as the three factors of the SCS: public self-consciousness, private self-consciousness, and social anxiety. A slight correlation is observed between NFIA and FSCE, $r = -.45$. A moderate correlation is noted between FSCE and private self-consciousness, $r = -.50$,

and between FSCE and public self-consciousness, $r = -.47$. There is a significant correlation between the three internal factors of the SCS.

The correlation was computed between the same factors of the SCS, with the sexes separated. There is no correlation on these subscales for girls, but a significant negative correlation is indicated for boys, $r = -.43$, $p < .05$, between NFIA and FSCE, and also between FSCE paired both with private self-consciousness and public self-consciousness. This indicates that boys who have a concern about the imaginary audience are not concerned about being the centre of focused attention nor are they internally self-conscious.

The Pearson product-moment was correlated over three age groups: 13-14, 14-15, 15-16. In the 13-14 age group, a moderate correlation is indicated for girls between public self-consciousness on the SCS and external self-consciousness on the ASBS, $r = .61$, $p < .01$. For boys, there is a moderate correlation, $r = .64$, $p < .04$, between external self-consciousness and social anxiety.

In the 14-15 age group, there is a moderate negative correlation between imaginary audience and private self-consciousness, $r = -.64$, $p < .02$. For boys in this age group, there is a very strong correlation between imaginary audience and private self-consciousness, $r = .91$, $p < .001$. This correlation is even stronger for boys over 15 but in a

radical shift in cognition over the two-year span from 14 to 16. Boys aged 14 who have high concern for the imaginary audience have a high degree of feelings of inadequacy or incompetence, while 15-year-olds who show high concern for imaginary audience appear to be more secure. It may be that the period between ages 14 and 15 is one in which the boy greatly increases his feeling of social competence. At age 15 there is less private self-consciousness; boys may be more outwardly focused.

Results of a multiple ANOVA of the ASBS subscale of NFIA and the Fenigstein SCS by sex and age are insignificant when the variables were pooled. However, there is a significant interaction with the NFIA variable, $F(2,40) = 3.66$, $p < .05$. This would indicate that the imaginary audience concern does not change at the same rate over time between the sexes but that there is a differential interaction which is not parallel. Imaginary audience increases from the age of 13 and peaks at 14 for girls, $M = 3.91$, then declines moderately, although still higher than for the 13-year-old group. It decreases slightly between 13 and 14 for boys, and then sharply increases at age 15, $M = 3.6$. See Figure 1 and Figure 2.

There is also a significant interaction between age groups over the four variables when the sexes are pooled and this is seen to occur in the subscales of the SCS, $p < .01$.

There is no overall difference between the sexes when ages are pooled.

A further ANOVA was done loading on the FSCE variable. Results indicate that there are no main effects overall, but there is a single factor effect on the FSCE variable $F(1,44) = 15.22, p < .001$, as well as on the public self-consciousness, $F(1,44) = 17.90, p < .001$, and private self-consciousness, $F(1,44) = 7.22, p < .01$. Figure 2 illustrates the scores for focused external self-consciousness. It is obvious from this figure that for both sexes there is a sharp decrease in focused external self-consciousness between 14-year-olds and 15-year-olds of both sexes.

CHAPTER 5

DISCUSSION

Hypothesis 1, that covert modeling will have an effect on self-consciousness on adolescents, as measured by the ASBS, is not supported.

Hypothesis 2, that there is a positive correlation between scores on the ASBS and the SCS, is not supported.

Hypothesis 3, that there is no difference in self-consciousness between girls and boys, is not supported.

Hypothesis 4, that there is no relation between anxiety levels and self-consciousness, is supported.

Covert Modeling Effects

Although both groups were at the grade nine level, there was a disparity in their age levels. Results contrary to those expected suggest that the groups were not equivalent; scores on the SCS support this conclusion. These results do not, therefore, preclude the possibility that a modeling package can be effective in changing attitudes towards self. A further study is suggested in which more closely matched groups could eliminate any confounding of results due to lack of homogeneity. In addition, a longer period of treatment is recommended, with

more practice, in order to fully test the efficacy of covert modeling. Cautela (1976) suggests that the period of time of treatment does not necessarily account for the rapid effects of covert modeling. Individual treatment may also prove to be more effective. However, as Kazdin (1978) points out, there are at present no empirically based guidelines that dictate the importance of the number of scenes that should be included in the treatment, the duration that they are imagined, or the number and duration of sessions.

There were no criteria for verifying that the subjects were imagining the performance of any behaviours. Motivation, which Bandura (1971) cites as one of the essential elements for effective behavioural change, may not have been present for the subjects.

Imaginary Audience

Elkind and Bowen, in their study (1979), found that girls consistently scored higher on the imaginary audience scale. The present study has contrary findings. While the NFIA scores are very similar for boys and girls in the 13-year-old group, there is a wide disparity at the 14-year-old level. The girls score considerably higher on this measure at this point, while among 15-year-olds, the boys score higher (see Figure 1). This result is different from the results reported by Enright et al. (1979) and Gray

and Hudson (1984), who found that egocentrism and IA concern peaked at grade six. In the study by Elkind and Bowen, self-consciousness was reported highest among the 13-year-olds.

It is of interest to consider the differing attitudes towards friendship that arise in middle adolescence. A study by Douvan and Adelson (1966) cites differing patterns of friendship for the early, middle, and late phases of adolescence in girls. Early adolescent friendship focuses on joint activity, and there is no concern for the depth or significance of the friendship. In middle adolescence, the focus shifts and a concern for the security of the relationship is emphasized. Coleman (1974) found that girls experience greater anxiety about relationships and concern about rejection and acceptance in relationships all through the adolescent years. Douvan and Adelson reason that this emphasis on loyalty comes about because girls are dealing with the issue of identification and seek alliances with girls who are going through the same experience at the same time. Girls at the stage of mid-adolescence are beginning dating practice and need a friend who will not abandon them, but will support and guide them through the traumas of forming and breaking heterosexual relationships. They seek friends who mirror their own experiences; thus, this concern for the imaginary audience is reasonable. If there is greater concern for the opinion and loyalty of others, the

upsurge in imaginary audience concern at age 14 is logical. In early adolescence the focus of friendship is task-oriented, shifting to interpersonal relationship in middle adolescence.

On the FSCE scale, the girls have lower scores than the boys, and the negative slope for the two groups is quite similar and nearly parallel. This result substantiates those found by Lechner and Rosenthal (1984) and may be due to the socialization process. Girls are more concerned about what others think of them, and this can lead to their having greater motivation to develop social skills (Hoffman, 1977). Boys in the 14-16 age group differ from girls in their expectations of friendship. The stress is on skills acquisition, autonomy, and self-sufficiency, rather than on intimacy and dependency as it is for girls. These results also indicate validity for the imaginary audience construct, distinct from external self-consciousness as measured on the ASBS and the SCS, since there is a difference in the pattern of scores between them.

The radical shift from positive to negative correlation between IA and private self-consciousness for boys in the 14-15 year age group may be indicative of the shift in social skills learning that occurs at this time. Boys may be more secure in their genital development and have begun to date, themselves, thus gaining more confidence in the social context. No studies of imaginary audience to date

have expressly considered the age range from 13 to 15 in any detail, although the results of the present study indicate that there is certainly a difference between boys and girls in social awareness at this time. Further studies of this age group, using a larger sample group, may substantiate this difference in cognitive development.

Implications

Results of this study indicate several points where the treatment method could be altered. Motivation is one of four components required for learning (Bandura, 1971). If the subjects were individually selected, there would be a greater probability of success since only those who wished to change self-perception would take part. Tailoring both the imagined scenes and coping phrases to the individual would also increase chances of success.

Practical Applications

A school counsellor, aware of adolescent concern for the imaginary audience, could discuss this in personal development classes. Students who display excessive self-consciousness might be relieved to know that others have similar feelings, that these feelings alter over time, and are quite common amongst their peers. This knowledge could, in itself, alleviate self-consciousness and merits further study.

REFERENCES

- Adams, G.R., & Jones, R. (1981). Imaginary audience behavior: A validation study. Journal of Early Adolescence, 1, 1-10.
- Anolik, S.A. (1981). Imaginary audience behavior and perceptions of parents among delinquents and non-delinquent adolescents. Journal of Youth and Adolescence, 10, 443-454.
- Bandura, A. (1971). Psychotherapy based upon modeling principles. In A. Bergin & S. Garfield (Eds.), Handbook of Psychotherapy and Behavior Change. New York: Wiley.
- Bandura, A. (1970). Modeling theory. In W. Sahakian (Ed.), Psychology of learning: Systems, models, and theories. Chicago: Markham.
- Bourdon, R.D. (1970). Imitation: Implications for counseling and therapy. Review of Educational Research, 40, 429-457.
- Buss, A.H. (1980). Self-consciousness and social anxiety. San Francisco: W.H. Freeman.
- Campbell, D.T., & Stanley, C.S. (1966). Experimental and quasi-experimental designs for research. Chicago: Rand McNally.
- Carver, C., & Glass, D. (1976). The self-consciousness scale: A discriminant validation study. Journal of Personality Assessment, 40, 169-172.
- Cautela, J.R. (1971, September). Paper presented at the fifth annual meeting of the Association for Advancement of Behavior Therapy, Washington, D.C.
- Cautela, J.R. (1976). The present status of covert modeling. Journal of Behavior Therapy and Experimental Psychiatry, 7, 323-326.
- Cautela, J.R., Flannery, R.E., & Hanley, S. (1974). Covert modeling: An experimental test. Behavior Therapy, 5, 494-502.

- Chandler, Michael J. (1973). Egocentrism and antisocial behavior: The assessment and training of social perspective-taking skills. Developmental Psychology, 9(3), 326-332.
- Coan, R.W. (1978). A review of the personal orientation inventory. In Buros, Mental Measurements Yearbook, 1, 120.
- Coleman, J.C. (1974). Relationships in adolescence. Boston: Routledge and Kegan Paul.
- Douvan, E., & Adelson, J. (1966). The adolescent experience. New York: Wiley.
- Duval, S., & Wicklund, R.A. (1973). Effects of objective self-awareness on attribution of causality. Journal of Experimental and Social Psychology, 9.
- Duval, S., & Wicklund, R.A. (1972). A theory of objective self-awareness. New York: Academic Press.
- Elkind, D. (1967). Egocentrism in adolescence. Child Development, 38, 1025-1034.
- Elkind, D., & Bowen, R. (1979). Imaginary audience behavior in children and adolescents. Developmental Psychology, 13, 38-44.
- Enright, D., Shukla, D.G., & Lapsley, D.K. (1980). Adolescent egocentrism - sociocentrism and self-consciousness. Journal of Youth and Adolescence, 9, 101-116.
- Exner, J.E. (1973). The self-focus sentence completion: A test of egocentricity. Journal of Personality Assessment, 37, 437-455.
- Fenigstein, A., Scheier, M.F., & Buss, A.H. (1975). Public and private self-consciousness: Assessment and theory. Journal of Consulting and Clinical Psychology, 43(4).
- Fenigstein, A. (1974). Self-consciousness, self-awareness, and rejection. Unpublished doctoral dissertation, University of Texas.
- Flanders, J.P. (1968). Review of research on imitative behavior. Psychological Bulletin, 59, 1968, 316-337.

- Gray, W.M., & Hudson, L.M. (1984). Formal operations and the imaginary audience. Developmental Psychology, 20(4), 619-627.
- Hoffman, M.L. (1977). Sex differences in empathy and related behaviors. Psychological Bulletin, 84, 712-722.
- Kazdin, A.E. (1973). Covert modeling and the reduction of avoidance behavior. Journal of Abnormal Psychology, 81, 87-95.
- Kazdin, A.E. (1974). Covert modeling, model similarity, and reduction of avoidance behavior. Behavior Therapy, 5, 325-340.
- Kazdin, A.E. (1974b). Effect of covert modeling and model reinforcement on assertive behavior. Journal of Abnormal Psychology, 83, 240-252.
- Kazdin, A.E. (1975). Covert modeling, imagery assessment, and assertive behavior. Journal of Consulting and Clinical Psychology, 43, 716-724.
- Kazdin, A.E. (1976). Assessment of imagery during covert modeling of assertive behavior. Journal of Behavior Therapy and Experimental Psychiatry, 7, 213-219.
- Kazdin, A.E. (1976b). Developing assertive behavior through covert modeling. In J.D. Krumboltz and C.E. Thoresen (Eds.), Counseling methods, 475-486. New York: Holt, Rinehart and Winston.
- Kazdin, A.E. (1978). Covert modeling: The therapeutic application of imagined rehearsal. In J. Singer (Ed.), The Power of Human Imagination. New York: Plenum.
- Kazdin, A.E. (1979). Imagery, elaboration, and self-efficacy in the covert modeling treatment of unassertive behavior. Journal of Consulting and Clinical Psychology, 47, 725-733.
- Kazdin, A.E. (1982). The separate and combined effects of covert and overt rehearsal in developing assertive behavior. Behavior Research and Therapy, 20, 17-25.
- Kissel, S. (1975). A study in childhood egocentricity. Journal of Clinical Psychology, 31, 646-648.

- Kunce, J.T., Bruch, M.A., & Thelen, M.H. (1974). Vicarious induction of academic achiever behavior in disadvantaged adults. Journal of Counseling Psychology, 7, 153-156.
- Lechner, C.A., & Rosenthal, D.A. (1984). Adolescent self-consciousness and the imaginary audience. Genetic Psychology Monographs, 110(2), 289-305.
- McKinney, J.P. (1981). In Research with the Locus of Control Construct, 1, Herbert M.L. Lefcourt (Ed.).
- Marvit, R., Lind, J., & McLaughlin, D. (1974). Use of video tape to induce attitude change in delinquent adolescents. American Journal of Psychiatry, 131(9), 996-999.
- Mead, G.H. (1934). Mind, self, and society. Chicago: University of Chicago Press.
- Meichenbaum, D.H. (1971). Examination of model characteristics in reducing avoidance behavior. Journal of Personality and Social Psychology, 17, 298-307.
- Meichenbaum, D.H. (1971). Training impulsive children to talk to themselves: A means of developing self-control. Journal of Abnormal Psychology, 77, 115-126.
- Rosenthal, T.L., & Reese, S.L. (1976). The effects of covert and overt modeling on assertive behavior. Behavior Research and Therapy, 14, 463-469.
- Sarason, I.G. (1975). Test anxiety and the self-disclosing coping model. Journal of Consulting and Clinical Psychology, 43.
- Scott, A.J., Cormier, W.H., & Cormier, L.S. (1980). Effects of covert modeling and written material on the acquisition of a counseling strategy. Counselor Education and Supervision, 19, 259-269.
- Taylor, J. (1953). A personality scale of manifest anxiety. Journal of Abnormal and Social Psychology, 48, 285-290.
- Taylor, R., Scheier, M., & Ickes, W. (1978). Correlates of self-consciousness. Journal of Personality Assessment, 42, 285-289.

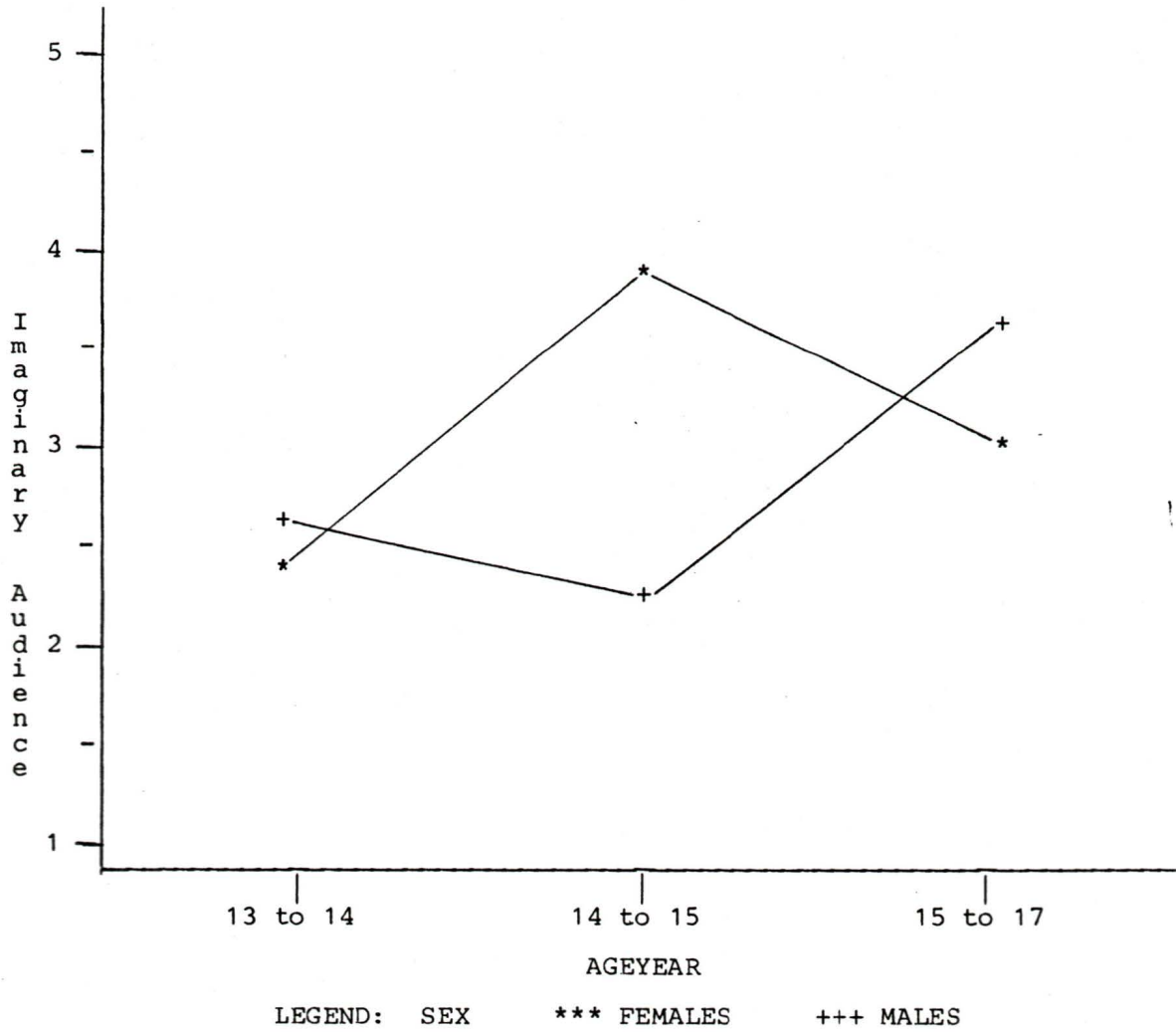


FIGURE 1 Mean Scores Imaginary Audience

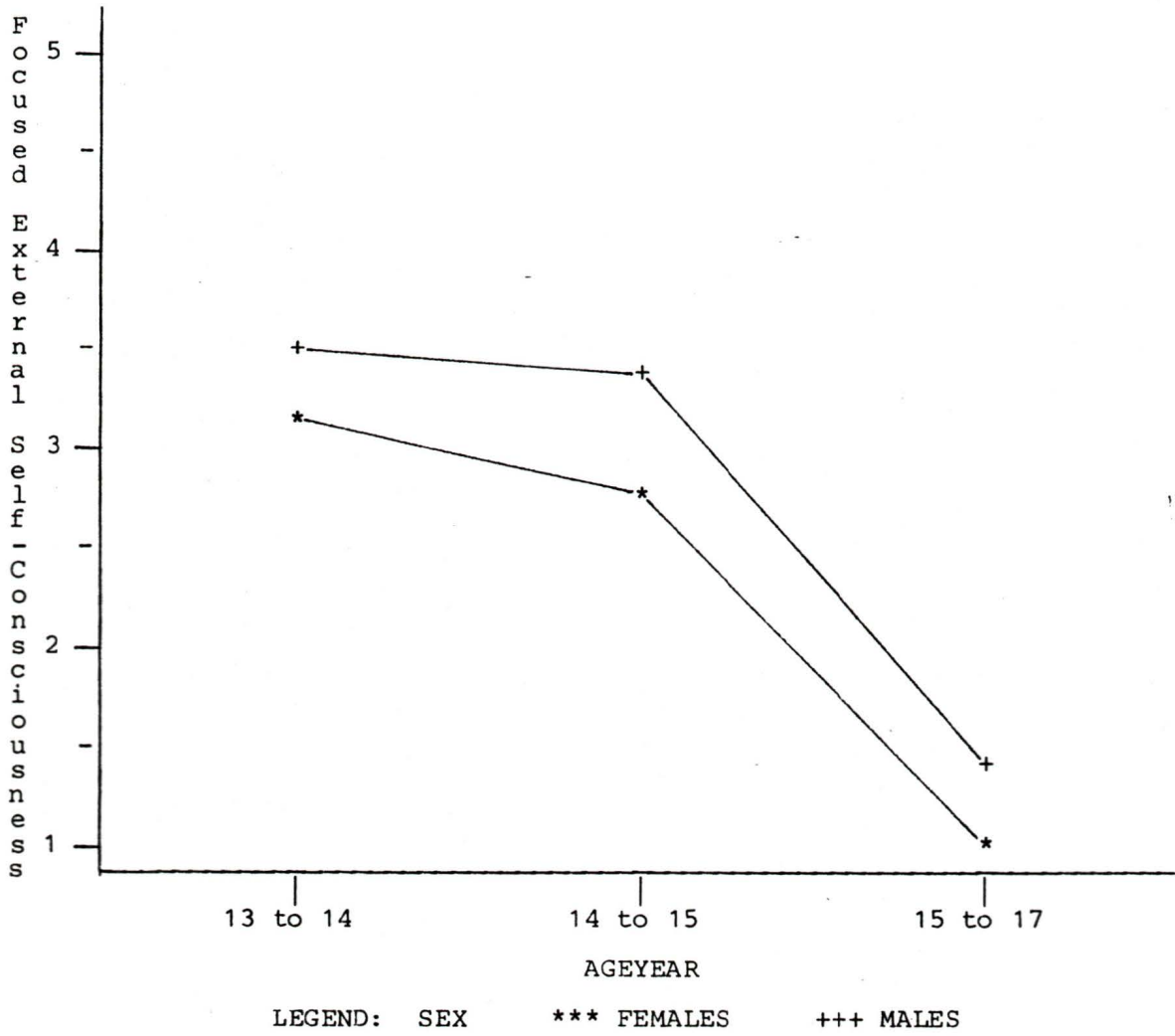


FIGURE 2 Mean Scores Focused External Self-Consciousness

APPENDIX 1

TAYLOR MANIFEST ANXIETY SCALE*

(Selections from the revised form)

Answer either True or False for the following statements.
Your first answer is probably most correct for you.

1. I am about as nervous as other people.
2. I blush as often as others.
3. I worry quite a bit over possible troubles.
4. At times, I lose sleep out of worry.
5. I often find myself worrying about something.
6. I wish I could be as happy as others.
7. I feel anxious about something or someone almost all of the time.
8. I do not have as many fears as my friends.
9. I am more self-conscious than most people.
10. I am a very nervous person.
11. I am not at all confident of myself.
12. My feelings are hurt easier than most people.

* Taylor, J., Journal of Abnormal and Social Psychology, 1953, 48, 285-290.

APPENDIX 2

FENIGSTEIN SELF-CONSCIOUSNESS SCALE

Instructions:

Please read each question and rate it on the following scale:

A = extremely like me
 B = moderately like me
 C = moderately unlike me
 D = extremely unlike me

- ___ 1. I'm always trying to figure myself out.
- ___ 2. I'm concerned about my style of doing things.
- ___ 3. Generally, I'm not very aware of myself.
- ___ 4. It takes me time to overcome my shyness in new situations.
- ___ 5. I reflect about myself a lot.
- ___ 6. I'm concerned about the way I present myself.
- ___ 7. I'm often the subject of my own fantasies.
- ___ 8. I have trouble working when someone is watching me.
- ___ 9. I never scrutinize myself.
- ___ 10. I get embarrassed very easily.
- ___ 11. I'm self-conscious about the way I look.
- ___ 12. I don't find it hard to talk to strangers.
- ___ 13. I'm generally attentive to my inner feelings.
- ___ 14. I usually worry about making a good impression.

(Continued)

APPENDIX 2 (Continued)

- ___ 15. I'm constantly examining my motives.
- ___ 16. I feel anxious when I speak in front of a group.
- ___ 17. One of the last things I do before I leave my house is look in the mirror.
- ___ 18. I sometimes have the feeling that I'm off somewhere watching myself.
- ___ 19. I'm concerned about what other people think of me.
- ___ 20. I'm alert to changes in my mood.
- ___ 21. I'm usually aware of my appearance.
- ___ 22. I'm aware of the way my mind works when I work through a problem.
- ___ 23. Large groups make me nervous.

APPENDIX 3

ADOLESCENT SOCIAL BEHAVIOUR SCALE

INSTRUCTIONS: This is a questionnaire about young people's behaviour, thoughts, and feelings in groups. Try to imagine yourself in the given situations (in some cases you can probably draw on your own experience). Check the response that best describes how you would honestly react. Don't spend too long on any one question; there is no correct answer.

1. If you see two people talking and casually glancing your way, do you:

Feel sure that they're talking about you?
 Think that it's probably coincidence?
 Check to see that you don't look odd in any way?

2. Imagine that you and your friends are trying out a new dance at a party. It is turned into a competition and you reach the finals. Do you:

Feel silly because you don't think you're very good?
 Try to perfect all the steps?
 Wonder what others think of your dancing?

3. If on arrival at a party, you found a grease patch on your jeans, would you:

Not worry?
 Go home because you think that everyone would notice?
 Go home because you don't feel right when you're dirty?

4. If you got "tipsy" at a party and ended up dancing on the table in front of everyone, how would you feel the next day:

A little nervous because you'd think everyone would mention it?
 Uncomfortable because you don't like acting the fool?
 No different, you'd forget it?

APPENDIX 3 (Continued)

5. If you were suddenly asked to present a paper to the class, would you:
- Be uncomfortable because you thought others were evaluating you?
 - Feel bad because you couldn't present your best work in the short time available?
 - Not worry too much about it?
6. If you arrive late for a meeting, do you:
- Try to come in the back way because you think that everyone's eyes will be on you?
 - Come in as unobtrusively as possible?
 - Feel bad for interrupting the meeting?
7. You are against uranium mining and asked to lead a demonstration. Would you:
- Decline because you'd feel shy being at the front?
 - Decline because you think your friends would call you a "radical"?
 - Accept without a moment's thought?
8. While opening a meeting, you accidentally spill something on a guest speaker. Is your first reaction to:
- Think how clumsy everyone will think you are?
 - Feel embarrassed about the mess you've made?
 - Hope that it won't leave a stain?
9. When you're at a party, and talking to someone of the opposite sex, do you:
- Not act any different than normal?
 - Usually feel shy and self-conscious?
 - Wonder what others are thinking about the two of you?

APPENDIX 3 (Continued)

10. It is the premiere of a film made by your school in which you played the lead role. What is your main concern:
- That you don't come across as well on film as on stage?
 - That everyone will think that you were not really suited to the part?
 - That the film goes well and will be a credit to your school?
11. If you and a group of friends arranged to meet at a coffee shop and you arrived first, would you:
- Think that everyone was looking at you and wondering why you were there?
 - Order a coffee while you were waiting?
 - Feel uncomfortable because you were alone?
12. You drop your knife with a loud clatter in a restaurant. Do you:
- Imagine that everyone has turned to see who made the noise?
 - Feel a fool for being so clumsy?
 - Pick it up and not worry about the noise?
13. If you go to a party where you hardly know anyone, do you:
- Think that everyone will notice you're a stranger?
 - Make the first move and introduce yourself to some people?
 - Feel awkward and stay in the background?
14. You have bands just put on your teeth, and are then asked to speak at a school conference. How do you feel?
- Pleased that you've been asked?
 - Sure that everyone will notice how ugly you look?
 - Embarrassed because they make your voice sound a little funny?

APPENDIX 3 (Continued)

15. FOR GIRLS: If you went out with a boy who was 6 inches shorter than you, would you:

FOR BOYS: If you went out with a girl who was 6 inches taller than you, would you:

___ Not feel right because you feel it should be the other way around?

___ Not worry about it and enjoy yourself?

___ Think that people would notice and consider it "odd"?

16. You can sing reasonably well and are asked to sing at a party. Do you:

___ Feel shy because your voice isn't all that good?

___ Start singing and try to get others to join in?

___ Try to get out of it because you think that others will call you a "show-off" if you do?

17. You go to help someone who has fallen in a crowded street. As a small circle gathers round, do you:

___ Imagine that everyone thinks you are a "busy-body"?

___ Feel ill at ease because you don't have a knowledge of first aid?

___ Ask for assistance?

18. Imagine that you have moved to a new neighbourhood. Would you:

___ Feel conspicuous because you think that everyone watches "new" people?

___ Feel shy about making new friends?

___ Try to settle in as quickly as possible?

19. It is your first day back at school after a long holiday overseas. Your friends have arranged a welcome home party for you. Do you:

___ Feel a bit nervous because you're not sure how everyone will greet you?

___ Look forward to telling everyone about your experiences?

___ Think that everyone will notice that you've put on a bit of weight?

APPENDIX 3 (Continued)

20. You can't avoid walking through a group of people standing chatting together. As you pass through, do you:

- Not think twice about it?
- Imagine that they are all looking at you?
- Feel bad because you have interrupted their conversation?

21. For the first time you are in the finals of an important swimming race. Do you:

- Feel thrilled that you reached the finals?
- Worry that you're not good enough?
- Think that others are watching you closely, and feel extra nervous?

22. At a party, your friends offer you a cigarette. You accept although you haven't smoked before. Do you then:

- Feel silly because you don't know how to smoke?
- Watch your friends and follow their example?
- Think that they're all looking at you and therefore try to do the drawbacks?

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IN ADOLESCENT SELF-CONSCIOUSNESS

Author



William Weldon Boychuk

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