

**A Study of Sex Role Stereotyping
Among Students of Lunenburg County
High Schools**

Peter F.J. Straubel © 1991



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Abstract

Title: A Study of Sex Role Stereotyping Among Students of Lunenburg County High Schools

Author: Peter F.J. Straubel

Date: 20 February 1992

In this study 862 students from six high schools in Lunenburg County, Nova Scotia were surveyed. The questionnaires were administered by guidance counsellors to a random sampling of grades 10, 11 and 12 students in all six high schools. The survey consisted of 72 questions which measured four attitude scales; Burt's Sex Role Stereotype Scale (SRS), Rubin and Peplau's Just World Scale (JWS), Burt's Adversarial Sexual Beliefs (ASB), and Bardis' Acceptance of Violence Scale (VS). Six of the questions solicited demographic information.

The results of the study showed that males had more conservative scores on the attitude scales than females, ie. males were more sexist, had a greater belief that the opposite sex was an adversary, and were more accepting of violence. In addition the study confirmed two hypotheses-that students who are more sexist are more inclined to be accepting of violence and that students who are more sexist have a greater tendency to view the opposite sex as an adversary.

The results of the study also supported previous research by Martha Burt (Burt,1980) which suggested that attitudes such as sex role stereotyping, adversarial sexual beliefs and acceptance of violence were attitudinal antecedents to female abuse.

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Introduction

Abuse of Women-A Social Problem

Educators in Nova Scotia (and elsewhere) are concerned with the high incidence of female abuse that exists among adult and student populations. According to Statistics Canada (Chronicle-Herald, 13 Oct. 1990) in 1989 more than 100 women across the country, an average of almost two each week, were killed by men they were still living with or had left. The homicide figures are just the tip of the iceberg. Underneath is a structure that is formed of equally startling statistics.

One in 10 Canadian women are abused in their homes and this is considered a conservative estimate (Labatt, 1991). The figure is probably closer to 1 in 4 (Labatt, 1991). The tabulated figures in Nova Scotia for abuse of Women were four times the national average, and the South Shore region of Nova Scotia had some of the highest figures in the province (Labatt, 1991). Bringing these statistics closer to home, a study was conducted for the Nova Scotia Advisory Council on the Status of Women in November, 1990 called *Young Women In Nova Scotia* (Day, 1990), in which 1600 women students of high school age were interviewed. The study reported that 11 percent of young women had been sexually abused by their boyfriends, 18 percent had been physically assaulted, and 32 percent said they had suffered emotional abuse; of those women from the sample who had reported having engaged in sexual intercourse, 19 percent said they had been forced into it by their boyfriends, (Day, 1990).

Most recently on 15 August 1991, the CBC Radio news program, "Mainstreet" reported that the trend for high rates of abuse of women is continuing for 1991. From January to

June 1991 (Paquette,1991). forty women across Canada have been murdered by partners or spouses, including five from Nova Scotia.

It is my opinion that there is the tendency to hide the causes for abuse of women behind convenient and ready-made social problems such as unemployment, poverty, drug and alcohol abuse, or illiteracy. The act of rationalizing this social problem is to divorce ourselves from the responsibility of doing something about it. Abuse of women is not a result of increasing unemployment or difficult economic times, nor are abusers restricted to lower socio-economic groups. Adverse social conditions increases the likelihood that abuse may occur but it is suggested by the author that social conditions are not the root of the cause for abuse.

I believe that attitudes are what cause men to become abusers; preconceived notions that women are somehow inferior, or deceitful, or "only good for certain things", or that it is Ok for a man to hit his wife or a boyfriend to push his girl against the locker because, after all, he has had a bad day. I am sure that most reasonable people feel that there is no justification for any person to strike a blow against another other than self defence. Why then do husbands, lovers and boyfriends continue to hit, insult, humiliate, manipulate, and even kill those women they are supposed to love?-And while we as individuals have very little direct control over social or economic problems, we do have some control over our attitudes.

Martha Burt a researcher for The Urban Institute, Washington, D.C., conducted a study in 1980 which became a sounding board for researchers of female abuse and family violence. Her study entitled, "Cultural Myths and Supports for Rape", investigated the factors that can predict an acceptance of the "rape myth". The mind set Burt calls "rape myth" is very dangerous and according to her investigation is becoming more wide spread in the belief

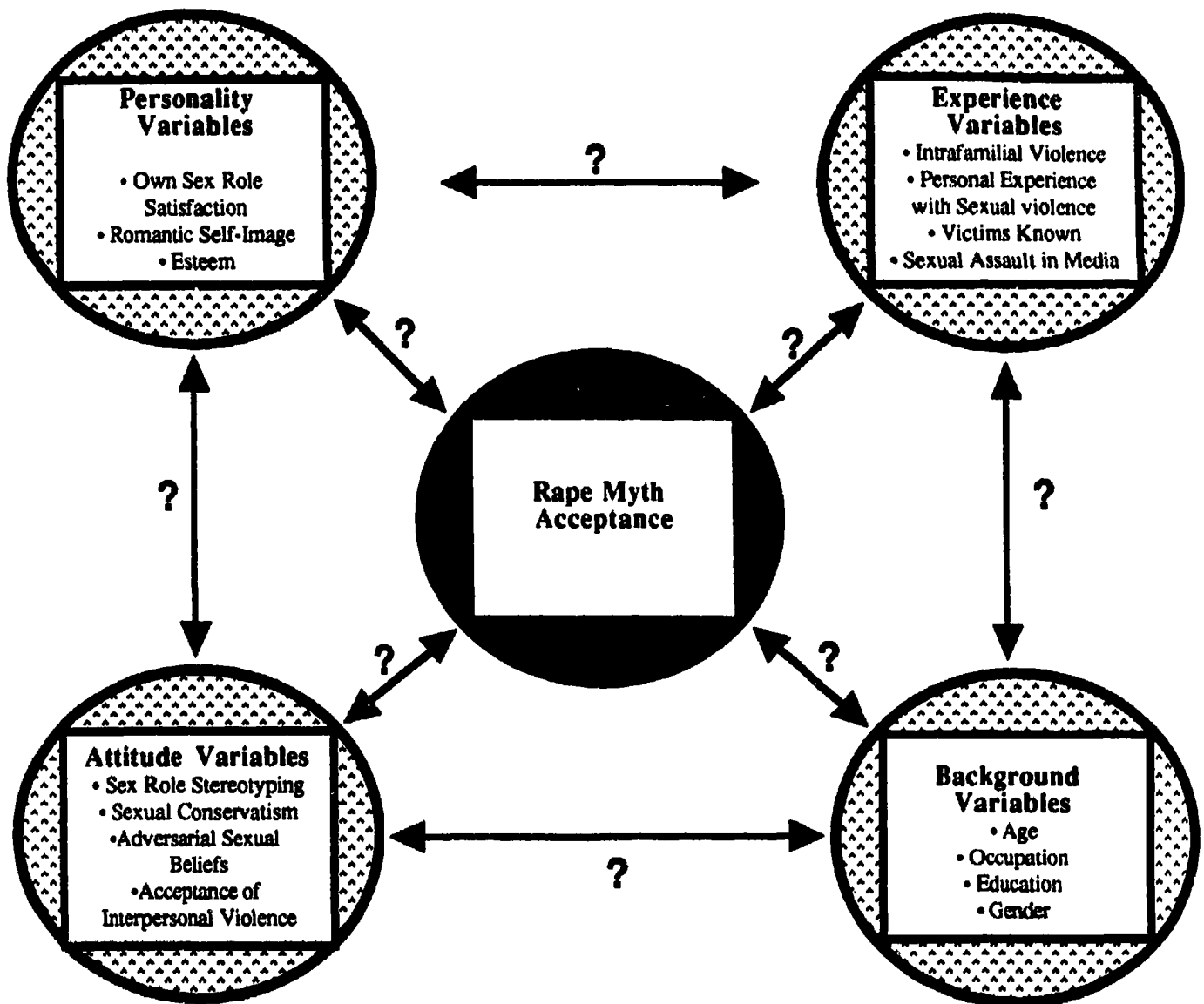
systems of lay people and professionals who interact with rape victims and assailants (Burt, 1980,p.217). Examples of rape myths are; "only bad girls get raped", "any healthy woman can resist a rapist if she really wants to", "women ask for it", "women 'cry rape' only when they've been jilted or have something to cover up", "rapists are sex-starved,insane, or both"(Burt,1980,p. 217). She also goes on to report that rape myth acceptance effects verdicts in mock-jury rape trials (Burt,1980,p.217). Acceptance of the rape myth can be explained as being the belief held by an individual that somehow the victim of sexual violence, such as rape, is responsible in some measure for the assault. This is a classic case of "blaming the victim".

Burt identified several attitudes and factors that predicted the acceptance of "rape myth". The attitudes are sex role stereotyping, adversarial sexual beliefs, sexual conservatism, and acceptance of interpersonal violence (Burt,1980). Other factors which predict rape myth are personality characteristics, background characteristics, and personal exposure to rape, rape victims, and rapists (Burt, 1980).

Burt developed a model which included all the variables that potentially affected rape myth acceptance (see Figure 1). All the variables appearing to the left of a given variable were assumed to affect that variable causally. She then used multiple regression techniques and non significant paths between variables were eliminated. The data for Burt's analysis was collected from a random sample of 598 Minnesota adults, aged 18 years and over, during February-April, 1977. The interviewers who conducted the survey were women trained in interview techniques and who worked for the US Census Bureau,in Minnesota.

The Rape Myth Acceptance Variable was measured by a 19 item attitude scale developed by Burt.The Personality Variables consisted of three variables. Own Sex Role Satisfaction (OSRS) was measured by a ten-iten scale developed by Burt. Self Esteem (ESTEEM) was

Figure 1.1
Theoretical Model of Antecedents of Rape Myth Acceptance
(Burt, 1980)



measured by using Rosenberg's (1965) Self Esteem Scale, and Romantic Self Image (RSI) was measured by using ten items from a scale developed by (Estep, Burt & Milligan, 1977). Burt chose these three personality variables with the logic that victim rejection occurs because people engage in defensive attribution. So one would expect that the more confident and satisfied the respondents felt about themselves the less rape myth acceptance. Of the personality variables Burt found that none of them produced a direct effect on rape myth acceptance and so were removed from the regression equation.

The Experiential Correlates used by the author were a selection of personal experiences of knowing victims or assailants, of having been a victim and having witnessed intrafamilial violence, and exposure to popular media treatments of sexual assault. To measure Number of Sexual Assault Victims Known (VICKNOWN) two questions were asked by the interviewers; "Have you ever known someone who was forced to engage in sex against their will?", and "How many sexual assault victims have you known?" The actual number of victims known was used as the measure of sexual assault victims known.

Three questions explored the respondents Personal Experience With Sexual Assault (VICSELF); "Have you ever had anyone force sex on you against your will?", "Have you ever had anyone attempt to force sex on you, but was unsuccessful?", and "Have you ever had sex with someone only because you were afraid physical force would be used against you if you didn't go along?" If a respondent answered "yes" to the second question, (VICATTEM) was coded 1; otherwise it was coded 0. If a respondent answered yes to either the first or third question, (VICSELF) was coded 1; otherwise it was coded 0.

The Experience With Intrafamilial Violence (VIOLEXP) was measured using a 5-point scale (always, frequently, sometimes, rarely, never) in response to the following questions; "How often did your parents hit you when you were growing up?", "In your family, when

you were growing up, how often did your parents hit each other violently?". "In your marriage, how often does/did the husband hit the wife?".

Exposure to Media Treatments of sexual assault (MEDIA) was measured by asking the respondents about their exposure to television, motion pictures, dramatic, and newspaper treatments of rape or sexual assault. Responses were coded as 1,2,3,4, and 5 or more exposures. The experiential variables proved to be the least consistent and have the least important effect on subsequent variables.

Burt examined the attitudes towards women, or Sex Role Stereotyping (SRS) and three other attitudinal variables; Sexual Conservatism (CONSERV), which refers to the restrictions on the appropriateness of sexual partners, sexual acts, conditions or circumstances under which sex should occur ; Acceptance of Interpersonal Violence (IPVIOL), which refers to the acceptance of the use of force and coercion to gain compliance, especially in sexual relationships; and Adversarial Sexual Beliefs (ADVERS), the expectation that sexual relationships are fundamentally exploitive (Burt, 1980, p. 218)

Each of the four attitude variables were measured by scales developed by Burt and were scored on 7-point likert scales (see Method section). When the results were analysed it was discovered that only Sexual Conservatism failed to affect rape myth acceptance significantly. The three other variables were all strong predictors of rape acceptance myth with acceptance of interpersonal violence being the strongest predictor .

The Background Variables used were sex , age, education and occupational status. Occupational Status was measured using Duncan's (1961) Socioeconomic Status Index. Burt found that the older the respondent the stronger they adhered to conservative attitudes towards sex role stereotyping, adversarial sexual beliefs and sexual conservatism.

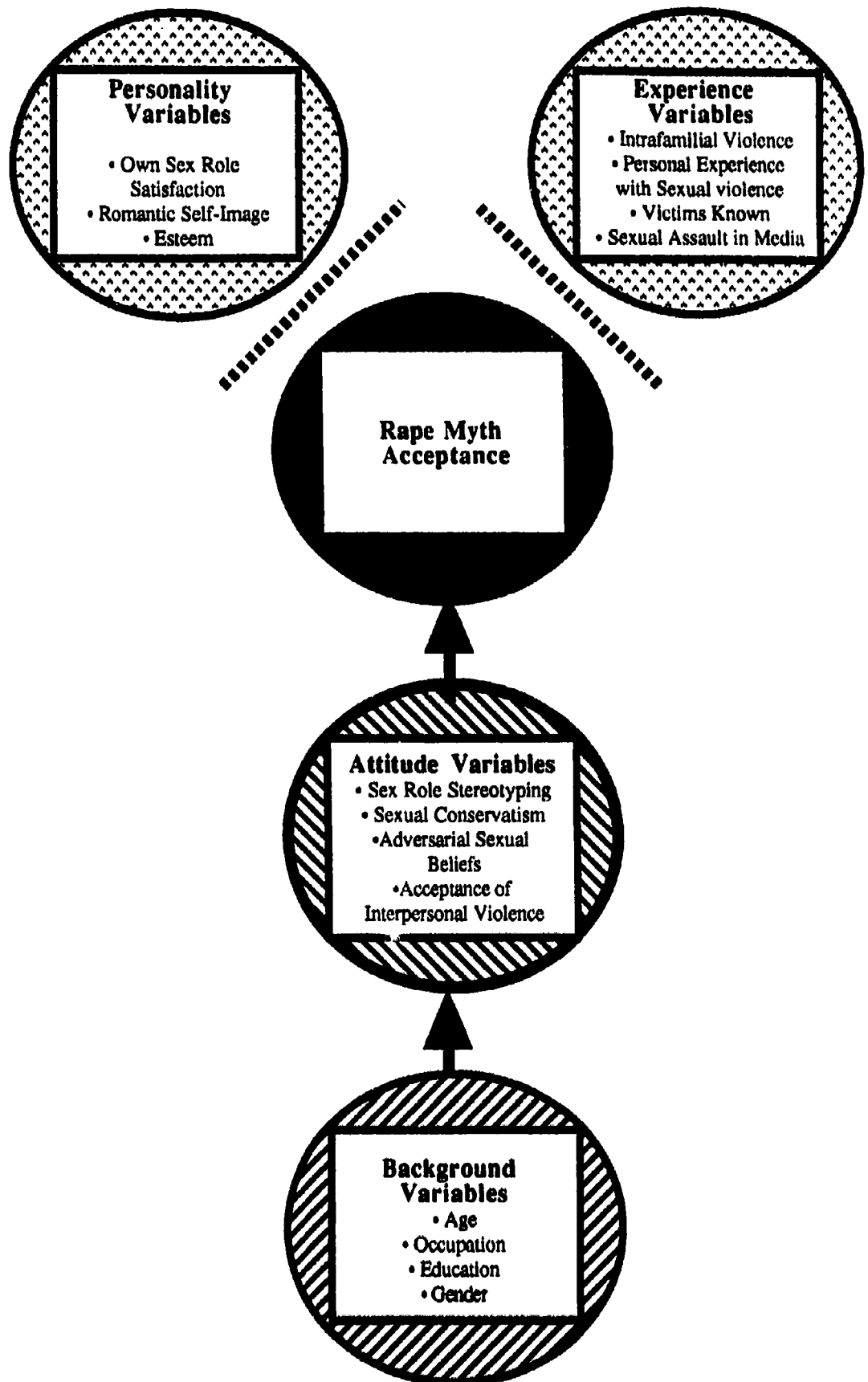
Occupational status and education had the opposite effect; the more educated and the higher the occupational status, the more liberal the attitudes on sex role stereotyping, adversarial sexual beliefs, and sexual conservatism. When the samples were split according to gender the results were similar.

Burt's study made two important discoveries. First, significant numbers in her sample believed many rape myths. Second, that their acceptance of violence against women (in this case specifically sexual violence) is strongly connected to deeply held and pervasive attitudes such as sex role stereotyping, distrust of the opposite sex (adversarial sexual beliefs), and acceptance of interpersonal violence.

Thus, Burt's research showed that the inclination to abuse women and the acceptance of abuse of women may be predicted from attitudes such as sex role stereotyping, adversarial sexual beliefs and acceptance of violence. In other words men who have stereotypical views of women, women's roles and behaviours tend to regard women in a less than equitable manner. Closely linked with this is the underlying belief that women are untrustworthy or manipulative, and the tendency for these men to have a greater acceptance of violence as appropriate behaviour or in some cases, as a substitute for communication.

This research will parallel Burt's work and will attempt to examine the attitudinal correlates, and the experiential and cultural forces which might form the antecedents to female abuse and the acceptance of such abuse.

Figure 1.2
Resultant Model of Antecedents of Rape Myth Acceptance
(Burt, 1980)



Attitudinal Correlates

The net effect of those attitudes which support female abuse is to isolate or distance the victim, (Burt, 1980) so that the abuser thinks it is acceptable to commit an abuse. On a cultural level the same attitudes lend themselves to deny or reduce perceived injury or to blame the victims for their own victimization.

The presence of fixed or traditional attitudes regarding how men and women are to behave (sex role stereotyping) plays a very significant although often overlooked part in the process which distances the victim and makes abuse possible or acceptable, (Burt, 1980). The development of a woman's personality and self esteem is also influenced by sex role stereotyping. It was found that masculinity was the best predictor of self-esteem (Long, Vonda, Olsen, 1986) and that adolescent females classified as androgynous or masculine in gender-role-orientation had higher self esteem than adolescents classified as feminine (Mullis, McKinley, 1987). Similarly, women who were classified as feminine had the greatest fear of success, (Sager, 1983) and so tended to remain in submissive roles.

Other studies reported that sex role stereotypical attitudes among teachers, counsellors and administrators influences womens' career choices and aspirations (Hawley, 1982; Betz and Hackett, 1981). At least one study suggested counsellors in general did not understand the importance of sex-fair practices in influencing futures of their student-clients, (Griffin, 1983). The research also suggests that women tended to choose their careers according to a male perception of what women's roles ought to be, (Griggs, et al., 1983; Knight and Sedlacek, 1983).

When you consider the research and the fact that most teachers, counsellors and

administrators at the high school level are men (and some, including women, are overtly sexist) it is not surprising, that women students choose their vocations accordingly. This study will use Burt's Sex Role Stereotype Scale and will use her sample as the norm group when measuring sex role stereotyping, (for Burt's study, SRS; $M=37.6, SD=10.5$).

Adversarial sexual beliefs refers to the belief that a member of the other gender is not to be trusted and is to be considered an adversary. Martha Burt suggested (Burt, 1980) that people with such attitudes tend to regard "...sexual relationships as fundamentally exploitive, that each party to them is manipulative, sly, cheating, opaque to the other's understanding and not to be trusted." People who hold such a view of male and female sexuality might view abuse as a likely outcome from such an exploitive relationship (Samios et al., 1985) and would not necessarily view an abusive situation as one which solicits sympathy or support for the victim. Adversarial gender beliefs therefore, would also be expected to vary significantly with the other attitudinal correlates, and for this purpose can also be compared to Burt's sample as a norm group (for Burt's study, ASB; $M= 29.0, SD= 8.5$).

The idea that the world is just is a relative point of view. Generally, those persons in positions of power, control or influence may tend to view the world as a more just and fair place to live, compared to the perception of those individuals who have very little power, control or influence. It might be argued that people in positions of power believe the world is just and fair in order to justify their privilege and to maintain the status quo. Research has shown that in populations men overall tended to believe in a just world whereas women tended to view the world as being less fair (Chen and Lin, 1988). These findings were the result of Chen and Lin's work which was a continuation of Burt's 1980 research.

Two researchers (Chen, Lin, 1988) surveyed 266 college students from four Indiana colleges in order to investigate gender differences in attitudes towards rape victims. They

used Burt's Sex Role Stereotype Scale (SRS) to measure attitudes towards sex roles. They developed the Attitudes Towards Rape Victims Scale (ATRVS), a series of questions that measured the respondent's acceptance of rape victims, that is the measure to what extent the respondent thought the victim was an innocent victim and not an architect of their own misfortune. An Attrition Scale was also developed by the authors which measured certain preconceived notions about the cause for rape and who should carry the blame for a sexual assault such as rape. The fourth scale that was used was the Just World Scale (JWS), a scale consisting of twenty-three questions that measures the extent to which a respondent views the world as being fair and just (see Methods section).

The researchers found that there were significant gender differences on the SRS with males more accepting of sex role stereotyping than females (for males, $M=32.547$; for females, $M=37.324$). Significant gender differences appeared on the ATRVS and the JWS. It was discovered that females were more accepting of rape victims and that males generally believed that the world was more fair and just than females.

The importance of this finding is that it points out the apparent contradiction that exists in the belief of a "Just World". A truly "Just World" has no victims, therefore if someone is injured then it is by the person's own carelessness. Therefore, it is no surprise (as in Chen and Lin's study) that males in general believe the world is more fair and just and at the same time they are less accepting of the notion that rape victims are in fact victims. On one level those men who were surveyed believed that rape victims are in some part the author of their unfortunate victimization, and yet on another level this seems incompatible with the belief in a "Just World".

The researchers analysed the results of the Attrition Scale and found that 49.6% of the students responding on the Attrition Scale believe that rape victims were "too trusting in

people" as a major cause of rape, while 25% believed that the rape victim's behaviour was another major cause.

The contradiction between fairness and "blaming the victim" is the phenomenon which Burt calls the "Just World Hypothesis" (Burt,1980). She points out that it becomes harmful when the believer uses it to detach themselves from any responsibility from a specific circumstance such as a rape or an abuse scenerio. Burt suggests the Just World Hypothesis is a type of logic "... in which observers justify misfortune by attributing responsibility or fault to the victim", (Burt, 1980, p.218-9).

A stronger belief in a Just World would be expected from those who would also tend to have more conservative views according to the other attitudinal correlates. The sample from the Chen, Lin study (1988) will serve as a norm group to compare the results for both the SRS and JWS for this study, (for Chen,Lin,: SRS for males $M=43.911$, for females $M=46.363$; JWS for males $M=89.93$ and for females $M=92.92$).

Cultural Forces

It seems to me that men since the neolithic have demonstrated a greater willingness to exhibit aggressive behaviour. While hunting cults needed this kind of behaviour as a mechanism for survival, it is unnecessary and inappropriate in today's world. Biologists might argue aggressive behaviour by men is in part a result of an abundance of testosterone. The social scientist might add that in part it is the result of role modelling and socialization. For instance some researchers (eg.Covey,1983) believe that a person's social skills or a lack of social skills tends to influence the person's behaviour and the

behaviour of others. Socially skilled men used less verbal aggression and physical violence while men who lacked social skills communicated more physically, and verbally more aggressively (Covey, 1983).

In my view young people today seem to be more frequently exposed to adult role models who reinforce the doctrine that "might is right" and that conflict is best resolved through force. At the same time our youngsters' portfolios of attitudes are actively being shaped. Young people watch those around them who have lost the ability to articulate opinions through healthy debate resort to intimidation or angry retorts in conversations when they don't get their way. On an international level young people see nations willingly use force of arms to settle problems that could be settled with compromise and communication. The message to our youth from a cultural level is quite clear; aggressiveness and violence is acceptable. Martha Burt articulated this view as well ; "...a cultural matrix that encourages rigid sex roles and imports male dominance, generates rape (abuse)-supportive attitudes and beliefs that act out as psychological releasers or neutralizers allowing potential rapists (abusers) to turn off social prohibitions against injuring or using others", (Burt, 1980).

Acceptance of violence is the belief that it is acceptable to use force or intimidation to get ahead and, that it is an appropriate form of behaviour in a relationship or in a social milieu. Some researchers distinguish between violence and aggression; "While violence is an act which causes damage to a person or property", aggression which is the prelude to violence, "includes overt and covert acts, or assertive, attacking, and intrusive behaviour" (Bardis, 1973). Since abuse includes those aggressive behaviors (whether physical or verbal) which cause someone some harm then aggressive behaviour is considered violence by these researchers. Others distinguish between physical and sexual violence as in the case of rape (Burt, 1980), however most researchers agree that all violent acts have in common the desire to be in control or to have power over others.

The tendency to behave violently or the propensity to be accepting of violence as a suitable means of conflict resolution is in part a function of learned behaviour and partly a function of a cultural attitude which supports or is accepting of violence. It has been suggested that underreporting of rape or sexual assault may be due to the acceptance of violence in a given social setting and fear of retaliation, (Lynch, 1985). There is strong evidence to suggest that men who are abusers have probably watched their fathers abuse their mothers and to a certain extent have been taught this behaviour (Stahly, 1985).

New research suggests that there is a link between social skills and physical violence or aggression, (Covey, 1985). In Covey's research there seemed to be a high correlation between social skills and the use of verbal reasoning and conflict resolution. The persons level of social skills was negatively correlated with the tendency to use verbal or physical aggression. The research also suggested that persons who were exposed to displays of bad social skills tended to learn this behaviour and also accepted it as appropriate behaviour. However some researchers (Stahly, 1985) argue that the tendency to behave violently does not exclusively come from individual contact with a violent person such as an abusive father but is something that is picked up from intangible social messages. Stahly points out that, "...battering men tend to come from physically violent families, but violence against women may be indicative of an underlying set of misogynistic attitudes, rather than an example of learned behaviour or low impulse control" (Stahly, 1985). Researchers like Stahly suggest that the acceptance of violence (as an acceptable means of behaviour) is a function of attitude and less a physiological problem or an inability to control impulses. Such attitudes are derived from culture and experience (which will be articulated in the next section) and like the other attitudinal correlates mentioned before, the tendency to accept violence can be measured.

One measure of a person's acceptance of violence (which is often mentioned in the

literature) is the Conflict Tactics Scale (CTS). This scale was developed by Murray A. Strauss (1979) with a view to measuring the variety of techniques members of a family can employ in resolving a conflict and also to measure to what extent they used such tactics. The acceptability of violence would be determined by their choice of conflict resolution tactics and their frequency of use.

The Conflict Tactic Scale measures three modes of dealing with conflict:

1. The use of rational discussion, argument, and reasoning-an intellectual approach to the dispute, called the "Reasoning Scale".
2. The use of verbal and nonverbal act which symbolically hurt the other, or the use of threats to hurt the other, which, for the purposes of the instrument is called the "Verbal Aggression Scale".
3. The use of physical force against another person as a means of resolving the conflict, called "Violence Scale".

Variations of the CTS have been developed by Strauss for specific kinds of violence such as, Child Abuse, Wife-beating, Husband-beating. The disadvantage with the CTS is that it requires interviews with open-ended response methods, an almost impossible task when trying to measure a large sample of teenagers. Another difficulty with the CTS is that it requires candid disclosure of very intimate and sensitive details of a person's private life. Such an interview would be unacceptable to most school districts and to most high school students. Therefore another measure of the acceptance of violence had to be substituted for the purposes of this study.

An appropriate instrument was developed by Panos D. Bardis (1972) which consisted of twenty five short questions that can be answered on a 7-point likert scale. The scale called simply the "Violence Scale" (VS) measures to what extent a person finds the use of

violence acceptable (violence here refers to words, and actions aimed at property damage and personal injury). Bardis developed and tested this instrument specifically for students in grade ten or above and the questions are not so sensitive in nature as to cause discomfort or a reluctance for disclosure by the respondent.

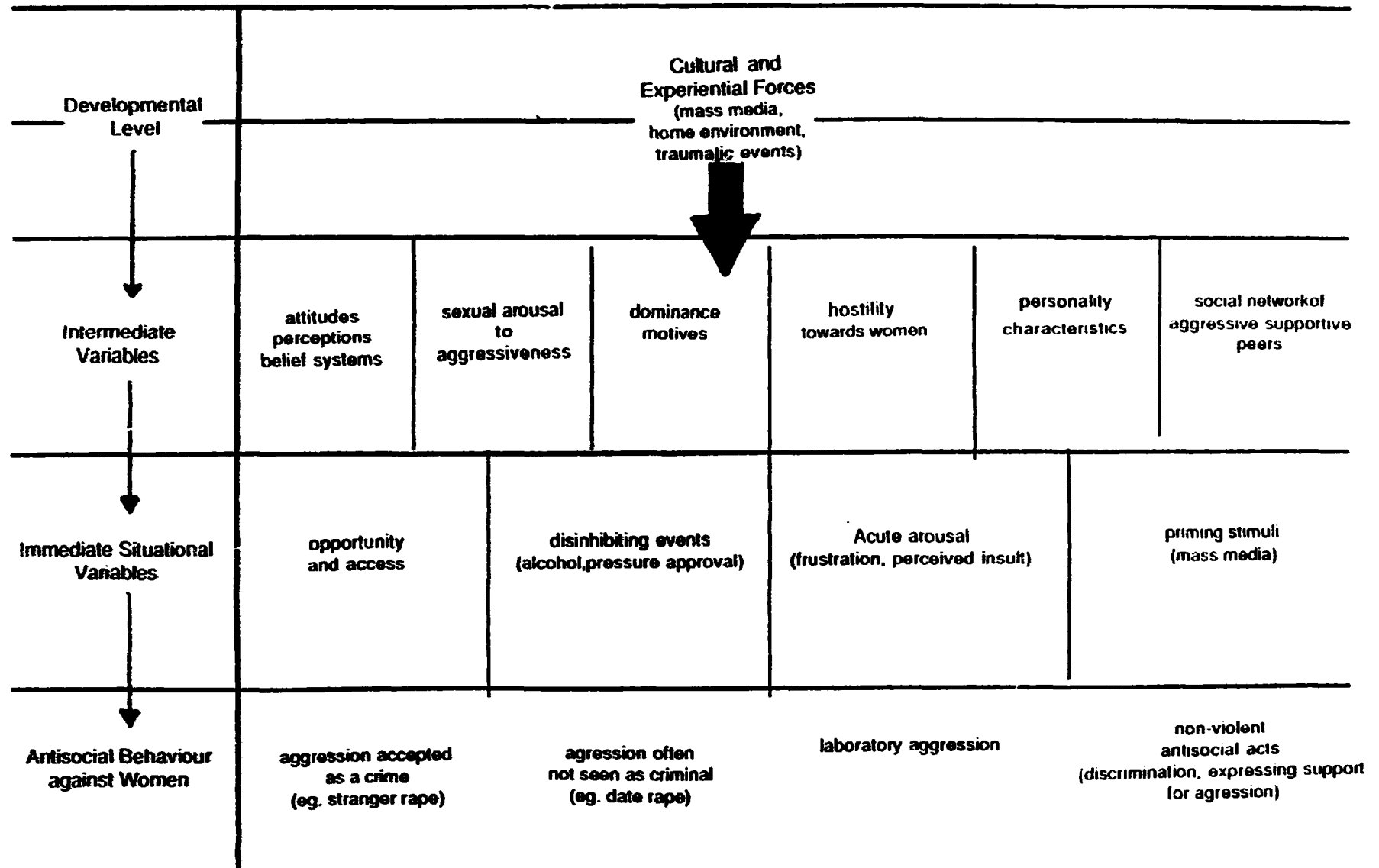
The test sample that Bardis (1972) used to develop the scale (25 male high school students and 20 female high school students from Toledo Ohio) can serve as a norm group with which to compare the results of this study,(for Bardis VS; for males $M = 54.3$, for females $M = 34.45$). It is important to note that Bardis' scale was developed and tested shortly after the "Kent State" shootings. This was a period of American social history where anti-war feelings were at an unprecedented height. Therefore I expect that my sample will produce scores that are considerably higher for the acceptance of violence than those of Bardis' sample. The purpose of comparing these two groups of teenagers (of roughly the same age and culture) by using this scale is to provide a contrast between two totally different social climates- one from a period of time when violence was less acceptable (if only as a reaction to the Viet Nam War), and the other from a period of time where violence seems to be more acceptable. Bardis' scale is a valuable measure of the acceptance of violence even though the two groups which will be compared are from totally different social contexts.

Experiential Forces

As mentioned earlier the acceptance of abuse is an attitude which is derived from cultural forces and through exposure to violence (Covey, 1985). It is a fact that a large number of male abusers have themselves experienced abuse or at least observed it happening as youngsters at home (Stahly,1985). The media is also a major provider of experiences with

Figure 2

Hypothesized Environmental Influences On Antagonistic Behaviour against women (Malamuth,Neil and Briere,1986)



violence (Malamouth,Neil, Briere,1986).

In the opinion of this author,video movies and television programs such as "Terminator", "Total Recall", "Blood Sport", "W.W.F.", etc. have done their part in glamourizing violent behaviour and also providing examples for the young. The result of gratuitous violence in the media is to harden the individuals response to the violence and to reduce empathy for the victim. This opinion is shared by some researchers. In one study (Linz, Donnerstein, Penrod,1984) male college students after viewing five, "R-rated" films depicting violence against women came to have "fewer negative emotional reactions" to the movies. The subjects perceived them as "significantly less violent", and to consider them (the films) "less degrading" to women.

Current research (Malamuth, Neil, Briere,1986) reported that sexual violence in the media had an indirect but important effect on violence against women. These researchers conducted a representative review of all forms of media with a view of documenting the frequency and variety of violent acts presented. A distinction was made between sexual violence and non-sexual violence as the researchers conducted their survey.They found that magazines (mainstream magazines that are readily obtained by all age groups as opposed to underground pornographic magazines) had the least amount of sexual violence ,accounting for only 5% of the total content. Sexual violence in movies accounted for 15% of the content and in adult books it accounted for 30% of the content.

Malamouth (et al) concluded that there were interesting significant differences between sexual and non-sexual violence in the media. In sexual violent acts, in the vast majority of the cases, women are illustrated as the victims and men the perpetrators. Whereas in non-sexual violence the recipients are most likely to be male. Similarly, the victims of sexual violence tend to give initial resistance to the act but then it is suggested that the victim

secretly desires and eventually derives pleasure from the assault. There are usually non-negative consequences for the victim or the perpetrator after the assault. In contrast, the victims of non-sexual violence are depicted abhorring their experience and intent on avoiding victimization in the future.

Malamuth, Neil and Briere incorporated the findings of their research and the work by Martha Burt into the development of a model hypothesizing indirect effects of media sexual violence on violence against women (see Figure 2). Like in Burt's model this one suggests that violence against women is the final result of a complicated interaction between cultural forces, experiential forces and individual forces such as attitudes. They also suggest that these three forces are the antecedents to violent behaviour and when they interact with immediate situational variables they result in a variety of antisocial behaviour against women as articulated in Figure 2.

Research Questions

A demographic section will be included in the survey which will use the following background variables; sex, age, school, parents' education and student's educational/vocational aspirations. The research will determine if there are any significant relationships between demographic variables?

Then this research will study several of those originating variables - the antecedents to the abuse of women. Three Independent-Psychological variables will be examined; belief in a just world (JWS), adversarial sexual beliefs (ASB) and, acceptance of violence (VS) with a view to determining if any significant relationships exist between the Psychological

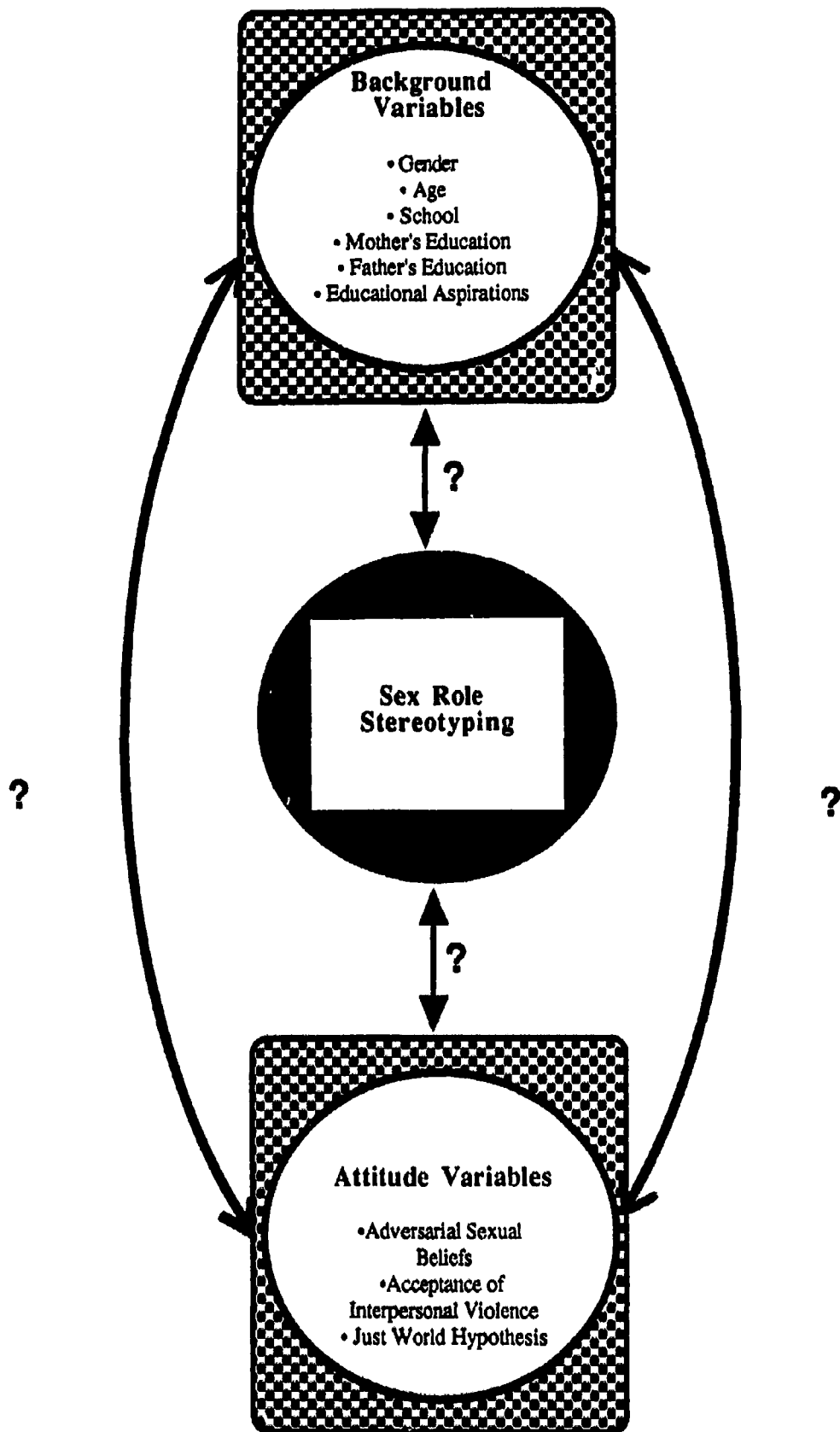
variables themselves, and then between the Demographic variables and the Psychological variables. The sample will be split according to gender where it is expected that significant gender differences will appear on the ASB, JWS and VS scores. The research will attempt to answer one specific research question which pretains to the psychological variables:

1. Do students who have a greater belief in a "Just World" also have more conservative attitudes towards the acceptance of violence, and adversarial sexual beliefs?

This research will then examine the last of the antecedents to abuse of women; sex role stereotyping. This variable will be the dependent variable and it will be compared to the demographic and the psychological variables. It is expected that significant gender differences will occur when the sample is split according to gender. The research will attempt to answer three additional research questions when the dependent variable is examined:

2. Are students of Lunenburg County high schools sexist? ie. Do they score higher on a Sex Role Stereotype Scale (SRS) than Indiana College Students or adults in Minnesota? - two norm groups using Burt's SRS (Burt, 1980)
3. Would students who are sexist be more inclined to accept interpersonal violence? ie. Is there a significant and sizeable positive correlation between students' scores on the SRS and their scores on the Acceptance of Violence Scale (VS)?
4. Are students who are more sexist more inclined to view the opposite sex as an adversary? ie. Is there a significant and sizeable positive correlation between students' scores on the Sex Role Stereotype Scale (SRS) and the scores on the Adversarial Sexual Beliefs Scale (ASB) ?

Figure 3
Theoretical Model of Antecedents of Sex Role Stereotyping
(Straubel, 1992)



Method

A questionnaire was developed which measured responses to six demographic questions and four scales; SRS,VS,ASB, and JWS. The questions from the four scales were randomized to conceal their intent to the respondents (see Appendix A for an example of the instrument).

The questionnaire was distributed to all six high schools in the Lunenburg County school district during March-April 1991. The questionnaires were administered by guidance counsellors to a random sampling of grades 10,11 and 12 students in all six high schools. The total questionnaires sent out were 948, and 862 useable questionnaires were returned for a return rate of 90%.

The responses were reversed where necessary before being entered into a Statview 512 computer program for statistical analysis.

The Independent-Demographic Variables

Research indicated (Burt, 1980) that the strongest relationships with the dependent variables were these demographic variables; age, education, occupation and gender. Since the subjects for this research were of high school age the demographics had to be chosen appropriately, and the following were used; gender, age, school, father's or male guardian's education, mother's or female guardian's education, student's future aspirations.

Gender

The respondent's self reported their gender. This variable was used as a basis for splitting the sample to see whether there was a difference between scores of groups of males and females. (N_{males}=439, N_{females}=423)

Age

For this variable the subject had to chose among these five categories; *15 or younger, 16,17,18,19 or older.*

School

Respondents had to indicate which school they attended; *New Germany Rural High School (NGRHS), Bridgewater High School (BHS), Lunenburg High School (LHS), New Ross Consolidated High School (NRHS), Park View Education Center (PVEC), Chester Municipal High School (CMHS).*

Father's or Male Guardian's Education

Students chose one of six statements; *did not complete junior high school, completed junior high school only, completed some high school but did not finish, completed high school only, continued his education beyond high school but did not go to university, and , completed a university degree.*

Mother's or Female Guardian's Education

Students responded to the same six statements as the Father's Male Guardian's Education.

Student's Aspiration

Students were asked to respond to their educational aspirations by selecting one of four statements; *quit high school and get a job, finish high school and get a job, finish high school and go to vocational/technical/business school, finish high school and go to university.*

The Independent-Psychological Variables

Adversarial Sexual Beliefs

In order to measure the extent to which a subject felt the opposite sex was untrustworthy or exploitive Burt's Adversarial Sexual Beliefs Scale (ASB) was used. This scale was developed by Burt and consisted of nine questions which measured responses to notions that the opposite sex was adversarial. The respondents scored the questions on a 7-point Likert scale ranging from "Disagree Completely" to "Agree Completely". All items use the following scoring scale: 7="Disagree Completely", 6= "Disagree Strongly", 5="Disagree", 4="Undecided", 3="Agree", 2= "Agree Strongly", 1= "Agree Completely". The scales were created by summing the item responses. Theoretical range of scores: 9, most

adversarial view of the other sex, to 63, least adversarial view of the other sex. Thus the lower the score the more the subject views the opposite sex as an adversary.

Adversarial Sexual Beliefs (Cronback's alpha for the norm group= .802)

1. A woman will only respect a man who will lay down the law to her.
2. Many women are so demanding sexually that a man can't satisfy them.
3. A man's got to show the woman who's boss right from the start or he'll end up henpecked.
4. Women are usually sweet until they've caught a man, but then they let their true self show.
5. A lot of men talk big, but when it comes down to it, they can't perform well sexually.
6. In a dating relationship a woman is largely out to take advantage of a man.
7. Men are out for only one thing.
8. Most women are sly and manipulating when they are out to attract a man.
9. A lot of women seem to get pleasure in putting men down.

The Cronback's alpha for this sample was=.69

Acceptance of Violence

The instrument that was used to measure the respondents attitudes towards violence was the Violence Scale by Panos D. Bardis. The scale consisted of 25 questions which measured respondents acceptance of varying degrees of violence as a means of conflict resolution. Violence in this scale means words and especially actions aimed at property damage and personal injury. The respondents scored the questions item by item according

to a 7-point Likert scale ranging from "Completely Disagree" to "Agree Completely". All items use the following scoring scale: 1="Disagree Completely", 2="Disagree Strongly", 3="Disagree", 4="Undecided", 5="Agree", 6="Agree Strongly", 7="Agree Completely". Theoretical range of scores: 25, lowest approval of violence, to 175, highest approval.

Violence Scale (reliability coefficient=.94)

1. Every nation should have a war industry
2. The death penalty should be part of every penal code.
3. University police should use violence against violent student demonstrators.
4. War in self defence is perfectly right.
5. Parents should encourage their children to use violence in self- defense.
6. The majority should use violence against violent minority groups.
7. War is often necessary
8. Private citizens should be allowed to carry guns.
9. The government should sent armed soldiers to control violent university riots.
10. The manufacture of weapons is often necessary.
11. When a school child misbehaves habitually, the teacher should use physical punishment.
12. Prison guards should be allowed to use violence against prisoners when necessary.
13. War can be just.
14. Violent crimes should be punished violently.
15. Hitting a child when he does something bad on purpose teaches him a good lesson.
16. Killing of civilians should be accepted as an unavoidable part of war.
17. The police force of a university should carry guns.
18. A violent revolution can be perfectly right.
19. A child's habitual disobedience should be punished physically.

- 20. A soldier should never hesitate to use violence.
- 21. Capital punishment is often necessary.
- 22. The government should use violence to control violent riots.
- 23. Punishing a child physically when he deserves it will make him a responsible and mature adult.
- 24. Universities should use violence against students who destroy university property.
- 25. Violence against the enemy should be part of every nation's defense.

The Cronback's alpha for this sample was=.88

The Just World Hypothesis

The Just World Scale (JWS) developed by Rubin and Peplau and used rather extensively by researchers was used to measure respondents belief in a just world. The scale consists of 23 questions which alternate between positive (just) items and negative (unjust) items. The original Rubin and Peplau JWS used a six point scale. For this research a modified version of the JWS scale was used (Chin, Lin, 1988) which consisted of a seven-point Likert scale ranging from "strongly agree" to "strongly disagree" with scores ranging from 1 to 7. Since the score sheet for this research used the same seven point scale for all four tests ranging from "disagree completely" to "agree completely" some items for the JWS had to be reversed scored. High scores in the JWS imply the lower degree of belief in a "just world". Theoretical range of scores: 23, greatest belief in a "just world" to 161, least belief in a "just world". Items marked (*) are reversed scored.

Just World Scale

The Cromback's alpha for this sample was=.61

1. I feel that many people in the world have a false reputation.
- 2.* In general ,this is a fair world
- 3.* Luck always brings fortune.
4. Those who drive carefully and those who do not have the same chance of being hurt in a car accident.
5. Many criminals are judged innocent in court.
- 6.* If you study hard you will have good grades.
- 7.* If you take care of your health you are very unlikely to have a heart attack.
8. Those candidates who insist on holding on to their principles in an election are usually the losers.
9. * Innocent people are seldom put in jail.
10. In a race, many athletes are not caught when they violate regulation.
- 11.* A person will get what he or she deserves.
- 12.* Parents always find good excuses to punish their children.
13. Those who do good deeds are usually not known and do not receive just rewards.
- 14.* Although bad persons might have held power in the history of mankind, good persons will eventually regain control
- 15.* In all occupations those who work hard always get promoted.
16. Parents often neglect their childrens' wishes.
17. In our court system it is difficult to find a fair judge.
- 18.* One should blame himself/herself for his/her misfortunes.
- 19.* Criminals always pay for their actions.
20. Innocent people are always the victims.
- 21.* The rich should be heavily taxed.
22. Most people do not have the motivation to cheat.
23. In a disordered world criminals should be severely punished.

The Dependent Variable

Sex Role Stereotype Scale (SRS)

The attitude of the student towards sex role stereotyping was measured using Burt's Sex Role Stereotyping Scale. The scale consisted of nine questions which measured responses to commonly held notions of female sex role behaviours. The respondents scored the questions on a 7-point Likert scale ranging from "disagree completely" to "agree completely". All items use the following scoring scale: 7=disagree completely; 6=disagree strongly; 5=disagree; 4=undecided; 3=agree; 2=agree strongly; 1=agree completely. Items marked (*) are reverse scored. To create the scales, simply sum the item responses after reversing where necessary. Theoretical range of scores: 9, most sexist, to 63, least sexist. The lower the score, the more sexist is the subject.

Sex Role Stereotyping (Cronback's alpha for the norm group= .800)

1. A man should fight when the woman he's with is insulted by another man
- 2.*It is acceptable for the woman to pay for the date.
3. A woman should be a virgin when she marries.
4. There is something wrong with a woman who doesn't want to marry and raise a family.
5. A wife should never contradict her husband in public.
6. It is better for a woman to use her feminine charm to get what she wants rather than ask for it outright.
7. It is acceptable for a woman to have a career but, marriage and family should come first.
8. It looks worse for a woman to be drunk than a man to be drunk.
- 9.*There is nothing wrong with a woman going to a bar alone.

The Cronback's alpha for this sample was= .69

Results

All the variables were compared with each other by correlation, regression and anova analysis using a StatsView 512 computer program. In some cases samples were split according to gender and then analysed again. Correlation matrices of all variables were produced. Then the sample was split according to gender and new matrices were produced. The correlation matrices are recorded in Tables 1 , 2, & 3. All other statistical results are tabulated in Annex B.

In order to prevent a "Type-One Error" significant results will be those for $p \leq .001$ given the size of the sample. For a sample size $N= 862$, $p \leq .001$ occurs at $R = .112$. (Significant results are indicated in bold print.)

The Independent-Demographic Variables

The Means (M) and Standard Deviations (SD) for the demographic variables are given below. Descriptive statistics for gender, age and school are given in charts.

Gender

Group	Count
Male	439
Female	423

Age

Age	Male	Female	Total
A-15	54	50	104
A-16	122	131	253
A-17	126	110	236
A-18	95	104	199
A-19 or older	42	28	70
Total	439	423	862

School

School	Count
New Germany Rural High School	80
Bridgewater High School	197
Lunenburg High School	70
New Ross Consolidated School	46
Park View Education Center	284
Chester Municipal High School	185

for Mother's/Female Guardian's Education; $M= 3.843$, $SD= 1.463$.

for Father's/Male Guardian's Education; $M= 3.52$, $SD= 1.739$.

for Student's Aspirations; $M= 3.421$, $SD= .736$.

Interrelationships among the six Demographic Variables

for Gender and Age, $R= .023$, $F= .438$, $p= .5084$;

Gender and School, $R= .01$, $F= .086$, $p= .7678$;

Table 1

Correlation Matrix-Whole Sample-All Variables

	Gender	Age	School	Mother Ed.	Father Ed.	Student Asp.	JWS	SRS	ASB	VS
Gender	1									
Age	-.023	1								
School	.01	-.026	1							
Mother's Education	-.041	-.202	-.063	1						
Father's Education	-.053	-.195	-.078	.462	1					
Student's Aspirations	.078	-.267	.01	.273	.30	1				
Just World Scale	.015	-.013	.094	.017	.003	-.006	1			
Sex Role Stereotyping	.375	-.121	.088	.075	.136	.281	.083	1		
Adversarial Sexual Beliefs	.42	-.101	-.046	.108	.105	.189	-.080	.562	1	
Violence Scale	-.385	.045	-.035	-.034	-.066	-.157	.037	-.469	-.472	1

Table 2

Correlation Matrix-Female Sample-All Variables

	Age	School	Mother Ed.	Father Ed.	Student Asp.	JWS	SRS	ASB	VS
Age	1								
School	-.006	1							
Mother's Education	-.213	-.063	1						
Father's education	-.220	-.119	.459	1					
Student's Aspirations	-.307	.036	.332	.319	1				
Just World Scale	-.074	.115	.003	.043	.054	1			
Sex Role Stereotyping	-.085	.119	.111	.133	.269	.138	1		
Adversarial Sexual Beliefs	-.063	-.057	.157	.112	.158	-.042	.435	1	
Violence Scale	.090	-.080	-.128	-.152	-.197	-.038	-.449	-.376	1

Table 3

Correlation Matrix-Male Sample-All Variables

	Age	School	Mother Ed.	Father Ed.	Student Asp.	JWS	SRS	ASB	VS
Age	1								
School	-.044	1							
Mother's Education	.193	-.062	1						
Father's Education	.175	-.038	.464	1					
Student's Aspirations	-.232	-.013	.231	.295	1				
Just World Scale	.037	.077	.03	-.028	-.041	1			
Sex Role Stereotyping	-.155	.065	.085	.202	.275	.041	1		
Adversarial Sexual Beliefs	-.134	-.053	.121	.166	.185	-.136	.522	1	
Violence Scale	-.003	.007	-.013	-.045	-.093	.109	-.322	-.366	1

Gender and Mother's Education, $R = .041$, $F = 1.438$, $p = .2307$;

Gender and Father's Education, $R = .053$, $F = 2.441$, $p = .1185$;

Gender and Student's Aspirations, $R = .078$, $F = 5.329$, $p = .0212$ (See Tables 4)

for Age and School, $R = .026$, $F = .569$, $p = .4509$;

Age and Mother's Education, $R = .202$, $F = 36.436$, $p = .0001$

(the older the student, the less educated is their mother)

Age and Father's Education, $R = .195$, $F = 34.003$, $p = .0001$

(the older the student, the less educated is their father)

Age and Student's Aspirations, $R = .267$, $F = 65.855$, $p = .0001$ (see Tables 5)

(the older the student, the lower their aspirations)

for School and Mother's Education, $R = .063$, $F = 3.373$, $p = .0666$;

School and Father's Education, $R = .078$, $F = 5.219$, $p = .0226$;

School and Student's Aspirations, $R = .01$, $F = .087$, $p = .7684$ (see Tables 6)

for Mother's Education and Father's Education, $R = .462$, $F = 233.952$, $p = .0001$

(the more educated the mother, the more educated the father)

Mother's Education and Student's Aspirations, $R = .273$, $F = 60.112$, $p = .0001$

(see Tables 7)

(the more educated the mother, the higher the student's aspirations)

for Father's Education and the Student's Aspirations, $R = .3$, $F = 84.984$, $p = .0001$

(see Tables 8)

(the more educated the father, the higher the student's aspiration)

Independent-Psychological Variables

The Means and Standard Deviations for the Psychological Variables are given below. The Means and Standard Deviations of the scores split according to gender follow...

Just World Scale (JWS)

for JWS; M= 99.914, SD= 9.009,

JWS for Male Sample; M= 99.786, SD= 9.67,

JWS for Female Sample; M=100.047, SD= 8.277.

Adversarial Sexual Beliefs (ASB)

for ASB; M= 43.245, SD= 8.021,

ASB for Male Sample; M= 39.938, SD= 7.47,

ASB for Female Sample; M= 46.676, SD= 7.085.

Violence Scale (VS)

for VS; M= 86.945, SD= 20.246,

VS for Male Sample; M= 94.588, SD= 19.748,

VS for Female Sample; M= 79.014, SD= 17.543.

The Interrelationships between the Six Demographic and the Three Independent-Psychological Variables

Just World Scale (JWS)

for JWS and Gender, $R = .015$, $F = .181$, $p = .6705$;

JWS and Age, $R = .013$, $F = .143$, $p = .7058$;

JWS and School, $R = .094$, $F = 7.64$, $p = .0058$;

JWS and Mother's Education, $R = .017$, $F = .24$, $p = .6247$;

JWS and Father's Education, $R = .003$, $F = .006$, $p = .9403$;

JWS and Student's Aspirations, $R = .006$, $F = .003$, $p = .9998$ (see Tables 9)

Adversarial Sexual Beliefs (ASB)

for ASB and Gender, $R = .42$, $F = 184.355$, $p = .0001$;

(Males have higher adversarial sexual beliefs than females)

ASB and Age, $R = .101$, $F = 8.856$, $p = .003$;

ASB and School, $R = .046$, $F = 1.802$, $p = .1737$;

ASB and Mother's Education, $R = .108$, $F = 10.159$, $p = .0015$;

ASB and Father's Education, $R = .105$, $F = 9.609$, $p = .002$;

ASB and Student's Aspirations, $R = .189$, $F = 31.975$, $p = .0001$ (see Tables 10)

(the higher the student aspiration, the lower the student's adversarial sexual beliefs,)

Violence Scale (VS)

for VS and Gender, $R = .385$, $F = 149.44$, $p = .0001$;

(Males have higher acceptance of violence than females)

VS and Age, $R = .045$, $F = 1.712$, $p = .1911$;

VS and School, $R = .035$, $F = 1.026$, $p = .3113$;

VS and Mother's Education, $R = .034$, $F = .982$, $p = .3221$;

VS and Father's Education, $R = .066$, $F = 3.714$, $p = .0543$;

VS and Student's Aspirations, $R = .157$, $F = 21.745$, $p = .0001$ (see Tables 11)

(the higher the student aspiration, the lower the acceptance of violence)

The Interrelationships of the Independent-Psychological Variables with Themselves

for ASB and JWS, $R = .08$, $F = 5.493$, $p = .0193$;

for ASB and VS, $R = .472$, $F = 246.164$, $p = .0001$;

(the higher the student's adversarial sexual beliefs, the higher the acceptance of violence)

for JWS and VS, $R = .037$, $F = 1.21$, $p = .2716$ (see Tables 12)

The Dependent Variable-Sex Role Stereotyping (SRS)

The Means and Standard Deviations for the SRS are given below. Descriptive statistics for the total sample and the sample split according to gender are included.

Sex Role Stereotyping (SRS)

for SRS; $M = 45.372$, $SD = 7.671$,

SRS for Male Sample; $M = 42.547$, $SD = 7.206$,

SRS for Female Sample; $M = 48.305$, $SD = 7.016$.

The Interrelationships Between the Dependent Variable with the Six Demographic Variables

for Sex Role Stereotyping (SRS) and Gender, $R = .375$, $F = 141.152$, $p = .0001$;

(Males are more sexist than females)

SRS and Age, $R = .121$, $F = 12.856$, $p = .0004$;

(the older the student, the more sexist they are)

SRS and School, $R = .088$, $F = 6.776$, $p = .0094$;

SRS and Mother's Education, $R = .075$, $F = 4.897$, $p = .0272$;

SRS and Father's Education, $R = .136$, $F = 16.298$, $p = .0001$;

(the more educated the father, the less sexist is the student)

SRS and Student's Aspirations, $R = .281$, $F = 73.642$, $p = .0001$ (see Tables 13)

(the higher the student aspiration, the less sexist is the student)

The Interrelationships Between the Dependent Variable with the Independent-Psychological Variables

for SRS and JWS, $R = .083$, $F = 6.016$, $p = .0144$;

SRS and ASB, $R = .562$, $F = 397.862$, $p = .0001$;

(the higher the student's adversarial sexual beliefs, the more sexist is the student.)

SRS and VS, $R = .469$, $F = 242.785$, $p = .0001$ (see Tables 14)

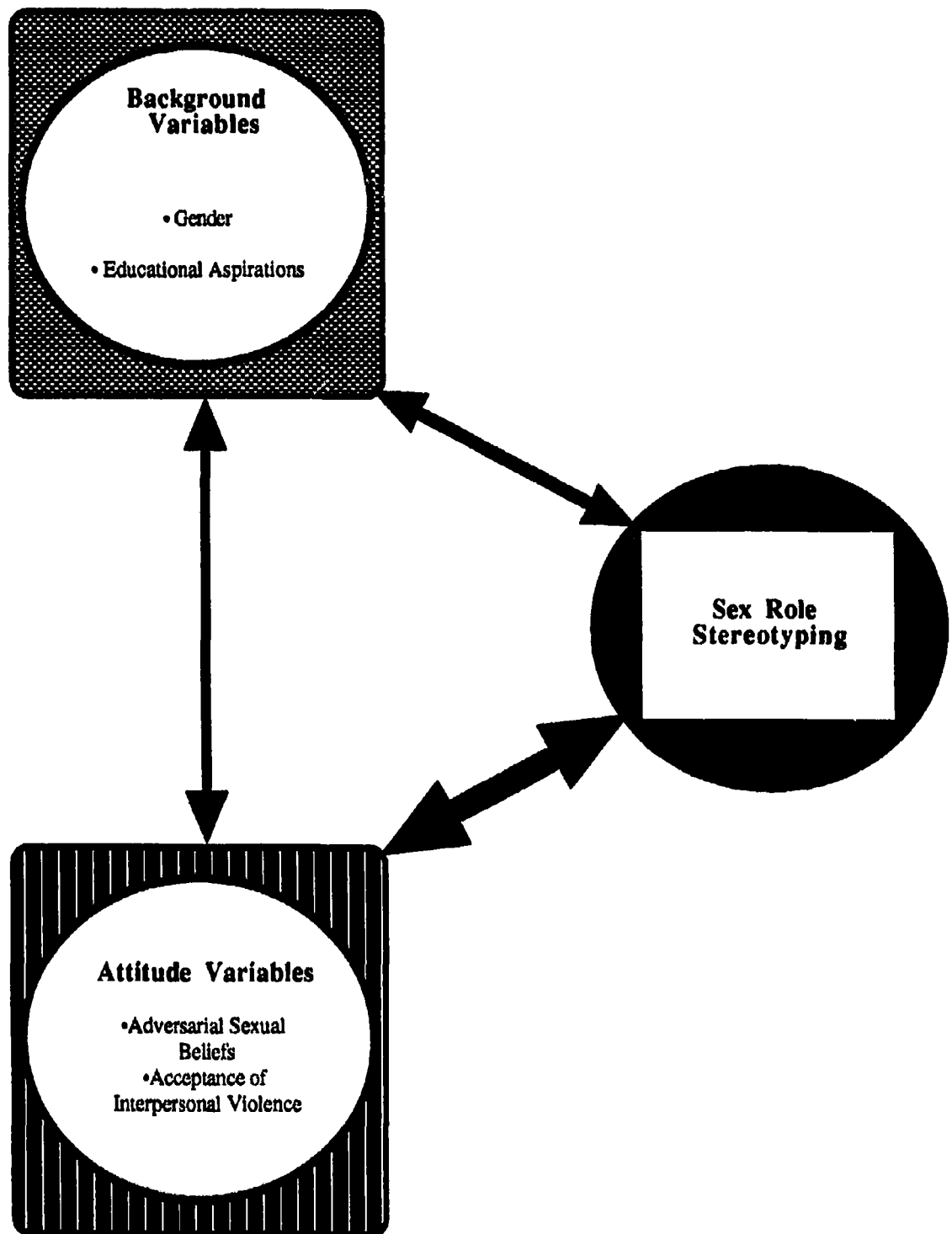
(the higher the student's acceptance of violence, the more sexist is the student,)

Stepwise Multiple Regression on the Dependent Variable-SRS

A stepwise multiple regression analysis was performed on the dependent variable using all other nine variables. No variables were forced in an effort to determine the best predictor for SRS. The results for the best six predictors are given below in chronological order.

1. SRS and ASB, $R = .562$, $F = 397.862$, $R\text{-squared} = .316$;
2. SRS and VS, $R = .608$, $F = 252.003$, $R\text{-squared} = .37$;
3. SRS and Student Aspirations, $R = .629$, $F = 187.016$, $R\text{-squared} = .395$;
4. SRS and JWS $R = .641$, $F = 149.669$, $R\text{-squared} = .411$;
5. SRS and Gender, $R = .649$, $F = 124.493$, $R\text{-squared} = .421$;
6. SRS and School, $R = .654$, $F = 106.741$, $R\text{-squared} = .428$. (see Tables 15)

Figure 4
Resultant Model of Antecedents of Sex Role Stereotyping
(Straubel, 1992)



Conclusions

Independent-Demographic Variables

Significant positive correlations occurred with Mother's Education and Father's Education and ($R = .462$, $F = 233.952$, $p = .0001$). This is somewhat irrelevant to this study but confirms the tendency that parents of similar educational backgrounds form couples and that a parent's education level effects a child's educational and vocational aspiration.

When correlation analysis was conducted there were significant positive correlation with Father's/Mother's Education and Student's Aspirations for both female and male samples . These results once again confirm that parents' education has an effect on a child's set of attitudes and their educational aspirations.

Student Aspirations correlated most significantly with Father's Education ($R = .30$, $F = 84.984$, $p = .0001$). Perhaps these results also suggest that for children especially girls the influence a father has on her attitudinal and educational development is quite profound. This may confirm other research (Griggs,et al.,1983; Knight and Sedlacek, 1983) that suggested that women chose their careers according to a male perception of what women's roles ought to be.

The Independent-Psychological Variables

Students in Lunenburg County had slightly higher scores on the JWS than the norm group [Recall: high scores on the JWS imply a lower degree of belief in a "just world"], indicating that the

Lunenburg County students viewed the world as being less fair and just than college students in Indiana (JWS Lunenburg County students: $M=99.914$; for Indiana college students $M=91.43$). This finding seemed consistent and reasonable given the economic and social disparity of South Shore Nova Scotia relative to other regions in North America.

The results for the JWS also confirmed the findings of (Chen, Lin, 1988) which showed significant gender differences in JWS scores. Lunenburg County male-students believed that the world was fairer than female-students (for males, $M= 99.786$; for females, $M= 100.047$).

The scores for the ASB for this sample showed that students of Lunenburg County tended to view members of the opposite sex as adversaries to a slightly lesser extent than adults in Minnesota, (ASB Lunenburg County Students: $M=43.245$, $SD=8.021$; for Minnesota sample $M= 29.0$, $SD= 8.5$). [Recall: the lower the score the greater the view that the opposite sex is an adversary.] The results also showed significant gender differences in scores. The scores for the male population were consistently lower than the scores for the female sample indicating that for this sample males had a greater tendency to view the opposite sex as an adversary (for males, $M= 39.938$; for females $M= 46.676$).

In terms of the VS variable, further analysis revealed that students in Lunenburg County had dramatically higher scores than high school students in Ohio (the norm group). [Recall: the higher the score on the VS the more accepting of violence]. (VS for Lunenburg County students; for males $M=94.59$, for females $M=79.01$, VS for Ohio students; for males $M=54.30$, for females $M=34.45$). This result suggests that Lunenburg County students generally tended to be more accepting of violence than the subjects of the norm group. This result in itself is not significant because Bardis' research was coloured by events in 1972 such as the Kent

State Massacre and the anti-Viet Nam war movement. One would expect that the results for the norm group would be considerably lower than a modern day sample.

Since the 70's, young people have far greater exposure to violence on all levels of their daily experience. The sample for this study for instance had just experienced the Persian Gulf War first hand on prime time television. A war that received a great deal of support from world leaders and general populations. Therefore, it would be reasonable to expect that scores on the VS in general would be considerably higher for this sample than the test sample in 1972. Nevertheless, this result raises two points of considerable importance; 1. the consistency of the pattern that overall the male sample tends to be much more accepting of violence than the female sample, and 2. that the culture of the 1990's is much more accepting of violence than it may have been in the 1970's.

The Independent-Demographic with the Independent-Psychological Variables

Gender

The student's gender was used to split the sample in order to acquire more accurate results for analysis. It was anticipated from the beginning that in terms of the three psychological variables the scores from the scales measuring these variables would differ according to gender. Overall women students had less adversarial attitudes towards the opposite sex and were less accepting of violence than their male counterparts. However male students thought the world was more fair and just than the women. More discussion of these results will be forthcoming as each of the variables will be discussed individually.

In correlation and regression analysis "age" made a significant difference on both ASB and VS scores. This indicated that significant differences in scores occurred because of the

subjects gender, and this is to be expected.

Student's Age

The Age of the student in analysis made no significant difference with respect to the psychological variables. Burt's findings (Burt, 1990), that the older the subject the more conservative the scores on the attitude scales was confirmed by this study in so far as students in Lunenburg County had slightly more liberal scores on the ASB than the norm group-an older population. On the other two scales, JWS and VS Lunenburg County students were considerably more conservative in their views.

School

It is difficult to make any broad conclusion from the results of the scores for this variable when compared to the psychological variables. The size of the numbers of students who were sampled effects the accuracy of the results and so to surmise that one school has a population that is more accepting of violence than another (or some other such comparison) would be an untruth and irrelevant to this study.

Overall the scores for all four tests were similar for each of the school's population with no major inconsistencies. Most importantly the general pattern , that the scores for the female samples tended to be different from the male as expressed above, remained consistent in each of the six school populations that were sampled.

Mother's or Female Guardian's Education/Father's or Male Guardian's Education

Neither Mother's Education nor Father's Education made any significant difference with

any of the psychological variables. This result is a strong indicator that for this sample the level of the parent's education had little effect on the attitudes of the student. Perhaps this result is an argument which helps dispell the commonly held belief that the abuse of women occurs more readily in homes of the poorly educated and lower income groups.

Student's Aspirations

In the analysis of this variable one has to be reminded that it was the student's perceived educational aspirations that were used to compare with the other variables. In Burt's study the sample consisted of adults with real occupations and completed levels of education. If one can equate desired educational level with aquired education then this sample confirmed Burt's findings that the higher the educational level the more liberal the attitudes.

Significant correlations occurred with Student Aspirations and both the ASB and VS. The scores for the ASB and VS became progressively more liberal as the aspired level of education increased. When the sample was split according to gender this trend continued with the most dramatic change in "M" (for both the male and female samples and for all three variables) occurring when the student aspired to go to university. In other words the higher the aspired for education , the more liberal were the students in their attitudes.

As before, no significant results occurred in the analysis of the JWS with no consistent pattern apparent.

The Independent-Psychological Variables with Themselves

The results for the JWS indicated that this variable did not make any significant differences on ASB or VS scores- no significant correlations existed.

Overall, for this sample the mean scores indicated that women tended to view the world as less fair and just than the males. This finding is not surprising given the reality that the world in general is still dominated and controlled by men and that some women tend to view themselves in submissive roles and as victims. Statistically however no significant differences existed according to gender.

When looking only at the means for the JWS for both male and female samples, the results seem to confirm the findings of (Chen,Lin,1988) who found that men in general tended to view the world as being more fair and just than women yet were less accepting of rape victims. On face value, this research corroborates this tendency in the sense that while the male subjects who had very conservative scores on the attitude scales tended to view the world as being most fair and just. Yet on a purely statistical level (since no strong correlations existed between the JWS and other variables) one can argue that the existence of the "Just World Hypothesis" was not confirmed by this study.

Further analysis showed a significant correlation existed between ASB scores and the VS; indicating that for this sample subjects who had strong adversarial sexual beliefs also had high levels of acceptance of violence. This result was consistent and reasonable to expect.

The Dependent Variable-SRS

The research clearly showed that student's of Lunenburg County high Schools are relatively sexist in their attitudes. The scores for the Lunenburg County sample were about the same as those of Indiana college students; with scores that were more sexist for

Lunenburg County male students and slightly less sexist for Lunenburg County female students. The scores for this sample were less sexist than those for adults in Minnesota, and this result was predictable. [Note: recall that the lower the score on the SRS the more sexist the subject] (SRS Lunenburg County students: $M = 45.372$; for males $M = 42.547$; for females $M = 48.304$), (SRS for Indiana college students: $M = 45.137$; for males $M = 43.911$; for females $M = 46.363$), (SRS for Minnesota adults: $M = 37.6$). This result confirms the already accepted reality that Lunenburg County and the South Shore of Nova Scotia is a culture where sexist attitudes are prevalent.

When the sample was split according to gender, the male population consistently scored lower on the SRS than the female sample. Thereby confirming the research (Chen, Lin, 1988) which suggested that in a given population men tend to be more sexist than women.

The Dependent Variable with Independent-Demographic Variables

The most significant result occurred with "Gender" ($R = .375$, $F = 141.152$, $p = .0001$). This indicates that scores on the SRS are in part determined by the student's sex. This result is consistent with the research (Chen, Lin, 1988) and also with the scores for the VS and ASB (see above).

The results showed that Age, School, Mother's/Father's Education made no significant difference in SRS scores. Perhaps one important observation would be that attitudes towards sex role stereotyping are not determined by the level of education that the parents may have. Once again dispelling the belief that sexism is more prevalent in lower income and poorly-educated families.

In terms of the Student's Aspiration variable, moderately significant correlations occurred with the SRS, ($R = .281$, $F = 73.642$, $p = .0001$). The scores for the SRS became progressively more liberal as the aspired level of education increased. This pattern continued when the sample was split according to gender with the most dramatic change in "M" (for both samples) occurring when the student aspired to go to university. This result was also consistent with Burt's findings. In other words, the higher the educational goals of the students, the less sexist were their attitudes.

The Dependent Variable with the Independent-Psychological Variables

In correlation analysis (and then confirmed by stepwise and simple regression analysis) there were significant and positive correlations between the SRS and both the ASB and VS for both the male and female samples, (for ASB, $R = .562$, $F = 397.862$, $p = .0001$; for VS, $R = .469$, $F = 242.785$, $p = .0001$). Thus the two original hypotheses—that students who are sexist, 1. are more inclined to be accepting of violence and, 2. tend to view the opposite sex as an adversary, were accepted by this study.

What exactly does the acceptance of these two hypotheses mean in terms of the issue of the abuse of women? The acceptance of the first hypothesis indicates that for this sample a very strong relationship exists between sexism and acceptance of violence. In other words, a person who is highly sexist will probably be most accepting of violence. Similarly, the rather strong correlation between sex role stereotyping and adversarial sexual beliefs indicates that persons who are more sexist also view the opposite sex as an adversary - and so, sexism seems to be strongly associated with a perception that the opposite sex is an enemy. These two results taken together might suggest that a strong relationship exists between the three attitudinal variables. Recall that Martha Burt's research established that

attitudes such as sex role stereotyping, adversarial sexual beliefs and acceptance of violence were the attitudinal antecedents to rape acceptance myth. Therefore, it might be possible to extrapolate from her research and suggest that for the sample in Lunenburg County, sex role stereotyping, adversarial sexual beliefs and acceptance of violence are antecedents to female abuse in general.

Epilogue

The importance of this research is that it attempts to quantify the existence of sexist attitudes in Lunenburg County. The development of certain attitudes in our youth such as, sex role stereotyping, adversarial sexual beliefs, acceptance of violence, have negative consequences for women. These attitudes can be measured and can be directly related to the pattern of cultural and experiential antecedents which can lead to the abuse of women.

This research also alludes to the existence of forces within our culture (and specifically that of Lunenburg County) which seem to be nurturing among males in particular a perception that the world is fair and just and therefore should not be changed. This false perception of reality called the "Just World Hypothesis" exists in Lunenburg County despite the startling statistics of female abuse that emerge from this region.

What this research hopes to provoke among educators is a sense of urgency to lobby and strive to develop educational strategies and programs which address this terrible social problem and perhaps through education , eventually erradicate it.



Annex A

Bibliography

Bardis, Panos, D., Violence: Theory and Quantification. Journal of Political and Military Sociology. 1973, 1.

Betz, Nancy E. & Hackett, Gail, The Relationship of Career-Related Self-Efficacy Expectations to Perceived Career Options In College Men and Women, Journal Of Counseling Psychology. 1981, 28.

Burt, Martha R., Cultural Myths and Supports for Rape, Journal of Personality and Social Psychology. 1980, 38, 217-230.

Browning, James and Dutton, Donald, Assessment of Wife Assault With the Conflict Tactics Scale: Using Couple Data to Quantify the Differential Reporting Effect, Journal of Marriage and the Family. 1986, 48.

Carducci, Bernardo J., Affective and Attributional Reactions to Sexual Harassment as Determined by Outcome. Paper presented at the annual meeting of the Western Psychological Association, Long Beach, C.A., 1987. Dialog , ERIC, ED 282 118.

Chen, Jeaw-Mei & Lin, Phylis-Lan, American College Students' Attitudes towards Rape Victims and Beliefs in a Just World. Educational Research Document. 1988. Dialog, ERIC, ED 305 290.

Cooper, Pamela J., In or Out of the Pumpkin Shell? Sex Role Differentiation In

Classroom Interaction. Paper presented at the annual meeting of the Speech Communication Association, Boston, M.A., 1987. Dialog, ERIC, ED 291 125.

Covey, Mark-K, Relationship Between Social Skill and Conflict Resolution Tactics. Paper presented at the Annual Convention of the Rocky Mountain Psychological Association, Snowbird, Utah, April, 1983. Dialog, ERIC, ED 235 445.

Day, Dian, Young Women In Nova Scotia; A Study of Attitudes, Behaviour and Aspirations, Nova Scotia Advisory Council on the Status of Women, 1990.

Ellard, John & Lerner, Melvin J., What does the Just World Scale Measure: Dimension or Style? Paper presented at the annual conference of the American Psychological Association, Anaheim, CA, Aug 1983. Dialog, ERIC, ED 237 858.

Geffner, Robert, et al., Sex Role Stereotyping of Occupations: Have We Come a Long Way? Paper presented at the annual meeting of the Western Psychological Association, Los Angeles, CA, Apr 1984. Dialog, ERIC, ED 246 334.

Geffner, Robert A & McClure, Robert F., Changing Sex Role Attitudes With Education: Can it Be Done? Paper presented at the Annual Conference of the Southwestern Psychological Association, Dallas, T.X., Apr 1990. Dialog, ERIC, ED 320 053.

Griffin, Barbara, Sex-Fair Counseling Practices: A Descriptive Analysis, EDRS Report, Texas, 1983. Dialog, ERIC, ED 242 997.

Griggs, Shirley A, et al., The Relationship Between Sex Role Attitudes and Counselor Effectiveness. Paper presented at the annual convention of the American Personnel and

Guidance Association, Washington, DC, Mar 1983. Dialog, ERIC, ED 235 453.

Hageman, Mary Bowe & Gladding, Samuel T., The Art of Career Exploration: Occupational Sex-Role Stereotyping Among Elementary Children. Elementary School Guidance and Counselling 1983, 11, 280-287.

Hawley, Peggy, Work and Sex Role Attitudes in Relation to Education and other characteristics. Vocational Guidance Quarterly, 1982, 31.

Hay, Ellen A., The Use of the Forced Compliance Paradigm in Modifying Sex Role Attitudes and its Relation to Feedback, Sex Role Orientation and Perceptual Differentiation. Paper presented at the annual mid year conference of the American Educational Research Association Research on Women and Education Special Interest Group, Tempe, AZ, Nov 1983. Dialog, ERIC, ED 242 617.

Johnson, Holly, Wife Abuse, Canadian Social Trends. Statistics Canada, Spring 1988.

Johnson, Holly & Chisholm, Peter, Violence in the Family, Canadian Social Trends. Statistics Canada, Autumn, 1987.

JURISTAT, Conjugal Violence Against Women, Service Bulletin. Statistics Canada, May, 1990.

Kapalka, George & Lachenmeyer, J, Sex-Role Flexibility, Locus of Control and Occupational Status, Sex-Roles, 1988, 19.

Kearney, Maureen, The Relationship Between Sex Role Orientation and Fear of Success.

Paper presented to the annual meeting of the Eastern Psychological Association, Baltimore, April, 1988. Dialog, ERIC, ED 221 809.

Knight, G. Diane & Sedlacek, William E., Sex Role Identity and Attitudes Toward Women in Traditional and Non-Traditional Occupations, Eastern Psychological Association, Maryland, 1983.(Research Report, #4-83) Dialog, ERIC, ED 248 335.

Labatt, Mary, Violence Against Women, FWTAO Newsletter, 1990, 2.

Lara-Cantu, Maria Asuncion, A Sex Role Inventory With Scales for Machismo and Self Sacrificing Woman, Journal of Cross Cultural Psychology. 1989, 20, 386-398.

Larsen, Knud.& Long, Ed, Attitudes Towards Rape, Paper presented at the annual meeting of the Western Psychological Association, Long Beach, CA, 1987. Dialog, ERIC, ED 278 884.

Linz, Daniel, et al., The Effects of Multiple Exposures to Filmed Violence Against Women, Journal Of Communication. 1984, 34, 130-147.

Long, Vonda-Olsen, Relationship of Masculinity to Self-Esteem and Self Acceptance in Male Professionals, College Students, Clients and Perpetrators of Domestic Violence Paper presented at the Annual Convention of the American Association for Counseling and Development, Los Angeles, CA, April, 1986. Dialog, ERIC, ED 275 941.

Lundy, Allan & Rosenberg, Judy A., Androgyny, Masculinity, and Self Esteem. Social Behaviour and Personality, 1987, 15, 91-95.

Lynch, Sherry-K., Counselling date rape survivors: Implications for College Student Professionals, Paper presented at the Annual Meeting of American College Personnel Association, Boston, MA, March, 1985. Dialog, ERIC, ED 267 319.

Lyons, Deborah and Green, Samuel, Sex Role Development as a Function of College Experience. Sex Roles, 1988, 18.

Malamuth, Neil M. & Briere, John, Sexual Violence In the Media: Indirect Effects on Agression Against Women. Journal of Social Issues, 1986, 42, 75-92.

Matteo, Sherri, The Effect of Sex Role Stereotyping on Sport Participation, Paper presented at the annual conference of the American Psychological Association, Toronto, Canada, 1984. Dialog, ERIC, ED 254 797.

Mullis, Ronald & McKinley, Kathleen, Relations between Adolescent Gender Role Orientation, Self -Esteem and Social Conformity, Paper presented at the annual conference of the National Council on Family Relations, Atlanta, GA, November, 1987. Dialog, ERIC, ED 291 051.

Paquette, Diane (reporter), Mainstreet, CBC Radio, 15 August 1988.

Russell, Gordon W, et al., Male Responses to Female Aggression, Social Behaviour and Personality 1988, 16 , 51-57 .

Samios, Mary, et al., Prevalence and Correlates of Courtship Violence, Paper presented at the Annual Meeting of the Eastern Psychological Association, Boston, MA, March, 1985. Dialog, ERIC, ED 259 264.

Scott, Judith & Brantley, John C. Development of and Inventory of Teachers' Attitudes towards Sex Role Stereotyping and Knowledge of Differences. Sex-Roles: A Journal of Research. 1983, 9, 341-353.

Sigelman, Carol-K., et al., Violence in College Students' Dating Relationships. Paper presented at the Annual Meeting of the Southeastern Psychological Association, Atlanta, GA, March, 1983. Dialog, ERIC, ED 233 289.

Schumm, Walter, R., et al., Adolescent Perspectives On Family Violence, The Journal of Social Psychology, 1982, 117.

Short, Paula M. The Women Professors Of Educational Administration: A Profile and Salient Issues. Paper presented at Annual Meeting of American Educational Research Association, San Francisco, CA, 1989. Dialog, ERIC, ED 306 656.

Stahly, Geraldine-Butts, Attitudes Towards Women as a Function of Subject's Experience with Family Violence. Paper presented at the annual meeting of the Western Psychological Association, San Jose, CA, April, 1985. Dialog, ERIC, ED 260 341.

Stets, Jan, E.& Pirog-Good, Maureen A., Control and Dating Violence, New Hampshire University. Durham Family Research Lab. 1988. Dialog, ERIC, ED 307 540.

Strauss, Murray A., Measuring Intrafamily Conflict and Violence: The Conflict Tactics(CT) Scales. Journal of Marriage and the Family, 1979.

(unsigned article) Two Women Murdered Each Week. Chronicle-Herald, 13 October 1990.

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1.	AD	BD				
2.	AD	BD	CD	DD	ED	
3.	AD	BD	CD	DD	ED	FD
4.	AD	BD	CD	DD	ED	FD
5.	AD	BD	CD	DD	ED	FD
6.	AD	BD	CD	DD		

QUESTION #	DISAGREE COMPLETELY	DISAGREE STRONGLY	DISAGREE	UNDECIDED	AGREE	AGREE STRONGLY	AGREE COMPLETELY
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QUESTION #	DISAGREE COMPLETELY	DISAGREE STRONGLY	DISAGREE	UNDECIDED	AGREE	AGREE STRONGLY	AGREE COMPLETELY
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30. Most people do not have the motivation to cheat.
31. A man's got to show a woman who's boss right from the start or he'll end up henpecked.
32. A child's habitual disobedience should be punished physically.
33. Most women are sly and manipulating when they are out to attract a man.
34. Those who drive carefully and those who drive recklessly have the same chance of being hurt in a car accident.
35. University police should use violence against violent student demonstrators.
36. Many criminals are judged innocent in a court.
37. There is nothing wrong with a woman going to a bar by herself.
38. A soldier in battle should never hesitate to use violence.
39. A lot of men talk big but when it comes right down to it they can't perform well sexually.
40. It is acceptable for the woman to pay for the date.
41. War in self defence is perfectly right.
42. Parents will always find good excuses to punish their children.
43. Prison guards should be allowed to use violence against prisoners when necessary.
44. A woman will only respect a man who will lay down the law to her.
45. Innocent people are always the victims.
46. If you take good care of your health you are very unlikely to have a heart attack.
47. War can be just.
48. Luck always brings fortune.
49. Capital punishment is often necessary.
50. In a dating relationship a woman is largely out to take advantage of a man.
51. Parents should encourage their children to use violence in self defence.
52. One should blame himself/herself for his/her misfortunes.
53. The Government should use violence to control violent riots.
54. Women are usually sweet until they've caught a man, but then they let their true self show.
55. Violent crimes should be punished violently.
56. It is better for a woman to use her feminine charm to get what she wants rather than ask for it outright.
57. The majority should use violence against violent minority groups.
58. Although bad persons might have held the power in the history of mankind, good persons will eventually regain control.
59. A wife should never contradict her husband in public.
60. In general, this is a fair world.
61. Hitting a child when he/she does something bad on purpose teaches him/her a good lesson.
62. There is something wrong with a woman who doesn't want to marry and raise a family.
63. War is often necessary.
64. Punishing a child physically when he deserves it will make him a responsible and mature adult.
65. The rich should be heavily taxed.
66. Private citizens should be allowed to carry guns.
67. In our court system, it is difficult to find a fair judge.
68. A woman should be a virgin when she marries.
69. Men are only out for one thing.
70. Universities should use violence against students who destroy university property.
71. Killing of civilians should be accepted as an unavoidable part of war.
72. It is acceptable for a woman to have a career, but marriage and family should come first.

STUDENT SURVEY

Please answer all the questions as accurately and honestly as possible. Use the Scoring Sheet to record your responses. Shade in the space beside the letter which applies to your situation.

1. I am, A) male B) female
2. My age is, A) 15 or younger
B) 16
C) 17
D) 18
E) 19 or older
3. I attend A) New Germany Rural High School
B) Bridgewater High School
C) Lunenburg High School
D) New Ross Consolidated School
E) Park View Education Center
F) Chester Municipal High School
4. My mother or female guardian: A) did not complete junior high school
B) completed junior high school only
C) completed some high school but did not finish
D) completed high school only
E) continued her education beyond high school but did not go to university
F) completed a university degree
5. My father or male guardian A) did not complete junior high school
B) completed junior high school only
C) completed some high school but did not finish
D) completed high school only
E) continued his education beyond high school but did not go to university
F) completed a university degree
6. I want to... A) quit high school and get a job
B) finish high school and get a job
C) finish high school and go to vocational/technical/business school
D) finish high school and go to university
7. Innocent people are seldom put in jail.
8. Violence against the enemy should be part of every nation's defence.
9. I feel that many people in the world have a false reputation
10. Those who do good deeds are usually not known and do not receive just rewards.
11. Parents often neglect their children's wishes
12. The Government should send armed soldiers to control violent university riots.
13. Those politicians who hold on to their principles are usually the losers.
14. The police force of a university should carry guns.
15. In a disordered world, criminals should be heavily punished.
16. If you study hard you will receive good grades.
17. A man should fight when the woman he is with is insulted by another man.
18. Every nation should have a war industry.
19. It looks worse for a woman to be drunk than a man to be drunk.
20. The manufacture of weapons is always necessary.
21. A lot of women seem to get pleasure in putting men down.
22. Criminals always pay for their actions
23. The death penalty should be part of every legal code.
24. Many women are so demanding sexually that a man just can't satisfy them
25. A violent revolution can be perfectly right.
26. In a race, many athletes are not caught when they violate a regulation
27. In all occupations those who work hard always get promoted.
28. A person will get what he/she deserves.
29. When a school child misbehaves habitually, the teacher should use physical punishment.

Annex B

Table 4

One Factor Anova, Gender vns. All Variables

One Factor ANOVA X₁: Gender Y₁: Age

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	1	575	575	438
within groups	860	1130.158	3.14	p = .5064
Total	861	1130.733		

Model II estimate of between component variance = - .739

One Factor ANOVA X₁: Gender Y₁: Age

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
Male	439	2.884	1.166	.056
Female	423	2.832	1.126	.055

One Factor ANOVA X₁: Gender Y₁: Age

Comparison:	Mean Diff	Fisher PLSD	Scheffe F-test:	Dunnett t:
Male vs Female	.052	153	438	662

One Factor Anova: Gender vrs. All Variables

One Factor ANOVA X₁: Gender Y₂: School

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	1	1.264	1.264	1.057
Within groups	860	1596.836	1.857	p = .3075
Total	861	1598.1		

Model = estimate of between component variance = 1.264

One Factor ANOVA X₁: Gender Y₂: School

Group	Count	Mean	Std. Dev.	Std. Error
Male	439	3.925	1.734	.083
Female	423	3.96	1.743	.085

One Factor ANOVA X₁: Gender Y₂: School

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
Male vs. Female	-.035	.232	.087	.295

One Factor Anova, Gender vns All Variables

One Factor ANOVA X₁: Gender Y₃: Mother's Ed.

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between Groups	1	3.979	3.979	1.438
Within Groups	860	1840.779	2.14	p = .2307
Total	861	1844.657		

Note: estimate of between component variance = .938

One Factor ANOVA X₁: Gender Y₃: Mother's Ed.

Group	Count	Mean	Std. Dev.	Std. Error
Male	439	3.902	1.432	.068
Female	423	3.783	1.494	.073

One Factor ANOVA X₁: Gender Y₃: Mother's Ed.

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
Male vs. Female	.12	.196	1.438	1.199

One Factor Anova, Gender vrs. All Variables

One Factor ANOVA X₁: Gender Y₄: Father's Ed.

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	1	7.369	7.369	2.441
within groups	260	2545.766	3.252	p = .1185
Total	261	2607.165		

Model is estimate of between component variance = 4.35

One Factor ANOVA X₁: Gender Y₄: Father's Ed.

Group	Count	Mean	Std. Dev.	Std. Error
Male	439	3.61	1.762	.084
Female	423	3.426	1.711	.083

One Factor ANOVA X₁: Gender Y₄: Father's Ed.

Comparison	Mean Diff	Fisher PLSD	Scheffe F-test	Dunnnett t
Male vs. Female	.185	.232	2.441	1.562

One Factor Anova: Gender vns. All variables

One Factor ANOVA X₁: Gender Y₅: Student aspiration

Analysis of variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	1	2.571	2.571	5.329
within groups	860	463.265	.539	p = .0212
Total	861	465.836		

Model II estimate of between component variance = 2.332

One Factor ANOVA X₁: Gender Y₅: Student aspiration

Group	Count	Mean	Std. Dev.	Std. Error
Male	439	3.364	.779	.037
Female	423	3.48	.664	.033

One Factor ANOVA X₁: Gender Y₅: Student aspiration

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnett t
Male vs. Female	-.115	.098*	5.329*	2.309

* Significant at 95%

Simple Regression: Gender Vns. All Variables

Simple Regression X₁: Gender Y₁: Age

DF	R	R-squared	Adj. R-squared	Std. Error
861	.023	.001	-.001	1.146

Analysis of Variance Table

Source	DF	Sum of Squares	Mean Square	F-test
REGRESSION	1	.575	.575	438
RESIDUAL	860	1130.152	1.314	p = .5084
TOTAL	861	1130.733		

No Residual Statistics Computed

Simple Regression X₁: Gender Y₁: Age

Beta Coefficient Table

Parameter	Value	Std. Error	Std. Value	t-value	Probability
INTERCEPT	2.936				
SLOPE	-.052	.078	-.023	.662	.5084

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	2.762	2.935	2.794	2.923
SLOPE	-.205	.102	-.18	.077

Simple Regression: Gender Vrs. All Variables

Simple Regression X1: Gender Y2: School

DF	W	R-squared	Adj. R-squared	Std. Error
861	1.01	1.014E-4	1.001	1.738

Analysis of Variance Table

Source	DF	Sum of Squares	Mean Square	F-test
REGRESSION	1	.264	.264	187
RESIDUAL	860	2596.636	3.022	p = .7678
TOTAL	861	2596.9		

No Residual Statistics Computed

Simple Regression X1: Gender Y2: School

Beta Coefficient Table

Parameter	Value	Std. Err.	Std. Value	t-Value:	Probability
INTERCEPT	3.89				
SLOPE	.035	.118	.01	.295	.7678

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.826	4.058	3.844	4.039
SLOPE	-.198	.267	-.16	.23

Simple Regression: Gender Vns All variables

Simple Regression X1: Gender Y3: Mother's Ed.

DF	R	R-squared	Adj. R-squared	Std. Error
581	.041	.002	.001	1.463

Analysis of Variance Table				
	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	3.079	3.079	.438
RESIDUAL	580	1540.779	2.656	2307
TOTAL	581	1543.857		

No Residual Statistics Computed

Simple Regression X1: Gender Y3: Mother's Ed.

Beta Coefficient Table

Parameter	value	Std. Err.	Std. value	t-Value.	Probability
INTERCEPT	4.022				
SLOPE	-.12	.1	-.041	1.199	.2307

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.746	3.941	3.761	3.925
SLOPE	-.315	.076	-.284	.045

Simple Regression: Gender Vns. All Variables

Simple Regression X1: Gender Y4: Father's Ed.

DF	R	R-squared	Adj. R-squared	Std. Error
961	.052	.003	.002	1.737

Analysis of Variance Table				
Source	DF	Sum of Squares	Mean Square	F-test
REGRESSION	1	7.369	7.369	2.441
RESIDUAL	960	2995.796	3.121	p = .1185
TOTAL	961	3003.165		

No Residual Statistics Computed

Simple Regression X1: Gender Y4: Father's Ed.

Beta Coefficient Table

Parameter	Value	Std. Err.	Std. Value	t-Value	Probability
INTERCEPT	3.795				
SLOPE	-.185	.118	-.053	1.562	.1185

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.404	3.636	3.422	3.617
SLOPE	-.417	.047	-.36	.01

Simple Regression: Gender Vns: All variables

Simple Regression X1: Gender Y5: Student aspiration

DF	R	R-squared	Adj. R-squared	Std. Error
1881	.078	.006	.005	.774

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	1.871	1.871	5.329
RESIDUAL	1881	463.265	.246	
TOTAL	1882	465.136		

No Residual Statistics Computed

Simple Regression X1: Gender Y5: Student aspiration

Beta Coefficient Table

Parameter	Value	Std. Err	Std. Value	t-Value	Probability
INTERCEPT	3.249				
SLOPE	.115	.05	.078	2.309	.0212

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.572	3.47	3.36	3.462
SLOPE	.017	.214	.033	.198

Table 5

One Factor Anova, Age vrs. All unaccounted for variables

One Factor ANOVA X₁: Age Y₁: School

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	4	13.15	3.288	1.082
within groups	857	2526.34	2.948	p = 3e-42
Total	861	2539.49		

Model estimate of between component variance = .062

One Factor ANOVA X₁: Age Y₁: School

Group	Count	Mean	Std. Dev.	Std. Error
A-15	104	4.067	1.679	.165
B-16	253	3.964	1.765	.111
C-17	236	3.975	1.738	.113
D-18	199	3.739	1.767	.125
E-19 or older	70	4.143	1.627	.194

One Factor ANOVA X₁: Age Y₁: School

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
A-15 vs B-16	.103	.397	.065	.508
A-15 vs C-17	.093	.401	.051	.454
A-15 vs D-18	.329	.413	.611	1.563
A-15 vs E-19 or older	-.076	.527	.02	.261
B-16 vs C-17	-.01	.309	.001	.065

One Factor Anova: Age Vrs All unaccounted for Variables

One Factor ANOVA X₁: Age Y₁: School

Comparison	Mean Diff	Fisher PLSD	Scheffe F-test	Dunnnett t
B - A vs C - A	1226	323	47	1.371
A - B vs A - C interaction	-1178	46	145	761
C - A vs B - A	136	323	496	1.411
A - B vs A - C interaction	-152	464	127	712
C - A vs B - C interaction	-404	473	701	1.674

One Factor Anova, Age Vrs. All unaccounted for Variables

One Factor ANOVA X₁: Age Y₂: Mother's Ed.

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	4	15.74	3.935	9.173
Within groups	557	166.15	0.298	p = .0001
Total	561	181.89		

Model II estimate of between component variance = 4.218

One Factor ANOVA X₁: Age Y₂: Mother's Ed.

Group	Count	Mean	Std. Dev.	Std. Error
A-15	104	4.288	1.419	.139
B-16	253	4.063	1.402	.088
C-17	236	3.852	1.441	.094
D-18	199	3.518	1.466	.104
E-19 or older	70	3.286	1.486	.178

One Factor ANOVA X₁: Age Y₂: Mother's Ed.

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnett t
A-15 vs B-16	.225	.328	.453	1.346
A-15 vs C-17	.437	.332*	1.669	2.584
A-15 vs D-18	.771	.341*	4.918*	4.435
A-15 vs E-19 or older	1.003	.436*	5.098*	4.516
B-16 vs C-17	.212	.255	.662	1.627

* Significant at 95%

One Factor Anova, Age /rs All unaccounted for Variables

One Factor ANOVA X₁: Age Y₂: Mother's Ed.

Comparison	Mean Diff	Fisher F ₁₃₀	Linnett F-test	Dunnnett t
B-16 vs D-18	546	267*	4.013*	4.009
B-16 vs E-19 on order	729	361*	4.112*	4.008
D-17 vs D-18	734	271*	1.46	2.417
D-17 vs E-19 on order	566	384*	2.006	12.895
D-18 vs E-19 on order	232	392	337	1.162

* Significant at 95%

One Factor Anova, Age Vrs. All unaccounted for Variables

One Factor ANOVA X₁: Age Y₃: Father's Ed.

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	4	111.185	27.796	9.859
Within groups	257	2491.98	9.7	p = .0001
Total	261	2603.165		

Model II estimate of between component variance = 6.222

One Factor ANOVA X₁: Age Y₃: Father's Ed.

Group	Count	Mean	Std. Dev	Std. Error
A-15	104	4.298	1.624	.159
B-16	253	3.656	1.71	.108
C-17	236	3.419	1.718	.112
D-18	199	3.291	1.698	.12
E-19 or older	70	2.857	1.78	.213

One Factor ANOVA X₁: Age Y₃: Father's Ed.

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnett t
A-15 vs B-16	.642	.39*	2.611*	3.232
A-15 vs C-17	.879	.394*	4.791*	4.378
A-15 vs D-18	1.007	.405*	5.95*	4.879
A-15 vs E-19 or older	1.441	.517*	7.469*	5.466
B-16 vs C-17	.237	.303	.588	1.533

* Significant at 95%

One Factor Anova, Age Vrs. All unaccounted for Variables

One Factor ANOVA X₁: Age Y₃: Father's Ed.

Comparison.	Mean Diff.	Fisher PLSD.	Scheffe F-test	Dunnnett t
B-16 vs D-18	365	317*	1.274	2.257
B-16 vs E-19 or older	799	452*	3.009*	3.469
C-17 vs D-18	126	322	.52	.78
C-17 vs E-19 or older	562	456*	1.468	2.423
D-18 vs E-19 or older	434	465	.64	1.833

* Significant at 95%

One Factor Anova: Age Vrs. All unaccounted for Variables

One Factor ANOVA X₁: Age Y₄: Student aspiration

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	4	33.751	8.438	16.724
Within groups	857	432.385	505	p = .0001
Total	861	466.136		

Model estimate of between component variance = 1.983

One Factor ANOVA X₁: Age Y₄: Student aspiration

Group	Count	Mean	Std. Dev.	Std. Error
A-15	104	3.74	.54	.053
B-16	1253	3.553	.686	.043
C-17	236	3.407	.687	.045
D-18	199	3.256	.785	.056
E-19 or older	70	2.986	.86	.103

One Factor ANOVA X₁: Age Y₄: Student aspiration

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
A-15 vs B-16	.187	.162*	1.277	2.26
A-15 vs C-17	.334	.164*	3.981*	3.99
A-15 vs D-18	.484	.169*	7.932*	5.633
A-15 vs E-19 or older	.755	.216*	11.807*	6.872
B-16 vs C-17	.147	.126*	1.3	2.28

* Significant at 95%

One Factor Anova, Age Vrs. All unaccounted for Variables

One Factor ANOVA X₁: Age Y₄: Student aspiration

Comparison	Mean Diff	Fisher PLSD	Scheffe F-test:	Dunnnett t.
B-16 vs D-18	297	132*	4.871*	4.414
B-16 vs E-19 or older	568	188*	8.754*	5.918
C-17 vs D-18	15	134*	1.212	2.202
C-17 vs E-19 or older	421	19*	4.743*	4.356
D-18 vs E-19 or older	271	194*	1.878	2.741

* Significant at 95%

Simple Regression: Age Vrs. All Variables

Simple Regression X₁: Age Y₁: Gender

DF	R	R-squared	Adj. R-squared	Std. Error
961	.023	.001	-.001	.5

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	.11	.11	436
RESIDUAL	960	215.716	.25	p = .5084
TOTAL	961	215.426		

No Residual Statistics Computed

Simple Regression X₁: Age Y₁: Gender

Beta Coefficient Table

Parameter	Value	Std. Err.	Std. Value	t-Value	Probability
INTERCEPT	1.519				
SLOPE	-.01	.015	-.023	.662	.5084

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	1.457	1.524	1.463	1.519
SLOPE	-.039	.019	-.034	.015

Simple Regression: Age Vrs. All Variables

Simple Regression X1: Age Y2: School

DF	R	R-squared	Adj R-squared	Std Error
861	.026	.001	-.001	1.738

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	1.718	1.718	.569
RESIDUAL	860	2597.382	3.02	p = .4509
TOTAL	861	2599.1		

No Residual Statistics Computed

Simple Regression X1: Age Y2: School

Beta Coefficient Table

Parameter	Value	Std. Err	Std Value	t-Value	Probability
INTERCEPT	4.053				
SLOPE	-.039	.052	-.026	.754	.4509

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.626	4.058	3.845	4.039
SLOPE	-.14	.062	-.124	.046

Simple Regression: Age vrs. All Variables

Simple Regression X₁: Age Y₃: Mother's Ed.

DF	R	R-squared	Adj R-squared	Std Error
861	.202	.041	.04	1.434

Analysis of Variance Table				
Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	74.945	74.945	36.436
RESIDUAL	860	1768.912	2.057	p = .0001
TOTAL	861	1843.857		

No Residual Statistics Computed

Simple Regression X₁: Age Y₃: Mother's Ed.

Beta Coefficient Table

Parameter:	Value:	Std. Err.	Std. Value:	t-Value.	Probability
INTERCEPT	4.579				
SLOPE	-.257	.043	-.202	6.036	.0001

Confidence Intervals Table

Parameter:	95% Lower:	95% Upper:	90% Lower:	90% Upper:
MEAN (X,Y)	3.748	3.939	3.763	3.924
SLOPE	-.341	-.174	-.328	-.187

Simple Regression: Age Vrs. All Variables

Simple Regression X1: Age Y4: Father's Ed.

DF	R	R-squared	Adj. R-squared	Std. Error
861	.195	.038	.037	1.706

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	99.009	99.009	34.003
RESIDUAL	860	2604.165	3.012	p = .0001
TOTAL	861	2603.165		

No Residual Statistics Computed

Simple Regression X1: Age Y4: Father's Ed.

Beta Coefficient Table

Parameter	Value	Std. Error	Std. Value	t-Value	Probability
INTERCEPT	4.366				
SLOPE	-.296	.051	-.195	5.831	.0001

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.406	3.634	3.424	3.615
SLOPE	-.396	-.196	-.379	-.212

Simple Regression: Age Vrs. All Variables

Simple Regression X1: Age Y5: Student aspiration

DF	R	R-squared	Adj R-squared	Std Error
861	.267	.071	.07	.71

Analysis of Variance Table

source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	33.156	33.156	65.855
RESIDUAL	860	432.98	.503	p = .0001
TOTAL	861	466.136		

No Residual Statistics Computed

Simple Regression X1: Age Y5: Student aspiration

Beta Coefficient Table

Parameter	Value	Std. Err.	Std. Value	t-Value	Probability
INTERCEPT	3.911				
SLOPE	-.171	.021	-.267	8.115	.0001

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.374	3.469	3.381	3.461
SLOPE	-.213	-.13	-.206	-.136

Table 6

One Factor Anova, School Vrs. All Unaccounted for Variables

One Factor ANOVA X₁: School Y₁: Mother's Ed.

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	5	19.036	3.807	1.786
Within groups	556	1824.821	3.282	p = .1132
Total	561	1843.857		

Model = estimate of between component variance = .335

One Factor ANOVA X₁: School Y₁: Mother's Ed.

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
A-NGRHS	80	3.825	1.24	.139
B-BHS	197	4.102	1.403	.1
C-LHS	70	3.8	1.566	.187
D-NRHS	46	3.696	1.533	.226
E-PVEC	284	3.715	1.534	.091

One Factor ANOVA X₁: School Y₁: Mother's Ed.

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
F-CMHS	185	3.827	1.43	.105

One Factor Anova, School Vrs. All unaccounted for Variables

One Factor ANOVA X_1 : School Y_1 : Mother's Ed.

Comparison:	Mean Diff.:	Fisher PLSD:	Scheffe F-test:	Dunnett t:
A-NGRHS vs. B-BHS	-.277	38	.408	1.429
A-NGRHS vs. C-LHS	.025	.469	.002	.105
A-NGRHS vs. D-NRHS	.129	53	.046	.479
A-NGRHS vs. E-PVEC	.11	363	.071	.596
A-NGRHS vs. F-CMHS	-.002	364	2.153E-5	.01

One Factor ANOVA X_1 : School Y_1 : Mother's Ed.

Comparison:	Mean Diff.:	Fisher PLSD:	Scheffe F-test:	Dunnett t:
B-BHS vs. C-LHS	.302	399	.441	1.484
B-BHS vs. D-NRHS	.406	.469	.576	1.698
B-BHS vs. E-PVEC	.387	266*	1.632	2.857
B-BHS vs. F-CMHS	.274	.293	.674	1.836
C-LHS vs. D-NRHS	.104	.544	.028	.377

* Significant at 95%

One Factor ANOVA X_1 : School Y_1 : Mother's Ed.

Comparison:	Mean Diff.:	Fisher PLSD:	Scheffe F-test:	Dunnett t:
C-LHS vs. E-PVEC	.085	382	.038	.437
C-LHS vs. F-CMHS	-.027	.402	.003	.132
D-NRHS vs. E-PVEC	-.019	.456	.001	.082
D-NRHS vs. F-CMHS	-.131	.472	.06	.546
E-PVEC vs. F-CMHS	-.112	.271	.132	.814

One Factor Anova, School Vrs. All unaccounted for Variables

One Factor ANOVA X₁: School Y₂: Father's Ed.

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	5	.6034	12.068	4.062
within groups	956	1542.825	1.971	p = .0012
Total	961	1603.165		

Model II estimate of between component variance = 1.819

One Factor ANOVA X₁: School Y₂: Father's Ed.

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
A-NGRHS	80	3.225	1.559	.174
B-BHS	197	3.985	1.701	.121
C-LHS	70	3.5	1.7	.203
D-NRHS	46	3.283	1.708	.252
E-PVEC	284	3.447	1.815	.108

One Factor ANOVA X₁: School Y₂: Father's Ed.

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
F-CMHS	185	3.33	1.683	.124

One Factor Anova.School Vns All unaccounted for Variables

One Factor ANOVA X₁: School Y₂: Father's Ed.

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnett t
A-NRHS vs B-BHS	- .76	.449*	2.211	3.325
A-NRHS vs C-LHS	- .205	.554	.19	.975
A-NRHS vs D-NRHS	- .156	.626	.007	.151
A-NRHS vs E-PVEC	- .222	.428	.207	1.018
A-NRHS vs F-CMHS	- .105	.453	.041	.454

* Significant at 95%

One Factor ANOVA X₁: School Y₂: Father's Ed.

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnett t
B-BHS vs C-LHS	.485	.471*	.817	2.021
B-BHS vs D-NRHS	.702	.554*	1.238	2.488
B-BHS vs E-PVEC	.538	.314*	2.263*	3.364
B-BHS vs F-CMHS	.655	.346*	2.756*	3.712
C-LHS vs D-NRHS	.217	.642	.088	.665

* Significant at 95%

One Factor ANOVA X₁: School Y₂: Father's Ed.

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnett t
C-LHS vs E-PVEC	.053	.451	.011	.23
C-LHS vs F-CMHS	.17	.475	.099	.704
D-NRHS vs E-PVEC	- .165	.538	.072	.601
D-NRHS vs F-CMHS	- .047	.557	.006	.166
E-PVEC vs F-CMHS	.117	.32	.104	.721

One Factor Anova, School Vrs. All unaccounted for Variables

One Factor ANOVA X₁: School Y₃: Student aspiration

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	5	11.518	2.304	4.338
within groups	356	454.817	.53	p = .0007
Total	361	466.136		

Model II estimate of between component variance = .355

One Factor ANOVA X₁: School Y₃: Student aspiration

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
A-NGRHS	80	3.188	.748	.084
B-BHS	197	3.553	.702	.05
C-LHS	70	3.229	.802	.096
D-NRHS	46	3.522	.781	.115
E-PVEC	284	3.454	.709	.042

One Factor ANOVA X₁: School Y₃: Student aspiration

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
F-CMHS	185	3.378	.735	.054

One Factor Anova School Vrs. All Unaccounted for Variables

One Factor ANOVA X₁: School Y₃: Student aspiration

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t:
A-NGRHS vs B-BHS	-366	19*	2.867*	3.786
A-NGRHS vs C-LHS	-341	234	.024	.744
A-NGRHS vs D-NRHS	-334	265*	1.229	2.479
A-NGRHS vs E-PVEC	-267	181*	1.672	2.892
A-NGRHS vs F-CMHS	-191	191	.766	1.957

* Significant at 95%

One Factor ANOVA X₁: School Y₃: Student aspiration

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t:
B-BHS vs C-LHS	.325	199*	2.051	3.202
B-BHS vs D-NRHS	.032	234	.014	.264
B-BHS vs E-PVEC	.099	133	.43	1.466
B-BHS vs F-CMHS	.175	146*	1.099	2.344
C-LHS vs D-NRHS	-.293	272*	.898	2.119

* Significant at 95%

One Factor ANOVA X₁: School Y₃: Student aspiration

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t:
C-LHS vs E-PVEC	-.226	191*	1.077	2.32
C-LHS vs F-CMHS	-.15	201	.429	1.465
D-NRHS vs E-PVEC	.068	227	.068	.583
D-NRHS vs F-CMHS	.143	236	.285	1.194
E-PVEC vs F-CMHS	.076	135	.243	1.102

* Significant at 95%

Simple Regression, School and unaccounted for Variables

Simple Regression X₁: School Y₁: Mother's Ed.

DF	R	R-squared	Adj. R-squared	Std. Error
861	.063	.004	.003	1.461

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	7.204	7.204	3.373
RESIDUAL	860	1836.654	2.136	p = .0666
TOTAL	861	1843.857		

No Residual Statistics Computed

Simple Regression X₁: School Y₁: Mother's Ed.

Beta Coefficient Table

Parameter:	Value:	Std. Err.:	Std. Value:	t-Value:	Probability:
INTERCEPT	4.051				
SLOPE	-.053	.029	-.063	1.837	.0666

Confidence Intervals Table

Parameter:	95% Lower:	95% Upper:	90% Lower:	90% Upper:
MEAN (X,Y)	3.746	3.941	3.761	3.925
SLOPE	-.109	.004	-.1	-.005

Simple Regression, School and unaccounted for Variables

Simple Regression X₁: School Y₂: Father's Ed.

DF	R	R-squared	Adj. R-squared	Std. Error
861	.078	.006	.005	1.735

Analysis of Variance Table				
Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	15.701	15.701	5.219
RESIDUAL	860	2657.463	3.090	p = .0226
TOTAL	861	2673.165		

No Residual Statistics Computed

Simple Regression X₁: School Y₂: Father's Ed.

Beta Coefficient Table

Parameter	Value	Std. Error	Std. Value	t-Value	Probability
INTERCEPT	3.826				
SLOPE	-.078	.034	-.078	2.284	.0226

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.404	3.636	3.422	3.617
SLOPE	-.145	-.011	-.134	-.022

Simple Regression, School and unaccounted for Variables

Simple Regression X₁: School Y₃: Student aspiration

DF	R	R-squared	Adj. R-squared	Std. Error
361	.01	1.009E-4	-.001	.736

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	.047	.047	.067
RESIDUAL	360	466.089	.542	p = .7684
TOTAL	361	466.136		

No Residual Statistics Computed

Simple Regression X₁: School Y₃: Student aspiration

Beta Coefficient Table

Parameter	Value	Std. Err.	Std. Value	t-Value	Probability
INTERCEPT	3.404				
SLOPE	.004	.014	.01	.295	.7684

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X, Y)	3.372	3.47	3.38	3.462
SLOPE	-.024	.033	-.02	.028

Table 7

One Factor Anova, Mother's Ed. and unaccounted for Variables

One Factor ANOVA X_1 : Mother's Ed. Y_1 : Father's Ed.

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	5	1566.333	313.267	47.601
Within groups	256	1036.832	4.050	p = .0001
Total	261	2603.165		

Model II estimate of between component variance = 22.177

One Factor ANOVA X_1 : Mother's Ed. Y_1 : Father's Ed.

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
A-< junior high	85	2.071	1.486	.161
B-junior high	53	2.358	1.469	.202
C-< high school	206	3.126	1.443	.101
D-high school	211	3.488	1.616	.111
E-vocational	182	4.099	1.622	.12

One Factor ANOVA X_1 : Mother's Ed. Y_1 : Father's Ed.

Group	Count:	Mean:	Std. Dev.:	Std. Error:
F-university	125	4.856	1.522	.136

One Factor Anova Mother's Ed. and unaccounted for Variables

One Factor ANOVA X₁: Mother's Ed. Y₁: Father's Ed.

Comparison:	Mean Diff.:	Fisher PLSD:	Scheffe F-test:	Dunnett t:
A-junior vs B-junior...	-288	53	227	1.066
A-junior vs C-high	-1.056	39*	5.535*	5.308
A-junior vs D-high s	-1.418	389*	10.234*	7.153
A-junior vs E-vocati	-2.028	398*	10.035*	10.009
A-junior vs F-unive...	-2.785	426*	32.994*	12.844

* Significant at 95%

One Factor ANOVA X₁: Mother's Ed. Y₁: Father's Ed.

Comparison:	Mean Diff.:	Fisher PLSD:	Scheffe F-test:	Dunnett t:
B-junior high vs. C-high...	-768	466*	2.088	3.231
B-junior high vs. D-high s...	-1.13	465*	4.544*	4.766
B-junior high vs. E-vocat...	-1.74	473*	10.45*	7.229
B-junior high vs. F-unive...	-2.498	496*	19.513*	9.878
C-high sc... vs D-high s...	-362	2.7*	1.148	2.396

* Significant at 95%

One Factor ANOVA X₁: Mother's Ed. Y₁: Father's Ed.

Comparison:	Mean Diff.:	Fisher PLSD:	Scheffe F-test:	Dunnett t:
C-high sc... vs E-vocati...	-973	308*	7.684*	6.198
C-high sc... vs. F-unive...	-1.73	343*	19.565*	9.891
D-high school vs E-vocat	-611	306*	3.064*	3.914
D-high school vs. F-unive...	-1.368	342*	12.345*	7.856
E-vocational vs F-univer	-757	352*	3.57*	4.225

* Significant at 95%

One Factor Anova, Mother's Ed. and unaccounted for Variables

One Factor ANOVA X₁: Mother's Ed. Y₂: Student aspiration

Analysis of variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	5	39.94	7.988	16.044
within groups	856	466.136	.498	p = .0001
Total	861	466.136		

Model 1 estimate of between component variance = 1.498

One Factor ANOVA X₁: Mother's Ed. Y₂: Student aspiration

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
A-< junior high	85	3.094	.868	.094
B-junior high	53	3.358	.623	.086
C-< high school	206	3.248	.797	.056
D-high school	211	3.365	.765	.053
E-vocational	182	3.588	.604	.045

One Factor ANOVA X₁: Mother's Ed. Y₂: Student aspiration

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
F-university	125	3.808	.434	.039

One Factor Anova: Mother's Ed. and unaccounted for Variables

One Factor ANOVA X₁: Mother's Ed. Y₂: Student aspiration

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
A-junior vs B-junior	-164	142*	317	2.141
A-junior vs C-high	-153	179	564	1.667
A-junior vs D-high s	-271	176*	1765	2.967
A-junior vs E-vocati	-344	162*	5675*	5.327
A-junior vs F-unive	-714	195*	10353*	17.196

* Significant at 95%

One Factor ANOVA X₁: Mother's Ed. Y₂: Student aspiration

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
B-junior high vs C-high	111	213	208	1.021
B-junior high vs D-high s	-006	213	.001	.059
B-junior high vs E-vocat	-.229	216*	868	2.083
B-junior high vs F-unive	-.45	227*	3.021*	3.886
C-high school vs D-high s	-117	136	577	1.698

* Significant at 95%

One Factor ANOVA X₁: Mother's Ed. Y₂: Student aspiration

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
C-high school vs E-vocati	-34	141*	4.496*	4.741
C-high school vs F-unive	-.56	157*	9.815*	7.005
D-high school vs E-vocat	-223	14*	1.952	3.124
D-high school vs F-unive	-443	156*	6.19*	5.563
E-vocational vs F-univer	-22	161*	1.442	2.685

* Significant at 95%

Simple Regression, Mother's Ed. and unaccounted for Variables

Simple Regression X₁: Mother's Ed. Y₁: Father's Ed.

DF	R	R-squared	Adj R-squared	Std. Error
860	.462	.214	.213	1.543

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	556.712	556.712	233.952
RESIDUAL	860	2046.452	2.38	p = .0001
TOTAL	861	2603.165		

No Residual Statistics Computed

Simple Regression X₁: Mother's Ed. Y₁: Father's Ed.

Beta Coefficient Table

Parameter:	Value	Std. Err.:	Std. Value:	t-Value:	Probability:
INTERCEPT	1.408				
SLOPE	.549	.036	.462	15.296	.0001

Confidence Intervals Table

Parameter:	95% Lower:	95% Upper:	90% Lower:	90% Upper:
MEAN (X,Y)	3.417	3.623	3.433	3.606
SLOPE	.479	.62	.49	.609

Simple Regression, Mother's Ed. and unaccounted for Variables

Simple Regression X₁: Mother's Ed. Y₂: Student aspiration

DF	R	R-squared	Adj. R-squared	Std. Error
361	.273	.074	.073	.708

Analysis of Variance Table				
Source	DF	Sum of Squares	Mean Square	F-test
REGRESSION	1	34.674	34.674	69.112
RESIDUAL	360	471.462	.502	p = .0001
TOTAL	361	468.136		

No Residual Statistics Computed

Simple Regression X₁: Mother's Ed. Y₂: Student aspiration

Beta Coefficient Table

Parameter:	Value:	Std. Error:	Std. Value	t-Value:	Probability
INTERCEPT	2.894				
SLOPE	.137	.016	.273	8.313	.0001

Confidence Intervals Table

Parameter:	95% Lower:	95% Upper:	90% Lower:	90% Upper:
MEAN (X,Y)	3.374	3.468	3.381	3.461
SLOPE	.105	.17	.11	.164

Table 8

One Factor Anova, Father's Ed. and Student Aspirations

One Factor ANOVA X₁: Father's Ed. Y₁: Student aspiration

Analysis of variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	5	43.514	8.703	17.627
within groups	656	422.622	.644	p = .0001
Total	661	466.136		

Model is estimate of between component variance = 1.542

One Factor ANOVA X₁: Father's Ed. Y₁: Student aspiration

Group	Count	Mean	Std. Dev.	Std. Error
A-junior high	182	3.132	.837	.062
B-junior high	68	3.25	.72	.087
C-< high school	173	3.301	.725	.055
D-high school	137	3.489	.729	.062
E-vocational	163	3.564	.648	.051

One Factor ANOVA X₁: Father's Ed. Y₁: Student aspiration

Group	Count	Mean	Std. Dev.	Std. Error
F-university	139	3.799	.469	.04

One Factor Anova, Father's Ed. and Student Aspirations

One Factor ANOVA X₁: Father's Ed. Y₁: Student aspiration

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test:	Dunnett t:
A-junior vs B-junior	-118	136	28	1.163
A-junior vs C-high	-169	146*	1.023	2.261
A-junior vs D-high	-357	156*	4.64*	4.494
A-junior vs E-vocat	-477	149*	6.517*	5.708
A-junior vs F-unive	-667	153*	14.19*	8.423

* Significant at 95%

One Factor ANOVA X₁: Father's Ed. Y₁: Student aspiration

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test:	Dunnett t:
B-junior high vs C-high	-051	197	051	503
B-junior high vs D-high s	-239	205*	1.052	2.293
B-junior high vs E-vocat	-314	199*	1.922	3.1
B-junior high vs F-unive	-549	204*	5.566*	5.275
C-high sc vs D-high s	-188	158*	1.1	2.345

* Significant at 95%

One Factor ANOVA X₁: Father's Ed. Y₁: Student aspiration

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test:	Dunnett t:
C-high sc vs E-vocati...	-264	151*	2.367*	3.44
C-high sc vs F-unive...	-498	157*	7.743*	6.222
D-high school vs E-vocat	-075	16	171	925
D-high school vs F-unive	-31	166*	2.677*	3.659
E-vocational vs F-univer	-234	159*	1.666	2.886

* Significant at 95%

Simple Regression, Father's Ed. and Student Aspirations

Simple Regression X₁: Father's Ed. Y₁: Student aspiration

DF	R	R-squared	Adj R-squared	Std Error
861	.3	.09	.089	.707

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	41.92	41.92	8.1984
RESIDUAL	860	424.216	.493	p = .0001
TOTAL	861	466.136		

No Residual Statistics Computed

Simple Regression X₁: Father's Ed. Y₁: Student aspiration

Beta Coefficient Table

Parameter	Value	Std. Err.	Std. Value	t-Value	Probability
INTERCEPT	2.974				
SLOPE	.127	.014	.3	9.219	.0001

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.374	3.468	3.382	3.461
SLOPE	.1	.154	.104	.15

Table 9

One Factor ANOVA X₁: Gender Y₁: JWS

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	1	14.721	14.721	18.1
within groups	860	69869.647	81.245	p = 0.015
Total	861	69884.367		

Model II estimate of between component variance = 66.525

One Factor ANOVA X₁: Gender Y₁: JWS

Group	Count	Mean	Std. Dev.	Std. Error
Male	439	99.786	9.67	462
Female	423	100.047	8.277	402

One Factor ANOVA X₁: Gender Y₁: JWS

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnett t
Male vs Female	- .261	1.205	18.1	426

Simple Regression JWS vs. Demographic Variables

One Factor ANOVA X₁: Age Y₁: JWS

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	4	207.064	51.766	6.37
within groups	257	69679.583	27.105	p = .6364
Total	261	69886.647		

Model 1 estimate of between component variance = .7365

One Factor ANOVA X₁: Age Y₁: JWS

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
A-15	104	100.529	10.015	.982
B-16	253	99.486	8.399	.528
C-17	236	100.496	9.553	.622
D-18	199	99.457	8.527	.604
E-19 or older	70	99.886	9.112	1.089

One Factor ANOVA X₁: Age Y₁: JWS

Comparison:	Mean Diff	Fisher PLSD:	Scheffe F-test	Dunnnett t:
A-15 vs B-16	1.043	2.062	.246	.993
A-15 vs C-17	.033	2.083	2.429E-4	.031
A-15 vs D-18	1.072	2.142	.241	.982
A-15 vs E-19 or older	.643	2.736	.053	.461
B-16 vs C-17	-1.01	1.602	.383	1.237

Simple Regression JWS vns. Demographic Variables

One Factor ANOVA X₁: Age Y₁: JWS

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
8-16 vs 2-18	0.029	11.677	2.857E-4	0.34
8-16 vs 8-19 in older	1.44	2.34	0.17	1.28
16-17 vs 2-18	1.038	1.703	0.38	0.197
16-17 vs 8-19 in older	6.1	12.409	0.02	4.97
2-18 vs 8-19 in older	1.425	2.46	0.029	1.42

One Factor Anova, School vrs. JWS

One Factor ANOVA X₁: School Y₁: JWS

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	5	1111.941	222.388	2.768
within groups	856	66773.706	80.343	p = 0.173
Total	861	69885.647		

Model II estimate of between component variance = 28.409

One Factor ANOVA X₁: School Y₁: JWS

Group	Count	Mean	Std. Dev.	Std. Error
A-NGRHS	80	98.625	7.249	.81
B-BHS	197	99.178	9.571	.682
C-LHS	70	97.871	8.594	1.027
D-NRHS	46	98.717	9.392	1.385
E-PVEC	284	101.218	9.202	.546

One Factor ANOVA X₁: School Y₁: JWS

Group	Count	Mean	Std. Dev.	Std. Error
F-CMHS	185	100.324	8.611	.633

One Factor Anova, School vs JWS

One Factor ANOVA X₁: School Y₁: JWS

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
A-NGRHS vs B-BHS	-1.533	2.333	047	047
A-NGRHS vs C-LHS	.754	2.29	053	514
A-NGRHS vs D-NRHS	-1.392	2.256	001	056
A-NGRHS vs E-PVEC	-2.593	2.227*	1.045	2.286
A-NGRHS vs F-CMHS	-1.699	2.354	401	1.417

* Significant at 95%

One Factor ANOVA X₁: School Y₁: JWS

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
B-BHS vs C-LHS	1.306	2.448	219	1.047
B-BHS vs D-NRHS	.46	2.881	02	.314
B-BHS vs E-PVEC	-2.041	1.631*	1.206	2.455
B-BHS vs F-CMHS	-1.147	1.801	.312	1.25
C-LHS vs D-NRHS	-.846	3.339	049	.497

* Significant at 95%

One Factor ANOVA X₁: School Y₁: JWS

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
C-LHS vs E-PVEC	-3.347	2.343*	1.566	2.798
C-LHS vs F-CMHS	-2.453	2.469	.761	1.95
D-NRHS vs E-PVEC	-2.501	2.796	.616	1.756
D-NRHS vs F-CMHS	-1.607	2.899	.237	1.088
E-PVEC vs F-CMHS	.894	1.662	.223	1.056

* Significant at 95%

One Factor Anova: Mother's Ed. vrs. JWS

One Factor ANOVA X₁: Mother's Ed. Y₁: JWS

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	5	307.757	61.551	757
within groups	356	69577.89	195.183	p = .5808
Total	361	69885.647		

Model II estimate of between component variance = -3.946

One Factor ANOVA X₁: Mother's Ed. Y₁: JWS

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
A-< junior high	85	99.635	8.746	.949
B-junior high	53	97.925	7.421	1.019
C-< high school	206	100.301	8.757	.61
D-high school	211	99.976	8.734	.601
E-vocational	182	100.385	9.9	.734

One Factor ANOVA X₁: Mother's Ed. Y₁: JWS

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
F-university	125	99.52	9.335	.635

One Factor Anova, Mother's Ed. vns JWS

One Factor ANOVA X₁: Mother's Ed. Y₁: JWS

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t:
A-junior vs B-junior	1.711	3.097	275	1.84
A-junior vs C-high	-666	1.181	266	577
A-junior vs D-high s	-341	1.274	217	294
A-junior vs E-vocati	-709	1.325	108	633
A-junior vs F-unive	115	1.468	202	391

One Factor ANOVA X₁: Mother's Ed. Y₁: JWS

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t:
B-junior high vs C-high	-2.376	2.726	586	1.711
B-junior high vs D-high s.	-2.052	2.719	439	1.481
B-junior high vs E-vocat.	-2.46	2.762	611	1.748
B-junior high vs F-unive...	-1.595	2.901	233	1.08
C-high sc. vs D-high s	325	1.733	027	368

One Factor ANOVA X₁: Mother's Ed. Y₁: JWS

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t:
C-high sc. vs E-vocati	-084	1.8	002	091
C-high sc. vs F-unive...	.781	2.006	117	764
D-high school vs E-vocat.	-408	1.79	04	448
D-high school vs F-unive..	.456	1.997	04	448
E-vocational vs F-univer	865	2.056	136	825

One Factor Anova, Father's Ed. vrs. JWS

One Factor ANOVA X₁: Father's Ed. Y₁: JWS

Analysis of Variance Table

Source	DF	Sum Squares	Mean Squares	F-test
Between groups	5	96.25	19.25	1.236
Within groups	256	69789.397	272.65	p = .9466
Total	261	69885.647		

Model = estimate of between component variance = 12.456

One Factor ANOVA X₁: Father's Ed. Y₁: JWS

Group	Count	Mean	Std. Dev.	Std. Error
A- junior high	182	100.121	8.554	.634
B-junior high	68	99.956	9.56	1.159
C- high school	173	99.78	8.502	.646
D-high school	137	99.248	7.708	.659
E-vocational	163	100.025	10.596	.83

One Factor ANOVA X₁: Father's Ed. Y₁: JWS

Group	Count	Mean	Std. Dev	Std. Error
F-university	139	100.317	9.215	.782

One Factor Anova, Father's Ed. vrs. JWS

One Factor ANOVA X₁: Father's Ed. Y₁: JWS

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test:	Dunnett t:
A-junior vs B-junior	165	2.519	.003	.129
A-junior vs C-high	341	1.882	.025	.355
A-junior vs D-high s	877	2.005	.146	.854
A-junior vs E-vocati	096	1.911	.002	.099
A-junior vs F-univer	-196	1.997	.007	.192

One Factor ANOVA X₁: Father's Ed. Y₁: JWS

Comparison:	Mean Diff.:	Fisher PLSD:	Scheffe F-test:	Dunnett t:
B-junior high vs C-high	176	2.537	.004	.136
B-junior high vs D-high s...	708	2.629	.056	.528
B-junior high vs E-vocat...	-069	2.559	.001	.053
B-junior high vs F-unive...	-361	2.623	.015	.27
C-high sc vs D-high s...	532	2.027	.053	.515

One Factor ANOVA X₁: Father's Ed. Y₁: JWS

Comparison:	Mean Diff.:	Fisher PLSD:	Scheffe F-test:	Dunnett t:
C-high sc vs E-vocati	-244	1.935	.012	.248
C-high sc... vs F-unive...	-536	2.019	.054	.521
D-high school vs E-vocat	-776	2.054	.11	.742
D-high school vs F-unive...	-1.068	2.134	.193	.983
E-vocational vs F-univer	-292	2.046	.016	.28

One Factor Anova, Student's Aspirations, vrs. JWS

One Factor ANOVA X₁: Student aspiration Y₁: JWS

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	3	645	215	0.3
Within groups	856	69885.001	81.451	p = .9998
Total	861	69885.647		

Model II estimate of between component variance = -27.079

One Factor ANOVA X₁: Student aspiration Y₁: JWS

Group	Count	Mean	Std. Dev.	Std. Error
A-quit h s /job	15	99.8	10.178	2.628
B-h s /job	83	99.892	9.047	.993
C-h s /vocational	288	99.948	8.25	.486
D-h s /university	476	99.901	9.425	.432

One Factor ANOVA X₁: Student aspiration Y₁: JWS

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
A-quit h s vs B-h s /job	-.092	4.97	4.359E-4	.036
A-quit h s vs C-h s /voc	-.148	4.692	.001	.062
A-quit h s vs D-h s /u	-.101	4.646	.001	.043
B-h s /job vs C-h s /voc	-.056	2.207	.001	.05
B-h s /job vs D-h s /univ	-.01	2.107	2.718E-5	.009

One Factor Anova, Student's Aspirations vs. JWS

One Factor ANOVA X₁: Student aspiration Y₁: JWS

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett :
C-h s / voc vs C-h s / u	0.047	1.323	NOL	0.69

Simple Regression JWS vs Demographic Variables

Simple Regression X₁: JWS Y₁: Gender

DF	R	R-squared	Adj. R-squared	Std. Error
1861	.015	2.106E-4	-.001	.5

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-Test
REGRESSION	1	.045	.045	.61
RESIDUAL	860	215.36	.25	p = .6705
TOTAL	1861	215.426		

No Residual Statistics Computed

Simple Regression X₁: JWS Y₁: Gender

Beta Coefficient Table

Parameter	Value	Std. Err.	Std. Value	t-Value	Probability
INTERCEPT	1.41				
SLOPE	.001	.002	.015	.426	.6705

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	1.457	1.524	1.463	1.519
SLOPE	-.003	.005	-.002	.004

Simple Regression JWS vrs. Demographic Variables

Simple Regression X1: JWS Y2: Age

SS	R	R-squared	Adj. R-squared	Std. Error
38.1	.013	1.652E-4	-.001	1.147

Analysis of Variance Table

Source	DF	Sum of Squares	Mean Square	F-Test
Regression	1	.66	.66	.42
Residual	66	1130.546	17.129	6.701E3
TOTAL	67	1130.733		

No Residual Statistics Computed

Simple Regression X1: JWS Y2: Age

Beta Coefficient Table

Parameter	Value	Std. Err.	Std. Value	t-Value	Probability
INTERCEPT	3.022				
SLOPE	-.002	.004	-.013	.378	.7058

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	2.782	2.935	2.794	2.923
SLOPE	-.01	.007	-.009	.006

Simple Regression JWS vrs. Demographic Variables

Simple Regression X₁: JWS Y₃: School

DF	R	R-squared	Adj. R-squared	Std. Error
361	.094	.009	.008	1.731

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	12.687	12.687	7.64
RESIDUAL	360	2576.213	2.996	p = .0058
TOTAL	361	2599.1		

No Residual Statistics Computed

Simple Regression X₁: JWS Y₃: School

Beta Coefficient Table

Parameter:	Value:	Std. Err.:	Std. Value:	t-Value:	Probability:
INTERCEPT	2.134				
SLOPE	.018	.007	.094	2.764	.0058

Confidence Intervals Table

Parameter:	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.826	4.058	3.845	4.039
SLOPE	.005	.031	.007	.029

Simple Regression JWS vrs. Demographic Variables

Simple Regression X1: JWS Y4: Mother's Ed.

DF	R	R-squared	Adj. R-squared	Std. Error
861	.017	2.784E-4	-.001	1.464

Analysis of Variance Table				
Source	DF	Sum of Squares	Mean Square	F-test
REGRESSION	1	.513	.513	.124
RESIDUAL	860	1643.344	1.912	p = .6247
TOTAL	861	1643.857		

No Residual Statistics Computed

Simple Regression X1: JWS Y4: Mother's Ed.

Beta Coefficient Table

Parameter	Value	Std. Error	Std. Value	t-value	Probability
INTERCEPT	3.573				
SLOPE	.003	.006	.017	.489	.6247

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.746	3.941	3.761	3.926
SLOPE	-.008	.014	-.006	.012

Simple Regression JWS vrs. Demographic Variables

Simple Regression X₁: JWS Y₁: Father's Ed.

DF	R	R-squared	Adj. R-squared	Std. Error
361	.003	6.527E-6	-.001	.74

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	.017	.017	.006
RESIDUAL	360	2603.148	7.231	p = .9403
TOTAL	361	2603.165		

No Residual Statistics Computed

Simple Regression X₁: JWS Y₁: Father's Ed.

Beta Coefficient Table

Parameter.	Value	Std. Err.:	Std. Value	t-Value:	Probability
INTERCEPT	3.47				
SLOPE	4.931E-4	.007	.003	.075	.9403

Confidence Intervals Table

Parameter.	95% Lower:	95% Upper:	90% Lower:	90% Upper:
MEAN (X,Y)	3.403	3.636	3.422	3.617
SLOPE	-.012	.013	-.01	.011

Simple Regression JWS vrs Demographic Variables

Simple Regression X1: JWS Y2: Student aspiration

DF	R	R-squared	Adj R-squared	Std Error
861	1.468E-4	2.154E-8	1E-001	1.736

Analysis of Variance Table				
Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	1.004E-5	1.004E-5	1.852E-5
RESIDUAL	860	466.136	542	p = .9966
TOTAL	861	466.136		

No Residual Statistics Computed

Simple Regression X1: JWS Y2: Student aspiration

Beta Coefficient Table

Parameter	Value	Std. Err.	Std. Value	t-Value	Probability
INTERCEPT	3.422				
SLOPE	-1.199E-5	.003	-1.468E-4	.004	.9966

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.372	3.47	3.38	3.462
SLOPE	-.005	.005	-.005	.005

Table 10

One Factor Anova. Gender vrs. All Variables

One Factor ANOVA X₁: Gender Y₈: ASB

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	1	9779.383	9779.383	184.355
Within groups	560	45619.368	81.46	p = .0001
Total	561	55399.352		

Model II estimate of between component variance = 9726.337

One Factor ANOVA X₁: Gender Y₈: ASB

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
Male	439	39.938	7.47	.357
Female	423	46.676	7.085	.344

One Factor ANOVA X₁: Gender Y₈: ASB

Comparison:	Mean Diff.	Fisher PLSD:	Scheffe F-test:	Dunnnett t:
Male vs. Female	-6.738	974*	184.355*	13.578

* Significant at 95%

One Factor Anova, Age vs. ASB

One Factor ANOVA X₁: Age Y₁: ASB

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	4	1730.281	432.57	2.862
within groups	857	54689.07	63.791	p = 0.226
Total	861	56419.351		

Model II estimate of between component variance = 29.695

One Factor ANOVA X₁: Age Y₁: ASB

Group:	Count	Mean:	Std. Dev.:	Std. Error:
A-15	104	43.952	7.369	.723
B-16	253	43.893	7.984	.502
C-17	236	43.771	8.111	.528
D-18	199	42.06	7.745	.549
E-19 or older	70	41.443	9.071	1.084

One Factor ANOVA X₁: Age Y₁: ASB

Comparison:	Mean Diff.:	Fisher PLSD:	Scheffe F-test:	Dunnett t:
A-15 vs B-16	.059	1.825	.001	.063
A-15 vs C-17	.181	1.845	.009	.192
A-15 vs D-18	1.892	1.897	.958	1.957
A-15 vs E-19 or older	2.509	2.424*	1.032	2.032
B-16 vs C-17	.122	1.419	.007	.159

* Significant at 95%

One Factor Anova, Age vrs. ASB
 One Factor ANOVA X_1 : Age Y_1 : ASB

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test.	Dunnett t:
B-16 vs. D-18	1.533	1.485*	1.467	2.422
B-16 vs E-19 on older	2.45	2.117*	1.29	2.272
C-17 vs D-18	1.711	1.509*	1.239	2.226
C-17 vs E-19 on older	2.728	2.134*	1.147	2.142
D-18 vs. E-19 on older	0.17	2.179	0.77	.556

* Significant at 95%

One Factor Anova, Mother's Ed. vrs. ASB

One Factor ANOVA X₁: Mother's Ed. Y₁: ASB

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	5	1423.843	284.769	4.516
Within groups	356	53975.509	151.616	p = .0005
Total	361	55399.352		

Model II estimate of between component variance = 44.343

One Factor ANOVA X₁: Mother's Ed. Y₁: ASB

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
A-< junior high	85	41.729	7.199	.781
B-junior high	53	42.151	8.617	1.184
C- high school	206	43.675	7.177	.535
D-high school	211	41.844	8.004	.551
E-vocational	182	43.846	8.179	.606

One Factor ANOVA X₁: Mother's Ed. Y₁: ASB

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
F-university	125	45.52	8.092	.724

One Factor Anova, Mother's Ed. vrs. ASB

One Factor ANOVA X_1 : Mother's Ed. Y_1 : ASB

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
A-junior vs B-junior	-1.402	2.728	.118	.307
A-junior vs C-high	-1.445	2.769	.122	.319
A-junior vs D-high	-1.114	2.102	.103	.112
A-junior vs E-vocat	-2.117	2.748*	.107	1.0429
A-junior vs F-univer	-3.791	2.791*	2.306*	3.395

* Significant at 95%

One Factor ANOVA X_1 : Mother's Ed. Y_1 : ASB

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
B-junior high vs C-high	-1.524	2.401	.31	1.246
B-junior high vs D-high	.307	2.395	.013	.252
B-junior high vs E-vocat	-1.695	2.433	.374	1.368
B-junior high vs F-univer	-3.369	2.555*	1.34	2.588
C-high school vs D-high	1.831	1.527*	1.109	2.354

* Significant at 95%

One Factor ANOVA X_1 : Mother's Ed. Y_1 : ASB

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
C-high school vs E-vocat	-1.171	1.586	.009	.212
C-high school vs F-univer	-1.845	1.767*	.84	2.05
D-high school vs E-vocat	-2.003	1.577*	1.243	2.493
D-high school vs F-univer	-3.676	1.759*	3.365*	4.102
E-vocational vs F-univer	-1.674	1.811	.659	1.815

* Significant at 95%

One Factor Anova, Father's Ed. vrs. ASB

One Factor ANOVA X₁: Father's Ed. Y₁: ASB

Analysis of Variance Table

Source:	DF:	Sum Squares:	Mean Square:	F-test:
Between groups	5	1723.391	344.678	2.265
within groups	856	54675.96	63.874	p = .0463
Total	861	55399.352		

Model estimate of between component variance = 16.161

One Factor ANOVA X₁: Father's Ed. Y₁: ASB

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
A-< junior high	182	41.698	7.855	.582
B-junior high	68	42.515	6.398	.776
C-< high school	173	43.665	8.627	.656
D-high school	137	43.263	7.597	.649
E-vocational	163	43.988	8.044	.63

One Factor ANOVA X₁: Father's Ed. Y₁: ASB

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
F-university	139	44.216	8.355	.709

One Factor Anova, Father's Ed. vrs. ASB

One Factor ANOVA X₁: Father's Ed. Y₁: ASB

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnett t:
A-junior vs B-junior	-517	2.23	.107	.719
A-junior vs C-high	-1.967	1.666*	1.074	2.318
A-junior vs D-high s	-1.565	1.774	.599	1.731
A-junior vs E-vocat	-2.29	1.692*	1.412	2.657
A-junior vs F-unive	-2.516	1.767*	1.565	2.797

* Significant at 95%

One Factor ANOVA X₁: Father's Ed. Y₁: ASB

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test:	Dunnett t:
B-junior high vs. C-high	-1.15	2.245	.202	1.005
B-junior high vs. D-high s...	-.748	2.327	.08	.631
B-junior high vs E-vocat	-1.473	2.265	.326	1.277
B-junior high vs. F-unive...	-1.701	2.322	.414	1.438
C-high sc. vs. D-high s	.402	1.794	.039	.44

One Factor ANOVA X₁: Father's Ed. Y₁: ASB

Comparison:	Mean Diff.:	Fisher PLSD:	Scheffe F-test:	Dunnett t:
C-high sc vs E-vocat	-.323	1.712	.027	.37
C-high sc vs. F-unive...	-.551	1.767	.073	.605
D-high school vs E-vocat	-.725	1.818	.122	.783
D-high school vs. F-unive.	-.953	1.889	.196	.991
E-vocational vs F-univer	-.228	1.811	.012	.247

One Factor Anova, Student's Aspirations vrs. ASB

One Factor ANOVA X₁: Student aspiration Y₁: ASB

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	3	2053.51	684.503	11.009
Within groups	858	53345.342	62.175	p = .0001
Total	861	55399.352		

Model II estimate of between component variance = 207.443

One Factor ANOVA X₁: Student aspiration Y₁: ASB

Group	Count	Mean	Std. Dev.	Std. Error
A-quit h.s./job	15	40.133	5.153	1.33
B-h s/job	83	39.964	7.533	.827
C-h s./vocational	288	42.281	8.007	.472
D-h s /university	476	44.498	7.936	.364

One Factor ANOVA X₁: Student aspiration Y₁: ASB

Comparison:	Mean Diff.:	Fisher PLSD:	Scheffe F-test:	Dunnett t:
A-quit h.s. vs B-h s/job	1.69	4.342	.002	.077
A-quit h.s.... vs. C-h.s./v...	-2.148	4.099	.353	1.029
A-quit h.s. vs D-h s /u	-4.365	4.059*	1.485	2.111
B-h.s/job vs. C-h.s./voc...	-2.317	1.928*	1.855	2.359
B-h s/job vs D-h s /univ	-4.534	1.841*	7.79*	4.834

* Significant at 95%

One Factor Anova, Student's Aspirations vrs ASB

One Factor ANOVA X₁: Student aspiration Y₁: ASB

Comparison:	Mean Diff:	Fisher PLSD:	Scheffe F-test	Dunnnett t
O-his vroc vs O-his vru	-21.17	1.95*	4.727*	3.766

* Significant at 95%

Simple Regression, ASB Vrs Demographic Variables

Simple Regression X₁: ASB Y₁: Gender

SS	df	R-squared	Adj. R-squared	Std. Error
361	42	.177	.176	.454

Analysis of Variance Table

Source	DF	Sum of Squares	Mean Square	F-test
Regression	1	38.028	38.028	184.355
Residual	42	177.398	.42	p = .0001
TOTAL	43	215.426		

1. Residual Statistics Computed

Simple Regression X₁: ASB Y₁: Gender

Beta Coefficient Table

Parameter	Value	Std. Err.	Std. Value	t-Value	Probability
INTERCEPT	.358				
SLOPE	.028	.002	42	13.578	.0001

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN	1.46	1.521	1.465	1.516
SLOPE	.022	.03	.023	.029

Simple Regression, ASB Vrs. Demographic Variables

Simple Regression X1: ASB Y2: Age

DF	R	R-squared	Adj. R-squared	Std. Error
361	.101	.010	.009	.114

Analysis of Variance Table				
Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	.11526	.11526	6.856
RESIDUAL	360	.119206	.000331	p = .003
TOTAL	361	.130733		

No Residual Statistics Computed

Simple Regression X1: ASB Y2: Age

Beta Coefficient Table

Parameter	Value	Std. Err.	Std. Value	t-Value	Probability
INTERCEPT	3.462				
SLOPE	-.014	.005	-.101	2.976	.003

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (x,y)	2.782	2.935	2.794	2.922
SLOPE	-.024	-.005	-.022	-.006

Simple Regression, ASB vns. Demographic variables

Simple Regression X₁: ASB Y₃: School

DF	R	R-squared	Adj. R-squared	Std. Error
361	.046	.002	.001	1.737

Analysis of Variance Table				
Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	5.436	5.436	1.502
RESIDUAL	361	2593.664	7.185	p = .1798
TOTAL	362	2599.1		

No Residual Statistics Computed

Simple Regression X₁: ASB Y₃: School

Beta Coefficient Table

Parameter	value	Std. Err.	Std. Value	t-Value	Probability
INTERCEPT	4.37				
SLOPE	-.01	.007	-.046	1.343	.1798

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.826	4.058	3.845	4.039
SLOPE	-.024	.005	-.022	.002

Simple Regression, ASB Vrs. Demographic Variables

Simple Regression X1: ASB Y4: Mother's Ed.

DF	R	R-squared	Adj R-squared	Std Error
361	.108	.012	.011	1.456

Analysis of Variance Table				
Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	21.527	21.527	10.59
RESIDUAL	360	1802.331	5.006	1.41015
TOTAL	361	1843.857		

No Residual Statistics Computed

Simple Regression X1: ASB Y4: Mother's Ed.

Beta Coefficient Table

Parameter	Value	Std. Error	Std. Value	t-value	Probability
INTERCEPT	2.991				
SLOPE	.02	.006	.108	3.187	.0015

Confidence Intervals Table

Parameter:	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.746	3.941	3.762	3.925
SLOPE	.008	.032	.01	.03

Simple Regression: ASB Vrs Demographic Variables

Simple Regression X1: ASB Y5: Father's Ed.

DF	R	R-squared	Adj R-squared	Std. Error
361	.105	.011	.01	1.73

Analysis of Variance Table				
Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	18.764	18.764	9.609
RESIDUAL	360	1574.401	4.373	10.002
TOTAL	361	1593.165		

No Residual Statistics Computed

Simple Regression X1: ASB Y5: Father's Ed.

Beta Coefficient Table

Parameter	value	Std. Err	Std. Value	t-Value	Probability
INTERCEPT	2.534				
SLOPE	.023	.007	.105	3.1	.002

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (x,y)	3.404	3.635	3.423	3.617
SLOPE	.008	.037	.011	.035

Simple Regression, ASB Vns Demographic variables

Simple Regression X1: ASB Y6: Student aspiration

SS	R	R-squared	Adj. R-squared	Std. Error
11	.189	.135	.135	.701

Analysis of Variance Table				
Source	SS	Sum of Squares	Mean Square	F-test
REGRESSION	11	16.71	16.71	3.1275
RESIDUAL	68.1	443.121	3.27	1.4 = .0001
TOTAL	79.1	459.831		

No Residual Statistics Computed

Simple Regression X1: ASB Y6: Student aspiration

Beta Coefficient Table

Parameter	Beta	Std. Err	Std. Value	t-value	Probability
INTERCEPT	2.67				
SLIPF	.07	.003	.189	5.655	.0001

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
INTERCEPT	3.373	3.469	3.361	3.462
SLIPF	.011	.023	.012	.022

Table 11

One Factor Anova, Gender vrs. All Variables

One Factor ANOVA X₁: Gender Y_g: VS

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	1	522.48149	522.48149	1.14944
Within groups	560	300678.258	536.926	p = .0001
Total	561	352926.437		

Model II estimate of between component variance = 51898.523

One Factor ANOVA X₁: Gender Y_g: VS

Group	Count	Mean	Std. Dev.	Std. Error
Male	439	94.588	19.748	.943
Female	423	79.014	17.543	.853

One Factor ANOVA X₁: Gender Y_g: VS

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnett t
Male vs Female	15.574	2.501*	149.44*	12.225

* Significant at 95%

One Factor ANOVA Age vs VS

One Factor ANOVA X₁: Age Y₁: VS

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	4	1349.526	337.382	4.12
Within groups	557	351576.91	629.224	10 = 5.11
Total	561	352926.437		

Model II estimate of between component variance = -18.215

One Factor ANOVA X₁: Age Y₁: VS

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
A-15	104	85.221	19.949	1.956
B-16	253	85.806	22.683	1.426
C-17	236	87.712	18.955	1.234
D-18	199	88.603	19.149	1.357
E-19 or older	70	86.329	18.605	2.224

One Factor ANOVA X₁: Age Y₁: VS

Comparison:	Mean Diff.:	Fisher PLSD	Scheffe F-test:	Dunnnett t:
A-15 vs B-16	-0.585	4.631	0.15	2.48
A-15 vs C-17	-2.491	4.679	2.73	1.045
A-15 vs D-18	-3.382	4.811	4.76	1.38
A-15 vs E-19 or older	-1.107	6.147	0.31	3.54
B-16 vs C-17	-1.906	3.598	1.27	1.04

One Factor Anova, Age vrs VS
One Factor ANOVA X₁: Age Y₁: VS

Comparison:	Mean Diff.	Fisher PLSD:	Scheffe F-test	Dunnnett t.
B-16 vs D-18	-2.797	3.767	.531	.457
B-16 vs E-19 or older	-5.522	5.769	.009	.191
C-17 vs D-18	-1.891	3.525	.152	.457
C-17 vs E-19 or older	-4.763	5.411	.063	.502
D-18 vs E-19 or older	-2.274	5.525	.163	.508

One Factor Anova, School vrs. VS

One Factor ANOVA X₁: School Y₁: VS

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	5	3294.525	658.905	16.13
within groups	856	349631.913	.408.448	p = .000
Total	861	352926.437		

Model II estimate of between component variance = 50.091

One Factor ANOVA X₁: School Y₁: VS

Group	Count	Mean	Std. Dev.	Std. Error
A-NGRHS	80	86.95	18.189	2.034
B-BHS	197	88.68	18.548	1.322
C-LHS	70	87.043	17.315	2.07
D-NRHS	46	90.957	20.167	2.973
E-PVEC	284	84.437	21.655	1.285

One Factor ANOVA X₁: School Y₁: VS

Group	Count	Mean	Std. Dev.	Std. Error
F-CMHS	185	87.914	21.414	1.574

One Factor Anova: School vns. VS

One Factor ANOVA X₁: School Y₁: VS

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
E-BHS vs E-BHS	-1.73	5.259	.063	.646
E-BHS vs D-NRHS	1.493	5.493	1.5765-4	.729
E-BHS vs D-NRHS	-4.347	7.347	.23	1.171
E-BHS vs E-PVEC	2.513	5.021	.193	.983
E-BHS vs E-OMHS	-3.64	5.308	.025	.356

One Factor ANOVA X₁: School Y₁: VS

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
E-BHS vs C-LHS	1.637	5.52	.068	.582
E-BHS vs D-NRHS	-2.276	6.496	.095	.688
E-BHS vs E-PVEC	4.244	3.678*	1.026	2.265
E-BHS vs E-OMHS	.767	4.061	.027	.371
C-LHS vs D-NRHS	-3.914	7.53	.208	1.02

* Significant at 95%

One Factor ANOVA X₁: School Y₁: VS

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
C-LHS vs E-PVEC	2.606	5.294	.187	.966
C-LHS vs E-OMHS	- .871	5.567	.019	.307
D-NRHS vs E-PVEC	6.52	5.305*	.824	2.03
D-NRHS vs E-OMHS	3.043	6.536	.167	.914
E-PVEC vs E-OMHS	-3.477	3.748	.663	1.821

* Significant at 95%

One Factor Anova, Mother's Ed. vrs. VS

One Factor ANOVA X1: Mother's Ed. Y1: VS

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	5	5545.975	1109.195	12.733
Within groups	856	347360.462	405.818	p = 0.135
Total	861	352906.437		

Model II estimate of between component variance = 140.675

One Factor ANOVA X1: Mother's Ed. Y1: VS

Group	Count	Mean	Std. Dev.	Std. Error
A-junior high	85	88.153	16.945	1.838
B-junior high	53	86.566	19.394	2.664
C-high school	206	85.228	20.151	1.404
D-high school	211	91.009	19.697	1.356
E-vocational	182	85.709	19.941	1.478

One Factor ANOVA X1: Mother's Ed. Y1: VS

Group	Count	Mean	Std. Dev.	Std. Error
F-university	125	84.056	23.246	2.079

One Factor Anova, Mother's Ed. yrs. VS

One Factor ANOVA X₁: Mother's Ed. Y₁: VS

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
A-junior vs B-junior	1.567	5.921	.041	.49
A-junior vs C-high	2.925	5.198	.054	1.126
A-junior vs D-high s	-2.857	5.06	.044	1.104
A-junior vs E-vocat	2.444	5.195	.071	.904
A-junior vs F-unive	4.097	5.554	.419	1.447

One Factor ANOVA X₁: Mother's Ed. Y₁: VS

Comparison:	Mean Diff.:	Fisher PLSD	Scheffe F-test:	Dunnnett t:
B-junior high vs C-high	1.338	6.09	.037	.431
B-junior high vs D-high s...	-4.443	6.076	.412	1.436
B-junior high vs E-vocat	.857	6.172	.015	.273
B-junior high vs F-unive...	2.51	6.482	.116	.76
C-high sc vs D-high s	-5.781	3.873*	1.717	2.93

* Significant at 95%

One Factor ANOVA X₁: Mother's Ed. Y₁: VS

Comparison:	Mean Diff	Fisher PLSD	Scheffe F-test	Dunnnett t
C-high sc vs E-vocat	-481	4.023	.011	.235
C-high sc vs F-unive	1.172	4.483	.053	.513
D-high school vs E-vocat	5.301	4*	1.353	2.601
D-high school vs F-unive	6.953	4.463*	1.67	3.958
E-vocational vs F-univer	1.653	4.594	1	.796

* Significant at 95%

One Factor Anova, Father's Ed. vrs. VS

One Factor ANOVA X₁: Father's Ed. Y₁: VS

Analysis of variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	5	1623.773	324.755	79.1
within groups	356	351302.664	986.4	p = .356
Total	361	352926.437		

Model II estimate of between component variance = -17.129

One Factor ANOVA X₁: Father's Ed. Y₁: VS

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
A-< junior high	182	88.511	19.899	1.475
B-junior high	68	88.926	19.376	2.35
C-< high school	173	87.468	19.085	1.451
D-high school	137	86.547	21.277	1.818
E-vocational	163	86.098	19.618	1.537

One Factor ANOVA X₁: Father's Ed. Y₁: VS

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
F-university	139	84.662	22.184	1.882

One Factor Anova, Father's Ed. vrs VS

One Factor ANOVA X₁: Father's Ed. Y₁: VS

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnett t
A-junior vs B-junior	1.415	5.652	104	144
A-junior vs C-high	1.943	4.222	147	485
A-junior vs D-high s	1.364	4.496	147	357
A-junior vs E-vocati	2.413	4.249	244	1104
A-junior vs F-unive	3.649	4.479	569	1687

One Factor ANOVA X₁: Father's Ed. Y₁: VS

Comparison:	Mean Diff.:	Fisher PLSD:	Scheffe F-test:	Dunnett t:
B-junior high vs C-high	1.458	5.692	051	503
B-junior high vs D-high s	2.379	5.899	125	792
B-junior high vs E-vocat	2.828	5.741	187	967
B-junior high vs F-unive	4.265	5.885	405	1422
C-high sc. vs D-high s	.921	4.548	032	397

One Factor ANOVA X₁: Father's Ed. Y₁: VS

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnett t
C-high sc vs E-vocati	1.37	4.341	077	62
C-high sc vs F-unive	2.806	4.53	296	1216
D-high school vs E-vocat	.449	4.609	007	191
D-high school vs F-unive	1.886	4.787	12	773
E-vocational vs F-univer	1.436	4.591	075	614

One Factor Anova, Student's Aspirations vrs. VS

One Factor ANOVA X₁: Student aspiration Y₁: VS

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups	3	4191.57	1397.19	7.648
Within groups	853	343735.067	402.854	p = .0001
Total	856	347926.637		

Model Estimate of between component variance = 887.722

One Factor ANOVA X₁: Student aspiration Y₁: VS

Group	Count	Mean	Std. Dev.	Std. Error
A-quits his /job	15	92.733	25.246	6.518
B-his /job	83	93.217	17.356	1.905
C-his /vocational	286	89.42	18.154	1.07
D-his /university	476	84.172	21.301	.976

One Factor ANOVA X₁: Student aspiration Y₁: VS

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnett t
A-quits his vs B-his /job	-484	11.023	.002	.086
A-quits his vs C-his /voc...	3.313	10.405	.13	.625
A-quits his vs D-his /u	8.561	10.303	.887	1.631
B-his /job vs C-his /voc...	3.797	4.895	.773	1.523
B-his /job vs D-his /univ	9.045	4.673*	4.811*	3.799

* Significant at 95%

One Factor Anova, Student's Aspirations vrs. VS

One Factor ANOVA X₁: Student aspiration Y₁: VS

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett
D-0.3 vs D-0.5/2	15.046	12.933*	4.112*	3.512

* Significant at 95%

Simple Regression: VS. VS Demographic Variables

Simple Regression X1: VS Y1: Gender

DF	R	R-squared	Adj. R-squared	Std. Error
1861	.365	.142	.142	.462

Analysis of Variance Table

Source	DF	Sum of Squares	Mean Square	F-test
REGRESSION	1	31.692	31.692	149.44
RESIDUAL	1860	163.534	.088	p = .0001
TOTAL	1861	195.226		

No Residual Statistics Computed

Simple Regression X1: VS Y1: Gender

Beta Coefficient Table

Parameter	Value	Std. Error	Std. Value	t-Value	Probability
INTERCEPT	2.317				
SLOPE	-.01	.001	-.365	12.225	.0001

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	1.46	1.522	1.465	1.517
SLOPE	-.011	-.008	-.011	-.008

Simple Regression, VS Vrs. Demographic variables

Simple Regression X1: VS Y2: Age

DF	R	R-squared	Adj. R-squared	Std. Error
861	.045	.002	.001	1.146

Analysis of Variance Table				
Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	2.146	2.146	1.712
RESIDUAL	860	1123.487	1.307	8 = 19.1
TOTAL	861	1125.633		

No Residual Statistics Computed

Simple Regression X1: VS Y2: Age

Beta Coefficient Table

Parameter	Value	Std. Error	Std. Value	t-Value	Probability
INTERCEPT	2.639				
SLOPE	.003	.002	.045	1.308	.1911

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	2.762	2.935	2.794	2.923
SLOPE	-.001	.006	-.001	.006

Simple Regression, VS vs Demographic variables

Simple Regression X1: VS Y3: School

DF	R	R-squared	Adj R-squared	Std. Error
361	.035	.001	.000	1.037

Analysis of Variance Table				
Source	DF	Sum of Squares	Mean Square	F-test
REGRESSION	1	3.099	3.099	1.026
RESIDUAL	360	2546.001	7.044	p = .3113
TOTAL	361	2549.1		

No Residual Statistics Computed

Simple Regression X1: VS Y3: School

Beta Coefficient Table

Parameter	Value	Std. Error	Std. Value	t-Value	Probability
INTERCEPT	4.2				
SLOPE	-.003	.003	-.035	1.013	.3113

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.826	4.058	3.845	4.039
SLOPE	-.009	.003	-.008	.002

Simple Regression, Vs. Yrs. Demographic Variables

Simple Regression X1: VS Y4: Mother's Ed.

SS	R	R-squared	Adj. R-squared	Std. Error
991	.934	.871	.8722943	1.467

Analysis of Variance Table

Source	SS	Sum of Squares	Mean Square	F-test
Regression	891	891.757	1.48626	45.1
Residual	991	1047.957	1.05732	

No Residual Statistics Computed

Simple Regression X1: VS Y4: Mother's Ed.

Beta Coefficient Table

Parameter	Value	Std. Err.	Std. Value	t-Value	Probability
INTERCEPT	4.056				
SLOPE	.002	.002	-.034	.991	.3221

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN Y4	3.746	3.941	3.761	3.925
SLOPE	-.007	.002	-.006	.002

Simple Regression, Vs. Vs. Demographic Variables

Simple Regression X1: VS Y5: Father's Ed.

DF	R	R-squared	Adj. R-squared	Std. Error
861	.066	.004	.003	.736

Analysis of Variance Table

Source	DF	Sum of Squares	Mean Square	F-test
REGRESSION	1	.11193	.11193	3.714
RESIDUAL	860	2591.971	.3014	p = .0543
TOTAL	861	2603.165		

No Residual Statistics Computed

Simple Regression X1: VS Y5: Father's Ed.

Beta Coefficient Table

Parameter	Value	Std. Err.	Std. Value	t-Value	Probability
INTERCEPT	4.009				
SLOPE	-.006	.003	-.066	1.927	.0543

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.404	3.636	3.422	3.617
SLOPE	-.011	1.045E-4	-.01	-.001

Simple Regression: vs Vns Demographic variables

Simple Regression X1: VS Y6: Student aspiration

DF	R	R-squared	Adj R-squared	Std. Error
361	.157	.025	.024	.727

Analysis of Variance Table				
Source	DF	Sum of Squares	Mean Square	F-test
REGRESSION	1	11.495	11.495	21.745
RESIDUAL	360	454.54	.0126	
TOTAL	361	466.036		

No Residual Statistics Computed

Simple Regression X1: VS Y6: Student aspiration

Beta Coefficient Table

Parameter	Value	Std. Err	Std. Value	t-Value	Probability
INTERCEPT	3.917				
SLOPE	-.006	.001	-.157	4.663	.0001

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.373	3.47	3.38	3.462
SLOPE	-.008	-.003	-.008	-.004

Table 12

Simple Regression: ASB Vrs. JWS 3: VS

Simple Regression X1: ASB Y1: JWS

DF	R	R-squared	Adj. R-squared	Std. Error
361	.08	.006	.005	3.388

Analysis of Variance Table

Source	DF	Sum of Squares	Mean Square	F-test
REGRESSION	1	443.81	443.81	3.497
RESIDUAL	360	69442.127	192.947	9 = 0.193
TOTAL	361	69885.937		

No Residual Statistics Computed

Simple Regression X1: ASB Y1: JWS

Beta Coefficient Table

Parameter	Value	Std. Error	Std. Value	t-Value	Probability
INTERCEPT	103.784				
SLOPE	-.089	.038	-.08	2.344	.0193

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (x,y)	99.313	100.515	99.41	100.418
SLOPE	-.164	-.015	-.152	-.027

Simple Regression: ASB Vrs JWS & VS

Simple Regression X1: ASB Y2: VS

SS	R	R-squared	Adj. R-squared	Std. Error
15	.472	.227	.222	17.362

Analysis of Variance Table

Source	DF	Sum of Squares	Mean Square	F-test
Regression	1	78539.742	78539.742	246.164
Residual	565	274366.895	319.154	p = .0001
Total	566	352906.637		

No Residual Statistics Computed

Simple Regression X1: ASB Y2: VS

Beta Coefficient Table

Parameter	Value	Std. Err	Std. Value	t-Value	Probability
INTERCEPT	1135.436				
SLOPE	-1.191	.076	-1.472	15.69	.0001

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	85.751	68.14	85.944	87.947
SLOPE	-1.34	-1.042	-1.316	-1.066

Simple Regression, JWS Vrs. VS

Simple Regression X₁: JWS Y₁: VS

DF	R	R-squared	Adj. R-squared	Std. Error
981	.037	.001	2.440E-4	20.244

Analysis of Variance Table

Source	DF	Sum of Squares	Mean Square	F-Test
REGRESSION	1	495.901	495.901	1.21
RESIDUAL	981	352430.536	409.303	p = .2716
TOTAL	982	352926.437		

No Residual Statistics Computed

Simple Regression X₁: JWS Y₁: VS

Beta Coefficient Table

Parameter	Value	Std. Error	Std. Value	t-Value	Probability
INTERCEPT	75.529				
SLOPE	.084	.077	.037	1.1	.2716

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (x,y)	85.592	88.299	85.81	88.081
SLOPE	-.066	.235	-.042	.21

Table 13

One Factor Anova, Gender vns All Variables

One Factor ANOVA X1: Gender Y7: SRS

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-Test
Between groups	1	7143.011	7143.011	141.152
Within groups	860	43520.452	50.605	p < .001
Total	861	50663.463		

Model estimate of between component variance = 7092.405

One Factor ANOVA X1: Gender Y7: SRS

Group	Count	Mean	Std. Dev.	Std. Error
Male	439	42.547	7.206	.344
Female	423	48.305	7.016	.341

One Factor ANOVA X1: Gender Y7: SRS

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
Male vs. Female	-5.758	.951*	141.152*	11.881

* Significant at 95%

One Factor Anova, SRS with Demographic Variables

One Factor ANOVA X₁: Age Y₁: SRS

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-Test
Between groups	4	493.53	123.382	14.286
Within groups	357	49669.933	139.158	p = .0019
Total	361	50163.463		

Model II estimate of between component variance = 47.636

One Factor ANOVA X₁: Age Y₁: SRS

Group	Count	Mean:	Std. Dev.:	Std. Error:
A-15	104	46.635	7.664	.752
B-16	253	45.783	7.248	.456
C-17	236	46.123	7.747	.504
D-18	199	44.005	7.476	.53
E-19 or older	70	43.371	8.69	1.039

One Factor ANOVA X₁: Age Y₁: SRS

Comparison:	Mean Diff.:	Fisher PLSD:	Scheffe F-test:	Dunnnett t:
A-15 vs B-16	.852	1.741	.231	.961
A-15 vs C-17	.512	1.759	.082	.571
A-15 vs D-18	2.63	1.808*	2.037	2.855
A-15 vs E-19 or older	3.263	2.31*	1.922	2.773
B-16 vs C-17	-.34	1.352	.061	.494

* Significant at 95%

One Factor Anova, SRS with Demographic Variables

One Factor ANOVA X₁: Age Y₁: SRS

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnett's
18-16 vs 12-18	1.778	1.416*	1.515	1.464
18-16 vs 15-19 under	1.411	1.118*	1.375	1.315
16-17 vs 12-18	1.118	1.436*	1.709	1.591
16-17 vs 15-19 under	1.751	1.134*	1.763	1.656
16-18 vs 15-19 under	0.34	1.177	1.4	1.419

* Significant at 95%

One Factor Anova, SPSS with Demographic variables

One Factor ANOVA X₁: School Y₁: SRS

Analysis of Variance Table

Source	SS	Sum of Squares	Mean Square	F-test
Between Groups	142.774	142.774	173.856	13.371
Within Groups	4977.673	4977.673	68.43	p = .0094
Total	5060.447	5060.447		

Adjusted R square = between component variance = 14.623

One Factor ANOVA X₁: School Y₁: SRS

Source	Count	Mean	Std. Dev	Std. Error
AAVCE	180	45.688	7.734	865
EECE	197	44.416	6.972	497
EECE	70	44.057	6.75	807
EECE	45	43.87	7.235	1.067
EECE	284	45.468	7.931	471

One Factor ANOVA X₁: School Y₁: SRS

Source	Count	Mean	Std. Dev	Std. Error
EECE	135	46.978	8.149	599

One Factor ANOVA, SRS with Demographic Variables

One Factor ANOVA X_1 : School Y_1 : SRS

Comparison	Mean Diff	Fisher PLSD	Scheffe F-test	Dunnnett t
A-NRHS vs E-BHS	1.271	1.984	318	1.253
A-NRHS vs C-LHS	1.57	2.45	341	1.316
A-NRHS vs D-NRHS	1.18	2.77	372	1.232
A-NRHS vs E-PVEC	2.19	1.495	11	227
A-NRHS vs F-CHHS	-1.291	2.373	72	1.215

One Factor ANOVA X_1 : School Y_1 : SRS

Comparison	Mean Diff	Fisher PLSD	Scheffe F-test	Dunnnett t
B-BHS vs C-LHS	359	2.083	023	338
B-BHS vs D-NRHS	547	2.451	038	438
B-BHS vs E-PVEC	-1.052	1.388	443	1.488
B-BHS vs F-CHHS	-2.562	1.532*	2.154	3.282
C-LHS vs D-NRHS	188	2.541	003	13

* Significant at 95%

One Factor ANOVA X_1 : School Y_1 : SRS

Comparison	Mean Diff	Fisher PLSD	Scheffe F-test	Dunnnett t
C-LHS vs E-PVEC	-1.411	1.997	385	1.787
C-LHS vs F-CHHS	-2.921	2.1*	1.491	2.73
D-NRHS vs E-PVEC	-1.599	2.379	348	1.319
D-NRHS vs F-CHHS	-3.109	2.466*	1.225	2.475
E-PVEC vs F-CHHS	-1.51	1.414*	879	2.046

* Significant at 95%

One Factor ANOVA: SRS with Demographic Variables

One Factor ANOVA X_1 : Mother's Ed. Y_1 : SRS

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-Test
Between groups	4	462.702	115.675	7.367
Within groups	156	4466.715	28.633	p = .0049
Total	160	4929.417		

Model = estimate of between component variance = 27.702

One Factor ANOVA X_1 : Mother's Ed. Y_1 : SRS

Group	Count	Mean	Std. Dev.	Std. Error
A- junior high	85	44.165	7.989	.867
B-junior high	53	45.472	7.948	1.092
C- high school	206	45.801	7.724	.538
D-high school	211	43.986	7.083	.488
E-vocational	182	45.841	7.189	.533

One Factor ANOVA X_1 : Mother's Ed. Y_1 : SRS

Group	Count	Mean	Std. Dev.	Std. Error
F-university	125	47.104	8.479	.758

One Factor ANOVA SRS with Demographic Variables

One Factor ANOVA X_1 : Mother's Ed. Y_1 : SRS

Comparison	Mean Diff	Fisher PLSD	Scheffe F-test	Dunnnett t
A-junior vs B-junior	-1.307	1.617	192	92
A-junior vs C-high	-1.636	1.428	555	1.446
A-junior vs D-high s	1.73	1.321	187	1.133
A-junior vs E-vocat	-1.676	1.265	561	1.435
A-junior vs F-unive	-2.939	2.102*	510	2.744

* Significant at 95%

One Factor ANOVA X_1 : Mother's Ed. Y_1 : SRS

Comparison	Mean Diff	Fisher PLSD	Scheffe F-test	Dunnnett t
B-junior high vs C-high	-1.329	2.303	016	281
B-junior high vs D-high s	1.486	2.298	322	1.269
B-junior high vs E-vocat	-1.369	2.334	019	31
B-junior high vs F-unive	-1.632	2.451	342	1.307
C-high sc vs D-high s	1.915	1.465*	1.194	2.433

* Significant at 95%

One Factor ANOVA X_1 : Mother's Ed. Y_1 : SRS

Comparison	Mean Diff	Fisher PLSD	Scheffe F-test	Dunnnett t
C-high sc vs E-vocat	-1.04	1.521	001	1.051
C-high sc vs F-unive	-1.303	1.695	455	1.509
D-high school vs E-vocat	-1.855	1.513*	1.154	1.2407
D-high school vs F-unive	-3.116	1.656*	2.63*	3.626
E-vocational vs F-univer	-1.263	1.737	408	1.428

* Significant at 95%

One Factor Anova, SPSS with Demographic Variables

One Factor ANOVA X₁: Father's Ed. Y₁: SRS

Analysis of Variance Table

Source	DF	Sum of Squares	Mean Square	F-test
Between groups	5	466.371	93.274	3.329
Within groups	696	49647.092	71.347	p = .0055
Total	701	50313.463		

Model: estimate of between component variance = 27.043

One Factor ANOVA X₁: Father's Ed. Y₁: SRS

Group	Count	Mean	Std. Dev.	Std. Error
A-junior high	182	43.978	8.379	.621
B-junior high	68	43.956	7.251	.879
C-high school	173	45.127	7.343	.558
D-high school	137	45.693	7.444	.636
E-vocational	163	46.153	7.073	.554

One Factor ANOVA X₁: Father's Ed. Y₁: SRS

Group	Count	Mean	Std. Dev.	Std. Error
F-university	139	46.964	7.871	.668

One Factor Anova: SRS with Demographic Variables

One Factor ANOVA X_1 : Father's Ed. Y_1 : SRS

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
A-junior vs B-junior	1.022	2.126	6.059e-0	2
A-junior vs C-high	1.144	1.588	40.7	1.41
A-junior vs D-high s	1.175	1.692*	1.792	1.49
A-junior vs E-vocat	1.2175	1.613*	1.402	1.547
A-junior vs F-unive	1.2366	1.685*	2.421*	2.479

* Significant at 95%

One Factor ANOVA X_1 : Father's Ed. Y_1 : SRS

Comparison	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
B-junior high vs C-high	-1.171	2.141	231	1.074
B-junior high vs D-high s	-1.738	2.319	473	1.537
B-junior high vs E-vocat	-2.197	2.159*	798	1.998
B-junior high vs F-unive	-3.008	2.213*	1.423	2.668
C-high sc vs D-high s	-566	1.711	084	65

* Significant at 95%

One Factor ANOVA X_1 : Father's Ed. Y_1 : SRS

Comparison:	Mean Diff.	Fisher PLSD	Scheffe F-test	Dunnnett t
C-high sc vs E-vocat	-1.026	1.633	704	1.234
C-high sc vs F-unive	-1.637	1.764*	696	2.116
D-high school vs E-vocat	-46	1.734	054	521
D-high school vs F-unive	-1.271	1.891	364	1.365
E-vocational vs F-univer	-811	1.727	17	922

* Significant at 95%

One Factor Anova: SRS with Demographic Variables

One Factor ANOVA X₁: Student aspiration Y₁: SRS

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
Between groups: 3		4037.75	1345.92	124.766
Within groups: 856		46625.683	54.342	p = .0001
Total: 861		50663.433		

Model II estimate of between component variance = 430.528

One Factor ANOVA X₁: Student aspiration Y₁: SRS

Group	Count	Mean	Std. Dev.	Std. Error
A-quit h.s./job	15	39.4	8.7	2.246
B-h.s./job	83	41.337	6.586	.723
C-h.s./vocational	288	43.892	7.405	.436
D-h.s./university	476	47.16	7.437	.341

One Factor ANOVA X₁: Student aspiration Y₁: SRS

Comparison:	Mean Diff.	Fisher PLSD:	Scheffe F-test	Dunnnett t:
A-quit h.s. vs B-h.s./job	-1.937	4.06	292	.937
A-quit h.s. vs C-h.s./voc	-4.492	3.832*	1.765	2.301
A-quit h.s. vs D-h.s./u	-7.76	3.795*	5.371*	4.014
B-h.s./job vs C-h.s./voc	-2.555	1.603*	2.58	2.782
B-h.s./job vs D-h.s./univ	-5.822	1.721*	14.696*	6.64

* Significant at 95%

One Factor Anova: SRS with Demographic Variables

One Factor ANOVA X_1 : Student aspiration Y_1 : SRS

Comparison	Mean Diff.	Fisher P-adj	Scheffe F-test	Dunn-Sidak
One vs Two	11.75	0.0001	11.75	0.0001

* Significant at 95%

Simple Regression, SRS with Demographic Variables

Simple Regression X₁: SRS Y₁: Gender

DF	R	R-squared	Adj. R-squared	Std. Error
1	.375	.141	.14	.464

Analysis of Variance Table

Source	DF	Sum of Squares	Mean Square	F-test
Regression	1	30.373	30.373	11.41152
Error	28	235.153	.84	p = .0011
TOTAL	29	265.526		

No Residual Statistics Computed

Simple Regression X₁: SRS Y₁: Gender

Beta Coefficient Table

Parameter	Value	Std. Err	Std. Value	t-Value	Probability
INTERCEPT	.38				
SLOPE	.024	.002	.375	11.881	.0001

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN Y	1.46	1.522	1.465	1.517
SLOPE	.02	.029	.021	.028

Simple Regression, SRS with Demographic Variables

Simple Regression X1: SRS Y2: Age

DF	R	R-squared	Adj R-squared	Std. Error
861	.121	.015	.014	1.173

Analysis of Variance Table				
Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	16.654	16.654	12.556
RESIDUAL	861	1114.079	1.295	p = .0004
TOTAL	861	1130.733		

No Residual Statistics Computed

Simple Regression X1: SRS Y2: Age

Beta Coefficient Table

Parameter	Value	Std. Error	Std. Value	t-Value	Probability
INTERCEPT	3.681				
SLOPE	-.018	.005	-.121	3.536	.0004

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	2.782	2.935	2.795	2.922
SLOPE	-.028	-.008	-.026	-.01

Simple Regression: SRS with Demographic Variables

Simple Regression X₁: SRS Y₃: School

DF	R	R-squared	Adj. R-squared	Std. Error
196	.088	.008	.007	1.732

Analysis of Variance Table

Source	DF	Sum of Squares	Mean Square	F-test
REGRESSION	1	20.319	20.319	6.776
RESIDUAL	196	2973.78	15.177	p = .0094
TOTAL	197	2994.10		

No Residual Statistics Computed

Simple Regression X₁: SRS Y₃: School

Beta Coefficient Table

Parameter	Value	Std. Error	Std. Value	t-Value	Probability
INTERCEPT	3.033				
SLOPE	.02	.008	.088	2.603	.0094

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.526	4.058	3.845	4.039
SLOPE	.005	.035	.007	.033

Simple Regression, SRS with Demographic Variables

Simple Regression X₁: SRS Y₄: Mother's Ed.

DF	R	R-squared	Adj. R-squared	Std. Error
361	.075	.006	.005	.146

Analysis of Variance Table

Source	DF	Sum of Squares	Mean Square	F-test
REGRESSION	1	10.44	10.44	4.697
RESIDUAL	360	1872.817	5.172	p = .0272
TOTAL	361	1883.257		

No Residual Statistics Computed

Simple Regression X₁: SRS Y₄: Mother's Ed.

Beta Coefficient Table

Parameter	Value	Std. Err.	Std. Value	t-Value	Probability
INTERCEPT	3.192				
SLOPE	.014	.006	.075	2.213	.0272

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.746	3.941	3.761	3.925
SLOPE	.002	.027	.004	.025

Simple Regression, SRS with Demographic Variables

Simple Regression X_1 : SRS Y_5 : Father's Ed.

DF	S	R-squared	Adj. R-squared	Std. Error
861	.136	.019	.017	.1724

Analysis of Variance Table				
Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	.48415	.48415	16.296
RESIDUAL	860	2554.749	2.971	p = .0001
TOTAL	861	2603.165		

No Residual Statistics Computed

Simple Regression X_1 : SRS Y_5 : Father's Ed.

Beta Coefficient Table

Parameter	Value	Std. Error	Std. Value	t-Value	Probability
INTERCEPT	2.117				
SLOPE	.031	.008	.136	4.037	.0001

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	3.404	3.635	3.423	3.616
SLOPE	.016	.046	.018	.044

Simple Regression, SRS with Demographic Variables

Simple Regression X₁: SRS Y₆: Student aspiration

SS	R	R-squared	Adj. R-squared	Std. Error
361	.281	.079	.078	.737

Analysis of Variance Table				
Source	DF	Sum of Squares	Mean Square	F-test
REGRESSION	1	36.767	36.767	73.642
RESIDUAL	860	466.136	.499	p = .0001
TOTAL	861	466.136		

No Residual Statistics Computed

Simple Regression X₁: SRS Y₆: Student aspiration

Beta Coefficient Table

Parameter	Value	Std. Err.	Std. Value	t-value	Probability
INTERCEPT	2.199				
SLOPE	.027	.003	.281	8.561	.0001

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X ₁)	3.374	3.468	3.361	3.461
SLOPE	.021	.033	.022	.032

Table 14

Simple Regression, SRS with JWS, ABS, VS

Simple Regression X₁: SRS Y₁: JWS

DF	R	R-squared	Adj R-squared	Std Error
36	.083	.007	.006	18.983

Analysis of Variance Table				
Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	455.502	455.502	18.016
RESIDUAL	35	8940.145	255.433	p = .0144
TOTAL	36	9395.647		

No Residual Statistics Computed

Simple Regression X₁: SRS Y₁: JWS

Beta Coefficient Table

Parameter	Value	Std. Err.	Std. Value	t-Value	Probability
INTERCEPT	95.473				
SLOPE	.098	.04	.083	2.453	.0144

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	99.314	100.515	99.41	100.418
SLOPE	.02	.176	.032	.164

Simple Regression, SRS with UWS, ABS, VS

Simple Regression X1: SRS Y2: ASB

DF	R	R-squared	Adj R-squared	Std. Error
961	.562	.316	.316	16.676

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	17522.633	17522.633	397.661
RESIDUAL	960	37876.519	44.142	p = .0001
TOTAL	961	55399.152		

No Residual Statistics Computed

Simple Regression X1: SRS Y2: ASB

Beta Coefficient Table

Parameter	Value	Std. Err.	Std. Value	t-Value	Probability
INTERCEPT	16.561				
SLOPE	.568	.029	.562	19.946	.0001

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	42.801	43.688	42.673	43.617
SLOPE	.53	.646	.54	.637

Simple Regression, SRS with UWS, ABS, VS

Simple Regression X₁: SRS Y₃: VS

DF	R	R-squared	Adj R-squared	Std Error
861	.469	.22	.219	117.889

Analysis of Variance Table				
Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	77698.904	77698.904	242.785
RESIDUAL	860	275227.533	320.032	p = .0001
TOTAL	861	352926.437		

No Residual Statistics Computed

Simple Regression X₁: SRS Y₃: VS

Beta Coefficient Table

Parameter	Value	Std. Err.	Std. Value	t-Value	Probability
INTERCEPT	143.135				
SLOPE	-1.236	.079	-.469	15.582	.0001

Confidence Intervals Table

Parameter	95% Lower	95% Upper	90% Lower	90% Upper
MEAN (X,Y)	85.749	88.142	85.942	87.949
SLOPE	-1.394	-1.082	-1.369	-1.106

Table 15

Stepwise Regression, SRS with All Variables

Stepwise Regression Y₁:SRS 9 X variables

Summary Information

F to Enter	.4
F to Remove	3.996
Number of Steps	5
Variables Entered	6
Variables Forced	32767.3

No Residual Statistics Computed

Stepwise Regression Y₁:SRS 9 X variables

STEP NO. 1 VARIABLE ENTERED: X₉: ASB

R:	R-squared:	Adj. R-squared:	Std. Error:
.562	.316	.316	6.346

Analysis of Variance Table

Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	1	16024.87	16024.87	397.862
RESIDUAL	860	34638.593	40.277	
TOTAL	861	50663.463		

STEP NO. 1 Stepwise Regression Y₁:SRS 9 X variables

Variables in Equation

Parameter	Value	Std. Err.	Std. Value	F to Remove
INTERCEPT	22.114			
ASB	.538	.027	2.62	397.862

Variables Not in Equation

Parameter	Par. Corr.	F to Enter
Gender	.186	30.613
Age	-.078	5.326
School	.138	16.721
Mother's Ed.	.018	.267
Father's Ed.	.024	7.651

Stepwise Regression: SRS with All Variables

STEP NO. 1 Stepwise Regression Y₁:SRS 9 X variables

Variables Not in Equation		
Parameter:	Par. Corr.	F to Enter
Student aspirat	.215	41.535
W3	.155	21.25
VS	-.26	72.887

Stepwise Regression Y₁:SRS 9 X variables

STEP NO. 2 VARIABLE ENTERED: X₈: VS

R.	R-squared.	Adj. R-squared	Std. Error.
.608	.37	.368	6.097

Analysis of Variance Table				
Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	2	18734.092	9367.046	252.003
RESIDUAL	859	31929.37	37.17	
TOTAL	861	50663.463		

STEP NO. 2 Stepwise Regression Y₁:SRS 9 X variables

Variables in Equation				
Parameter:	Value:	Std. Err.	Std. Value	F to Remove
INTERCEPT	35.87			
VS	-.099	.012	-.262	72.887
ASB	.42	.029	.439	203.932

Variables Not in Equation		
Parameter:	Par. Corr.	F to Enter
Gender	.129	14.465
Age	-.083	5.92
School	.126	13.758
Mother's Ed	.024	.497

Stepwise Regression, SRS with All Variables

STEP NO. 2 Stepwise Regression Y_1 :SRS 9 X variables

Parameter	variables Not in Equation	
	Par. Corr.	F to Enter
Father's Ed	.093	7.415
Student aspirat	.202	36.319
VS	.162	23.096

Stepwise Regression Y_1 :SRS 9 X variables

STEP NO. 3 VARIABLE ENTERED: X_6 : Student aspiration

R.	R-squared.	Adj. R-squared	Std. Error.
.629	.395	.393	5.975

Analysis of Variance Table				
Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	3	20030.746	6676.915	187.016
RESIDUAL	858	30632.717	35.702	
TOTAL	861	50663.463		

STEP NO. 3 Stepwise Regression Y_1 :SRS 9 X variables

Variables in Equation				
Parameter	Value	Std. Err.	Std. Value	F to Remove
INTERCEPT	30.574			
Student aspirat..	1.704	.283	1.53	36.319
VS	-.094	.011	-2.48	67.454
ASB	.396	.029	4.14	186.193

Variables Not in Equation		
Parameter	Par. Corr.	F to Enter.
Gender	.136	16.077
Age	-.033	9.48
School	.125	13.663

Stepwise Regression: SRS with All Variables

STEP NO. 3 Stepwise Regression Y₁:SRS 9 X variables

Variables Not in Equation		
Parameter	Par. Corr.	F to Enter
Mother's Ed	-.03	.779
Father's Ed	.037	1.126
JWS	.162	23.148

Stepwise Regression Y₁:SRS 9 X variables

STEP NO. 4 VARIABLE ENTERED: X₇: JWS

R	R-squared:	Adj. R-squared:	Std. Error:
.641	.411	.409	5.899

Analysis of Variance Table				
Source	DF	Sum Squares	Mean Square	F-test
REGRESSION	4	20836.4	5209.1	149.669
RESIDUAL	857	29827.062	34.804	
TOTAL	861	50663.463		

STEP NO. 4 Stepwise Regression Y₁:SRS 9 X variables

Variables in Equation				
Parameter:	Value	Std. Err.	Std. Value	F to Remove
INTERCEPT	19.457			
Student aspirat..	1.683	.279	161	36.354
JWS	.108	.022	127	23.148
VS	-.094	.011	-2.48	69.282
A38	.406	.029	4.25	199.652

Variables Not in Equation		
Parameter	Par. Corr.	F to Enter
Gender	.129	14.417
Age	-.031	.812

Stepwise Regression, SRS with All variables

STEP NO. 4 Stepwise Regression Y_1 :SRS 9 X variables

Variables Not in Equation		
Parameter	Par. Corr.	F to Enter
School	.113	10.996
Mother's Ed	-.084	1.003
Father's Ed	.137	1.144

Stepwise Regression Y_1 :SRS 9 X variables

STEP NO. 5 VARIABLE ENTERED: X_1 : Gender

R.	R-squared.	Adj. R-squared.	Std. Error.
.649	.421	.418	5.854

Analysis of Variance Table				
Source	DF	Sum Squares	Mean Square	F-test:
REGRESSION	5	21330.437	4266.087	124.493
RESIDUAL	856	29333.026	34.268	
TOTAL	861	50663.463		

STEP NO. 5 Stepwise Regression Y_1 :SRS 9 X variables

Variables in Equation				
Parameter	Value	Std. Err.	Std. Value.	F to Remove
INTERCEPT	17.844			
Gender	1.719	.453	1.12	14.417
Student aspirat	1.705	.277	1.64	37.879
WJS	.103	.022	1.21	21.467
VS	-.084	.012	-.221	52.78
AGE	.373	.03	3.9	155.62

Variables Not in Equation		
Parameter	Par. Corr.	F to Enter
Age	-.033	.955

Stepwise Regression, SRS with All Variables

STEP NO. 5 Stepwise Regression Y₁:SRS 9 X variables

Parameter	Variables Not in Equation	
	Par. Corr.	F to Enter
School	.112	10.83
Mother's Ed	-.023	.434
Father's Ed	.052	2.327

Stepwise Regression Y₁:SRS 9 X variables

(Last Step) STEP NO. 6 VARIABLE ENTERED: X₃: School

R.	R-squared:	Adj. R-squared:	Std. Error:
654	.428	.424	5.821

Analysis of Variance Table				
Source	DF	Sum Squares:	Mean Square:	F-test:
REGRESSION	6	21697.327	3616.221	106.741
RESIDUAL	855	28966.136	33.879	
TOTAL	861	50663.463		

STEP NO. 6 Stepwise Regression Y₁:SRS 9 X variables

Parameter:	Value:	Variables in Equation		
		Std. Err.	Std. Value	F to Remove
INTERCEPT	16.606			
Gender	1.699	.45	.111	14.246
School	.378	.115	.086	10.83
Student aspirat..	1.693	.276	.162	37.775
JWS	.097	.022	.113	18.886
VS	-.082	.011	-.215	50.464
ASB	.379	.03	.396	162.225

Stepwise Regression, SRS with All Variables
STEP NO. 6 Stepwise Regression Y_1 :SRS 9 X variables

Parameter	Variables Not in Equation	
	Partial Corr	F to Enter
Age	-.071	2.01
Mother's Ed	-.015	2.05
Father's Ed	-.062	3.283