

Teaching At-Risk High School Students Communication Competence Skills through Facework and Improved Self-Monitoring

Kevin T. Jones

Department of Communication, Journalism, and Cinematic Arts
George Fox University
414 North Meridian Avenue
Newberg, Oregon 97132, USA.

Jeff Birdsell

Department of Communication, Journalism, and Cinematic Arts
George Fox University
414 North Meridian Avenue
Newberg, Oregon 97132, USA.

Abstract

The relationship between communication apprehension and at-risk students has been given a fair amount of attention in academic research. While it has been determined that at-risk students tend to have higher degrees of communication apprehension,¹ little research has been done to explore what other communication skills deficiencies at-risk students might possess. Two studies were conducted to assess a group of 29 at-risk student's communication abilities. In the first study, we compare the students' competence and communication apprehension to national averages and discover that the students find themselves above average in competence but also more apprehensive about communicating. The second study investigated the efficacy of a communication curriculum centered on self-monitoring skills in order to address the specific deficiencies in communication apprehension. Post-test data indicates that students increased their self-monitoring skills.

Key Words: At-risk students, communication apprehension, communication competence, PRCA-24, Self-Monitor, Facework.

1. Introduction

In 2010, the Common Cores State Standards² were introduced in the United States, which included English Language Arts Standards in Speaking and Listening. These standards in speaking and listening centered on comprehension, collaboration, and presentation of knowledge and ideas³ in an attempt to address the long known fact (among communication educators) that high school graduates are grossly underprepared in communication skills. Weintraub (2014) illustrated this concern by noting, "45 percent of new college students said they had gaps in their oral communication skills – more than any other area – and 12 percent said the gaps were large" (p. 14). These disconcerting numbers identify the gap among college bound students but fail to represent a potentially even wider gap in non-college bound students and/or the under-represented group identified as "at-risk" students. This study will examine the communication skill deficiencies among high school students defined as at-risk and explore curriculum implemented to address the perceived deficiencies.

2. Review of Literature

¹ Chesebro, J. W., McCroskey, J.C., Atwater, D.F., Bahrenfuss, R. M., Cawelti, G., Gaudino, J.L., & Hodges, J. (1992).

² © Copyright 2010. National Governors Association Center for Best Practices and Council of Chief State School Officers. All rights reserved.

³ www.corestandards.org/assess/CCSSI.ELASStandards.pdf.

2.1 At-Risk Students

Students are typically categorized in school as overachievers, the average, and the at-risk (Dupree & Morote, 2011). The over achievers are typically self-sustaining, receive focus and attention from teachers, and will more than likely have no issues getting accepted into college. The average students are just that: average. They will more than likely graduate high school but their futures are uncertain. The at-risk students are those who have a higher dropout rate in high school and are less likely to go to college. At-risk students struggle in school whether they try and fail to understand or just do not care to even try. Typically, at-risk students have troubles in their home life and these troubles detract from their ability to learn in school (Dupree & Morote, 2011).

Lippert, Titsworth, and Hunt (2005) reinforced the concern that “at-risk” students are “in danger of academic failure or exclusion from school . . . for a variety of interrelated reasons” (p. 1). Attempting to identify and address potential interrelated reasons can play a key role in moving an at-risk student out of the at-risk category. Hecker, Young, and Caldrella (2014) explained that, “Catching behavioral problems early and taking the time for ‘appropriate interventions’ can be critical in preventing both behavioral and academic difficulties” (p. 21).

Among the problems that can be targeted early are communication skills. Communication skills as a topic of concern for at-risk students was specifically highlighted by McWhirter, McWhirter, McWhirter, and McWhirter (1994) when the author’s argued that low achieving or at-risk students needed to develop five “C’s” of competence to help them succeed. One of the identified “C’s” was “communication with others” (p. 190).

2.2 Communication Apprehension

McCroskey (1977) defined communication apprehension as “an individual’s level of fear or anxiety associated with either real or anticipated communication with another person or persons” (p. 241). People who are fearful of communicating usually tend to keep quiet or try to avoid the situation entirely. While it is common to associate communication apprehension with public speaking and/or “stage fright” (Clevenger 1959), communication apprehension applies to a broad range of areas involving communication. McCroskey and Richmond (1982) echoed this sentiment by identifying that an individual can experience communication apprehension in any situation, not just public speaking.

Communication apprehension and learning challenges have long been connected. Roby (2009) noted that individuals tended to have more communication apprehension when they were not taught adequate communication skills. In a meta-analytic review of communication apprehension, Allen and Bourhis (1996) concluded that there was a negative relationship between the level of communication apprehension and communication skills. McCroskey (1976) made this connection when he noted, “Communication apprehensives learn less than low communication apprehensives throughout their elementary and secondary education” (p. 5). Chesebro, McCroskey, Atwater, Bahrenfuss, Cawelti, Gaudino, and Hodges (1992) found that at-risk middle school students had more communication apprehension when speaking in groups and to strangers when compared to national norms. Negative relationships between communication skills and academic success can clearly lead to negative consequences for students.

Improving communication skills can improve a student’s academic classification. Rosenfeld, Grant and McCroskey (1995) examined the inverse of Chesebro et al.’s study by looking at communication apprehension among talented or “gifted” students. The results of the study argued that talented/gifted students had very low apprehension when speaking in groups or with strangers when compared to national norms. Rosenfeld, Richman, and Bowen (1998) expanded upon earlier studies by looking at the role of supportive communication in at-risk middle school students. The authors’ discovered that at-risk students with poor communication skills received poor or very low supportive communication at home. Rosenfeld and Richman (1999) tested the same hypothesis on at-risk high school students and discovered similar results.

2.3 Communication and Academic Success

Communication skills are closely related to both academic and social success. Rozkan (2014) examined the relationship between communication skills, problem solving skills, and self-efficacy perception in adolescents and concluded that communication skills and interpersonal problem-solving skills were significantly correlated to social self-efficacy. Communication skills and interpersonal problem solving skills were also found to be important predictors of social self-efficacy.

Communication competence can be increased and apprehension reduced through curriculum interventions (Rubin, Rubin & Jordan, 1997). Communication skills are not innate and must be taught. Richmond, Wrench, and McCroskey (2013) noted

Most of us are born with this potential to learn communication; whether or not we acquire effective communication skills is up to our teachers and to us. Through careful instruction, personal observation, experience, and practice an individual can learn many of the communication skills needed to be a better communicator” (p. 15).

Many high schools struggle to introduce communication education for even the highest achieving students and when at-risk students appear to not be on track to graduate, it is likely that communication skills are underdeveloped in favor of more traditional subjects. At the high school where the research for this study was conducted, there were no required public speaking class or “formal” communication-training course of any kind. Students gave presentations in regular classes but received very little instruction from a communication degree holding instructor.

Since effective communication skills must be taught, at-risk students may have lacked good communication skills role models somewhere along the way or grew up in an environment where the importance of communication skills was de-emphasized. This leads us to our hypotheses:

H1: At-risk students will exhibit less than average communication competence.

H2: At-risk students will exhibit greater than average communication apprehension.

3. Method (Study 1)

3.1 Participants

A total of 29 students were tested at a small public high school in the Pacific Northwest. All 29 students were first year high school students and were identified as at-risk students based upon middle school performances. To qualify for this at-risk group, each student had less than 80% attendance (meaning they were absent from school for more than 20% of the time or more than 18 days per semester during middle school), had one or more failing grades in a core content class in middle school, and scored below the benchmark on the standardized State test. All 29 students were placed in a specific freshman inquiry class with the intent of trying to keep them from dropping out of school. In the test group, 15 students were male and 14 were female. Additionally, 20 students were Caucasian, seven were Hispanic, and one was African American. The average age for the test group was 14.3 years. Collection of data was a blind study to ensure student confidentiality (Babbie, 2013). Authors’ university IRB approval was obtained to conduct the study. The primary author worked with the principal of the high school and the lead teacher of the class for approval to test the students. The lead teacher for the high school class often administered many of the tests so the data collection was seen as a normal class procedure. Students were asked to respond to the test questions as a part of the regular class curriculum but were never told what the questionnaire was testing or what it was about. Three tests were administered to the group. Each student was tested for communication competence, communication apprehension and self-monitoring skills.

3.2 Communication Competence

Communication competence was measured by use of the Communication Competence Test (CCT) (Wiemann, 1977). The CCT is a 36-item, Likert-type questionnaire that yields scores ranging from 36 to 180.⁴ CCT questions were general enough in nature that they were not anticipated to pose interpretation problems for high school students.

3.3 Communication Apprehension

Communication apprehension was measured by use of the Personal Report of Communication Apprehension (PRCA-24; McCroskey, 1982). The PRCA is a 24-item Likert-type questionnaire that yields score ranging from 24-120.⁵ The PRCA-24 was selected because it was the measurement tool used in several previous studies and it is the most widely used measurement of communication apprehension (Levine & McCroskey, 1990).

⁴ The CCT requires respondents to state their level of agreement, using a scale of strongly disagree, disagree, neutral/undecided, agree, or strongly agree to 36 statements concerning their feelings about various situations such as “I adapt to changing situations” or “I am a good listener.” Higher scores indicate higher levels of communication competence. Wiemann’s CCT achieved a Chronbach’s alpha of .96

⁵ The PRCA-24 requires respondents to state their level of agreement, using a Likert-type response scale of strongly disagree, disagree, undecided, agree, or strongly agree, to 24 statements concerning their feelings about communication with other

4. Results⁶

4.1 Communication Competence

It was hypothesized that at-risk students would have lower than average communication confidence. This hypothesis was not supported. Instead, the students indicated significantly higher than average communication competence $t(28) = 24.96, p < .0001$. The average score for communication competence on the CCT is 108 while the mean average for the at-risk students was 133 (SD = 14.79).

4.2 Communication Apprehension

It was hypothesized that the at-risk students would have greater than average communication apprehension. This hypothesis was supported, $t(28) = 3.543, p < .005$. The national average for communication apprehension is 65.6 (McCroskey, Beatty, Kearney, & Plax, 1985) while the mean average for the at-risk students was 75.4 (SD = 14.97). The sub-scores are summarized in the table below

Subcategory	PRCA24 Comparison			
	<i>Interpersonal</i>	<i>Groups</i>	<i>Public Speaking</i>	<i>Meetings</i>
National Mean	14.2	15.4	19.3	16.4
Sample Mean	17.89	18.65	22.06	17.79
National Standard Deviation	4.2	4.8	5.1	4.8
Sample Standard Deviation	4.84	4.57	5.51	4.91
Significance	$p < .0001$	0.001	0.011	nonsignificant

At-risk students reported above average levels of communication competence but also greater communication apprehension. The students experienced higher than average communication apprehension in all four subcategories and significantly higher apprehension in interpersonal, group communication, and public speaking. They found themselves competent but had a great deal of apprehension especially in areas where a public speaking class would not really address their needs. The at-risk students needed to improve the communication skills that are not “taught”, primarily interpersonal skills and some group communication skills. Interpersonal and group settings, unlike meetings and public speaking, are less structured and tend to have fewer formal rules.

5. Study 2

5.1 Self-Monitor Skills

A key component to successful communication skills is the ability to engage in self-monitoring which is the ability to recognize and adapt to social cues in informal situations. A high self-monitoring individual is someone who, out of concern for social appropriateness, is particularly sensitive to the expression and self-presentation of others in social situations and uses these cues as guidelines for monitoring his/her own self-presentation (Snyder, 1974, p. 528).

The results from Study 1 suggest that the at-risk students claim greater than average competence but, paradoxically, experience greater than average apprehension. There is a gap between their abilities and their perceived abilities. Many students would sit in their chairs, heads down on the desks, talk without raising their hands, use of disconfirming language with peers was the norm, and many made sarcastic side comments. Their non-verbal communication conveyed a message that they did not care. Ironically, through one-on-one interaction with the primary author, it was discovered that many of the students did care but did not realize the message they were sending. When the class was given a survey and asked questions such as, “Who in the class would cheat on an exam?” one student received a unanimous “yes” from everyone in the class. The student declared that he had never cheated on a test in his life. When asked why he thought the class said he would, he replied, “I have no idea.” He then proceeded to lay his head on his desk, mumbling mean statements about his classmates, and refusing to participate in any further activities. He did not make the connection that his “presenting self” and his “perceived self” (Adler, Rosenfeld, & Proctor, 2013, page 78) were inconsistent. Continual encounters of this type led us to believe the students were possibly low self-monitors.

people. The statements are grouped in to four settings: (a) group (e.g., “I dislike participating in group discussions”); (b) meeting (e.g., generally, I am nervous when I have to participate in a meeting”); (c) dyadic (e.g., “Ordinarily I am very tense and nervous in conversations”); and (d) public (e.g., “Certain parts of my body feel very tense and rigid while giving a speech”). Higher raw scores indicate greater communication apprehension.

⁶ See Appendix A for Table of Results for all tests.

As a result of both quantitative and qualitative data analysis, we hypothesized that

H3: At-risk students will be poorer than average self-monitors.

and that

H4: Self-monitoring skills can be increased through communication education.

5.2. Method

Data was gathered from the same 29 students identified in Study 1. Their self-monitoring abilities were assessed and an intervention was designed to improve self-monitoring.

The self-monitor skills test is a 25-item Likert-type questionnaire that yields score ranging from 0-25. Scores in the range of 0-8 indicate a low self-monitor. Scores in the 9-16 range indicate a moderate self-monitor. Scores in the 17-25 range indicate a high self-monitor. A low or “non” self-monitoring person has little concern for the appropriateness of his/her presentation and expression, pays less attention to the expression of others, and monitors and controls his/her presentation to a lesser extent. His/her presentation and expression appear to be controlled from within by his/her experience rather than by situation and interpersonal specifications of appropriateness (Snyder p. 536). Snyder’s (1974) self-monitoring test was used to measure self-monitoring skills of the at-risk students.⁷ The self-monitoring scale was used because it is well respected and used in the psychology and communication disciplines and has a test-retest reliability of .83 and a Kuder-Richardson 20 reliability of .70. All statements on the test were read to the students and an interpretation of more sophisticated statements was provided when students did not understand what a statement meant.

5.2.1 Intervention design

Based on the student’s low self-monitoring scores, interviews were conducted with each student in an attempt to identify personable variables contributing to the low scores. The interviews included questions about self-perception, self-image and peer perception. It was determined from the interviews that a majority of the students had very little understanding of their facework (Goffman 1955). McBride and Toller (2011) noted that

Goffman suggested facework is the “positive social value a person effectively claims for himself ” (p. 212). Domenici and Littlejohn (2006) defined facework as “a set of coordinated practices in which communicators build, maintain, protect, or threaten personal dignity, honor, and respect” (pp. 10–11). Facework, then, can be identified as a collaborative and negotiated effort between interacting parties designed to create a particular image by an individual. The test scores in this study along with the personal interviews indicated that a majority of the at-risk students were unaware that their facework, or the way they were presenting themselves to others, directly effected how people perceived and evaluated them. There was a significant disconnect between the students “perceived self” and their “presenting self.”

In order to show this gap in the student’s perception process, each student was given a list of each classmates name and asked to provide a yes or no answer to a series of questions such as “would this person cheat on a test?” “Would this person lie to get out of trouble?” “Will this person graduate from high school?” The scores were then compiled and each student was given their scores – i.e. “Would this person cheat on a test” – 18 = yes, 11 = no. Students were then able to see what their classmates thought of them. Many students were very surprised to discover that their peers perception of them (presenting self) did not match their perception of themselves (perceived self). This disconnect opened the door to several lectures and discussions about why and how these disconnects might be taking place.

A series of lectures, activities, and instructional tools were developed which were designed to teach the class about facework, how facework effects perception, and how facework effects communication. The material included lessons on topic areas such as non-verbal communication, confirming verses disconfirming language, self-perception, and listening skills.

6. Results

It was hypothesized that the students would engage in less than average self-monitoring behavior. This hypothesis was supported. At-risk students were placed into “low”, “medium”, and “high” self-monitoring tertiles based on self-monitoring scores and compared to the expected ranges of Snyder’s (1974) self-monitoring scale.

⁷ Snyder’s self-monitoring test consists of twenty-five questions that require a “yes” or “no” answer. Questions explore areas such as “I find it hard to imitate the behavior of other people,” “In a group of people I am rarely the center of attention,” and “I am not particularly good at making other people like me.”

The distribution of the lower third is similar but students in the upper third are only slightly above the minimum national standard for counting as high self-monitors.

Subcategory	Self-monitoring		
	Low	Medium	High
National Range	0-8	9-16	17-25
Pretest Sample	0-9	10-12	14-19

Additionally, although relationships between the variables were not significant, the strength and direction of the relationships in the sample held when controlling for amount of self-monitoring behavior. We are confident that an intervention designed to improve self-monitoring behavior is beneficial even for those students in the sample who are better self-monitors.

It was hypothesized that self-monitoring behaviors would increase as a result of the intervention. This hypothesis was supported, $t(29) = 6.438$, $p < .0001$. The mean score for self-monitoring prior to the intervention was 11.31 ($SD = 3.58$) while the mean score after the intervention was 13.41 ($SD = 3.31$).

7. General Discussion

This study found a connection between development of facework skills and increased self-monitoring abilities. Increased attention to teaching communication skills should become a priority when dealing with at-risk students. A long-range study is needed to determine how many of the students in this study moved out of the at-risk category and graduated from high school. However, it is clear from the data collected in this study that at-risk students lack communication skills deemed valuable in everyday interactions (i.e. such as facework). At-risk students may benefit more from communication skills curriculum than traditional forms of instruction (i.e. math, writing, etc.). Since at-risk students have consistently poor communication skills, we contend that improving communication skills has the potential to move a student out of the at-risk category.

One of the reasons for being an at-risk student is underdeveloped communication skills. When this underdevelopment goes unrecognized by the students (which it was) and interventions are designed to improve public speaking skills instead of interpersonal skills, the at-risk students are unable to recognize and address the very communication deficiencies that lead them to be labeled “at risk” in the first place.

This study supported the argument by Hecker, Young, and Caldrella (2014) that, “Catching behavioral problems early and taking the time for ‘appropriate interventions’ can be critical in preventing both behavioral and academic difficulties” (p. 21). Identifying and addressing communication skills deficiencies in K-12 curriculum could potentially save many students from becoming at-risk students and dropping out of school. While many states do not offer primary or secondary level certification in communication, the Common Core State Standards has clearly identified communication skills as essential for K-12 students. This study supports this call and identified how one group of at-risk students benefited from communication skills instruction.

8. Limitations and suggestions for future research

Perhaps the biggest limitation for this study was the sample size. However, despite the sample size, the study produced significant findings when comparing the scores to national averages and pretest scores. Failure to collect post-test data for communication competence may be perceived as a limitation. Since pretest communication competence scores were so high, accurate competence self-reporting was suspicious and collection of accurate post-test data was deemed questionable.

Self-monitoring skills can be improved to address interpersonal and group communication deficiencies. Communication curriculum should be enhanced to include facework strategies, particularly for at-risk students who appear to struggle in environments where standards for conduct are more ambiguous. In the short term, the primary researcher has already noticed that several students began to sit up straight in their chairs, not lay their heads on their desks, sarcastic side comments were reduced, and much more confirming language was used to replace the disconfirming language that had been the norm. Several students showed a greater interest in their facework, trying to make sure that their presenting self was more consistent with a successful student. By the end of the semester, several students had improved grades and began talking about “when I graduate from high school some day...”

In the long-term, we would expect academic improvements, as students are better able to express themselves with teachers, counselors, and peers. Future research in this area should explore these improvements longitudinally, tracking students from the initial categorization of “at-risk” to graduation or the removal of the at-risk label.

References

- Adler, R. B., Rosenfeld, L. B., & Proctor II, R. F. (2013). *Interplay: The process of interpersonal communication*. New York, New York: Oxford University Press.
- Allen, M., & Bourhis, J. (1996). The relationship of communication apprehension to communication behavior: A meta-analysis. *Communication Quarterly*, 44, 214-226.
- Babbie, E. R. (2013). *The practice of social research*. Belmont, CA: Wadsworth, Cengage Learning.
- Chesebro, J. W., McCroskey, J.C., Atwater, D.F., Bahrenfuss, R. M., Cawelti, G., Gaudino, J.L., & Hodges, J. (1992). Communication apprehension and self-perceived communication competence of at-risk students. *Communication Education*, 41, 345-360.
- Clevenger, T. (1959). “A synthesis of experimental research in stage fright.” *Quarterly Journal of Speech*, 45, 124-145.
- Domenici, K., & Littlejohn, S. (2006). *Facework: Bridging theory and practice*. Thousand Oaks, CA: Sage.
- Dupree, J. J., & Morote, E. S. (2011). The connections between students’ self-motivation, their classification (typical learners, academic intervention services learners, and gifted), and gender in a standardized social studies test. *Online Submission*.
- Goffman, E. (1955). On facework: An analysis of ritual elements in social interaction. *Psychiatry*, 18, 213–231.
- Hecker, B. Young, E. L., & Caldrella, P. (2014). Teacher perspectives on behaviors of middle and junior high school students at risk for emotional and behavioral disorders. *American Secondary Education*, 42, 20-32.
- Levine, T. R., & McCroskey, J. C. (1990). Measuring trait communication apprehension: A test of rival measurement models of the PRCA-24. *Communication Monographs*, 57, 62-72.
- Lippert, L. R., Titsworth, B. S., & Hunt, S. K. (2005). The ecology of academic risk: Relationships between communication apprehension, verbal aggression, supportive communication, and students' academic risk status. *Communication Studies*, 56, 1-21.
- McBride, M. C., & Toller, P. (2011). Negotiation of face between bereaved parents and their social networks. *Southern Communication Journal*, 76, 210-229.
- McCroskey, J. C. (1976). The problems of communication apprehension in the classroom. *Florida Communication Journal*, 4(2), 1-12.
- McCroskey, J. C. (1977). *Quiet children and the classroom teacher*. Annandale, VA: Speech Communication Association.
- McCroskey, J. C. (1982). *An introduction to rhetorical communication*. 4th edition. Englewood Cliff, New Jersey: Prentice-Hall.
- McCroskey, J. C., Beatty, M. J., Kearney, P., & Plax, T. G. (1985). The content validity of the PRCA-24 as a measure of communication apprehension across communication contexts. *Communication Quarterly*, 33, 165-173.
- McCroskey, J. C., & Richmond, V. P. (1982). Communication apprehension and shyness: Conceptual and operational distinctions. *Central States Speech Journal*, 33, 458-468.
- McWhirter, J. J., McWhirter, B. T., McWhirter, A. M., & McWhirter, E. H. (1994). High- and low-risk characteristics of youth: The five C’s of competency. *Elementary School Guidance and Counseling*, 28, 188-196.
- Richmond, V. P., Wrench, J. S., & McCroskey, J. C. (2013). *Communication apprehension, avoidance, and effectiveness*. Boston, MA: Pearson.
- Roby, D. E. (2009). Teacher leadership skills: An analysis of communication apprehension. *Education*, 129, 608-614.
- Rosenfeld, L. B., Grant, C. H., III, & McCroskey, J. C. (1995). Communication apprehension and self-perceived communication competence of academically gifted students. *Communication Education*, 44, 79-86.
- Rosenfeld, L. B., Richman, J. M., & Bowen, G. L. (1998). Supportive communication and school outcomes for academically “at-risk” and other low-income middle school students. *Communication Education*, 47, 309-325.

- Rosenfeld, L. B., & Richman, J. M. (1999). Supportive communication and school outcomes, part II: Academically “at-risk” low income high school students. *Communication Education, 48*, 294-307.
- Rozkan, A. (2013). The effect of communication skills and interpersonal problem solving skills on social self-efficacy. *Educational Sciences: Theory & Practice, 13*, 739-745.
- Rubin, R. B., Rubin, A. M., & Jordan, F. F. (1997). Effects of instruction on communication apprehension and communication competence. *Communication Education, 46*, 104-114.
- Snyder, M. (1974). Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology, 30*, 526-537.
- Weintraub, S. C. (2014, November). Why communication teachers should care about the common core. *SPECTRA, 50*, 12-17.
- Wiemann, J. M. (1977). Explication and test of a model of communication competence. *Human Communication Research, 3*, 195-213.

Appendix A: Test Results

Subject	Sex	Comm Competency	PRCA24 Groups	PRCA24 Meetings	PRCA24 Inter-Personal	PRCA24 Public Speaking	PRCA24 Total	Self-Monitor Pre	Self-Monitor Post
1	F	123	18	20	19	22	79	11	13
2	F	142	30	29	26	30	115	7	12
3	M	139	19	18	12	30	79	9	9
4	F	136	20	18	18	19	75	8	13
5	F	151	18	24	24	29	95	17	18
6	M	113	11	12	12	19	54	14	18
7	M	148	13	12	11	13	49	9	15
8	M	121	14	11	12	14	51	11	11
9	F	136	14	14	15	14	57	17	18
10	M	151	19	12	11	12	54	12	12
11	F	124	20	16	23	18	77	7	10
12	F	121	23	19	20	28	90	13	14
13	F	117	22	24	20	24	90	9	12
14	M	110	25	22	24	20	91	7	9
15	M	149	13	15	16	25	69	11	14
16	F	133	18	15	15	19	67	16	19
17	F	136	17	17	16	19	69	10	15
18	M	121	15	17	18	18	68	11	12
19	F	135	17	21	12	30	80	8	10
20	M	156	14	16	12	16	58	8	8
21	M	155	15	6	14	30	65	7	9
22	M	148	18	18	19	24	79	18	18
23	M	124	22	19	27	22	90	16	17
24	M	156	22	19	20	23	84	10	13
25	M	113	28	26	26	28	108	10	13
26	F	117	14	16	18	19	67	9	12
27	F	110	18	16	19	24	77	10	10
28	F	136	24	23	22	26	95	15	17
29	F	135	20	21	18	25	84	18	18
Mean		132.96	18.65	17.79	17.89	22.06	75.44	11.31	13.41
National Norms		108	15.4	16.4	14.2	19.3	65.6	0-8/9-16	17-25