

**THE EFFECTIVENESS OF  
FINANCIAL LITERACY SEMINARS**

**A PILOT STUDY**

**2006**

**The Women's Resource of Greater Houston**

and

**Rice University**



**The Effectiveness of Financial Literacy Seminars  
A Pilot Study  
2006**

Commissioned by The Women's Resource of Greater Houston

Underwritten by  
Karen Ostrum George  
and  
The Women's Resource of Greater Houston Endowment Fund

Michael Emerson, PhD

Jill Foote, PhD, CFA

2005-2006 Research Committee

Reuben Rosof, Chair

Shea Adkins

Allison Wright Brooks

Marion Gammill

Karen Ostrum George

Patrick St. A. Lyn

Angela Lutz

Crissy Rivera

Jennifer Sims Vu

Robbie Blanton Lowrey  
Executive Director

---

## OVERVIEW / INTRODUCTION

---

Managing one's finances is central to living in modern society. One needs to know how to save money, when and when not to use credit, how to pay bills, how to determine which loan terms are better than others, and so much more. Despite being a core component of modern life, financial literacy is not systematically taught. Our nation's primary and secondary schools rarely offer such seminars, and it is uncommon for families to teach their children such skills.

According to Bikera Stevenson, director of Education Based Housing at Timberridge in Houston:

*“People of my generation and younger are eager to learn how to be financially secure. We haven't been prepared to deal with finances, budgeting, or saving, and therefore need courses that can teach us these skills.”*

To help fill this vital need, The Women's Resource of Greater Houston (TWR) offers free Financial Literacy seminars to area residents. These seminars are intended to teach participants basic, essential financial principles, and to provide practical financial knowledge such as how to budget and save, how compound interest works, and how to wisely use credit cards.

These seminars – five different ones in all – are taught by volunteer instructors at local area agency organizations like the NAACP, Project Rowhouses, Mission of Yahweh, and Volunteers of America. These agencies, with the help of TWR, arrange for the time and place of the seminars, recruit participants, and provide classrooms for the 1 to 2 hours of seminar instruction. The volunteer instructors typically are highly educated financial professionals, who are trained, in advance of teaching seminars, by TWR trainers.

Do these seminars work? In particular, do participants who take these seminars know more about financial matters after taking the seminar than they did before taking the seminar? Ultimately, are participants able to apply the knowledge gained from the seminars to improve their financial management and their financial health?

To begin addressing these questions, TWR partnered with Rice University's Center on Race, Religion, and Urban Life (CORRUL) and the Jesse H. Jones Graduate School of Management to conduct a pilot study. This pilot study had three main objectives: to provide a preliminary indicator of the effectiveness of TWR's financial literacy seminars, to begin the process of developing methods for studying such seminars, and to provide recommendations for improvement.

The research was directed by Dr. Michael Emerson and Dr. Jill Foote. Dr. Elizabeth Long provided consulting services. The actual research was conducted by Rice undergraduate students who took Emerson's Research Methods course in the spring of 2006.

The methods used, test results, and overall conclusions drawn from this pilot study are detailed herein, along with our recommendations for improving seminar effectiveness and a discussion on future studies TWR may wish to sponsor.

**Michael Emerson, PhD**  
Director, CORRUL  
Professor of Sociology  
Rice University

**Jill Foote, PhD, CFA**  
Director, M.A. Wright Fund  
Lecturer of Management  
Rice University

**Elizabeth Long, PhD**  
Chair, Department of Sociology  
Professor of Sociology  
Rice University

---

## STUDY METHODOLOGY

---

In order to understand the learning impact that participants received from the TWR Financial Literacy seminars, the Rice University student researchers designed a series of seminar tests. As discussed in more detail below, the goal of these tests were to measure seminar participants' knowledge acquisition, retention, and application. Due to time constraints on this pilot coupled with unexpected difficulties, only an assessment of knowledge acquisition was made.

The central difficulty encountered in conducting this pilot study was the high frequency of class cancellations. Classes would be selected for testing, but then not be held. As a result, the Rice student researchers added a cancellation study to this pilot. This examination was aimed at understanding why classes were cancelled and potentially identifying any patterns in class cancellations.

The nature of this pilot's design, with student researchers conducting on-site seminar testing, also resulted in the collection of ample qualitative data and observations. This qualitative analysis was supplemented with information learned through discussions and interaction between the pilot's instructors and student researchers with TWR personnel, Financial Literacy seminar instructors, and agency personnel.

### **Seminar Testing**

To measure what seminar participants knew about the seminar material immediately before and immediately after taking the seminar, pre-seminar and post-seminar tests were designed. For each seminar tested, an identical 10-question, multiple choice 'knowledge' survey was given to each student before and after the seminar. For example, students taking Money Matters were given the same 10-question survey on Money Matters before the start of the seminar and immediately afterward. This pre- and post-seminar test design was intended to measure knowledge acquisition (What did the students learn from the seminar?).

The student researchers hoped to conduct a third 'follow-up' test (or survey) looking again at seminar participants' knowledge but at later points after seminar completion, such one and six months later. The goal of such follow-up was to measure knowledge retention (Did the students remember what they had learned in the seminar?) and knowledge application (Were the students able to use any of the knowledge gained in the seminar to improve their financial situation?) Due to time constraints and other difficulties this follow-up testing did not occur.

From March 11 to June 15, 2006, pre-seminar and post-seminar testing was administered to 56 seminar participants in six different classes. Four of the five financial literacy seminars offered by TWR were tested (Money Matters, Pay Yourself First, Charge it Right, and Borrowing Basics) at four agencies (Covenant House, Dress for Success, Mission of Yahweh, and Project Rowhouses).

### **Cancellation Analysis**

The Rice student researchers elected to conduct their cancellation analysis using the latest full year of 2005, during which 154 classes at 22 agencies were scheduled. The rationale for each cancelled class was analyzed, trends in high and low cancellations were examined, and ultimately, high cancellation agencies were contacted and asked a series of questions. These questions were aimed at ascertaining what improvements could be recommended to decrease seminar cancellation frequency.

**Limitations to this study**

When examining the results of this pilot study, certain limitations should be taken into consideration. First, by nature of being a pilot, this study was limited in its time frame and scope, leading to a relatively small number of seminars and seminar participants being involved. This study was designed and researched by Rice University undergraduate students who had to travel to diverse agency locations to conduct the research making the logistics difficult. These limitations were made worse by the relatively large number of unexpected seminar cancellations. The pilot's use of standardized, multiple choice pre- and post-seminar test questions may lead to inaccurate results as students may be able to 'guess correctly' without understanding and may 'remember' the pre-seminar questions for use in post-seminar testing. Finally, this pilot's conclusions only pertain to short-term, immediately after the seminar, knowledge acquisition. Long-term assessments of knowledge retention or application were not performed.

---

## RESULTS – SEMINAR TESTING

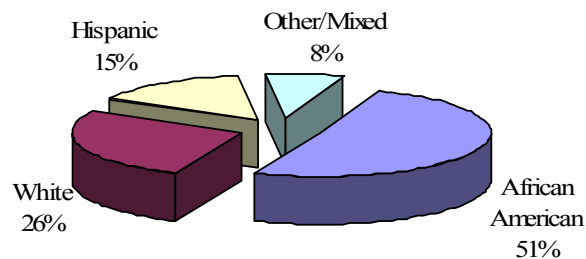
---

Rice University student researchers administered pre-seminar and post-seminar tests to 56 students participating in four TWR Financial Literacy seminars taught from March 11 to June 15, 2006. Four of the five financial literacy seminars offered by TWR were tested (Money Matters, Pay Yourself First, Charge it Right, and Borrowing Basics) at four agencies (Covenant House, Dress for Success, Mission of Yahweh, and Project Rowhouses). See Appendix A for an example of the pre- / post-seminar test.

### Seminar Participant Demographics

- **Gender / Ethnicity**

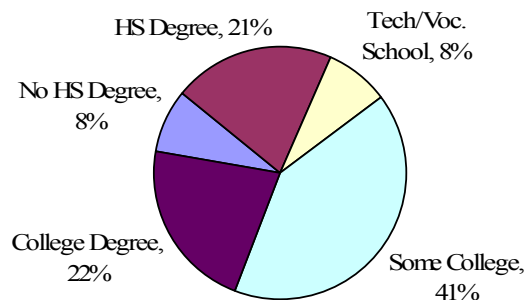
Approximately 90% of the seminar participants were female. As shown in Figure 1, about half of the students described themselves as African American, with a mix of other ethnic groups comprising the other half.



**Figure 1: Ethnic Composition of Seminar Participants**

- **Education**

Level of education reported by seminar participants was diverse as shown in Figure 2. Although more than 25% of the students had no more than a high school degree, about 20% said they had completed college. About half of the students had taken some post-high school courses, but not earned any subsequent degrees.

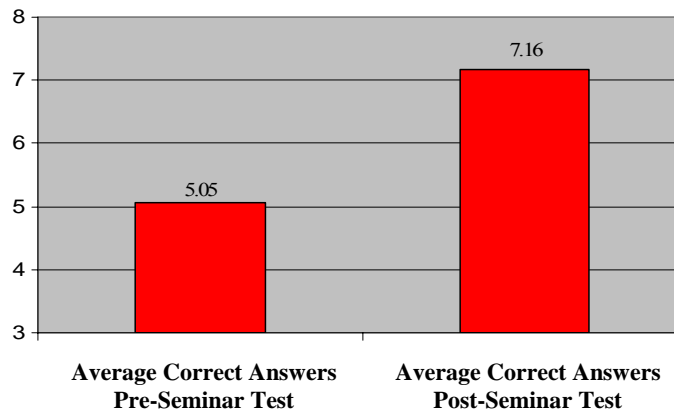


**Figure 2: Education Level of Seminar Participants**

## Learning Results

- **Post-seminar testing improved noticeably**

As reported in Figure 3 below, students answered half of the questions correctly before taking the financial literacy seminar. After the seminar, they answered approximately three-quarters of the questions correctly. In grade terms this means that the average class participant went from an F grade (50% correct) in the pre-seminar test to a C grade post-seminar (over 70% correct).



**Figure 3: Improvement in Pre- and Post-Seminar Testing**

- **Education level played a role**

Perhaps an even more interesting result was found by educational level. On the pre-seminar test, as expected, students with higher levels of formal education scored higher than other students. On the post-seminar test, however, score differences were eliminated. That is, after the seminar, no matter the students' level of formal education, they averaged a little over seven correct, eliminating the pre-seminar test disparity. At least in our sample, then, *the TWR Financial Literacy seminars served as a knowledge equalizer.*

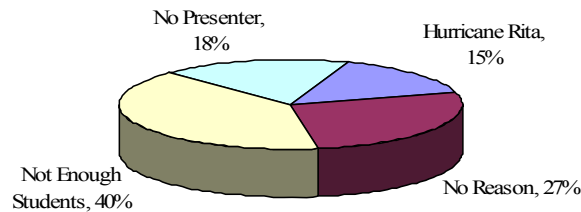
---

## RESULTS – CANCELLATION ANALYSIS

---

The Rice student researchers elected to conduct their cancellation analysis using the latest full year of 2005, during which 69 of 154 (or 45%) scheduled classes were cancelled (some were rescheduled and held later). Figure 4 provides statistics on the reasons for seminar cancellation.

Given the complicated logistics of attempting to gain the cooperation and organize multiple agencies and volunteers, and the reality that no one is being paid to conduct or take these seminars, a high number of cancellations is not unexpected. Indeed, it is an achievement that seminars are held as often as they are held.



**Figure 4: Reasons for 2005 seminar cancellations**

Note: TWR began keeping details records of cancellation reasons in August 2005. Thus, for about a quarter of the cancellations, the reason for cancellation is not known (no reason).

### Cancellation Causes

- **Lack of students**

The most common reason for cancellation (40% of all cancellations) was due to a lack of students.

- **Instructor absence**

Following a lack of students, the second most common reason (18%) for seminar cancellations was lack of an instructor or the instructor having to cancel.

- **Extenuating circumstances – Hurricane Rita**

In the calendar year of 2005, 15% of cancelled classes were due to the Hurricane Rita evacuation.

### Low Cancellation Agencies

Some agencies were more successful at holding the seminars they offered. Six of the 22 agencies that offered seminars in 2005 held at least 80% of their offered seminars (see Appendix B for list of low cancellation agencies).

In analyzing the data for these successful agencies, certain similarities were evident:

- Each successful agency had at least one instructor who repeatedly taught classes at that agency.
- These agencies tended to have data recorded for student demographics and conducted evaluation surveys.
- If the presenter, due to repeated contact with the agency, develops a relationship with the agency, he or she may help the agency “keep on track” by getting enough students for the classes and agency personnel may work harder.



### **High Cancellation Agencies**

Conversely, some agencies, at least in 2005, rarely held the seminars they offered. Of the 22 agencies that offered seminars in 2005, four had at least two-thirds of their classes cancelled (see Appendix B for list of high cancellation agencies).

These high cancellation agencies were contacted and asked a number of questions including: How do they advertise? Why do they think students do not sign up for the classes? What might enable them to recruit more students? How could TWR help them get more seminar participants? What did the student researchers learn?

- Agencies typically advertised by posting flyers and word-of-mouth. Some advertised in local papers as well or sent out e-mails to their list of potential participants. Several of the agency representatives where there was a high seminar cancellation rate expressed a desire for more advertising help from TWR. (This may be an issue with these agencies, however, as many agencies which had low cancellation rates did not express such a desire.)
- Some of the agency representatives thought students did not attend because they perceived seminars to be too difficult or not germane to their current life situation. For example, Bikira Stevenson, the director of Education Based Housing at Timberridge said: “People don’t sign up for the classes because they think the information might be too complex to understand.” Discussions of investing, the stock market, and IRAs are “not in a language they can understand...and the material is not pertinent to them because they are dealing more with day-to-day living than future-based matters.”
- Two of the four agency representatives felt the location of their agency was not convenient for instructors, potentially contributing to seminar cancellations.

---

## CONCLUSIONS

---

The results of this pilot provide a preliminary indication that TWR Financial Literacy seminars are having a positive impact on the lives of the students taking them.

On average, participants increased their knowledge as a result of their seminar, increasing their average questions answered correctly from 5 to around 7.2 – a grading increase from an F (failing, less than 50%) to a passing grade of C (more than 70% correct).

Furthermore, observations made by the study's researchers indicate that many of TWR's students are attentive and absorb information from the instructors. They ask questions and work hard at completing the in-class exercises. Additionally, many of the instructors are effective, personable, well trained teachers.

Although this pilot study's results are positive, the study's limitations do not allow for a more definite answer to questions of impact – particularly questions of long term impact – or provide much detail as to why the positive change occurred.

### **Further Study Needed**

A longer-term, in-depth study will need to be undertaken to provide a more definitive assessment as to the impact of the TWR Financial Literacy classes. Once the pilot study's recommendations have been evaluated and implemented as appropriate by TWR, a more detailed impact study will be warranted.

As this pilot study was limited in scope and duration to one college semester, only knowledge acquisition resulting from the seminars was analyzed. As part of a full-scale study, knowledge retention and knowledge application should be evaluated in addition to knowledge acquisition.

### **Recommendations**

This pilot study has also resulted in a number of recommendations which, when implemented, will increase the effectiveness of the seminars. These recommendations were generated from a combination of the study's seminar testing and cancellation analysis, observations made by the involved Rice University faculty and students, and from discussions with TWR personnel, TWR Education Committee members, seminar instructors, and agency personnel.

These recommendations, which are detailed in the final section of this report, fall into two major areas – those dealing with TWR's interaction and relationship with various agencies and those aimed at improving the effectiveness of the seminar material and instruction.

---

## RECOMMENDATIONS

---

### **Agency Relationships – Structure and Interaction**

- **Concentrate TWR Financial Literacy seminars on ‘learning ready’ groups**

Similar seminars taught to different demographic groups appear to have significant variance in class engagement and learning effectiveness. For example, seminars taught to young, unwed mothers were met with a relatively high level of participation as opposed to those taught to teenagers in crisis intervention programs. A greater learning impact and more efficient delivery of seminars can be gained by ensuring that the seminars concentrate on groups that will most benefit from these seminars – those groups that are ‘learning ready’. Other groups can be added at a later date, given appropriate time and resources.

- **Decrease the number of involved agencies**

A more focused concentration on agencies with learning ready groups (coupled with later recommendations for improving classes) may require TWR to decrease the number of agencies with which it deals, at least over the short-run. Furthermore, some agencies were found to frequently cancel classes leading to an inefficient use of TWR resources. Instructors or students who show up to discover their class has been cancelled may be disappointed and thus less likely to participate in the future. Work should be undertaken to help agencies remedy frequent cancellations, and ultimately seminars should be discontinued at agencies that chronically cancel.

- **One size does not fit all: Match instructors and agencies**

On-going interaction between instructors and agencies resulted in improved classes and greater consistency in class occurrence. As instructors more frequently interact with student groups at one agency, classes can be tailored to better serve the groups’ learning needs and particular circumstances. Furthermore, closer relationships between instructors and agencies results in greater faith that classes will be held. This leads agencies to make a greater effort to ensure a full class of students. Such trust may also be noticed by seminar participants leading to a better learning environment.

- **Increase use of marketing material and communication with agencies**

Some agencies made use of TWR marketing flyers to successfully solicit students. However, some agency personnel were unaware of the availability of such material while others commented that flyers were not always available. An on-going tracking process and communication should be implemented to ensure that all agencies have ample flyers and that the flyers are being utilized.

- **Improve seminar participant data collection**

Agencies that collected data (such as demographic data) on seminar participants seemed to be more successful at financial literacy seminar delivery as measured by more frequently held seminars and a higher number of student participants. All agencies should be encouraged and assisted where necessary to collect such data. Such discipline will likely result in better seminar execution. Furthermore, this data aids the tracking of seminar success, by allowing TWR or future researchers to better evaluate previously held seminars and to potentially contact former seminar participants.

## **Content and Delivery of Seminar Material**

- **Decrease seminar complexity**

Certain aspects of seminars are difficult to understand and complete given the available time and tools. For example, in one Charge It Right class an exercise was done comparing various financing options (APR, cash back options, term of financing). While useful (and certainly real-life), this exercise required multiplication with decimals and an understanding of complex formulas involving amortization of principal versus interest. Furthermore, several agencies interviewed commented on the perceived or actual difficulty of these seminars. Each seminar should be analyzed to either simplify aspects or to provide tools necessary to more readily complete difficult exercises (such as provision of calculators or a monthly payment table demonstrating payment per dollar amount of loans at various interest rates and loan terms).

- **Increase ‘hands on’ aspects of seminars**

Some instructors brought real-life material (such as bank account applications and charge card bills) to their classes. This was met with more interest and student participation presumably resulting in greater learning. Thus, each seminar should be examined to maximize the usage of ‘hands on’ material and such material should be made available to instructors as part of TWR’s ‘train the trainers’ instructional sessions.

- **Implement best practices for seminar trainers**

Significant variance was noted in trainers’ use of effective learning tools and techniques. Some examples of these best practices were:

- Using Powerpoint slides or overhead projectors
- Starting class with an outline of learning objectives and definitions of terms
- Using ‘hand on’ material as described above
- Administering and collecting seminar evaluations

Best practices from across trainers should be collected and shared with all. Furthermore, TWR should consider videotaping effective instructors and showing these tapes at “train the trainer” sessions.

- **Include seminar material and related resources on TWR’s web-site**

On-going web-site access to information and related resources could increase the long-term effectiveness of the seminars as participants continue to learn and engage with TWR. Examples of such resources are mortgage and loan calculators; sample bank, loan and credit card applications; illustrations of currently available investments, interest rates, and tables calculating interest earned over time on these investments; and contact information for questions and need for further assistance. Access to these web-site resources could be limited to students who ‘pass’ each seminar providing an incentive structure for seminar learning and completion.

- **Consider having institutional rather than individual instructors**

The possibility of having institutions take responsibility for a series of seminars at an agency or for a particular seminar across agencies should be explored. An example would be having a commercial bank be responsible for Borrowing Basics. Dealing with institutions could increase the consistency of seminar delivery, increase the ‘hands on’ aspects of seminars, and expand the cadre of available, qualified instructors.

## APPENDIX A: Example of Pre- / Post-Seminar Test (Survey)

### Charge It Right Survey

The following survey is meant to improve the TWR Money Smart classes and is in no way an evaluation of the class participants. **For each question, please circle the best answer. If you are unsure of the answer, circle “don’t know.”**

1. Why do people consult credit counselors?
  - A. To open a credit card
  - B. To cancel a credit card
  - C. For help with your bank account
  - D. For help with your credit card
  - E. Don’t know
  
2. Suppose you and your spouse have a joint credit card and he/she purchased a big-screen TV with the card without asking you. Who is responsible for the payments on this item?
  - A. You
  - B. Your spouse
  - C. You and your spouse
  - D. The sellers of the TV
  - E. Don’t know
  
3. What is the first thing you should do if your credit card is lost/stolen?
  - A. Call the credit card issuer
  - B. Wait for it to turn up
  - C. Look for a new credit card
  - D. Pay off the balance
  - E. Don’t know
  
4. How many days do you legally have to report discrepancies on your credit card report?
  - A. 30
  - B. 60
  - C. 90
  - D. 120
  - E. Don’t know
  
5. What is one consequence of not paying your credit card bill on time?
  - A. A late fee
  - B. The card issuer will give you extra time to pay without penalty
  - C. There are no consequences
  - D. You have to return the things you purchased with the card
  - E. Don’t know
  
6. What should you do with the receipts from your credit card purchases?
  - A. Shred them immediately
  - B. Save them
  - C. Send them to the card issuer
  - D. Throw them away
  - E. Don’t know

7. What is a balance transfer fee?
  - A. A charge for when you access cash through an ATM with your credit card
  - B. A charge for when you pay less than the entire monthly balance when your payment is due
  - C. A charge for moving one credit card balance to another credit card
  - D. A charge for the privilege of having the credit card
  - E. Don't know
  
8. How much of your credit card balance should you attempt to pay each month?
  - A. All of it
  - B. None of it
  - C. The minimum payment
  - D. The amount of the annual fee
  - E. Don't know
  
9. How should you choose a credit card?
  - A. Pick the first offer you receive
  - B. Shop around for the best deal
  - C. Pick the prettiest card
  - D. Pick the one from the company that advertises the most
  - E. Don't know
  
10. Which percentage represents the best APR (annual percentage rate)?
  - A. 30%
  - B. 18%
  - C. 19.4%
  - D. 15%
  - E. Don't know

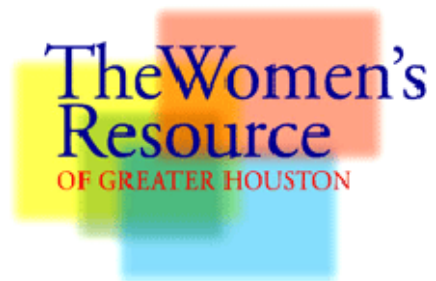
## **APPENDIX B: Low and High Cancellation Agencies**

Low cancellation agencies (including number of seminars held and number of seminars offered):

1. NAACP Family Technology Center at Wheeler and 59 (6 out of 6 seminars held)
2. NAACP Family Technology Center on Fannin (5 out of 5 held)
3. Project Row Houses (5 out of 5 held)
4. Mission of Yahweh (8 out of 10 held)
5. Volunteers of America at McGovern (11 out of 12 held)
6. Volunteers of America on Lavender (5 out of 6 held)

High cancellation agencies (including seminars cancelled and seminars offered):

1. PYOC Child Development Learning Center (4 of 5 seminars cancelled)
2. Education Based Housing at Windsor Gardens (4 of 6 cancelled)
3. Education Based Housing at Timberridge (5 out of 6 cancelled)
4. Boys and Girls Club of Greater Houston (4 out of 5 cancelled)



*Formerly Greater Houston Women's Foundation*

The Women's Resource of Greater Houston helps women and children develop social, financial, and personal skills through education and experience.

**The Women's Resource of Greater Houston**  
2200 Post Oak Boulevard, Suite 50 • Houston, Texas 77056 • Tel. 713.667.4493

*[www.thewomensresource.org](http://www.thewomensresource.org)*