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Jennifer Potts

Western Kentucky University, jenny.potts618@topper.wku.edu

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FINANCIAL LITERACY IN RETIREMENT PLANNING

A Capstone Experience/Thesis Project

Presented in Partial Fulfillment of the Requirements for

The Degree Bachelor of Science with

Honors College Graduate Distinction at Western Kentucky University

By

Jennifer Potts

Western Kentucky University

2013

CE/T Committee:

Dr. Jean Snavely, Advisor

Andrew Head, Executive in Residence

Dr. Clay Motley

Approved By

Advisor
Department of Finance

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ABSTRACT

Studying finance, I have been exposed to the retirement plan options and how they work in most of my classes. But when I would talk to my family and friends about what I was learning, I quickly discovered that many people simply had no interest or understanding about the subject. I believe everyone needs to have a basic understanding of where income will come from once they retire. This realization pushed me to study the level of financial literacy about retirement and plan options of adults in the working world and determine how I could bring information about this topic to the Bowling Green, Kentucky community. I administered a survey to employees of a local business to gauge their basic financial literacy, and then determined how they most prefer to learn about finance topics. In this thesis, I explain the basic retirement options and products in today's market and discuss my findings in surveying a company in the Bowling Green area on their financial literacy and how to develop the retirement plan knowledge of the employees I surveyed.

Keywords: Financial literacy, Retirement planning, Finance, Financial advisor, Investment, Company analysis

Dedicated to the faculty and staff of the Gordon Ford College of Business

ACKNOWLEDGEMENTS

I would like to thank my advisors, Dr. Jean Snavely and Andrew Head for helping me to formulate my ideas and bring this thesis to fruition. Their knowledge and perspective have helped me to shape the scope of this project into something that may improve upon the financial literacy of a small group in Bowling Green, which in turn may trickle to the entire community. I would also like to thank Richard Fontenot at BlueCotton for allowing me to come into his business to administer surveys to gather data for this project.

VITA

January 13, 1992Born- Henderson, Kentucky

2013.....Intern, State Farm
Insurance Companies

2013.....President, Delta Sigma Pi,
International Business
Fraternity

2013.....Abacus Editor,
Delta Sigma Pi,
International Business
Fraternity

2013.....President,
Financial Management
Association

FIELDS OF STUDY

Major Field: Finance

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CHAPTER 1

INTRODUCTION

When one thinks of retirement, images of lush beach houses and yachts come to mind, or maybe a huge house in the mountains with a luxury SUV in the driveway. However, not many people imagine a healthy and prosperous IRA that can support them in their golden years, let alone understand the importance of beginning some type of retirement savings at their current age.

The numbers behind retirement can be quite intimidating to the young investor. If the retirement age is around 65, and the investor expects to die approximately at age 85, that is 20 years of income that is needed. Once investors reach retirement age, they will generally be earning what is needed to maintain their standard of living. Say this yearly amount is \$50,000; if the investor needs \$50,000 per year for 20 years, their retirement fund will need at least \$1,000,000. According to the Employee Benefit Research Institute, 46% of Americans have less than \$10,000 saved for their retirement years¹. That is 1% of the required amount from the previous example.

While the thought of saving can be scary, utilizing the services of a financial planner can help to put retirement savings into a manageable process for the investor. Financial planners can take the big picture of investing, not only for retirement but for

¹ "12 Terrifying Retirement Facts Keeping Boomers-And Their Advisors-Up At Night." *Financial Planning*. Financial Planning. Web. 11 Nov 2013. <<http://www.financial-planning.com/gallery/fp/twelve-retirement-facts-unsettling-baby-boomers-financial-advisors-2676576-1.html>>.

other investments as well, such as home purchases and college savings, and break it down for their clients to ease the tension surrounding these large investments.

CHAPTER 2

A BRIEF HISTORY AND DESCRIPTION OF RETIREMENT PLANS

Social Security

President Theodore Roosevelt signed the Social Security Act on August 14, 1935, creating the Social Security Board. It remained under that name until July 16, 1946 when it then became the Social Security Administration (SSA) during the Federal Reorganization of 1946 under President Truman. The SSA endured another change under President Eisenhower in 1953 during the creation of the Department of Health, Education and Welfare, which then became the Department of Health and Human Services in 1980. Finally, in 1994, President Clinton signed legislation naming the Social Security Administration its own independent entity².

Social Security income at retirement is funded by a predetermined payroll tax from earnings. Employees and employers each pay 6.2% of their earnings into the fund.³ The average monthly earnings during the 35 highest earning years of the employee's career life are inserted into a formula by the SSA to determine the benefit given at retirement⁴.

² United States Government. Social Security Administration. *Brief Graphic Organizational History*. Web. <<http://www.ssa.gov/history/orghist.html>>.

³ United States Government. Social Security Administration. *How is Social Security Financed?*. Web. <<http://www.ssa.gov/pressoffice/factsheets/HowAreSocialSecurity.htm>>.

⁴ United States Government. Social Security Administration. *Your Retirement Benefit: How it is Figured*. Web. <<http://www.ssa.gov/pubs/EN-05-10070.pdf>>.

Social Security was not created to be the sole source of income for retirement; it was created and intended as a base for retirement income and to supplement income from employer-based plans⁵.

Employer Sponsored Plans

There are retirement plans offered by employers to benefit the retirement of their full time employees. There are two major types of plans, defined benefit and defined contribution. Defined benefit plans offer a predetermined payment given to employees at retirement and can be funded in part by payroll deductions from the employees' earnings. At retirement, the defined benefit plan offers a consistent income to the employee. Defined contribution plans require a contribution of income by the employee, and that amount may be matched by the employer, either in full or a percentage of the employee's contribution.

The use of defined benefit plans has decreased in popularity over the past ten years, and more companies are leaning toward defined contribution plans for their employees. There are several reasons for this shift that include cost, transfer of risk, and the lack of portability associated with defined benefit plans.

The costs to the employer that are associated with defined benefit plans can be burdensome. The amount that is given to the employee at retirement is typically determined by a formula, such as an average of the employee's most recent earnings per year multiplied by the amount of years that they have worked for the company. Some companies will only offer full retirement benefits to those employees that have worked

⁵ Warschauer, Thomas. "Social Security (Old-Age, Survivors, and Disability Insurance)." *Trans. Array CFP Board Financial Planning Competency Handbook*. Hoboken: John Wiley & Sons, 2013. 380. Print.

the required amount of years determined by the company to receive these benefits.⁶ Since the employer must provide this income to the employee after retirement, this type of plan poses a greater cost to employers. In order to provide a pension to retired employees, the employer must have a large amount in their pension fund that is managed by the company. With this comes investment risk; the employer now has to overcome investment challenges and hedge against potential losses. Another downside of defined benefit plans is their lack of portability. If an employee leaves their current company that provides a defined benefit plan, they will not receive their pension. According to an article in Forbes magazine by Jeanne Meister on August 14, 2012, workers in this day and age typically stay at one job for 4.4 years.⁷ This may not be enough time for the employee to attain the required years worked for retirement benefits, and the employee is then left without retirement benefits in full.

Defined contribution plans are ever increasing in popularity with the decline of defined benefit plans. The contributions in defined contribution plans are invested in a fund, or a combination of funds that is chosen by the employee from a list offered by the employer. The balance at retirement is dependent on the performance of the chosen investments over the period of time and the employee contributions before retirement. Since the employee is charged with picking between investment alternatives, some level of investment literacy is required. Employees may be able to seek advice from a financial

⁶"Understanding Defined Benefit Plans." *AXA-Equitable*. AXA-Equitable Life Insurance Company. Web. 7 Nov 2013. <<http://www.axa-equitable.com/retirement/understanding-defined-benefit-plans.html>>.

⁷ Meister, Jeanne. "Job Hopping Is the 'New Normal' for Millennials: Three Ways to Prevent a Human Resource Nightmare." *Forbes*. 14 Aug 2012: n. page. Web. 7 Nov. 2013. <<http://www.forbes.com/sites/jeannemeister/2012/08/14/job-hopping-is-the-new-normal-for-millennials-three-ways-to-prevent-a-human-resource-nightmare/>>.

professional to help choose an investment, but some may be more inclined toward cash and cash alternatives and choose not to utilize this option.

Employees derive tax benefits from defined contribution plans. Contributions that are deposited by both employee and employer are tax-deferred, which means no income tax is paid on the contributions when they are invested⁸. For example, an employee in the 15% tax bracket makes \$40,000 in a year and wishes to contribute \$5,000 into their defined contribution plan, that employee would only pay the 15% income tax on \$35,000 of their earnings. These income tax deferrals can be extremely beneficial to employees and can encourage more investment into the plan. Taxes on income, however, cannot be completely avoided. With defined contribution plans, income tax is paid on the distributions (or what is withdrawn) from the account at the ordinary income tax rate of the employee during the year of the distribution.⁹

There are some stipulations when it comes to distributions. Once the employee reaches the retirement age determined by the plan, often at age 59 ½, they may begin to withdraw distributions from their investments without penalty. If a distribution is taken before the employee is at the determined age, a 10% excise tax will be assessed against by the employee in addition to their normal income tax¹⁰.

Some defined contribution plans have requirements concerning distributions made from the plan. A required minimum distribution (RMD) is the required amount the employee must withdraw at a certain age. This amount is based on the value of the fund

⁸ Burns, Sharon. "Distribution Rules, Alternatives, and Taxation." *Trans. Array CFP Board Financial Planning Competency Handbook*. Hoboken: John Wiley & Sons, 2013. 428-429. Print.

⁹ Burns, Sharon. "Distribution Rules, Alternatives, and Taxation." *Trans. Array CFP Board Financial Planning Competency Handbook*. Hoboken: John Wiley & Sons, 2013. 429. Print.

¹⁰ There are exceptions to this tax, however. If the owner of the plan passes away or becomes disabled, the excise tax is not incurred. Also, if the owner has a need to withdraw to pay medical expenses that exceed 7.5% of their adjusted gross income, they do not have to pay the penalty

at the end of the previous year, and the age of the employee. If a distribution is taken that is less than the RMD amount, the employee will be subject to a 50% tax on the remainder of the distribution for that year. For example, if the required distribution amount is \$5,000 and the employee only withdraws \$3,000, they would pay a 50% penalty on the remaining \$2,000 for that year. Most plans have a RMD age of 70 ½.

With defined contribution plans, the employer is not charged with providing the entirety of retirement income to its employees. Their financial obligation is limited to the matching amount to the employees' contributions, which reduces the cost to the employer by a substantial amount. The nature of a defined contribution plan also lends itself to transfer investment risk from the employee to the employer. Since the employee is responsible for choosing the allocation of the investment of their contributions, the employer is no longer charged with making this decision and is therefore alleviated from a large portion of the risk associated with the fund. Allowing the employee to choose where their retirement contributions will be invested also creates an opportunity for the employee to expand upon their financial and investment literacy.¹¹ If an employee leaves a company prior to retirement, there are some options for taking their retirement plan with them. In most cases, defined contribution plans can be converted or rolled over, into an Individual Retirement Arrangement, which will then stay with that employee regardless of their employment situation.

Individual Retirement Arrangements offer employees a way to continue to save for retirement through job changes and other situations. With these plans, investors are able to contribute to their plan each year to grow their fund tax deferred. Once the

¹¹ "An Evolving Pension System: Trends in Defined Benefit and Defined Contribution Plans" by David Rajnes, Employee Benefit Research Institute, September, 2001.

investor reaches age 59 ½, they may begin making withdrawals from the IRA without penalty. There are two types of IRA's, traditional and Roth.

The main difference in how traditional and Roth IRA's work is the tax treatments of contributions. In a traditional IRA, before-tax dollars are contributed (much like the defined contribution employer retirement plan) and taxes are paid when distributions are taken. Roth IRA's are the opposite in that income tax is paid before contributions are made to the Roth and the qualified distributions are tax free. While some may say that it doesn't matter if taxes are paid on the front end (Roth) or the back end (Traditional), it can actually become a significant amount of money in the long run.

This difference is best illustrated by the following example: Jack and Jill are each 29 ½ years old and currently in the 15% tax bracket. Jack has a traditional IRA and contributes \$5,000 each year, and does not pay taxes on his contributions, and Jill has a Roth IRA into which she also contributes \$5,000 per year, but she pays income tax on these contributions. Jill is paying 15% on her \$5,000 contribution and Jack is paying no tax on his. Fast forward 30 years: Jack and Jill are both earning much higher salaries and are now in a higher tax bracket as a result, the 30% tax bracket. They both are ready to begin withdrawing funds from their IRA's. Since Jill has already paid income taxes on her contributions and the growth is tax-free in her Roth IRA, she can withdraw her distributions without paying income tax. Jack's Traditional IRA has also tax-deferred growth, but he did not pay income tax on the contributions he made, so he must pay taxes at his current rate, 30%.

One option employers can offer is a SIMPLE (Savings Incentive Match Plan for Employees) IRA, which enables employees and employers to contribute to a traditional IRA for the employees and is generally suited for small businesses¹² like BlueCotton.

For a summary of the differences between defined benefit plans and defined contribution plans, and the differences between traditional and Roth IRA's see Table 1 below.

Table 1: Summary of Differences Between Retirement Plan Options

Feature	Defined Benefit	Defined Contribution
Employer provides majority of income at retirement	✓	
Employee makes contributions during working years for income at retirement		✓
Investment risk on employer	✓	
Investment risk on employee		✓
Portable with job changes		✓

Feature	Traditional IRA	Roth IRA
Before tax dollars contributed	✓	
After tax dollars contributed		✓
Tax-free distributions		✓

¹² United States Government. Internal Revenue Service. *SIMPLE IRA Plan*. Web. <<http://www.irs.gov/Retirement-Plans/Plan-Sponsor/SIMPLE-IRA-Plan>>.

CHAPTER 3

METHODOLOGY AND RESULTS

A custom designer of t-shirts, sweatshirts, hats, tumblers, bags and other items, BlueCotton has a well-known reputation in the Bowling Green area. Since Bowling Green is home to Western Kentucky University, BlueCotton is extremely popular among school organizations, the Greek community, churches, and athletic teams. The company was started in 1991 by two college students, who, by means of a failed business venture, were stuck with a large bill and nearly 1,000 t-shirts. They began customizing shirts for fraternities and sororities, and quickly became a staple in the Greek world, soon to spread to other organizations. BlueCotton is now a thriving business in Bowling Green, offering a fun, laid-back atmosphere for its employees who enjoy such amenities as “free lunch Tuesdays.”¹³

BlueCotton offers a SIMPLE (Savings Incentive Match PLan for Employees) IRA. To be eligible for this option, an employee simply has to have earned \$5,000 in the previous employment year and is expected to earn \$5,000 in the current year. Age is not a determining factor in this particular plan. BlueCotton will match 100% of contribution of an employee with a maximum of 1% or 3% of the employee’s total earnings. The 1% and 3% maximum amounts alternate each year, and 3 of 5 years are the 3% maximum. For

¹³ "BlueCotton Careers." *BlueCotton*. N.p.. Web. 7 Nov 2013. <<http://www.bluecotton.com/careers>>.

example, if an employee makes \$30,000 in their contribution year and wishes to contribute \$1,000, BlueCotton would contribute an additional \$300 in a 1% year ($30,000 \times .01$) and \$900 in a 3% year ($30,000 \times .03$).

Methodology

To gauge employee financial literacy, a nine question, anonymous survey (see Table 2) was administered to 30 employees approximately 25-45 years old that determined how well they knew both their employer's offered retirement plan and retirement options in general. This survey was given during one of BlueCotton's free lunch days where employees gather to eat together. The survey also included whether or not the employees used the services of a financial planner, and whether or not they had official plans for retirement for themselves and/or their spouses. At the end of the survey, the employees were asked if they would be interested in a free retirement workshop offered by local financial planners in the Bowling Green area to gauge their interest in learning more about their options.

After the initial survey was administered and the data collected and analyzed, a second survey (Table 3) was created as a follow up to gauge the employees' interest in learning more about financial literacy in the workplace. This follow up survey was administered approximately 3 months after the initial survey and data was collected from 28 employees. This survey was also given on a free lunch day to ensure maximum participation. The questions in this survey were broader and were more focused on how BlueCotton employees prefer to improve their financial literacy.

Table 2: BlueCotton Initial Survey

Please fill out the survey and turn in at the end of lunch.

Are you eligible for your employer's retirement plan?
Yes No

If yes, do you participate?
Yes No

How well do you know the details of BlueCotton's SIMPLE IRA?
Not at all 0 1 2 3 4 5 Very Well

Do you currently seek financial advice from a licensed professional?
Yes No

If yes, how long have you been utilizing the services of the licensed professional?
0-5 Years 5-10 Years 10 or more years

If no, why do you not seek advice from a licensed professional?
Cost of services
You handle your own finances
Little faith in the market
Not interested in financial services
No faith in financial advisor

Do you have an official plan in place for your retirement?
Yes No

How well do you understand basic retirement options outside of your employer's plan?
Not at all 0 1 2 3 4 5 Excellent understanding

Would you be interested in a free workshop to learn more about retirement options?
Yes No

Table 3: BlueCotton Final Survey

Please answer the survey questions and return at the end of lunch.

1. Would you be interested in learning more about retirement planning and investments during Tuesday lunch through guest speakers?

Yes No

2. Would it be beneficial to you to have literature, i.e. brochures or flyers that have information pertaining to investment options and contact information for local financial professionals?

Yes No

3. How interested would you be in a session on easy ways to save money for you and your families?

Not interested 1 2 3 4 5 Very interested

4. Would you be interested in a one-on-one consultation with a financial professional?

Yes, if there is no fee

Yes

No

5. What topics would you want to learn about through guest speakers during Tuesday lunch?

Retirement/savings

Insurance

College savings for children/self

Vehicle or home purchase

General financial information

Results

After collecting the data from the surveys, it was determined that 83% of the employees surveyed were eligible for BlueCotton's retirement plan, and a little over two thirds of that 83% participate in the SIMPLE IRA (See Figure A). As shown in Figure B, a little over half of the eligible employees believe they understand the details of the offered plan. Figure C shows that only 20% of all surveyed employees use the services of a licensed financial professional, and two thirds of that 20% have been with their advisor for less than five years.

Figure A: Eligibility and participation in BlueCotton's SIMPLE IRA

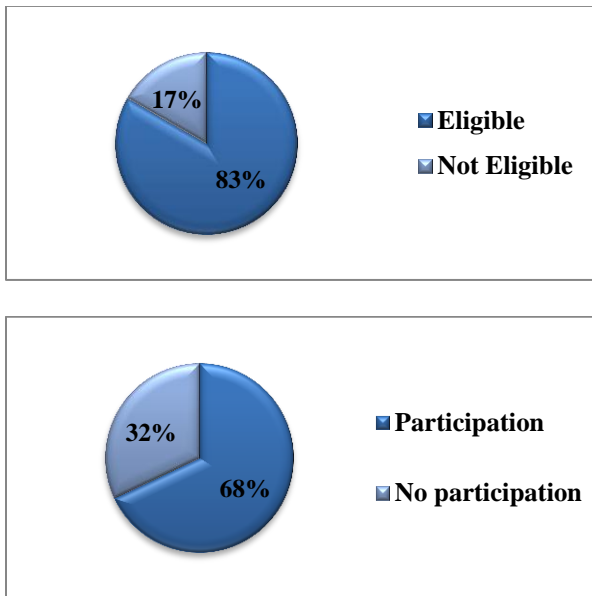


Figure B: Employee understanding of BlueCotton’s SIMPLE IRA

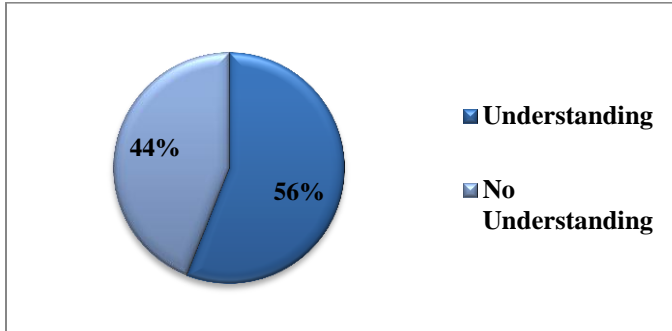
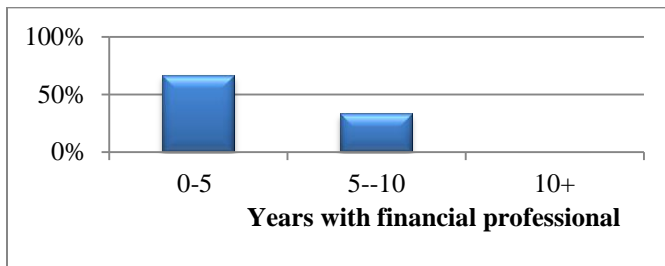
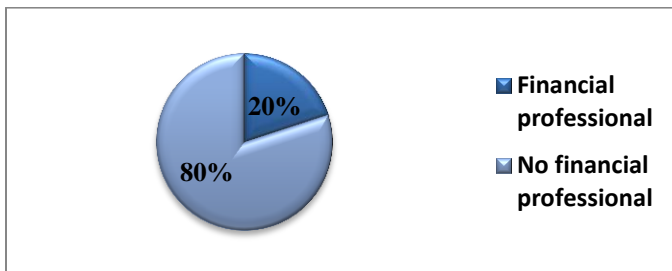
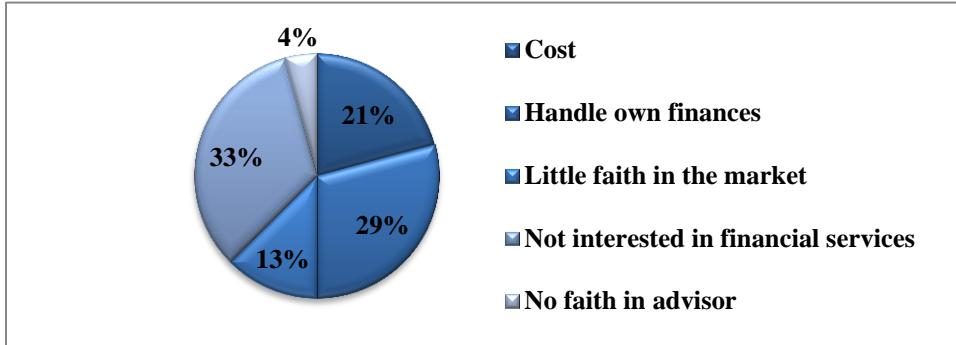


Figure C: Data on use of financial professionals



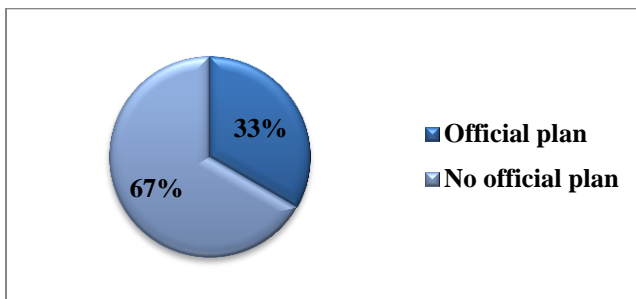
Of the remaining 80% of employees that do not seek financial advice, the most common reasons are that they handle their own finances (29%) and are simply not interested in financial services (33%) (See Figure D).

Figure D: Reasons for not utilizing a licensed financial professional



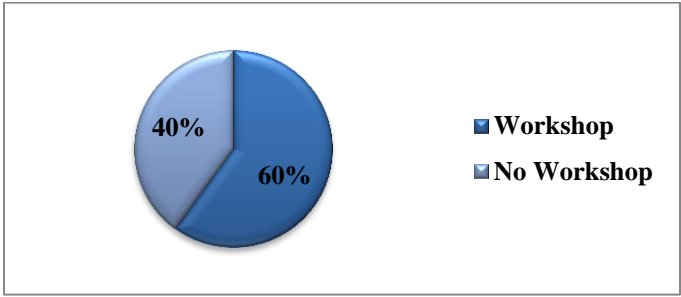
In addition to only 20% of the employees using the services of a financial professional, only 33% have an official plan in place for retirement as shown in Figure E.

Figure E: Official plans for retirement



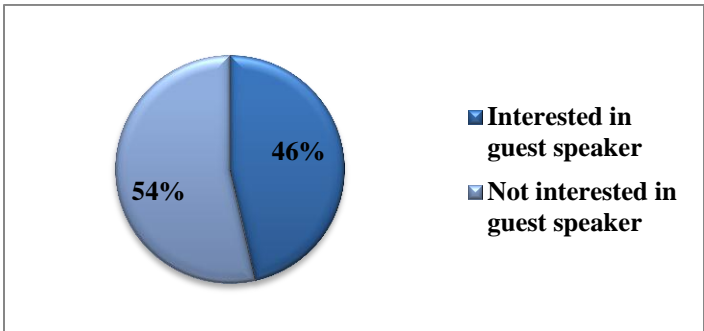
When asked about a retirement planning workshop that would provide information on retirement planning and saving in a non-sales environment, 60% of the employees surveyed indicated that they would be interested in attending such a workshop.

Figure F: Interest in a retirement planning workshop



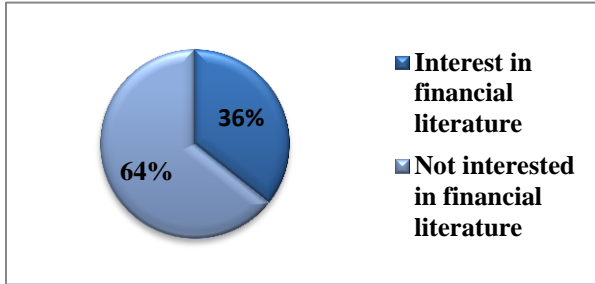
In analyzing the data from the second survey, it was determined that 46% of employees surveyed are interested in learning more about retirement planning and other investments through guest speakers during their catered lunch provided by Blue Cotton as shown in Figure G.

Figure G: Employee interest in learning in the workplace



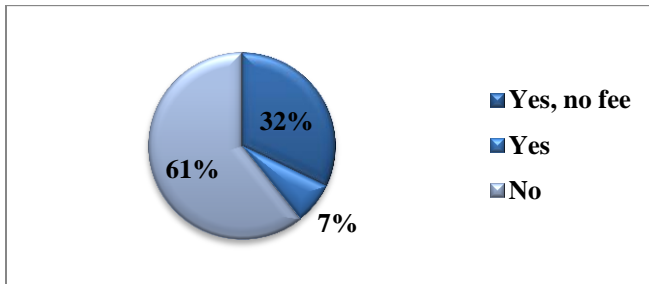
Only 36% of the employees that were surveyed would consider literature such as brochures and fliers with information both on investment options and the contact information of local financial professionals beneficial, seen in Figure H.

Figure H: Level of interest in financial literature



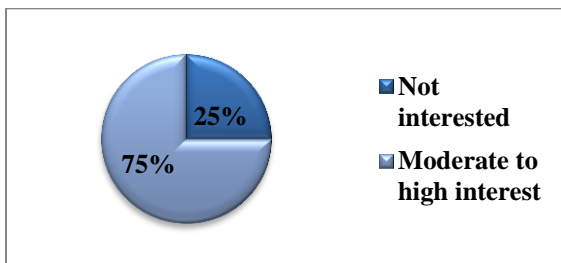
As shown in Figure I, 32% of the employees surveyed would be interested in a one-on-one consultation if there were no fees involved with the consultation.

Figure I: Employee interest in financial consultation



Although there was a general low interest in learning opportunities at work, 75% of the employees would be interested in a session or seminar on easy ways to save money for themselves and their families, as shown in Figure J.

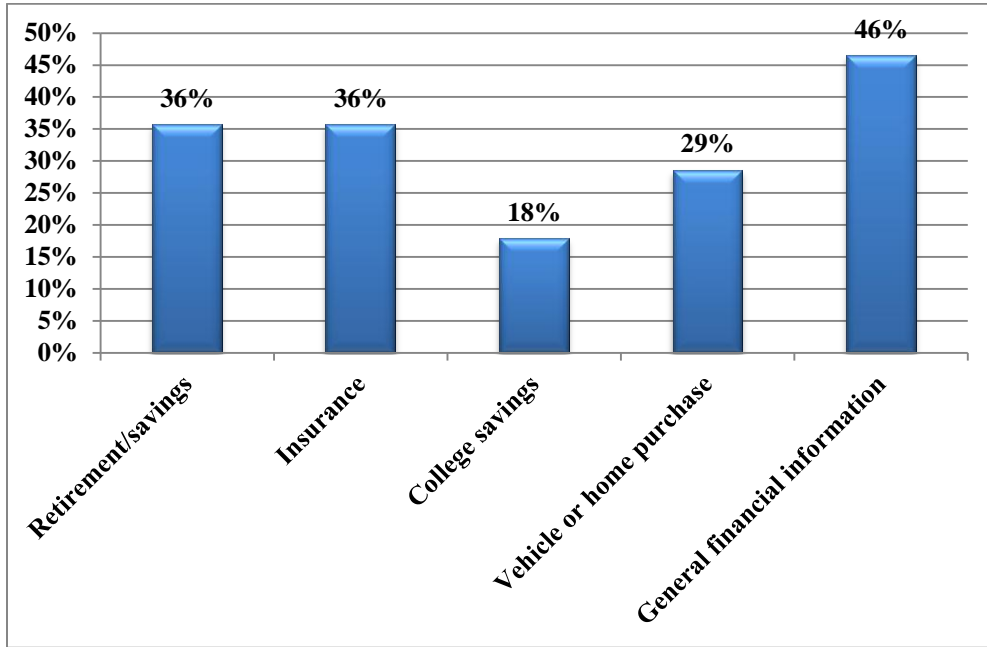
Figure J: Easy ways to save money seminar



The last question posed simply asked the employees which topics from a given list would be of interest to them if there were guest speakers during their Tuesday lunch.

Overall, the most popular topic was general financial information which would include all of the separate topics, but still held a majority with 46% as seen in Figure K.

Figure K: Level of interest in finance topics



CHAPTER 4

CONCLUSION

In conclusion, even though the employees of BlueCotton seemed less interested in learning opportunities within the workplace during catered lunches, the interest is still there for fundamental financial learning, such as easy ways to save money and a retirement planning workshop. My initial hypothesis that many people in the working community have little to no interest or understanding was somewhat confirmed. As mentioned earlier, many people see retirement savings as something in the future that will eventually be a concern.

Combining BlueCotton's employees' interest in further learning opportunities and their preference for it to not be in the workplace, I would suggest the promotion of community events in the Bowling Green area. One of the most recent events was Financial Help Day offered by the Center for Financial Success at Western Kentucky. This open forum type program where people can get information that is specific and relevant to themselves without having to sit through a seminar or sales pitch may be more enticing to BlueCotton employees. Community events such as Financial Help Day can get the information and contacts to employees, while not interrupting their work and lunch time.