The influence of positive psychological factors on small business owners' retirement planning activities

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Abstract

This analysis studies the influence of certain behavioral characteristics on small business owners' retirement planning preparation. In the proposed model, an owner's retirement goal clarity is hypothesized to mediate the relationship between the level of his retirement planning activities and three behavioral factors: engagement, satisfaction, and future time perspective. Survey responses from business owners were analyzed using structural equation modeling. Results suggest that owners who are engaged by their businesses and have a "live for today" attitude are less motivated to plan for retirement. A sense of satisfaction with the business, however, shows positive influences on retirement planning motivation. © 2012 Academy of Financial Services. All rights reserved.

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Keywords: Behavioral finance; Retirement planning; Small business owners; Satisfaction; Engagement

1. Introduction

Nearly 50% of United States small business owners, employing approximately 19.5 million employees, do not offer retirement plans for the benefit of themselves and their employees (Copeland, 2009). Employees of companies in which no plan is offered are denied an automatic savings tool via automatic payroll deductions. Rather, they are personally responsible for initiating their own retirement planning solutions. However, most workers will not save for retirement without an automatic process in place (Banks, 2008). Fewer than half of U.S.

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workers have even tried to calculate how much savings they will require for retirement needs (Meredith, 2008). As these millions of individuals reach retirement age, their unfunded income needs could have perilous national economic impact. A better understanding of the factors that motivate small business owners to adopt retirement plans could aid in encouraging more plan sponsorship, thereby boosting overall national retirement savings.

The majority (73%) of small businesses are sole proprietorships (Small Business Administration, 2009) for which the plan adoption decision is generally made by the business owner. The likelihood of plan sponsorship increases with the number employed in the business. The percentage of workers participating in a plan ranges from 14% for businesses with fewer than 10 employees to 57% for workers at firms with 1,000 or more employees as illustrated in Fig. 1.

Currently, the most common plan type used is a defined contribution plan; typically a 401(k) plan. Under a defined contri-bution plan, an employee contributes a portion of her wages to an individual account within the plan. At retirement, the worker gets the accumulated contributions plus accumulated investment income or loss as a lump sum (Munnell and Sass, 2006). The only direct costs to the small business owner result from the implementation and servicing of the retirement plan, as well as any voluntary matching employee dollars offered, typically 2% to 6% of wages. Fees, such as commissions, are generally assessed against the employee's plan balance. The cost to the small business owner is relatively low, especially in comparison to the cost of other employee benefits like medical insurance (Crimmel, 2009).

A small business owner should have a self interest in adoption of a retirement plan so that, like his employees, he will be able to enjoy tax-deferred retirement saving. Under ERISA (employee retirement insurance savings act) guidelines, any plan used by the owner must also include the employees. If an owner wishes to establish a qualified retirement plan for his own benefit, approximately 80% of the company's fulltime employees must participate as well. Therefore, there is direct incentive to the owner to establish a plan.

If the cost of offering a retirement plan is modest and adoption of a plan provides the owner with an attractive tax savings device, there may be other, non-economic factors influencing so many owners in not offering a plan. For paid employees, retirement signifies a critical point at which individuals maximize leisure time and financial wealth (Boscaljon, 2004). However, small business owners consistently report the highest level of job satisfaction or all workers (Gallup Poll, 2009). Perhaps their perception of retirement leisure is not connected with accumulation of retirement savings. By gaining insight into behavioral factors that might influence an owner's retirement decisions, it may be possible to develop strategies to encourage these owners to adopt retirement plans and consequentially have a positive impact on the retirement futures of millions of U.S. employees.

2. Literature review

What behavioral factors might influence small business owners to actively plan for their own retirement and to therefore be motivated to provide an employee retirement plans? Business owners consistently report the highest level of satisfaction with work (Gallup Poll,

Percentage of Employers Sponsoring A Retirement Plan
(by number of employees)

- Number of Employees, 1,000 or more, 71%
- Number of Employees, 500 to 999, 63%
- Number of Employees, 100 to 499, 57%
- Number of Employees, 25 to 99, 45%
- Number of Employees, 10 to 24, 30%
- Number of Employees, Fewer than 10, 18%
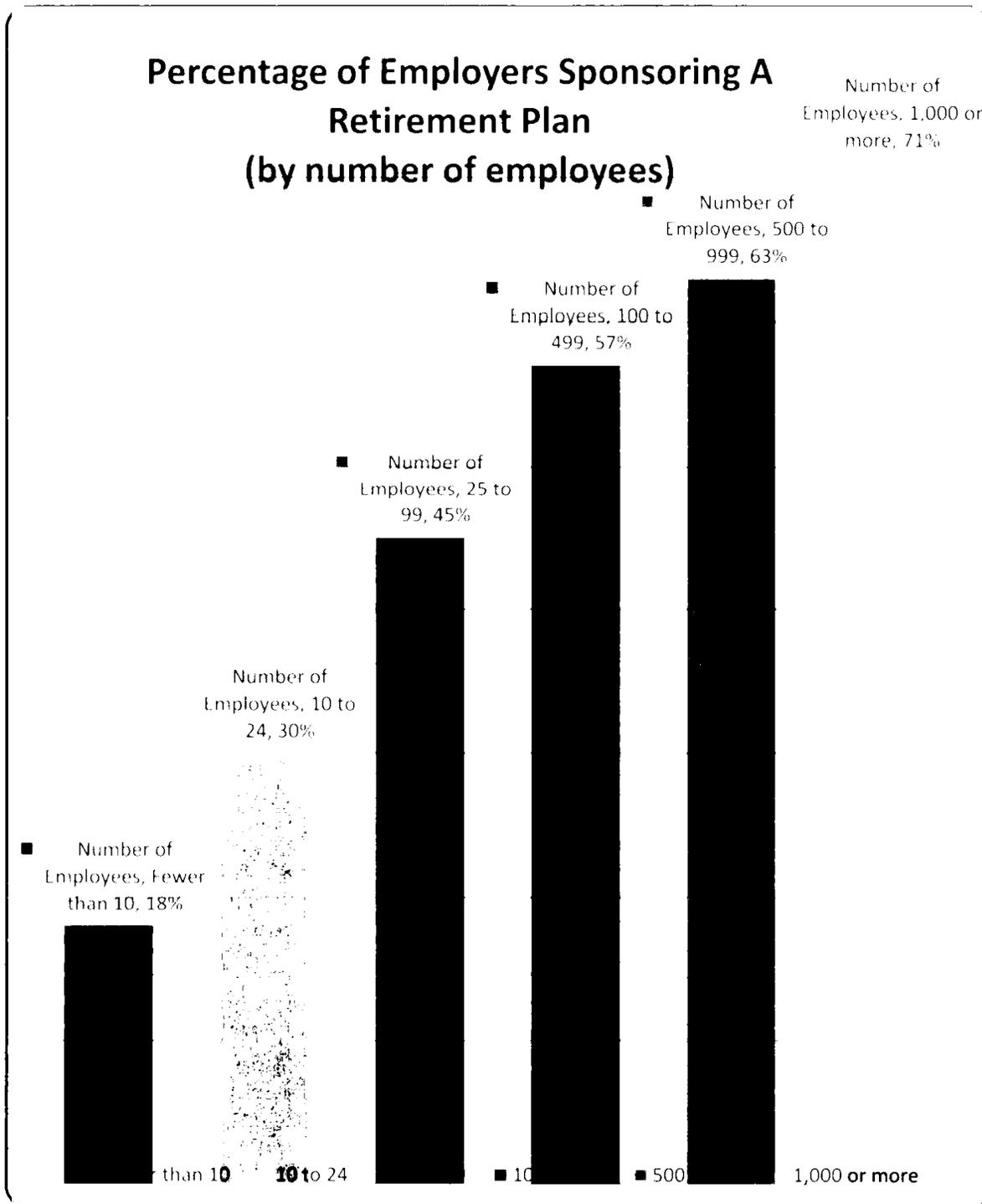
| than 10 | 10 to 24 | 10 | 500 | 1,000 or more |

Fig. 1. Percentage of employers sponsoring a retirement plan. (Source: Investment Company Institute, 2008)

2009). Motivations for being self-employed have been reported as personal freedom, independence, and more flexible lifestyle. Perhaps work satisfaction is a primary factor in their lack of retirement planning.

Small business owners are presumed to be particularly sensitive to activities related to internal stakeholders, such as employees (Hornsby, Kuratko, Naffzigger, La Follette, and Hodgetts, 1994). If this is true, it is reasonable to assume that they would be concerned about the prospects of their employees' future retirements. Results from a qualitative study, however, belied this assumption. Small business employers expressed little regard for the future retirement finances of their employees. The results also suggested that small business owners believed their employees placed little value on the presence of such plans. Rather, the primary incentive for the owner to have a plan was for the benefit of his own future retirement goals (McCullough, 2008).

Stawski et al. (2007) hypothesized and tested a model proposing a sequential path to predict the retirement savings contributions of individuals. The results of this study suggested that savings contributions are well predicted by planning activities that, in turn, can be predicted by goal clarity (Stawski, Hershey, and Jacobs-Lawson, 2007). Small business owners' high level of work satisfaction may affect their attitudes toward planning for retirement as thoughts of retirement may be unappealing. Contemporary literature has increasingly studied work engagement as an alternative to satisfaction (Schaufeli, 2002; Erickson, 2005). A review of the literature on the four constructs in the Stawski model (retirement goal clarity, satisfaction, engagement, and future time perspective) substantiates that each may be relevant.

Retirement goal clarity refers to the extent that an individual has envisioned and begun to plan retirement strategy. Kosloski (2001) proposed that jobs with high intrinsic rewards and positive social relations were related to less planning, regardless of how planning was defined. Atchley (1988) proposed that once a person develops a high positive work orientation, they view work as a positive experience. To the extent that these outcomes are valued, individuals will be less likely to leave them (McCune and Schmitt, 1981). Conversely, those with negative attitudes about work are incentivized toward retirement (Beehr, 1986; Ekerdt and Deviney, 1993). Other studies have demonstrated a link between attitudes toward one's job and either retirement intentions or behavior. In a study of factors associated with early retirement, (Hayward and Hardy, 1985) found that certain characteristics or requirements of the job were related to retirement, presumably by changing the attractiveness of retirement. (Barfield and Morgan, 1969) suggested that workers who were dissatisfied with their jobs were more likely to desire early retirement. If retirement is viewed by an individual as a loss of something important or valued, it will be viewed negatively. Thus, to the extent that retirement implies the loss of valued rewards, it will be viewed negatively by the worker and adjustment to retirement will be more difficult. Extending this logic, if retirement is devalued, planning for retirement should be devalued as well (Mutran, Reitzes, and Fernadez, 1997).

The definition of engagement, as a construct separate from *satisfaction*, has been debated in the research literature. Kahn (1990) defined personal engagement as the "harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances." Maslach and Leiter (1997) initially defined engagement as the opposite of burnout (i.e., someone who is not experiencing job burnout must be engaged in their job). Schaufeli et al. (2002), however, offered that engagement is not merely the opposite of burnout. They defined engagement as

a "more persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual, or behavior."

The distinction between the constructs of satisfaction and engagement seems to be one of passiveness and activity. While satisfaction alludes to an overall sense of contentment and wellbeing, engagement implies energy and proactive involvement. Specifically, satisfaction can be regarded a function of *pleasant* affect experiences at work (Brief and Weiss, 2002). Erickson (2005) stated that "engagement is above and beyond simple satisfaction. He states that it is about passion, commitment and the willingness to invest expend."

A successful small business owner is faced with a multitude of tasks that often require great amounts of energy. An owner who is highly engaged in his business operations may be too focused on the needs and rewards of the present challenges to be distracted by thoughts of retirement planning and goal clarity.

Future time perspective references how far into the future a possible self can be projected. A person with a high future time perspective would be able to consider possibilities farther into the future than one with a low future time perspective (Shell, 2001). One aspect of this construct involves having a sense of the future for which one is aiming (Markus and Nurius, 1986). A person with a strong future time perspective would be able to consider possibilities farther into the future than one with a weak future time perspective. This trait is evidenced by a tendency to place high value to goals in the future similar to expectancy–value theory (Atkinson and Raynor, 1974; Nuttin, 1985).

Studies suggest that entrepreneurs have a tendency towards high self-efficacy and strong locus of control characteristics. Individuals with high self-efficacy and belief that they are highly competent at decision-making, perceive greater opportunities in a risky situation and take more risks (Krueger and Dickson, 1994). They are confident about their abilities to handle unforeseen circumstances and therefore, feel less need to plan for contingencies. Cooper (1995) argued that higher levels of self-confidence are related to lower levels of information search activity. Results of research (Mayfield, Perdue, and Wooten, 2008) suggests that those who truly differ experience and risk aversion also differ in investment intentions and their subsequent investment behaviors and decisions. Therefore, the entrepreneur's ignorance of the risks being borne may blind him to the need for more information because of his or her overconfidence. This overconfidence might impact the small business owner's incentive to protect his future by planning for finances in retirement. It is reasonable to conjecture if a small business owner is not future driven, he may discount the need for future personal retirement security.

Hershey and Mowen (2000) found that a majority of individuals "satisfice" (Simon, 1955) when problem solving. They consider only a small subset of information relating to the problem at hand. A variety of studies (Poterba, 1996; Bernheim, 1997; Walsh and Pennington, 1989) found that knowledge of the financial planning process can have significant influence on retirement plan activities. Hershey and Mowen (2000) tested this relationship and found strong predictability between knowledge of retirement planning and retirement preparedness.

It could be argued that the way to measure a small business owner's retirement planning activity would be to merely ascertain if a retirement plan was in place. This was adopted in the Stawski model by measuring *retirement contributions* as the dependent variable. Retire-

ment planning activities, however, can include actions beyond savings. Many individuals, for example, relocate in retirement. Other provisions such as health insurance and elimination of mortgage debts may be a major component of retirement planning.

Kosloski et al. proposed that the most direct measure of retirement planning is anticipatory rehearsal. One aspect of retirement planning, for example, is evidenced in the extent to which an individual thinks about retirement and discusses it with friends and co-workers (Kosloski, Ekerdt, and DeViney, 2001). Other indicators are the level at which an individual has tried to calculate actual funds needed in retirement. Findings from the Retirement Confidence Survey (VanDerhei, 2009) revealed that only about forty percentage of American workers have spent the time trying to estimate this amount. Therefore, individuals with strong retirement goal clarity would seem more likely to seek retirement planning knowledge and subsequently, engage in retirement planning activities.

The path model proposed by Stawksi suggests that retirement goal clarity mediates the relationship between age and retirement planning activities. Therefore, for this study the mediation was also proposed in the relationships between the independent variables and retirement plan knowledge.

3. Hypotheses

3.1. Hypothesis 1

A small business owner's level of satisfaction with work is negatively related to his retirement planning attitude (goal clarity).

3.2. Hypothesis 2

A small business owner's engagement with the business negatively affects retirement goal clarity.

3.3. Hypothesis 3

A small business owner's tendency to "live for today" (lack of future time perspective) negatively affects retirement goal clarity.

3.4. Hypothesis 4

Retirement goal clarity is positively related to retirement planning knowledge.

3.5. Hypothesis

Retirement planning knowledge is positively related to retirement planning activities.
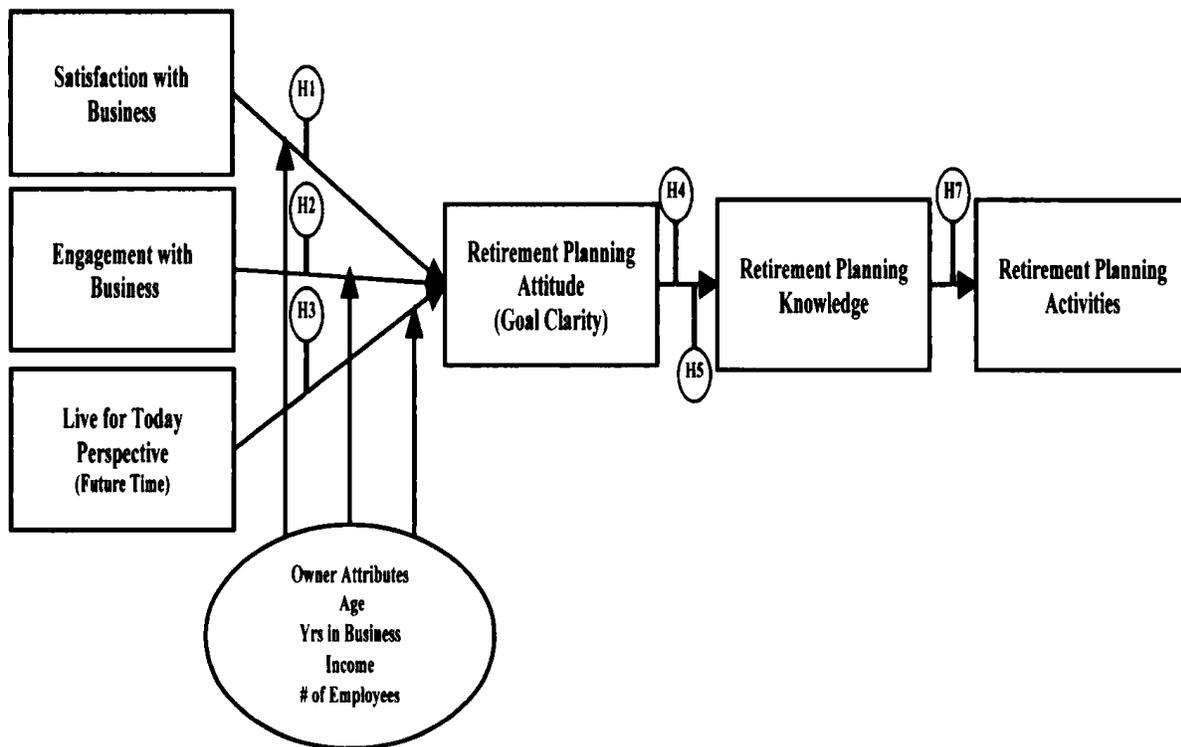
Fig. 2. Hypothesized sequential model: predicting a small business owner's retirement planning activities.

3.6. Hypothesis 6

Retirement goal clarity mediates the relationship between the independent variables and retirement planning knowledge.

4. Theoretical model

The model for this study expands on the Stawski model with the addition of two psychological characteristics (*satisfaction with work* and *engagement with work*). It also proposes that a third construct (*future time perspective*) is a predictor of the small business owner's attitude about retirement. In keeping with the behavioral focus of the model, the observable dependent variable (*savings contributions*) was replaced with *retirement activities*. Directly observable characteristics, including existence of a plan were included as moderators of the general model. Fig. 2 presents the proposed research model.

5. Data and methodology

5.1. Sample and data collection

In total, 1,466 small business owners were initially contacted via SurveyMonkey.com. The respondent sample was composed of 207 owners of small businesses employing less

Table 1   Survey questions by construct

Live for today (future time perspective) - adapted from Hershey and Mowen (2000)
FT1   I enjoy living for the moment and not knowing what tomorrow will bring
FT3   The future seems very vague and uncertain to me
FT4   I pretty much live on a day to day basis

Engagement in business - adapted from Bakker and Schaufeli (2006)
ENG1   At my business, I feel that I am full of energy.
ENG2   I am enthusiastic about my business.
ENG3   My business inspires me.
ENG4   When I get up in the morning, I feel like going to work.
ENG5   I feel happy when I am working intensely.
ENG6   I am proud of the work that I do.

Satisfaction with business - adapted from Mortimer and Lorence (1989)
SAT1   All, in all, I am satisfied with my business.
SAT2   Knowing what I know now, if I had to decide all over again whether to run my business, I would.
SAT3   I would be happy running my business indefinitely.

Retirement goal clarity - adapted from Stawski et al. (2007)
GC2   I have set specific goals for how much I will need to save for my retirement.
GC3   I have a clear vision of how life will be in retirement.
GC4   When it comes to retirement, I feel confident that my finances are in order.

Knowledge of retirement planning - adapted from Hershey and Mowen (2000)
KN1   When I need financial planning services, I know where to obtain information.
KN2   I am knowledgeable about small business retirement plans.

Retirement planning activities - adapted from Stawski et al. (2007)
RPA1   I frequently read articles and/or watch television shows on financial planning and investing.
RPA2   I frequently visit financial planning sites on the internet.
RPA4   I have discussed retirement plans with a knowledgeable friend or acquaintance.

than 100 workers who were members of a Chamber of Commerce in Northeastern Ohio. Seventy-five percentage of respondents were men, with both mean and median ages of 48 years. The mean and median number of years owning the business was 13.4 and 12, respectively. Because of the relatively small sample and its geographic concentration, the demographics of the sample respondents were compared with those from a larger study on Small Business Owner satisfaction conducted by the National Federation of Independent Businesses (Dennis, 2001). There was strong correlation between the two study groups, particularly in the areas of business sector diversity, sex of owner, age of owner, years in business, and income level.

5.2. Methodology

Validated scales, adapted from previous research, were used to measure each of the constructs. The scales were selected for their characteristics of focusing on a single dimension and to maintain discriminant validity and, adaptability to a Likert scale format. Questions from the survey are shown in Table 1.

Satisfaction was assessed with Mortimer and Lorence's (1989) scale. Items relating to *engagement* were taken from Bakker and Schaufeli (2006). *Future time perspective* was measured using Hershey and Mowen's (2000) scale. This measure was designed to tap the extent to which individuals enjoy thinking about and planning for the future. *Retirement goal*

clarity was measured using Stawski, Hershey, and Jacobs-Lawson's (2007) scale. Items contained in the scale either reflect the act of thinking about, discussing, or setting goals for the future, particularly in relation to retirement quality of life. *Knowledge of financial planning for retirement* was assessed using Hershey and Mowen's (2000) scale for items designed to assess individuals' perceptions of their general knowledge of the topic. *Retirement planning activity* level was measured using a revised version of the Stawski's (2007) planning measure. This scale was designed to tap the frequency of both information seeking and instrumental planning activities that had occurred over the past 12 months.

The method of analysis of the data involved a five-step process. First, using data screening techniques, the data were examined for test assumptions, normality, and missing values. Next, two measurement models were examined. First the scale items were assessed using Exploratory Factor Analysis (EFA) to confirm that the constructs proposed to test the hypotheses showed acceptable unidimensionality, reliability, and validity. Then, Confirmatory Factor Analysis (CFA) was conducted to further test the constructs for alignment and absence of common method bias. To test the hypotheses, a structural equation model (SEM) was developed and tested using The Analysis of Moment Structures (AMOS) graphics program. SEM is an extension of multiple regression that examines causal processes that are modeled pictorially to enable clearer conceptualization of the theory under study. Rather than achieving only descriptive statistics, SEM is effective in hypotheses testing by analyzing data for inferential purposes (Byrne, 2001). Finally, the trimmed SEM model was tested for moderation effects.

6. Results and discussion

Before conducting factor analysis, tests for sampling adequacy were done to ensure that the sample was adequate for factoring. The measures of sampling adequacy used were Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity. The analyses resulted in a KMO of 0.839; well above the 0.50 level that is standard for adequacy minimum (Field, 2009). The Bartlett's test significance of 0.00 allowed for rejection of the null hypothesis, suggesting that the data are appropriate for factor analysis (Table 2).

Next, EFA was conducted to confirm the constructs underlying the model (Thurstone, 1947). The extraction method used was Maximum Likelihood with Promax, non-orthogonal oblique rotation that provides the most accurate view of how constructs are likely to be related (Fabrigar et al., 1999). Convergent validity was evidenced from the pattern matrix (Table 3) that showed all items loaded highly on their respective factors.

An examination of the correlations among variables from the analysis, shown in Table 4, showed strong alignment between the engagement construct and satisfaction with work. Despite this strong relationship, however, the pattern matrix results suggested that these question sets are measuring different phenomenon. Therefore, they were maintained as distinct constructs in the model to be tested.

The resultant factors were then verified using confirmatory factor analysis (CFA) to assess their validity and reliability in the context of the current research. Like EFA, CFA hypothesizes some relationships among a set of variables (Brown, 1996). For the purpose of this

Table 2 Means, standard deviations, and correlations among study items

Item	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
EngBus1	5.50	0.92	1.00																		
EngBus2	5.90	0.89	0.76	1.00																	
EngBus3	5.68	1.05	0.72	0.87	1.00																
EngBus4	5.64	1.07	0.68	0.70	0.63	1.00															
EngBus5	5.96	0.86	0.55	0.53	0.48	0.56	1.00														
EngBus6	6.37	0.74	0.51	0.62	0.57	0.46	0.50	1.00													
Today1	2.95	1.71	0.01	0.02	0.02	0.08	0.07	0.02	1.00												
Today3	3.43	1.51	-0.24	-0.29	-0.24	-0.17	-0.12	-0.16	0.18	1.00											
Today4	2.78	1.67	-0.10	-0.13	0.08	-0.09	0.03	-0.01	0.47	0.40	1.00										
Sat1	5.60	1.22	0.46	0.40	0.34	0.44	0.19	0.32	0.04	-0.25	-0.19	1.00									
Sat2	5.91	1.27	0.43	0.51	0.44	0.43	0.35	0.39	-0.08	-0.22	-0.23	0.49	1.00								
Sat3	5.40	1.51	0.38	0.44	0.42	0.42	0.39	0.34	0.00	-0.12	-0.10	0.36	0.58	1.00							
GoalClarity2	4.90	1.62	0.02	-0.01	-0.02	-0.07	-0.08	0.04	-0.22	-0.27	-0.35	0.11	0.12	-0.10	1.00						
GoalClarity3	4.44	1.52	0.10	0.10	0.10	-0.01	-0.05	0.06	-0.21	-0.38	-0.41	0.25	0.18	0.03	0.75	1.00					
GoalClarity4	4.27	1.74	0.19	0.09	0.09	0.08	0.06	0.16	-0.03	-0.31	-0.29	0.33	0.22	0.11	0.56	0.59	1.00				
Know1	5.74	1.25	0.03	-0.04	0.05	0.01	0.00	0.06	-0.01	-0.10	-0.05	0.14	0.02	-0.03	0.32	0.18	0.31	1.00			
Know2	4.57	1.58	0.03	0.03	0.02	0.00	-0.05	0.05	-0.16	-0.13	-0.30	0.09	0.10	0.00	0.49	0.41	0.42	0.45	1.00		
RPlanAct1	4.09	1.85	0.10	0.08	0.11	0.13	0.10	0.05	-0.11	-0.02	-0.15	-0.02	0.06	0.09	0.35	0.26	0.26	0.25	0.40	1.00	
RPlanAct2	3.22	1.85	-0.08	-0.03	0.03	-0.01	-0.08	-0.08	-0.11	0.02	-0.15	-0.03	0.02	-0.01	0.41	0.32	0.19	0.24	0.45	0.66	1.00
RPlanAct4	4.82	1.79	0.01	-0.03	0.02	-0.06	-0.10	-0.09	-0.09	0.10	-0.10	0.02	-0.03	-0.04	0.41	0.31	0.21	0.32	0.41	0.42	0.44

Notes: Extraction method: Principal axis factoring rotation method: Promax with Kaiser normalization.
Kaiser-Meyer-Olkin = 0.839.
Bartlett's test of sphericity χ^2 = 1.90, df = 190, sig = 0.000.

Table 3 Pattern matrix factor loadings: Principal axis factoring, Promax rotation with Kaiser normalization

Item	1	2	3	4	5	6
Future time 1	0.535	.033	.166	−0.051	−0.134	−0.138
Future time 3	0.317	−0.124	−0.170	−0.198	−0.050	.015
Future time 4	0.923	.059	−0.016	.033	−0.214	−0.193
Engagement 1	.042	0.751	.125	.078	−0.115	.031
Engagement 2	−0.011	0.877	.031	.132	−0.215	.033
Engagement 3	−0.003	0.851	−0.026	.095	−0.187	.051
Engagement 4	.029	0.681	.173	−0.155	−0.088	.069
Engagement 5	.033	0.763	−0.121	−0.109	−0.051	.022
Engagement 6	.095	0.739	−0.015	.124	−0.003	−0.012
Engagement 7	−0.054	0.751	−0.145	−0.124	−0.043	.129
Satisfaction 1	.119	.064	0.795	.004	.042	.004
Satisfaction 2	−0.101	.296	0.451	−0.036	−0.035	.087
Satisfaction 3	−0.069	.313	0.355	−0.272	−0.121	.081
Goal clarity 1	−0.100	.134	−0.215	0.725	.221	.397
Goal clarity 2	−0.053	−0.021	.044	0.709	.436	.505
Goal clarity 3	−0.107	−0.026	.186	0.593	.293	.382
Goal clarity 5	.115	−0.110	−0.036	0.758	.143	.150
Planning knowledge 1	.196	−0.028	.209	.105	0.452	.332
Planning knowledge 2	−0.066	.047	.059	.118	0.533	.569
Planning knowledge 3	.036	.076	−0.091	−0.039	0.449	.362
Planning knowledge 4	−0.047	.048	−0.066	−0.155	0.705	.154
Planning knowledge 5	−0.150	−0.084	.041	−0.026	0.615	.156
Planning activities 1	−0.052	.123	−0.092	−0.067	.341	0.792
Planning activities 2	.006	−0.137	.029	.031	.328	0.867
Planning activities 4	.125	−0.027	−0.012	.226	.392	0.448

Notes: Kaiser-Meyer-Olkin = 0.839.

Bartlett's test of sphericity χ^2 = 1.90, df = 190, sig = 0.000.

study, the program AMOS was used. To run the confirmatory factor analysis using AMOS, a measurement model diagram, as shown in Fig. 3, was specified.

The model was run to evaluate the fit of the observed data to further assess the construct validity. A model is considered to "fit" if the observed covariance matrix is statistically equivalent to the hypothesized matrix. An examination of model fit statistics suggests that the measurement model has validity. The factor loadings are consistent with the results from the exploratory analysis. The χ^2 statistics show a CMIN of 357.12 and 197 degrees of freedom that results in a CMIN/DF of 1.81. A CMIN ratio of 3 to 1 or 2 to 1 is considered acceptable (Carmines and McIver, 1981). The RMSEA, root mean square error of approximation should

Table 4 Correlations among study variables

	Variable	1	2	3	4	5	6
1	Live for today (future time perspective)	1.00	−0.40	0.07	−0.14	−0.17	0.50
2	Engagement with business	−0.04	1.00	0.44	0.37	−0.40	0.22
3	Satisfaction with business	0.07	0.44	1.00	0.47	−0.19	0.09
4	Goal clarity	−0.14	0.34	0.47	1.00	−0.18	0.07
5	Retirement knowledge	−0.17	−0.40	−0.19	−0.18	1.00	−0.38
6	Retirement planning activities	0.50	0.22	0.09	0.07	−0.38	1.00

Small Business Owner Study
Factors Influencing Retirement Activities
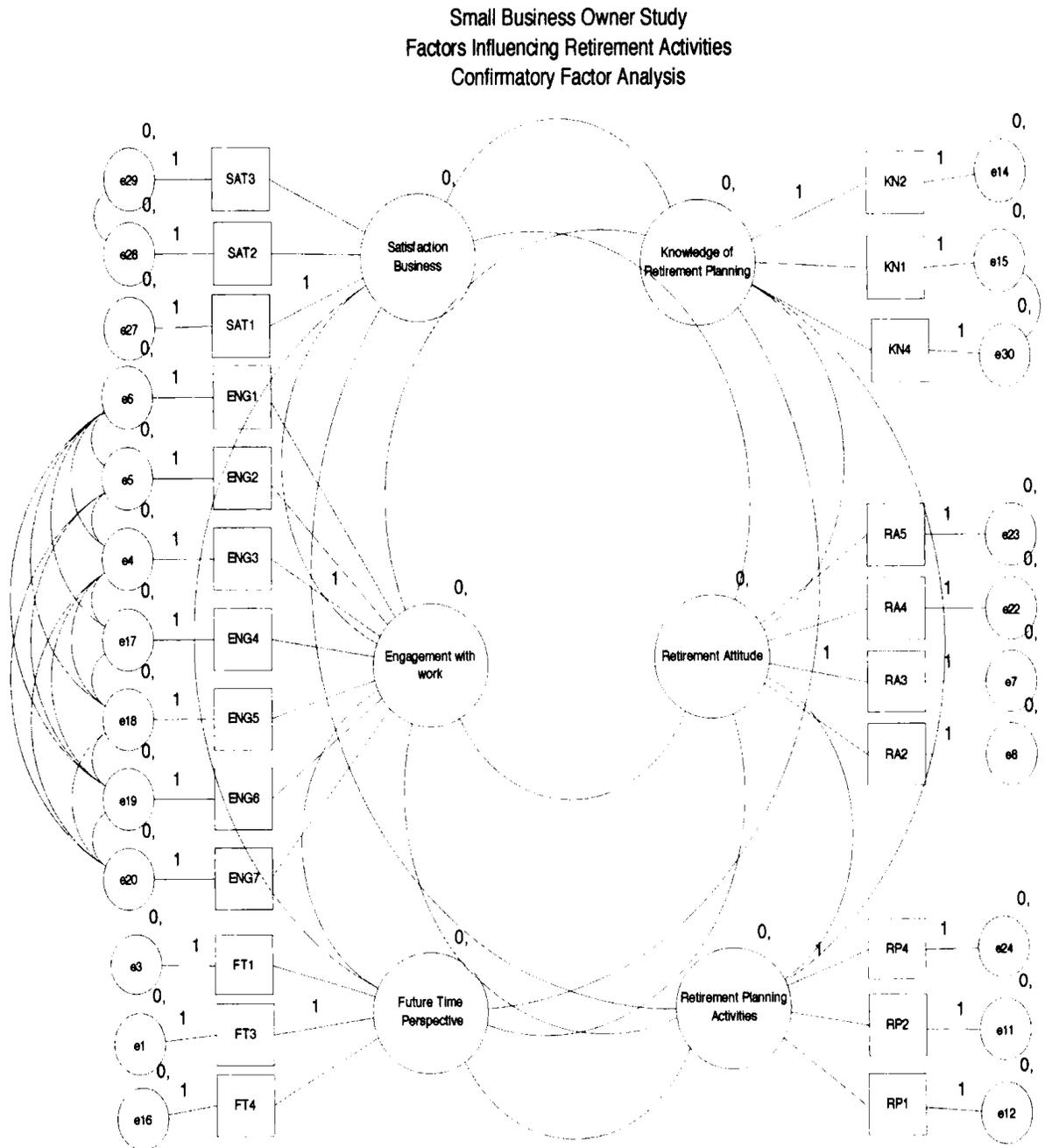Confirmatory Factor Analysis

Fig. 3. Confirmatory factor analysis model.

be less than 0.08 with values less than 0.06 indicating good fit (Browne and Cudeck, 1996). The model RMSEA at 0.063 is well within the guidelines. The CFI (comparative fit index) is considered acceptable if $\geq$ 0.90. For the initial model, it is 0.925.

Results of the standardized loading of items in each construct in relation to the constructs' covariance suggest that the factors have both discriminant and convergent validity. These results are shown in Table 5. To test the hypothesized model and assess its overall fit, a structural equation model was tested, as shown in Fig. 4.

Table 5   Item convergent and discriminant validity assessment

Construct	Item	Standard loading	Shared variance	Squared variance	CR	AVE	MSV	ASV
Future time	1	0.52	−0.15	0.02	0.66	0.41	0.27	0.10
	3	0.48	−0.33	0.11				
	4	0.86	−0.20	0.04				
			−0.52	0.27				
			−0.29	0.08				
Knowledge	1	0.39	0.56	0.31	0.68	0.45	0.31	0.14
	2	0.99	0.12	0.01				
	3	0.48	0.52	0.27				
			−0.33	0.11				
			0.03	0.00				
Plan activities	1	0.57	0.02	0.00	0.77	0.53	0.31	0.12
	2	0.83	0.49	0.24				
	3	0.77	0.56	0.31				
	4		0.02	0.00				
	5		−0.20	0.04				
Satisfaction	1	0.60	0.02	0.00	0.75	0.50	0.45	0.12
	2	0.83	0.12	0.01				
	3	0.67	0.67	0.45				
	4		−0.29	0.08				
	5		0.19	0.04				
Goal clarity (Retire attitude)	1	0.50	0.49	0.24	0.83	0.56	0.27	0.16
	2	0.66	0.19	0.04				
	3	0.88	0.52	0.27				
	4	0.87	−0.52	0.27				
	5		0.05	0.00				
Engagement	1	0.82	0.05	0.00	0.91	0.60	0.45	0.09
	2	0.94	−0.15	0.02				
	3	0.96	0.03	0.00				
	4	0.75	0.02	0.00				
	5	0.60	0.67	0.45				
	6	0.66						
	7	0.63						

The hypothesized model achieved good fit statistics with a χ^2 of 271.999 and 143 degrees of freedom that results in a CMIN/DF of 1.90. The RMSEA is 0.066 and the CFI is 0.928. Mediation tests results indicated full mediation which concurs with the findings from the original Stawski model. Therefore, the model appears to be valid with respect to the data. A summary of path estimates and critical ratios for the hypotheses 1–5 is shown in Table 6.

Of the original hypotheses, all are supported at the 0.001 significance level with the exception of (1) satisfaction predicting goal clarity and (2) engagement predicting goal clarity that are both significant at the 0.05 level. Contrary to the original hypothesis, however, the relationship between satisfaction and goal clarity is positive rather than negative. This suggests that owners who are satisfied with their businesses are more, not less likely, to
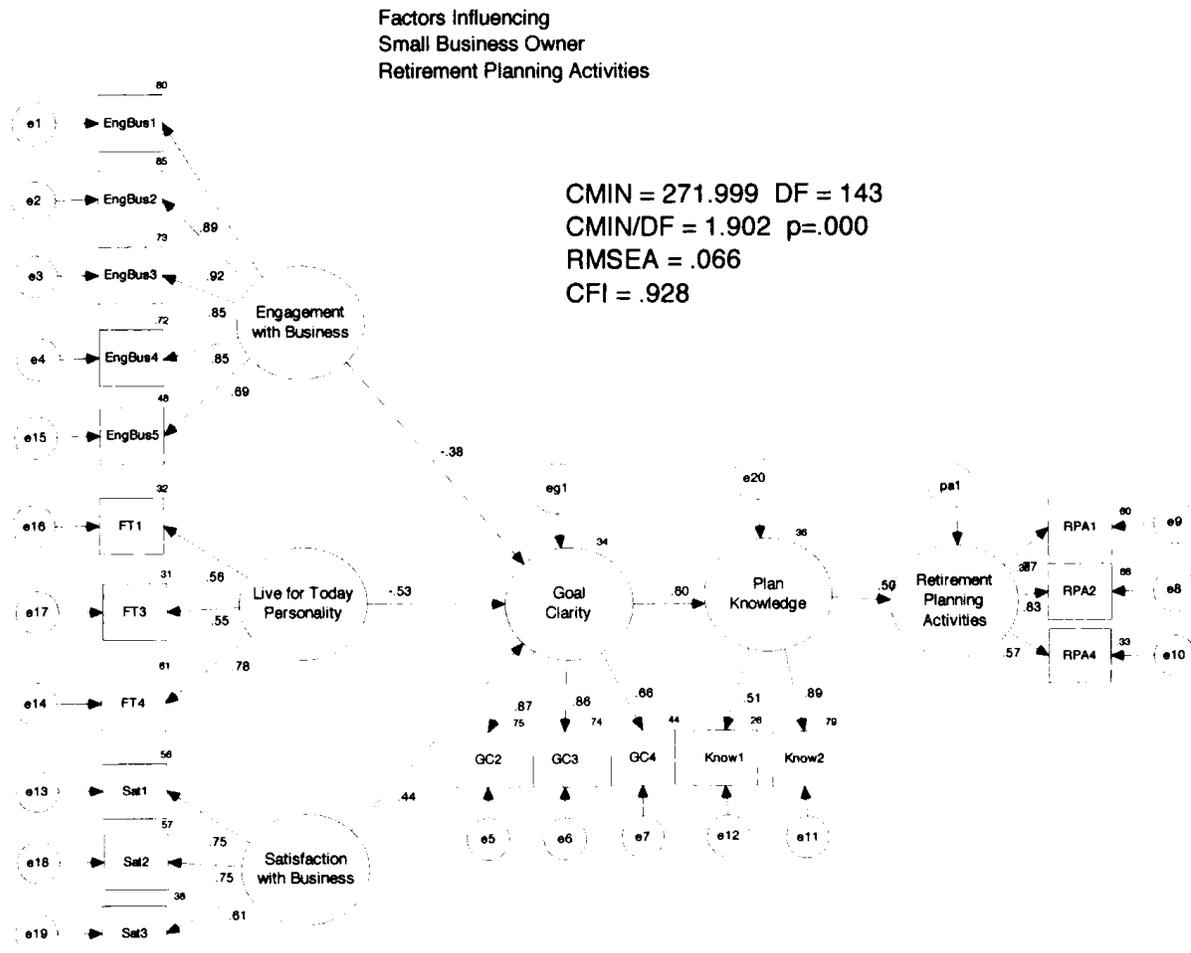
Fig. 4. AMOS structural equation model.

acquire retirement goal clarity. The relationship between engagement and goal clarity is negative, as hypothesized. These divergent results lend further credibility to the assertion that engagement and satisfaction are two distinctly different constructs.

Although overall statistical results suggested a sound model, one relationship was particularly surprising. The link between satisfaction with work and goal clarity appears to be positive, rather than negative. This suggests that owners who are more satisfied with their

Table 6   AMOS structural equation model hypotheses analysis

Hypothesis	+/− predicts		Estimate	Standard error	Critical ratio	*p* value	Hypothesis supported?
1. Satisfaction	−	Goal clarity	0.58	0.26	2.26	0.02	No - positive
2. Engagement	−	Goal clarity	−0.49	0.24	−2.05	0.04	Yes
3. Live for today personality	−	Goal clarity	−0.82	0.17	−4.81	***	Yes
4. Goal clarity	+	Plan knowledge	0.64	0.09	7.58	***	Yes
5. Plan knowledge	+	Retire plan activities	0.37	0.10	3.64	***	Yes

Notes: Path loadings (unstandardized).

businesses would be expected to be more likely to plan for retirement. This relationship, although significant for the model of all respondents, appears to be moderated by attributes of the owner. It was most significant for owners who were older than 49 or in business more than 14 years and those who already had a retirement plan in place. Business owners who report being satisfied may have reached a maturity level of controlled emotions in regards to how they feel about their businesses. This is in keeping with the characteristics described by the construct.

In contrast, the prediction that an owner's high level of engagement with his business suggests negative retirement goal clarity was supported. This relationships is supported by the literature that proposes that jobs with high intrinsic rewards and positive social relations were related to less planning, regardless of how planning was defined (Kosloski, 2001).

The third behavioral construct, "live for today" mindset showed significant negative relationship with retirement goal clarity. Previous research suggests that entrepreneurs, in particular have a tendency towards high self-efficacy (Krueger & Dickson, 1994). They are confident about their abilities and exhibit higher levels of self-confidence that are related to lower levels of information search activity (Cooper, 1995). This overconfidence might impact the small business owner's incentive to protect his future by planning. The negative relationship between a live for today attitude and financial goal clarity may be particularly significant for busy owners who are often preoccupied with many diverse responsibilities. With their attention away from retirement planning issues, the business owners may be neglecting to take the necessary steps to implement a retirement plan for the benefit of themselves and their employees.

Results of the model reinforced previous studies which suggest that retirement goal clarity is a strong, positive predictor of retirement knowledge (Hershey and Mowen, 2000). Retirement knowledge, in turn, positively suggests retirement planning activities. Therefore, efforts to assist owners in developing retirement goal clarity may directly influence their decision to adopt a business plan.

7. Conclusions

The study model was an extension of previous research in retirement goal clarity and resultant retirement planning activities. The model was constructed to measure the relationship between behavioral characteristics reported to be associated with entrepreneurs and small business owners and retirement goal clarity and planning. The model hypothesizes that the more satisfaction and engagement an owner feels in his business, the less likely he will be to plan for retirement. In addition, it conjectures that a business owner, who is assumed to have high self-efficacy, would have a tendency to live for today. Surprisingly, results of the study suggest that small business owners who are satisfied with their business will actually have a greater tendency to plan for retirement while those who are highly engaged with their business and/or lack a future time perspective will not plan for retirement.

The study findings suggest that a small business owner's decisions regarding retirement plan efforts are affected by behavioral characteristics partially unrelated to economic incentives and disincentives. Therefore, policy makers and plan sponsors who focus their tactics

only on "carrot and stick" economic tactics such as allowing tax deductions and penalizing for participant discrimination may continue to find their efforts to encourage small business owners to adopt a plan unsuccessful. In turn, the employees of these small businesses may face an uncertain retirement future.

Policy makers might consider creation of government sponsored retirement accounts that could allow eligible small-business employees to save for retirement by having deductions from their paychecks automatically put into investments offered by a government entity, either state or federal. Creation of these types of plans is being debated in some states, such as Virginia (Arvidson, 2009), as well as within the Obama administration (PlanAdvisor, 2009). Although implementation of government sponsored plans may not address the needs of the small business owners, it may be the only eventual means for which the employees of these businesses can finally begin to save for their retirement futures.

One might infer from the study results that the influence of a plan advisor can be an important element in the retirement plan adoption. However, as small business retirement plans can be labor intensive and unprofitable accounts, advisors may be disinterested in selling to this market. Plan sponsors advisors who do wish to develop the small business plan market might consider developing strategies that focus on the emotional needs of the owner. For example, a possible angle might be to communicate to owners that having a retirement plan is part of a successful, thriving plan to maintain the freedom of choice for the owner as she saves.

The study has several limitations. The general limitations of using survey research techniques and structural modeling apply to the findings from this study. Although the demographic profile of the sample closely matched those of a larger NFIB survey, the geographical congruence of the respondents may be affecting the results. As evidenced by the inconclusive fit for all paths for owners who only have an IRA, there may be other moderators that could serve as relevant tests for the model.

Future research should be conducted to identify other psychological factors that may also be relevant to motivations in retirement goal clarity. The model could also be tested for validity on other subject cohorts.

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