AN INTERDISCIPLINARY APPROACH TO THE MODELING OF RETIREMENT PLANNING PRACTICES

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Many westernized societies will face significant economic challenges in the coming decades when attempting to provide adequate public pension benefits for future retirees. This widely anticipated pension financing shortfall will result from shifting population dynamics (i.e., the graying of the baby boomers) and the all too common tendency of individuals to delay planning and saving for old age (Helman, Salisbury, Paladino, & Copeland, 2005; Milgram & Tenne, 2000). Unfortunately, only bits and pieces are known about the field of forces that motivate workers to save for the post-employment period. In this study, we examine the perceived savings adequacy of workers and its determinants. We extend an empirically-grounded psychological model of retirement planning (Hershey, Henkens & van Dalen, 2007) by incorporating into it indicators of social and economic forces thought to be associated with retirement savings. These forces were examined in a cross-cultural context, using data drawn from respondents in the Netherlands and United States.

Participants were 496 Dutch and 419 Americans, 25-64 years of age. All respondents were married or living with a partner at the time of testing. Each individual completed a questionnaire that assessed psychological, social, and economic determinants of retirement savings adequacy. A number of the constructs measured as part of the study were based on multiple-item scales (e.g., future time perspective; financial planning knowledge; retirement goal clarity), whereas others were based on single item indicators (e.g., quality of employer pension; early learning experiences related to saving). Among both cultures, the internal consistency of the scales was found to be acceptable.

Separate regression analyses were carried out for each country in which three different sets of variables (psychological, social, and economic) were used to predict the criterion: retirement savings adequacy. In addition to these three models, a full hierarchical regression model was tested for each country that included economic, social *and* psychological predictor variables. In all regression equations, age, sex, and health status were entered first into the model to serve as control variables.

Findings revealed striking differences across countries among variables predictive of the criterion, and cross-cultural differences were observed in the robustness of the models. Standardized beta weights and R^2 values for the four American models is shown in Table 1, and comparable models for Dutch respondents are summarized in Table 2.

With the exception of the economic model, substantially more variance was accounted for in the American models than those developed for the Dutch. The investigators attribute this difference to the highly individualized (and thus, lawful) nature of retirement planning behavior in the United States. Moreover, psychological and social forces were found to dominate the perceived savings adequacy of American workers, whereas Dutch workers were largely influenced by economic contingencies such as the quality of their employer's pension plan and public pension programs.

The results of this study provide clear insights into the determinants of retirement savings adequacy. From a theoretical perspective, they indicate that holistic, interdisciplinary models of planning are better able to account for individual variation in retirement savings practices than disciplinary-specific formulations that are more commonly found in the literature. From an applied perspective, these findings suggest that policy analysts should take into account individual, contextual, economic and cultural differences when formulating pension reforms that stress individual responsibility for planning and saving.

References

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Table 1: Regression analyses to explain perceived savings adequacy of married workers in the US (N=419)

	Standardized Regression Coefficients (*t*-values)							
	Economic factors		Social factors		Psychological factors		Full Model	
Explanatory variables								
Socio-demographic factors								
Age	0.01	(0.26)	-0.03	(-0.80)	-0.12**	(3.61)	-0.16**	(-4.81)
Sex	-0.09	(-1.85)	-0.12**	(-3.03)	-0.04	(1.10)	-0.05	(-1.65)
Health	-0.29**	(-6.11)	-0.18**	(-4.30)	-0.09**	(-2.58	-0.06	(-1.74)
Economic factors								
Public pensions	0.07	(1.66)					0.05	(1.59)
Employer's pension	0.22**	(5.23)					0.12**	(3.71)
Private assets	0.36**	(8.03)					0.16**	(4.77)
Social factors								
Spousal support			0.42**	(9.76)			0.18**	(5.06)
Support from colleagues and friends			0.06	(1.44)			-0.05	(-1.49)
Learned to save as a child			0.18**	(4.36)			0.04	(1.14)
Psychological factors								
Future time perspective					0.33**	(7.69)	0.22**	(5.19)
Retirement goal clarity					0.16**	(3.19)	0.12*	(2.57)
Financial knowledge					0.11*	(2.25)	0.10*	(2.02)
Planning					0.28**	(5.04)	0.24**	(4.67)
Adjusted R²	26.7		31.2		56.2		62.3	

* Significant at p <0.05; ** Significant at p <0.01

Table 2: Regression analyses to explain perceived savings adequacy of married workers in the Netherlands (N=496)

Explanatory variables	Economic factors		Social factors		Psychological factors		Full Model	
			Standardized Regression Coefficients (*t*-values)					
Socio-demographic factors								
Age	0.08*	(2.22)	0.06	(1.30)	0.04	(0.88)	0.05	(1.24)
Sex	-0.02	(0.40)	-0.21**	(-5.00)	-0.08	(1.91)	0.05	(1.17)
Health	-0.13**	(-3.56)	-0.19**	(-4.52)	-0.15**	(-3.91)	-0.10*	(-2.71)
Economic factors								
Public pensions	0.18**	(4.73)					0.15**	(4.31)
Employer's pension	0.40**	(9.93)					0.33**	(8.73)
Private assets	0.26**	(6.98)					0.18**	(4.79)
Social factors								
Spousal support			0.14**	(3.13)			0.06	(1.63)
Support from colleagues and friends			0.09	(1.88)			0.00	(0.10)
Learned to save as a child			0.09*	(1.96)			0.01	(0.39)
Psychological factors								
Future time perspective					0.14**	(3.12)	0.08	(1.85)
Retirement goal clarity					-0.04	(-0.67)	-0.05	(-1.14)
Financial knowledge					0.24**	(5.19)	0.14**	(3.27)
Planning					0.28**	(6.04)	0.24**	(5.74)
Adjusted R²	34.2		13.5		29.5		44.0	

* Significant at p <0.05; ** Significant at p <0.01