Life Satisfaction in Time Orientation

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Abstract

Time orientation influences people's perception and evaluation of a situation. Satisfaction in the present life and the future life is likely to be affected by one's time orientation. Using samples of 1829 middle-aged Americans, this study examined the association between individuals' time orientation and satisfaction with life in general as well as with their financial situation. In this study, we created the future-to-current ratio to assess a person's relative time orientation tendency between future time orientation and present time orientation. The results indicated that respondents with a higher tendency of holding future time orientation exhibited greater life satisfaction and financial satisfaction of the present. A higher tendency of holding future time orientation also predicted a higher life satisfaction and financial satisfaction of the future. The findings of the study emphasize having a future time orientation is important with regard to well-being.

Keywords Life satisfaction · Financial satisfaction · Time orientation · Future orientation

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Introduction

Life satisfaction or subjective well-being refers to how people evaluate their lives or quality of lives based on their cognitive and affective assessment of how they feel about their lives or existence itself (Diener and Suh 2000). Researchers have explored how to measure people's life satisfaction, happiness, or subjective well-being, and discussed ways to make their life happier and more fulfilled in spite of concurrent existence of negative affect and hardships of life, such as depression, addiction, anxiety, and pessimistic emotions (Andrews and Robinson 1991; Diener et al. 1985; Seligman and Csikszentmihalyi 2000). Since life satisfaction is based on one's subjectively judged quality of life, the self-reported variable rather than one assessed by other people using objective measurements, such as socio-economic characteristics (e.g., income, net worth, education, job, health), is considered a more proper outcome variable (Diener and Suh 2000).

As life satisfaction is evaluated by a person's cognitive and affective judgment of her/his quality of life, satisfaction with life is highly subjective to the individual's psychological mechanisms and circumstances (Diener et al. 2002). The perception of time is one of the factors that affect the cognitive process in construing, framing, evaluating, and remembering life events (Kluckhohn and Strodtbeck 1961; Lee et al. 2017), which often refers to time orientation. Increasing evidence suggests that individual differences in time orientation are related closely to one's assessment of life (Stolarski et al. 2016). Researchers have demonstrated that the way people retrospect, experience, and anticipate moments of life is related to life satisfaction or subjective well-being (Davis and Ortiz 2017).

However, the findings often are inconsistent and contradictory. For example, Parr (1997) found that present value or present-orientation is related positively to life satisfaction because a focus on the present and the value of here-and-now experiences are a necessary prerequisite for perceived life satisfaction. In addition, Csikszentmihalyi (1999) argued that happiness or life satisfaction comes from living in the present where people are involved in autotelic experiences. When people are occupied with the present, they can find and absorb meanings from what they are doing now. By living in the present, people can transcend their fear of uncertainty about the future, or past regrets, leading to better life satisfaction. A similar relation was found among older adults where the older individual had a more positive orientation to the past and present, as well as greater life satisfaction (Kazakina 1999).

In contrast, some studies have underscored the positive relationship between future orientation and life satisfaction. Many researchers have discussed this relation based on self-efficacy, motivation, goal setting, or one's sense of control over life (Bandura 1990; Burack and Lachman 1996; Prenda and Lachman 2001). Trommsdorff (1994) argued that people organize their future behavior according to their time orientation, which comprises specific expectations and evaluations about future events. Future orientation is related to setting goals, planning activities, and the ability to control future outcomes. Prenda and Lachman (2001) viewed a future orientation or propensity to plan for the future as a life management strategy, and found a positive association between future orientation, life satisfaction, and perceived control over life. The future orientation's effect on life satisfaction was the greatest among the elderly, although future orientation in the propensity to plan itself declined with age. They also found a mediating role of sense of control that enhanced the increases in the relation between future orientation and life satisfaction.

Other studies have extended the scope of the discussion of time orientation and satisfaction to consumer financial decisions and satisfaction. Financial status is one of the important life domains and financial satisfaction is defined as the subjective evaluation of financial status. Extensive empirical evidence supports that financial issues are significantly associated with job performance (Joo et al. 2008; Kim and Garman 2003), physical and mental health (Bridges and Disney 2010; Kim et al. 2003; Serido et al. 2014; Shaw et al. 2011), relationship (Archuleta et al. 2011; Britt et al. 2008; Clark-Lempers et al. 1990; Ponnet 2014), and subjective well-being (Ervasti and Venetoklis 2010; Tay et al. 2017; Xiao et al. 2009). Thus, financial satisfaction, defined as the subjective evaluation of financial status, is often linked to satisfaction with overall life (Bowling and Windsor 2001; Diener et al. 1995; Tiefenbach and Kohlbacher 2016; Xiao et al. 2009) as well as satisfaction with other life domains (Archuleta et al. 2011; Mao et al. 2017; Joo and Grable 2004). Tiefenbach and Kohlbacher (2016) found financial satisfaction is the most significant predictor of happiness.

Time orientation also matters in perceiving financial satisfaction. Future orientation leads consumers to consider future consequences of their behaviors, and thus, consumers with a stronger future orientation can resist temporal discounting or the temptation of immediate rewards (e.g., spending money in the short-term) over greater, delayed rewards (e.g., long-term financial well-being) in financial decisions (Howlett et al. 2008). Shobe and Page-Adams (2001) proposed a conceptual model to explain future orientation's role that considers future consequences on the relationship between assets and well-being, measured as positive social and economic outcomes, as a mediator, while Sherraden (1991) focused on future orientation as one domain of social and economic outcomes that affects assets (e.g., household stability, social influence, personal efficacy, civic participation, and children's well-being). Howlett et al. (2008) tested the role of future orientation, as well as self-regulation and financial knowledge, in long-term financial decisions, empirically, and found that consumers with higher levels of future orientation tended to make financial decisions that maximized their future anticipated well-being. Specifically, consumers with a stronger future orientation were more likely to participate in a retirement plan (i.e., 401 k plan) and to have less favorable attitudes toward high-risk/moderate return investments that entail high risk in the long run than did consumers with low levels of future orientation. On the other hand, present time orientation tended to result in negative financial outcomes. Consumers who hold a present-oriented perspective are inclined to compulsive buying (Lee and Song 2011; Norum 2008) so that they are likely to have financial problems such as holding high balances on credit cards (Joireman et al. 2010; Pinto et al. 2000).

A typical assumption on the relationship between life satisfaction and financial satisfaction is that financial satisfaction is a part of or a precursor of life satisfaction (Easterlin and Sawangfa 2007; Tiefenbach and Kohlbacher 2016; Xiao et al. 2009). However, this study argued that life satisfaction and financial satisfaction should be considered separately when examining the effect of time orientation on those variables. Previous studies found that life satisfaction is positively associated with present orientation but suggested mixed associations with a future orientation (Cunningham et al. 2015; Zhang et al. 2013). Financial satisfaction is negatively associated with present orientation but positively related to future orientation. Thus, analyzing life satisfaction and financial satisfaction separately will provide a more comprehensive picture to test the role of time orientation.

Therefore, the research questions in this study were: (1) Are different time orientations associated with current life satisfaction? (2) Are different time orientations associated with anticipated future life satisfaction? (3) Are different time orientations associated with current financial satisfaction? (4) Are different time orientations associated with anticipated future financial satisfaction?

Research Gap and Present Study

Based on previous studies, this study brought up a few questions rooted in research gaps. First, the existing literature did not provide a clear distinction between life satisfaction and financial satisfaction in estimating the role of time orientations. Although studies generally implied that financial satisfaction leads to life satisfaction, the determinants of each concept are not necessarily assumed to be the same. The current study compared the effect of predictors between two subjective assessments using seemingly unrelated estimation (SUE). Second, previous literature did not test a difference in satisfaction at temporal points. For example, if a person holds a future-oriented perspective, would the person expect her/his life in the future to be satisfactory? If a person holds a future-oriented perspective, would the person be satisfied with the present financial situation or the future financial situation? It is reasonable to assume that people perceive the present satisfaction and future satisfaction as two distinct constructs that are not necessarily linearly related to each other. For example, people with higher future orientation would be likely to endure the current hardship leading to lower life satisfaction in the present but still look forward to future satisfaction leading to higher life satisfaction, or vice versa. To articulate these questions, this study employed the concept of temporal satisfaction with life, following Pavot et al. (1998). Temporal satisfaction with life makes people compare the past, present, and future life satisfaction by differentiating each temporal point of satisfaction. The researchers confirmed that people are good at partitioning three-time orientations in relation to life satisfaction (McIntosh 2001; Pavot et al. 1998). Based on the concept of temporal satisfaction with life, this study examined the effect of time orientations on present life satisfaction, future life satisfaction (anticipated life satisfaction), present financial satisfaction, and future financial satisfaction (anticipated financial satisfaction).

This study also developed the future-to-current ratio, which measures an individual's relative tendency to favor future over present values as a continuous construct. Time orientation can be more complicated beyond a dichotomously measured group identification, such as either present orientation or future orientation. People may not be completely future-oriented or present-focused. Rather, people tend to value the future more than present, or vice versa. To capture the relative traits of time orientation, this study investigated how temporal distance affects life satisfaction and financial satisfaction and did not treat time orientation of respondents as either future- or present-oriented.

Methods

Data and Measurement

The MacArthur Foundation Research Network has conducted the longitudinal national survey of Midlife Development in the U.S. (MIDUS) at approximately nine-year intervals

since 1995/96 to investigate the role of behavioral, psychological, and social factors related to middle-aged Americans' health and well-being. Participants were approached based on the random digit dialing (RDD) technique with over-sampling in metropolitan areas. The initial sample size of 7108 has declined to 3294 over the past three decades. This study used data from the third wave of the survey (MIDUS III), collected in 2013/14. Participants who did not answer all questions related to our dependent variables (i.e., life satisfaction, anticipated life satisfaction, financial satisfaction, anticipated financial satisfaction) were excluded in the analysis, and the final sample size was 1829.

Measures

Dependent Variables

There were four dependent variables in the study: (1) *Present life satisfaction*, (2) *Anticipated future life satisfaction*, (3) *Present financial satisfaction*, and (4) *Anticipated future financial satisfaction*. Each variable was assessed with a single item that asked, respectively, "How would you rate your life overall these days?" "Looking ahead ten years into the future, what do you expect your life overall will be like at that time?" "How would you rate your financial situation these days?" "Looking ahead ten years into the future, what do you expect your financial situation will be like at that time?" Respondents were asked to answer on a scale of 0 to 10 where 0 refers to "*the worst*" and 10 to "*the best*."

Key Independent Variables

The *Future-to-Current Ratio* was defined as the respondent's self-assessed temporal distance. To assess time orientation's relative effect on life satisfaction and financial satisfaction overall, we used two time orientations: future and current.

The future-oriented perspective was measured with three items from the MIDUS III questionnaire: (1) "I like to make plans for the future," (2) "I know what I want out of life," and (3) "I find it helpful to set goals for the near future." The current-oriented perspective was comprised of three items: (1) "I live one day at a time," (2) "There is no use in thinking about the past because there is nothing you can do about it," and (3) "I believe there is no sense planning too far ahead because so many things can change." Each item was measured on a 4-point Likert type scale with 1 = *not at all*, 2 = *a little*, 3 = *some*, and 4 = *a lot.* Then, the future-to-current ratio was developed using the ratio of future-oriented perspective to present-oriented perspective, in which a higher ratio reflected a greater tendency to plan for the future, as below:

$$\text{Future-to-Current Ratio} = \text{Future perspective}/\text{Current perspective}$$

The study used respondents' socioeconomic information as control variables. These included age, gender, race/ethnicity, educational attainment, marital and employment status, household size and income, homeownership, and health status. *Age* was a continuous variable measured in years. *Gender* was coded dichotomously: 1 = *male*, 0 = *female. Race* was coded as 1 = *White*, 2 = *Black/African American*, and 3 = *Other.* The respondents in the *Other* category included Native Americans, Asians, Native Hawaiians, Pacific Islanders, and so on. *Education* was a categorical variable defined as

1 = *high school or less*, 2 = *some college/college graduate*, and 3 = *graduate or professional degree. Marital status* was coded as 1 = *married*, 2 = *never married*, and 3 = *separated, divorced, or widowed. Employment status* was a categorical variable coded dichotomously: 1 = *working*, 0 = *non-working.* Employees and self-employed respondents were categorized in the working group. Respondents who were not working included the unemployed, those laid off temporarily, retired, housemakers, full-time/part-time students, and so on. *Household size* was a continuous variable defined as the total number of individuals living in the household. *Household income* was a continuous variable defined as the household's annual income from wages, pensions, social security, and other sources. *Homeownership* was a dichotomous variable coded as 1 = *homeowner* and 0 = *renter. Health status* was measured by a single item: "How would you rate your health these days?" The respondents rated their subjective health status using a scale from 0 to 10 where 0 indicates "*the worst*" and 10 "*the best.*"

Analysis

This study used Ordinary Least Square regression to estimate the effects of time orientations on present life satisfaction, future life satisfaction, present financial satisfaction, and future life satisfaction. This study additionally conducted a seemingly unrelated estimation (SUE) to compare the differences in the effect of determinants on life satisfaction and financial satisfaction. Seemingly unrelated estimation is a nonparametric method comparing the marginal effects of independent variables between two separate models (Weesie 2000). SUE tested whether the estimated coefficients from the life satisfaction model are significantly different from the estimates of variables from the financial satisfaction model.

Results

Respondents' Demographics

Table 1 shows the descriptive statistics of the sample used in the model ($N = 1829$). Demographic features revealed that there were slightly more female (52%) than male respondents. Their mean age was 61 and ranged from 42 to 92. The majority of the sample was White, college educated, married, employed, and homeowners. The respondents' income averaged $99,039 annually and they rated their health status as approximately seven of ten, which was relatively good. The mean score of the future-to-current ratio, the ratio of the respondents' future to current-oriented perspective, was 1.50 ($SD = 0.74$). This implies that the respondents exhibited a slightly greater propensity to have a future-oriented than current-oriented perspective, as the score was greater than 1. With respect to satisfaction, respondents' life satisfaction was relatively high. They rated their present and future lives as 7.93 ($SD = 1.52$) and 7.97 ($SD = 1.80$), respectively, which indicates that their levels of life satisfaction were consistent both when they evaluated their life now and when they predicted their life ten years later. The mean value of current financial satisfaction was 6.79 ($SD = 2.12$) and the respondents expected their anticipated financial satisfaction would be 6.98 ($SD = 2.19$).

Table 1 Descriptive Statistics of the Respondents ($N = 1829$)

Variable	%	M (SD)	Min	Max
Age		61.38 (9.76)	42	92
Gender				
Male	47.62			
Female	52.38			
Race				
White	90.27			
Black	3.06			
Other	6.67			
Education				
High school or less	24.44			
College	53.20			
Graduate/professional	22.36			
Marital status				
Married	69.66			
Never married	7.49			
Separated/divorced/widowed	22.85			
Employment				
Working	64.35			
Non-working	35.65			
Household size		2.32 (1.26)	1	20
Household income		99,038.96 (74,574.87)	1000	300,000
Homeownership				
Own	88.30			
Rent	11.70			
Health		7.50 (1.44)	1	10
Future-to-current ratio		1.52 (.74)	.25	4
Life satisfaction				
Present		7.93 (1.52)	0	10
Future		7.97 (1.80)	0	10
Financial satisfaction				
Present		6.79 (2.12)	0	10
Future		6.98 (2.19)	0	10

Future-to-Current Time Orientation and Life Satisfaction

Table 2 describes the results of regression analyses that examined the association between the future-to-current ratio variable and life satisfaction. Demographic variables were included in the model as well to control their effects. Overall, the models that predicted present and future life satisfaction were significant: ($F_{14,1814} = 43.90, p < 0.001, R^2 = 0.25$, and $F_{14,1814} = 33.98, p < 0.001, R^2 = 0.21$), respectively. These results indicated that the

Table 2 Regression Analysis Predicting Life Satisfaction of Present and Future ($N = 1829$)

	Life satisfaction (Present)		Life satisfaction (Future)	
	b	SE	b	SE
Future-to-current ratio	.28***	.04	.34***	.05
Age	.03***	.004	−.03***	.004
Gender (female)	.25***	.06	.25**	.08
Race (Black)	.30	.18	.53*	.22
Race (other)	−.11	.12	−.15	.15
Education (college)	−.06	.08	.01	.10
Education (graduate/professional)	−.06	.10	−.02	.12
Marital status (never married)	−.44**	.13	−.51**	.16
Marital status (separated/divorced/widowed)	−.34***	.08	−.11	.10
Employment (working)	−.03	.07	.04	.09
Household size	.01	.03	.03	.03
Household income (log)	.17***	.04	.14**	.05
Homeowner	.46***	.10	.12	.13
Health	.36***	.02	.40***	.03
Constant	.87*	.54	4.32***	.66
F	43.90***		33.98***	
R^2	.25		.21	

$*p < .05$, $**p < .01$, $***p < .001$

future-to-current ratio, age, gender (female), household income, homeownership, and health were associated positively with present life satisfaction, while some marital status categories (never married and separated/divorced/widowed) were related negatively to it. In predicting future life satisfaction, the future-to-current ratio, gender (female), race (Black/African American), household income, and health were found to have positive associations, while age and marital status (never married) had negative associations.

The effects of the predictor variables were similar in both models; however, there were some commonalities and differences. First, the future-to-current ratio was associated significantly with both satisfaction with one's present ($b = 0.28$, $p < 0.001$) and predicted future life ($b = 0.34$, $p < 0.001$). This indicates that respondents exhibited increased satisfaction with their current lives when they focused more on the future than the present. The future-oriented perspective also increased the level of satisfaction significantly when respondents were asked to evaluate their prediction of their lives ten years in the future. This finding implies that having a future-oriented perspective is important for individuals to perceive positive well-being in the future as well as the present. Second, age was related positively to present life satisfaction but negatively to anticipated future life satisfaction, which suggests that people tend to devalue their future lives as they age. Third, race had no significant effect on evaluations of current life satisfaction. However, Blacks tended to predict a higher level of anticipated future life satisfaction than did Whites. Fourth, household income and health were significant factors that determined the level of satisfaction with both present and future life.

Table 3 Regression Analysis Predicting Financial Satisfaction of Present and Future ($N = 1829$)

	Financial satisfaction (Present)		Financial satisfaction (Future)	
	b	SE	b	SE
Future-to-current ratio	.22***	.06	.29***	.07
Age	.03***	.01	−.04***	.01
Gender (female)	−.06	.09	−.06	.10
Race (Black)	.37	.26	.76**	.27
Race (other)	−.20	.17	−.23	.18
Education (college)	.06	.11	.11	.12
Education (graduate/professional)	.14	.14	.03	.15
Marital status (never married)	.06	.18	−.05	.19
Marital status (separated/divorced/widowed)	−.30*	.12	−.12	.13
Employment (working)	−.29**	.10	−.29*	.11
Household size	−.15***	.04	−.12**	.04
Household income (log)	.64***	.05	54***	.06
Homeowner	.91***	.14	.34*	.15
Health	.31***	.03	.32***	.03
Constant	−4.99***	.75	.62	.80
F	43.02***		32.37***	
R^2	.25		.20	

*$p < .05$, **$p < .01$, ***$p < .001$

Future-to-Current Time Orientations and Financial Satisfaction

The results of the regression analyses that examined the relation between the future-to-current ratio variable and financial satisfaction are presented in Table 3. Models for both dependent variables were significant, $F_{14,1814} = 43.02$, $p < 0.001$, $R^2 = 0.25$ for present financial satisfaction, and $F_{14,1814} = 32.37$, $p < 0.001$, $R^2 = 0.20$ for anticipated future financial satisfaction. Respondents' financial satisfaction with their present status was associated positively with the future-to-current ratio, age, household income, homeownership, and health. These factors also were significant in predicting future financial satisfaction, except age, which showed a negative association. Employment status and household size were related significantly and negatively to both present and anticipated future financial satisfaction.

Similar to the results of the previous analyses, several interesting points were found. First, the future-to-current ratio had positive effects on both levels of financial satisfaction with the present ($b = 0.22$, $p < 0.001$) and the future ($b = 0.29$, $p < 0.001$) after other demographics and financial conditions were controlled. People who held a relatively future-oriented perspective showed greater satisfaction with their current financial situation as well as anticipated financial situation in ten years. Second, age was also associated positively with present financial satisfaction but negatively with future anticipated financial satisfaction. This implies that respondents' satisfaction increases with age (because of their increased accumulation of wealth over time), but

Table 4 Regression Analysis Comparing Present Life Satisfaction and Present Financial Satisfaction ($N=$ 1829)

	Life satisfaction (Present)		Financial satisfaction (Present)		Seemingly Unrelated Estimation
	b	SE	b	SE	χ^2
Future-to-current ratio	.28***	.04	.22***	.06	1.31
Age	.03***	.004	.03***	.01	.13
Gender (female)	.25***	.06	−.06	.09	13.16***
Race (Black)	.30	.18	.37	.26	.04
Race (other)	−.11	.12	−.20	.17	.24
Education (college)	−.06	.08	.06	.11	1.15
Education (graduate/professional)	−.06	.10	.14	.14	2.06
Marital status (never married)	−.44**	.13	.06	.18	6.87**
Marital status (separated/ divorced/widowed)	−.34***	.08	−.30*	.12	.10
Employment (working)	−.03	.07	−.29**	.10	6.27*
Household size	.01	.03	−.15***	.04	13.17***
Household income (log)	.17***	.04	.64***	.05	45.81***
Homeowner	.46***	.10	.91***	.14	6.57*
Health	.36***	.02	.31***	.03	1.40
Constant	.87*	.54	−4.99***	.75	
F	43.90***		43.02***		
R^2	.25		.25		

$*p < .05, **p < .01, ***p < .001$

they also worry about their future situation (resulting from dissaving) as they age. Third, race had no significant effect on the levels of present financial satisfaction; however, again, Blacks were more likely to predict that their financial satisfaction would be better in the future than were Whites. Fourth, respondents' financial conditions (i.e., household income, homeownership) were positive factors in determining the level of financial satisfaction with both the present and future.

Comparison between Life Satisfaction and Financial Satisfaction

We tested the differences in the effect of determinants of life satisfaction and financial satisfaction using a seemingly unrelated estimation (SUE). Table 4 illustrates the SUE results. First, although the future-to-current ratio did not show any differences in marginal effect, it was positively associated with both present life satisfaction and present financial satisfaction. It indicates that the tendency to have a future-oriented perspective increases overall life satisfaction and financial satisfaction of the present. Second, being female and never married were only related to life satisfaction of the present, which were significantly different when compared between the results of the life satisfaction and the financial satisfaction models, using SUE. Females were more

Table 5 Regression Analysis Comparing Future Life Satisfaction and Future Financial Satisfaction ($N=$ 1829)

	Life satisfaction (Future)		Financial satisfaction (Future)		Seemingly Unrelated Estimation
	b	SE	b	SE	χ^2
Future-to-current ratio	.34***	.05	.29***	.07	.48
Age	−.03***	.004	−.04***	.01	3.19
Gender (female)	.25**	.08	−.06	.10	11.74***
Race (Black)	.53*	.22	.76**	.27	.65
Race (other)	−.15	.15	−.23	.18	.19
Education (college)	.01	.10	.11	.12	.64
Education (graduate/professional)	−.02	.12	.03	.15	.13
Marital status (never married)	−.51**	.16	−.05	.19	6.85**
Marital status (separated/ divorced/widowed)	−.11	.10	−.12	.13	.00
Employment (working)	.04	.09	−.29*	.11	7.91**
Household size	.03	.03	−.12**	.04	12.12***
Household income (log)	.14**	.05	54***	.06	31.02***
Homeowner	.12	.13	.34*	.15	1.75
Health	.40***	.03	.32***	.03	3.95*
Constant	4.32***	.66	.62	.80	
F	33.98***		32.37***		
R^2	.21		.20		

*p < .05, **p < .01, ***p < .001

likely to be satisfied with present life, while the never married were less likely to be satisfied with present life. However, the effects of those variables were not significant for the present financial satisfaction. SUE indicated those differences were statistically significant. Third, working status and household size had negative effects on present financial satisfaction but not on present life satisfaction, whose marginal effects were significantly different between life satisfaction and financial satisfaction. Fourth, household income and homeownership were positively associated with both present life satisfaction and present financial satisfaction and the marginal effects of those variables were significantly different.

Table 5 demonstrates the comparison between anticipated future life satisfaction and anticipated future financial satisfaction. The difference in the marginal effects of future-to-current ration was not significantly supported by SUE, but it increased both future life satisfaction and future financial satisfaction. However, the marginal effects of some variables between life satisfaction and financial satisfaction were supported through SUE. Similar to the results of present satisfaction models, being female and never married were only significantly associated with future life satisfaction, while working status and household size were significantly related to future financial satisfaction. Also, the marginal effects of household income and health on future life satisfaction

and future financial satisfaction were significantly different. However, in the future satisfaction context, homeownership was significantly associated with only financial satisfaction, and the difference between the two models was not supported.

Discussion and Implications

This study investigated the way individuals' sense of time is associated with life and financial satisfaction. To measure individuals' different temporal perceptions, the study constructed the future-to-current ratio that represents a greater tendency to overvalue the future compared to the present when it has a value greater than 1. As the ratio reflects the way an individual considers his/her future satisfaction relatively more important than that in the present, we examined satisfaction with the future as well as present satisfaction. Specifically, we hypothesized that an individual's affective reference point (i.e., future compared to present) is associated with (1) present life satisfaction, (2) anticipated future life satisfaction, (3) present financial satisfaction, and (4) anticipated future financial satisfaction.

The results of the regression analyses indicated that the future-to-current ratio is associated with both current and anticipated future life satisfaction, indicating that those with a more future-oriented perspective tended to report greater life satisfaction both in the present and the future. These findings contradict those of some previous studies that indicated that a present-focused temporal orientation was related positively to life satisfaction (e.g., Cunningham et al. 2015; Zhang and Howell 2011). However, the results supported other previous literature that a future-oriented perspective increases life satisfaction (e.g., Przepiorka and Sobol-Kwapinska 2018; Stolarski et al. 2015). The results that were consistent with those of some previous studies imply that people perceive greater satisfaction with life when they feel they are in control of their lives and achieving their goals. One notable finding of this study is that the positive effect of the future-oriented perspective was also significant for life satisfaction anticipated in the future. This can be interpreted as people expecting that their present efforts to obtain future reward will ensure better lives in the future.

The future-to-current ratio was also associated positively with both current and anticipated financial satisfaction. These findings are consistent with most previous research that has demonstrated that people with a future-oriented perspective tended to make sound financial decisions that maximized both their present and future well-being (Hershey et al. 2010; Howlett et al. 2008).

This study has several implications. First, it proposes that it is important to understand people's type of frame orientation. Satisfaction in life depends upon the frame an individual uses to evaluate a situation, and time orientation determines his/her ways of viewing and judging the world. Accordingly, it ultimately influences one's decisions in life. With respect to time, the type of time orientation people hold determines their level of satisfaction in life. The results of this study imply that having a future time orientation is important because individuals with a greater tendency to have this orientation are more likely to be satisfied with their lives compared to those who hold the current-oriented perspective. For such people, the future is more than what follows the present. They tend to think ahead, establish goals, and strive to achieve them while still holding to the present. In this way, future orientation gives people a greater sense of

mastery in their lives overall. This may be the reason people with future orientation exhibit greater life/financial satisfaction in the present as well as the future.

Second, the findings of this study did not demonstrate the importance of balanced viewpoints about future and present. Rather, we found that relative importance was placed on the future than the current-oriented perspective. This study developed a ratio to measure time orientation that was measured using both the future (denominator) and present orientations (numerator). Although our respondents, on average, tended to view the future-oriented perspective as more important, the key trait in the ratio is not to overlook the present value of life.

Third, the ratio can be used as an adjustment index of life satisfaction for further studies. Measuring life satisfaction may involve some measurement errors derived from the way it is assessed using subjective measures (e.g., self-reporting questions about satisfaction). Thus, the respondent's own orientation distorts the level of life satisfaction already. The time orientation either can amplify or suppress one's subjective assessment of life, and the ratio can be used to obtain adjusted life satisfaction.

This study has some limitations that suggest directions for future research. First, we used a single item to measure life satisfaction. Although the item is a reasonable measure that has a higher correlation with scale measures (Abdel-Khalek 2006), there also are other scales that capture the level of life satisfaction, such as the Satisfaction with Life Scale (SWLS; Diener et al. 1985). Future research may use these other scales to compare with our results. Second, the data used in this study included the middle-aged to older adult population, not the younger generation. Generally, the future-oriented perspective has been shown to be highest in middle age and then decrease thereafter (Röcke and Lachman 2008; Sobol-Kwapinska et al. 2016). However, the association between the future-oriented perspective and life/financial satisfaction remained positive and significant in this study. Future research may include young adults in the analyses to identify age differences in temporal perceptions.

Data Availability This study used a public data (MIDUS).

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

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