Published in final edited form as:

Psychol Aging. 2013 December ; 28(4): 1098–1107. doi:10.1037/a0034672.

Income Decline and Retiree Well-being: The Moderating Role of Attachment¹

Dikla Segel Karpas,

Faculty of Industrial Engineering and Management Technion – Israel Institute of Technology

Peter A. Bamberger², and

Faculty of Management, Tel Aviv University

Smithers Institute, School of Industrial & Labor Relations, Cornell University

Samuel B. Bacharach

Smithers Institute, School of Industrial & Labor Relations, Cornell University

Abstract

Given that it influences the appraisal of situations and the utilization of coping resources, attachment orientation may condition the effects of retirement-related stressors on retiree well-being. Focusing on depression, psychosomatic complaints, and health –and a retirement-related stressor – income decline – we followed a sample of workers from just prior to retirement to up to 7 years post-retirement. Results indicate that attachment avoidance – but not anxiety – moderates the adverse effects of income decline on well-being, with such effects more pronounced among individuals reporting higher levels of attachment avoidance. Theoretical and practical implications are discussed.

Keywords

retirement income; retirement adjustment; attachment; older adults' well-being

While most individuals manage to adapt quickly to retirement, about 30% of retirees experience difficulties in adjustment (Braithwaite & Gibson, 1987) -- “the process of getting used to the changed circumstances of life in retirement” (Van Solinge & Henkens, 2008, p. 423). This is often manifested in terms of decreased life satisfaction, depression and loneliness, and deterioration in health (Dave, Rashad, & Spasojevic, 2006; Pinquart & Schindler, 2007; Reitzes, Mutran, & Fernandez, 1996). Research examining why some experience difficulties in retirement adjustment while others do not suggests that differential outcomes may be associated with the variance in individuals' retirement experiences (Pinquart & Schindler, 2007; Szinovacz & Davey, 2003; Wang, 2007) and, in particular, differences in the impact of retirement on individuals' income and/or economic security (Van Solinge & Henkens, 2008; Wang, 2007). Yet, empirical findings regarding the effect

¹This research was funded by a grant from the National Institute on Alcohol Abuse and Alcoholism (# 5 R01 AA011976), and was also supported by the Smithers Institute for Alcohol-Related Workplace Studies of Cornell University.

²Corresponding author. peterb@post.tau.ac.il; Tel: +972-4-825-3564; Fax +972-4-826-3936.

of retirement-related income decline on retirement adjustment remain inconclusive, with some studies demonstrating the expected negative effect (e.g., Van Solinge & Henkens, 2008), and others finding no such effect (Van Solinge & Henkens, 2005; Wang, 2007).

Such empirical inconsistencies often indicate the need to consider possible moderators, such as individual differences. Indeed, drawing from research on the role of personality on non-retirement life transitions, scholars posit that individual differences may serve as an important direct influence on retirement adjustment (Wang & Shultz, 2010). However, empirical research on the direct effect of individual differences on retirement adjustment, let alone research examining the potential moderating effects of individual differences on the impact that varying retirement conditions and situations may have on retiree well-being, is limited (Wang & Shultz, 2010).

Accordingly, drawing on person-situation interaction theory (Mischel, 1990; Mischel, 1996; Mischel & Shoda, 1995), we propose that one's ability to adjust to retirement is contingent upon situational factors *and* personality, and, most importantly, the interaction between the two. This theory posits that one's affective and behavioral response to an encountered situation is determined by the continuous interaction between a stable set of personality traits and situational features. Such individual differences affect the way situational features are perceived and mentally construed, thus influencing affective responses to them (Mischel 1990; Mischel, 1996; Mischel & Shoda, 1995). Taking the possible interaction between situational variables and personality into account may enhance the predictive utility of models that seek to explain adjustment to retirement, and enhance our understanding of the role played by personality attributes as vulnerability or resilience factors in retirement adjustment.

Given its role in shaping the way individuals prepare for, perceive, appraise and cope with stressful situations (Mikulincer & Shaver, 2007), one such individual difference, namely attachment orientation (Bowlby, 1969/1982; Bowlby, 1973; Bowlby, 1980), may play a pivotal role in determining how situational changes in retirement are experienced and their consequential effects on well-being. Accordingly, we generate and test hypotheses regarding the conditioning effects of attachment on the relationship between experienced change in income following retirement and well-being.

Income Change in Retirement, Attachment and Well-being

Recent analyses of projected income replacement rates for the aging baby boomers suggest expected rates of between 60% to 80% (Brady, 2010; Dalirazar, 2010). Accordingly, new retirees can expect an income reduction of around 30%. Such income decline may result in a shift in retirees' relative standing within their social environment, as well as in unfavorable comparisons to past earnings, which may result in feelings of relative deprivation and compromised well-being (Diener, 1984; Easterlin, 1974). However, as noted above, empirical findings regarding the effects of retirement-related income decline on retiree well-being are mixed. Drawing from person-situation interaction theory (Mischel, 1990; Mischel, 1996; Mischel & Shoda, 1995), we propose that a more complete understanding of the effects of income change in retirement on retiree well-being can be gleaned by taking

individual differences into account, with attachment-related differences playing a key role in this regard.

Research has found that, over the life course, attachment orientation has important influences on well-being in general, and adjustment capabilities in particular (Mikulincer & Shaver, 2007). Although attachment research has focused primarily on the young, several studies demonstrate the importance of attachment to well-being in older adulthood and old age. For example, in a German sample of grandparents, the securely attached were found to report higher levels of social integration, and better health in comparison to those more insecurely attached (Wensauer & Grossmann, 1995; Magai et. al., 2001). Secure and avoidant older individuals have also been found to report higher levels of life satisfaction (Webster, 1997; Webster, 1998), and positive affect (Magai, Consedine, Gillespie, O'Neal, & Vilker, 2004). Beyond pointing to the direct effects of attachment on the well-being of older adults, these studies also suggest that attachment may serve as a protective or vulnerability factor in retirement adjustment, with those who are more attachment secure likely to be less vulnerable to various stressors in retirement (such as income decline) than those more attachment anxious or avoidant (i.e., insecure). This conditioning effect is likely to stem from the impact that attachment orientation has on situational appraisal and coping (Mikulincer & Shaver, 2007).

Attachment anxiety and avoidance are both related to the tendency to appraise situations as highly threatening and respond with elevated levels of stress, which can result in heightened distress and the deterioration of well-being (Lopez, Mauricio, Gormley, Simko, & Berger, 2001; Mikulincer & Florian, 1995; 1999). Those more anxiously attached tend to make catastrophic appraisals of situations and dwell on negative emotions. This may promote the perception of any income decline as an acute threat, and consequently, evoke distress (Mikulincer & Shaver, 2007). Additionally, the anxiously attached tend to underestimate their efficacy in coping and managing distress by themselves, rely on emotional coping, and direct attention onto their felt distress rather than the search for possible solutions (Mikulincer & Shaver, 2007). Thus, in addition to the primary resource loss associated with income decline, the anxiously attached are likely to experience a secondary loss of (psychological) resources as they attempt to deal with what is appraised as an acute threat, while relying on highly demanding and often ineffective coping tactics. Such resource loss can have profoundly negative implications for well-being (Hobfoll, 1988).

In a similar manner, attachment avoidance may also increase older adults' vulnerability to the adverse consequences of income decline on well-being. Highly avoidant individuals are characterized by compulsive self-reliance (Bowlby, 1977). As many retirees have limited opportunities to replace the income lost by disengaging from the workforce, retirement-related income loss may be perceived by such individuals as signaling a loss of control and independence, and thus as a significant threat. Moreover, attachment avoidance is related to the use of coping strategies that rely heavily on denial, distancing and the suppression of the sources of distress (Mikulincer & Shaver, 2007; Vogel & Wei, 2005). Not only can these strategies ultimately limit effective coping and adjustment, but the suppression of distress is by itself highly resource-demanding. Hence, those more attachment avoidant are (like the attachment anxious) also at heightened risk of depleting their psychological resources, and,

as a result, more likely to experience a deterioration in their overall well-being (Hobfoll, 1988).

Accordingly, while secure attachment, by facilitating a benign appraisal of situations and the adoption of more constructive coping, may protect older adults from the potential negative effects of income decline in retirement, insecure attachment (i.e., heightened attachment anxiety or avoidance), by exacerbating the appraisal of income decline as threatening and weakening individuals' ability to cope with stressful situations, may heighten retirees' vulnerability to poorer well-being as a result of a retirement-related income decline. As such, we hypothesize that: Attachment avoidance (H1) and anxiety (H2) moderate the relations between income decline and well-being, such that high levels of attachment avoidance/anxiety amplify any adverse impact of income decline on well-being.

Method

Approach and Participants

We tested the hypotheses using longitudinal data collected from a sample of retired unionized workers previously employed in transportation, manufacturing, and construction. The sample was drawn from a larger sample of soon-to-be retirement-eligible union members generated with the assistance of nine local and national unions. At baseline (i.e., T1), these unions provided us with access to their members who, while still employed on a full-time basis, would be eligible to retirement (per the union's contract) within the coming six months. 560 of those meeting the sampling criteria agreed to participate in the study at the time of first contact in 2003 (T1) for a response rate of 45 percent. However, with our focus on how attachment anxiety and avoidance condition the impact of *retirement-related* income decline on retirement adjustment, our analysis is limited to those sample members who: (a) retired by 2008 (T2), and (b) provided data on their well-being two years later (critical to capture well-being *subsequent* to any retirement-related change in income) at T3. By 2008 (T2), 276 participants reported that they had retired from their career jobs under the terms of their contract and had begun to draw retirement benefits. Of these 276 participants, 257 provided data on various measures of well-being when approached again in 2010 (T3). Thus, our final sample consists of the 257 participants who were employed at T1, retired by T2, and provided data in all three waves of data collection (i.e., T1-T3).

Following Goodman and Blum (1996), we tested for non-random attrition for the 19 T2 participants that were non-responders in T3. To do so, we regressed all study variables on a binary variable differentiating between the missing and non-missing. The results indicate no significant differences based on attrition. Furthermore, we tested for differences between respondents who had retired by T2 (i.e., those included in the analyses) and those remaining in the workforce and thus not meeting the study inclusion criteria (i.e., the broader sample from which the analyzed sample was drawn). Results of independent t-tests revealed that those in the analyzed sample (i.e., those who retired by T2) were significantly older (mean age 58) than those who remained at work (mean age = 55; $t=3.9$, $p<0.01$). The analyzed sample also contained a significantly smaller proportion of women (38% women in the analyzed sample vs. 63% in the broader sample) ($\chi^2=25.2$, $p<0.001$). Furthermore, those who had retired by T2 (i.e., analyzed sample) reported a higher number of illnesses than

those remaining at work (broader sample) at T1 ($M=0.94$ for retirees vs. $M=0.73$ for employees, $t=2.1$, $p<0.05$), and at T3 ($M=1.24$ for retirees vs. $M=0.87$ for employees, $t=3.3$, $p<0.01$). Not surprisingly, those who retired by T2 reported a significantly greater income drop ($M=1.1$ categories) than those remaining in the workforce ($M=0.2$) ($t=4.174$, $p<0.001$).

For the final sample, mean age at T1 was 58 (in most of these unions eligibility was established at 30 years of service). Males accounted for 62% of the sample. 72% were married/living with a partner ($n=185$). The majority of respondents retired between 2003 and 2005 (62%), with 15% and 23% retiring between 2005-2006 and 2007-2008, respectively.

Measures

We operationalized well-being in terms of three variables—depression, psychosomatic complaints, and ill health—assessed at T1 and T3. As recommended by Rogosa (1980) and Allison (1990), to capture the *change* in well-being, we modeled each of these three well-being indicators at T3, while controlling for the same indicator at T1. *Depression* was measured using the CES-D (Center for Epidemiologic Studies Depression) Scale. Respondents rated the frequency of 20 depressed feelings during the last month on a scale ranging from 1 (“never”) to 5 (“frequently”). The scale includes items such as “had crying spells” and “felt lonely” (Radloff, 1977); $\alpha = .88$. *Psychosomatic complaints* were measured using Caplan, Cobb, French, Harrison and Pinneau’s (1975) 15-item scale. Respondents were asked to rate on a 1 (“never”) to 5 (“frequently”) scale the frequency of experiencing common psychosomatic symptoms, such as shortness of breath and upset stomach, in the last month ($\alpha=.78$). *Ill health* was measured using the Lifetime Histories of Physician Diagnosed Illnesses measure developed by the National Institute on Aging. This measure includes 11 chronic illnesses prevalent in older populations, such as heart diseases and hypertension. The scale has been used in many epidemiological studies of older populations (e.g., Colsher & Wallace, 1990; Nahum-Shani & Bamberger, 2011), and has strong predictive validity (e.g., Salive et al., 1992). Respondents were asked to report whether they had ever been diagnosed by a physician as suffering from any of these illnesses. The number of diagnosed illnesses was summed to capture health status. An increased number of diagnosed illnesses over time is indicative of poorer health status, or more *ill health*.

As our hypotheses relate to the consequences of a retirement-related decline in income, consistent with Wang (2007), we measured income decline in terms of the difference in household income before and after retirement (i.e., subtracting household income at T2 from the household income at T1, with larger differences indicating a greater magnitude of income decline). Drawing from Warr (1992), the original variable “household income” included 13 income categories, with the lowest category being “below \$10,000 a year” and the highest “above \$70,000”. The mid-range categories had a consistent range of \$4999 (i.e., \$10,001-\$15,000), excluding the 12th category that had range of \$9999. The distribution of income was skewed to the left at T1 with just over 40% of respondents reporting income of under \$70,000. This skewness was diminished at T2, with 56% of respondents reporting income of \$70,000 or less (See Table 1). Table 1 also shows the magnitude and nature of income change by T1 income category. Overall, 45% of the respondents experienced no change in their income category, 10% reported a drop of 1 income category, 21% reported a

drop of 2-4 categories (approx. 7% for each category), 11% reported a more substantial drop of 5 to 12 categories, and the remainder experienced income growth. The highest T1 income categories (i.e., categories 11-13) experienced the largest proportionate decline in category members by T2, with 37 to 52 percent of T1 category members reporting a decline in income equivalent to one or more income categories. The mean drop in income was 1.1 categories ($SD=2.50$), equivalent to approximately \$6000. With the majority of participants earning more than \$70,000 at T1, this translates to a drop of 10% or less for the bulk of study participants, far less than the average 30% expected drop in income reported in the earlier studies noted above. The smaller proportionate income drop in the current study is not surprising given that our sample consists of unionized workers whose retirement incomes tend to be better protected than that of their non-union peers (Mishel & Walters, 2003).

We assessed the moderators *attachment avoidance* and *attachment anxiety* at T3 using the Experience in Close Relationships Scale (ECR) (Brennan, Clark, & Shaver, 1998). This widely used and well-validated self-report scale consists of 36 items: 18 measuring attachment anxiety and 18 measuring attachment avoidance. These are treated as separate constructs. Attachment anxiety is measured by items such as “I worry about being rejected or abandoned” and attachment avoidance is measured by items such as “I prefer not to show others how I feel deep down”. Each item is rated on a 1 (“disagree strongly”) to 7 (“agree strongly”) Likert scale. Scores are computed by averaging the items for each construct. We measured attachment at T3, together with the dependent variables. We also controlled for the interaction between attachment anxiety and avoidance to make sure that the effects we capture are indeed due to the interaction between attachment and change in income, and not due to any second-order effects of the attachment constructs themselves. Cronbach alpha was 0.88 for attachment avoidance, and 0.84 for attachment anxiety.

We controlled for several demographic variables previously found to be associated with well-being, including: *age*, *gender*, *education level*, and *marital status*. These were measured at T3. The importance of marital status stems from the support provided by the spouse. Hence, we used a binary variable contrasting those who have and do not have a partner. As changes in marital status might have an effect on attachment orientation, we performed a sensitivity analysis—testing the model once controlling for marital status at T1 and once at T3. There were no significant differences between the models. Thus, in the results reported below we controlled for marital status at T3. Since adjustment is a process, results may be contingent upon the amount time that has passed from the significant event (i.e., retirement). Hence, we controlled for the time that passed since the withdrawal from the workforce. As income decline may be affected by current employment, we used a dummy variable to control for whether retirees were engaged in bridge employment (i.e., being employed, at least to some extent, subsequent to drawing retirement benefits), with the alternative being fully retired. To ensure that our model captures the effect of experienced *change* in income, above and beyond that of the starting income level itself, we controlled for respondents’ income at T1 (i.e., before participants’ retirement). Finally, as noted above, for each of the dependent variables (depression, psychosomatic complaints, and health), per

Rogosa (1980) and Allison (1990), we included a measurement of the same variable at T1 in our models to capture change.

Analysis

Hypotheses regarding depression and psychosomatic complaints were estimated using OLS regression. The model for health was estimated on the basis of a Poisson regression analysis (with a quasi-likelihood correction for under-dispersion), since health was measured as the number of diagnosed illnesses and defined as a count variable. Because change in income was assessed in terms of the difference between categories, stem and leaf diagnostics (the results of which are available upon request) were performed to ensure that the distribution of the residuals did not violate the assumption of normality. All models were tested hierarchically. In the first step we included only the control variables, namely: age, gender, marital status, education, retirement status (i.e. bridge employment or full retirement), time from retirement, income at T1 and the respective DV measurement at T1 (i.e. depression in model 1, psychosomatic complaints in model 2, and health in model 3). In the second step we included the main effects of the independent variable (change in household income), and the main effects of the hypothesized moderators—attachment avoidance and attachment anxiety—as well as the interaction between the two attachment terms. In the third step we added the two interaction terms in which change in household income was multiplied by attachment avoidance and attachment anxiety, respectively. Per convention, all interaction terms were centered around the mean (Aiken, West, & Reno, 1991).

Results

As two of the dependent variables, depression and psychosomatic complaints, are highly correlated in both measurements ($r=.78$, $p<.01$ at T1, $r=.73$, $p<.01$ at T3), we performed a confirmatory factor analysis to establish discriminant validity. The analysis confirmed that while more parsimonious than the two-factor model ($\chi^2_{558}=1607$; $SRMSR=.08$; $RMSEA CI=.078$, $.087$; $GFI=.74$; $NFI=.57$; $NNFI=.65$), the one factor model ($\chi^2_{560}=1631$; $SRMSR=.08$; $RMSEA CI=.078$, $.088$; $GFI=.74$; $NFI=.57$; $NNFI=.65$) had a significantly poorer fit with the data ($\chi^2=24$, $p<.001$). Accordingly, we conducted our analysis using two separate models, one for depression and another for psychosomatic complaints. Similarly, due to the high correlation between attachment anxiety and attachment avoidance ($r=.45$, $p<.001$), we performed confirmatory factor analysis comparing a two-factor model ($\chi^2_{558}=1801.26$; $SRMSR=.1$; $RMSEA CI=0.08$, 0.09 ; $GFI=.66$; $NFI=.55$; $NNFI=.62$) to a single-factor model ($\chi^2_{560}=2165.72$; $SRMSR=.12$; $RMSEA CI=0.10$, 0.11 ; $GFI=.57$; $NFI=.46$; $NNFI=.50$). As expected, the two-factor model fit the data significantly better ($\chi^2=364$, $p<.001$) than the single-factor model.

Means, standard deviations, and correlations between the variables are presented in Table 2. Attachment anxiety is positively correlated with depression at both T1 and T3 ($r=.23$, $p<.01$; $r=.36$, $p<.001$) and with psychosomatic complaints at both T1 and T3 ($r=.21$, $p<.001$; $r=.33$, $p<.001$). Attachment avoidance is positively correlated with depression and psychosomatic complaints at T3 ($r=.19$, $p<.01$; $r=.15$, $p<.01$).

Results of the multivariate analyses are presented in Table 3. With regard to the depression and psychosomatic complaints models (Models 1.2-3 and 2.2-3), the results indicate that attachment anxiety is a positive and significant covariate ($p < .001$). Additionally, for both of these indicators of well-being, the interaction between attachment anxiety and avoidance is significant and negative ($p < .05$): Attachment avoidance attenuates the positive relations between attachment anxiety and depression as well as between attachment anxiety and psychosomatic complaints.

The results shown in Table 3 lend partial support for our hypotheses. More specifically, with regard to depression, the findings indicate a significant interaction between income drop and attachment avoidance ($b = .04$, $p < .01$) (model 1.3). Simple slopes analysis (with the slopes of the dependent variables on the independent variables estimated for three levels of the moderator, namely 1 SD below mean [i.e., “low”], at mean, and one SD above mean [“high”]) reveals that the effect of income decline in retirement on depression is positive and significant when attachment avoidance is high ($b = .04$, $se = .02$, $t = 1.98$, $p < .05$) but not significant when attachment avoidance is at the mean or low ($b = .001$, $se = .01$, $t = .16$, $p = n.s$; $b = -.03$, $se = .02$, $t = -1.83$, $p = n.s$ respectively) (See Figure 1a). Similar effects were found for psychosomatic complaints (Table 3 models 2.1-3). Attachment avoidance significantly moderates the relation between income drop and psychosomatic complaints ($b = .04$, $p < .01$). The effect of income drop in retirement on psychosomatic complaints is strongest when attachment avoidance is high ($b = .55$, $se = .02$, $t = 2.86$, $p < .01$), and weaker and not significant when avoidance is at the mean or low ($b = .01$, $se = .01$, $t = 1.23$, $p = n.s$; $b = -.02$, $se = .02$, $t = -1.31$, $p = n.s$ respectively) (See Figure 1b).

To test the hypotheses for ill health (Table 3 models 3.1, 3.2 and 3.3), we used a modified Poisson regression model. Because our data were slightly under-dispersed (scale = 0.7), we inserted a correction term allowing us to test the parameter estimates under a Poisson model (McCullagh & Nelder, 1989; Pedan, 2001). Results show a significant interaction of income and avoidance ($L'Beta = .06$, $p < .05$). Simple slopes analysis reveals that attachment avoidance strengthens the adverse effect of income drop in retirement on the number of diagnosed illness, such that when attachment avoidance is high, the effect becomes more positive (i.e., the greater the income drop in retirement, the greater the number of diagnosed illnesses) ($L'Beta = .08$, $se = .03$, $\chi^2 = 8.39$, $p < .01$). The effect is weaker and not significant when attachment avoidance is at the mean and low ($L'Beta = .03$, $se = .02$, $\chi^2 = 2.35$, $p = n.s$; $L'Beta = -.02$, $se = .03$, $\chi^2 = .40$, $p = n.s$ respectively) (See Figure 1c).

We also tested whether certain amounts of income decline are necessary before attachment-related declines in well-being can be observed. To address this question, we assessed the level of income decline at which the avoidance –well-being slope became statistically significant. The results indicate that for depression, when income decline is 0.25 SD above the mean, there is a marginal effect of avoidance on depression ($b = .06$, $p < .10$), with this effect becoming significant when the income decline is 0.5 SD above the mean ($b = .08$, $p < .05$) or greater. For psychosomatic complaints, an income decline of 0.5 SD above mean is associated with a marginally significant effect of avoidance ($b = .07$, $p < .10$), with an income drop of 1 SD above the mean or greater necessary in order to generate a significant

avoidance effect ($b=.12, p<.05$). Similarly, the slope of avoidance on health is significant when the income drop is at least 1 *SD* above the mean ($L'Beta=.16, p<.05$).

Discussion

The results of the analyses lend partial support to our hypotheses, indicating that attachment avoidance conditions the effect of change in income on retiree well-being. That is, although income decline for most retirees has little apparent adverse effect on well-being, for those with high levels of attachment avoidance, it does. More specifically, our findings indicate that while many retirees manage to adapt to income decline in retirement, those characterized by higher levels of attachment avoidance tend to have more difficulty doing so. Among highly avoidant retirees, negative changes in income are associated with subsequently increased levels of depression, psychosomatic complaints, and ill-health.

Consistent with prior studies indicating that attachment anxiety explains more of the variance than attachment avoidance in a variety of outcomes such as psychopathology (George & West, 1999), relationship and marital satisfaction (Collins & Reed, 1990; Gallo & Smith, 2001), and distress in reaction to loss (Fraley & Bonanno, 2004), we too generally found the *direct* effects of attachment anxiety to be greater than those of attachment avoidance. We also found that the effect of attachment anxiety is conditioned by attachment avoidance, such that attachment avoidance serves to protect from the negative effects of attachment anxiety: When avoidance is greater, the association between anxiety and well-being is diminished. This finding is consistent with previous research on attachment in older adulthood, demonstrating that attachment avoidance can have positive consequences for well-being (Webster, 1997; 1998; Magai et al., 2004). However, the utility of attachment avoidance in old age remains far from certain not only because findings regarding its direct consequences vary across studies (Wensauer & Grossmann, 1995; Magai et al., 2001; Consedine & Magai, 2003), but also because, as our findings indicate, attachment avoidance may also have adverse *indirect* effects such as amplifying the negative effects of income decline on well-being.

Our data suggest no support for the hypothesized *conditioning* effect of attachment anxiety on the impact of change in income on retiree well-being, leading us to conclude that attachment avoidance has a stronger moderating effect on the income decline – well-being relationship than attachment anxiety. One explanation for the heightened moderating effect of attachment avoidance (relative to anxiety) may be that the *direct* effects of attachment anxiety (in contrast to avoidance) on the well-being of older adults are, at least with respect to depression and psychosomatic complaints, so robust that they are not conditioned by situational change. Another explanation may be that the impact of situational change on well-being depends on individuals' sense of control and self-reliance; factors at the core of attachment avoidance, but not anxiety. Individuals with high attachment avoidance are prone to suppress their need of others, feel uncomfortable depending on others and seeking support, and emphasize the importance of self-reliance. Due to limited employment opportunities and finite savings, income decline in retirement may be generally perceived as an irreversible fact with which one must cope. Such a realization may be more problematic for those for whom the loss of control and independence is more salient, namely those more

attachment avoidant. Furthermore, avoidant individuals' tendency to suppress emotions and avoid coping with their distress (Mikulincer & Shaver, 2007) may be especially problematic when dealing with chronic stress (such as that generated by income decline) for prolonged periods. The constant suppression of distress and the avoidance of support-seeking can be extremely resource-demanding and hence have an acute and long-term impact on well-being (Hobfoll, 1988; Mikulincer & Shaver, 2007), thus generating the heightened moderating effect of attachment avoidance captured in our results.

Another possible explanation for the heightened conditioning effect of attachment avoidance relative to attachment anxiety may have to do with differences across individuals regarding the salience of money (Boyce & Wood, 2011; Boyce, Wood & Brown, 2010). Research suggests that different attachment patterns may be associated with greater or lesser salience associated with money (Zhou & Gao, 2008). In particular, Mikulincer and Shaver (2008) suggest that more highly avoidant individuals may perceive money as means by which to achieve independence and preserve self-reliance, self-identity and self-worth. Accordingly, the disproportionate conditioning effects of attachment avoidance relative to anxiety may stem from a tendency of the attachment avoidant to view any retirement-related income drop as having particularly severe consequences with respect to their sense of independence and self-worth.

Limitations and Future Research

Several limitations of this study deserve mention. First, while our focus on the association between income decline and well-being over the longer term provides important insights, it also hinders our ability to capture any shorter-term implications of income decline in retirement. This shortcoming may explain the absence of an association between attachment anxiety and well-being in this study. While individuals characterized by high levels of attachment anxiety may have experienced elevated distress levels in the months immediately following retirement, these levels may have returned to normalcy over time as they became more accustomed to the situation. Accordingly, future studies may benefit from assessing the short- *and* long-term moderating effect of attachment.

Second, attachment orientation was assessed at T3, or in other words, subsequent to the assessment of retirement-related income change. This is of concern in that it is possible that the chronic stress caused by income-related stressors may reduce one's ability to benefit from social engagement, thus perhaps resulting in social withdrawal and intensified avoidance tendencies. Were this the case, it would suggest an alternative model in which income, rather than (or perhaps in addition to) interacting with attachment to influence retirement adjustment, might serve as an antecedent to attachment orientation. However, we view this as unlikely because a substantial body of research suggests that attachment is a relatively stable personality construct (Mikulincer & Shaver, 2007). Moreover, as shown in Table 2, the correlations between both attachment dimensions and income at T1 are non-significant. Nevertheless, scholars wishing to directly examine the impact of financial strain on attachment should assess both income and attachment at multiple points in time and consider the use of a cross-lagged analysis.

Third, because the two largest income categories were broader than the others, income declines that would result in a category shift for lower earners would not do so for those in these categories. The resulting loss of variance in income change for those at these highest levels may have attenuated the proportion of participants actually experiencing income change, thus increasing the possibility of Type II error and suggesting that the findings reported above may err on the conservative. In a post-hoc analysis, we explored this possibility, eliminating those in the top two T1 income categories from the analysis. Despite extremely limited statistical power due to the elimination of 190 of the original 257 observations, the findings with regard to both depression and psychosomatic complaints were essentially identical to those reported above. However, the estimate for avoidance*income decline interaction term with regard to ill health, while similar in magnitude and direction to that reported above, was not statistically significant.

Fourth, we only accounted for one change typical of the transition to retirement, namely income decline. However, the transition to retirement usually involves many lifestyle changes such as changes in daily routine and in the social environment. As attachment has a significant role shaping not only appraisal and coping patterns, but also social relations, it may condition other changes as well, especially those changes that have a more prominent social aspect. Hence, we believe that future research should examine attachment as a moderator of other changes related to the retirement transition.

The current study's focus on unionized workers/retirees poses an additional limitation in that their retirement experience may not necessarily be representative of non-union workers/retirees. This is because, as noted above, unionized workers typically retire with pension benefits that are superior to those of their non-union peers (Mishel & Walters, 2003). Indeed, as mentioned, retirees in our sample reported a smaller reduction in income than that projected for the general work force (Brady, 2010; Dalirazar, 2010). A more substantial income drop might yield different patterns, such as, for example, an interaction with attachment anxiety. Accordingly, future research may benefit from testing the generalizability of our findings to similar types of workers employed on the basis of individual rather than collective employment agreements.

Finally, future research should explore other individual differences such as self-efficacy and coping tendencies that may similarly condition the impact of situational factors on retirement adjustment. Self-efficacy may promote a more positive attitude toward situational change and enhance one's coping capacity, thus facilitating adjustment.

Implications for Practice

Despite these limitations, the results of this study may help practitioners identify populations at risk for experiencing difficulties in the adjustment process. Although our analysis is limited to the effects of shifts in income on well-being, our findings suggest that attachment pattern may serve as an important vulnerability factor when considering the impact of other situational shifts experienced by older adults. Our findings may also help human resource practitioners and retirement counselors better match retirement planning, support strategies and interventions aimed at enhancing older adults' retirement adjustment to the attachment orientation of their employees or clients.

References

- Aiken, LS.; West, SG.; Reno, RR. Multiple Regression: Testing and Interpreting Interactions. London: Sage Publications, Inc; 1991.
- Allison PD. Change scores as dependent variables in regression analysis. *Sociological Methodology*. 1990; 20(1):93–114.
- Bowlby, J. Attachment: Attachment and Loss Attachment. 2. Vol. 1. New York: Basic Books; 1969/1982. Original work published 1969
- Bowlby, J. Attachment: Attachment and Loss Separation: Anxiety and Anger. Vol. 2. New York: Basic Books; 1973.
- Bowlby, J. Attachment: Attachment and Loss Sadness and Depression. Vol. 3. New York: Basic Books; 1980.
- Bowlby, J. The Making and Breaking of Affectional Bonds. London: Tavistock; 1977.
- Boyce CJ, Wood AM. Personality and the marginal utility of income: Personality interacts with increases in household income to determine life satisfaction. *Journal of Economic Behavior & Organization*. 2011; 78(1):183–191.
- Boyce CJ, Wood AM, Brown GD. The dark side of conscientiousness: Conscientious people experience greater drops in life satisfaction following unemployment. *Journal of Research in Personality*. 2010; 44(4):535–539.
- Brady PJ. Measuring retirement resource adequacy. *Journal of Pension Economics & Finance*. 2010; 9(2):235–262.
- Braithwaite V, Gibson D. Adjustment to retirement: What we know and what we need to know. *Ageing and Society*. 1987; 7(1):1–18.
- Brennan, KA.; Clark, CL.; Shaver, PR. Self-report measurement of adult attachment. In: Simpson, Jeffry A.; Rholes, William S., editors. *Attachment Theory and Close Relationships*. New York: Guilford Press; 1998. p. 46-76.
- Caplan, RD.; Cobb, S.; French, JRP.; Van Harrison, R.; Pineau, SR, Jr. Job Demands and Worker Health: Main Effects and Occupational Differences. Washington: U.S. Department of Health, Education and Welfare; 1975. (U.S.G.P.O. Stock No. 1733-00083)
- Collins NL, Reed SJ. Adult attachment, working models, and relationship quality in dating couples. *Journal of personality and social psychology*. 1990; 58(4):644–663. [PubMed: 14570079]
- Colsher PL, Wallace RB. Elderly men with histories of heavy drinking: Correlates and consequences. *Journal of Studies on Alcohol and Drugs*. 1990; 51(6):528–535.
- Dalirazar, N.; V, MS. U S Census Bureau; 2010. Can Americans afford to retire?. Retrieved November, 2012, from: http://www.census.gov/people/wealth/files/Final%20Draft_Paper_Revised4_5_2011.pdf
- Dave D, Rashad I, Spasojevic J. The effects of retirement on physical and mental health outcomes. *Southern Economic Journal*. 2006; 75(2):497–523.
- Diener E. Subjective well-being. *Psychological Bulletin*. 1984; 85:542–574. [PubMed: 6399758]
- Easterlin, RA. Does economic growth improves the human lot? Some empirical evidence. In: David, PA.; Melvin, WR., editors. *Nations and Households in Economic Growth*. Palo Alto CA: Stanford University Press; 1974. p. 98-125.
- Fraley RC, Bonanno GA. Attachment and loss: A test of three competing models on the association between attachment-related avoidance and adaptation to bereavement. *Personality and Social Psychology Bulletin*. 2004; 30(7):878–890. [PubMed: 15200694]
- Gallo LC, Smith TW. Attachment style in marriage: Adjustment and responses to interaction. *Journal of Social and Personal Relationships*. 2001; 18(2):263–289.
- George C, West M. Developmental vs. social personality models of adult attachment and mental ill health. *British Journal of Medical Psychology*. 1999; 72(3):285–303. [PubMed: 10524716]
- Goodman JS, Blum TC. Assessing the non-random sampling effects of subject attrition in longitudinal research. *Journal of Management*. 1996; 22(4):627–652.
- Hobfoll, SE. The Ecology of Stress. New York: Taylor & Francis; 1988.

- Lopez FG, Mauricio AM, Gormley B, Simko T, Berger E. Adult attachment orientations and college student distress: The mediating role of problem coping styles. *Journal of Counseling & Development*. 2001; 79(4):459–464.
- Magai C, Cohen C, Milburn N, Thorpe B, McPherson R, Peralta D. Attachment styles in older European American and African American adults. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*. 2001; 56(1):S28–S35.
- Magai C, Consedine N, Gillespie M, O’Neal C, Vilker R. The differential roles of early emotion socialization and adult attachment in adult emotional experience: Testing a mediator hypothesis. *Attachment & Human Development*. 2004; 6(4):389–417. [PubMed: 15764126]
- McCullagh, P.; Nelder, JA. *Generalized Linear Models*. Boca Raton, FL: Chapman & Hall/CRC; 1989.
- Mikulincer M, Florian V. Appraisal of and coping with a real-life stressful situation: The contribution of attachment styles. *Personality and Social Psychology Bulletin*. 1995; 21:406–406.
- Mikulincer M, Florian V. Are emotional and instrumental supportive interactions beneficial in times of stress? the impact of attachment style. *Anxiety, Stress, and Coping*. 1997; 10(2):109–127.
- Mikulincer M, Florian V. Maternal-fetal bonding, coping strategies, and mental health during pregnancy: The contribution of attachment style. *Journal of Social and Clinical Psychology*. 1999; 18(3):255–276.
- Mikulincer, M.; Shaver, PR. *Attachment in adulthood: Structure, dynamics, and change*. New York, NY: The Guilford Press; 2007.
- Mikulincer M, Shaver PR. “Can’t Buy Me Love”: An Attachment Perspective on Social Support and Money as Psychological Buffers. *Psychological Inquiry*. 2008; 19(3-4):167–173.
- Mischel, W. Personality dispositions revisited and revised: A view after three decades. In: Pervin, LA., editor. *Handbook of Personality: Theory and Research*. New York, NY: Guilford Press; 1990. p. 111-134.
- Mischel, W. *Personality and Assessment*. 2. New Jersey, NY: Lawrence Erlbaum; 1996. Original work published in 1968
- Mischel W, Shoda Y. A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*. 1995; 102(2):246–268. [PubMed: 7740090]
- Mishel, LR.; Walters, M. How unions help all workers. Economic Policy Institute; Washington, D.C.: 2003. Retrieved on Aug. 7, 2013 from: http://www.epi.org/publication/briefingpapers_bp143/
- Nahum-Shani I, Bamberger PA. Explaining the variable effects of social support on work-based stressor–strain relations: The role of perceived pattern of support exchange. *Organizational Behavior and Human Decision Processes*. 2011; 114(1):49–63. [PubMed: 21152110]
- Pedan, A. Analysis of count data using the SAS system. *Proceedings of the 26th Annual SAS Users Group International Conference*; 2001. p. 226-247.
- Pinquart M, Schindler I. Changes of life satisfaction in the transition to retirement: A latent-class approach. *Psychology and Aging*. 2007; 22(3):442–455. [PubMed: 17874946]
- Radloff LS. The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*. 1977; 1(3):385–401.
- Reitzes DC, Mutran EJ, Fernandez ME. Does retirement hurt well-being? factors influencing self-esteem and depression among retirees and workers. *The Gerontologist*. 1996; 36(5):649–656. [PubMed: 8942108]
- Rogosa D. A critique of cross-lagged correlation. *Psychological Bulletin*. 1980; 88(2):245.
- Salive ME, Cornoni-Huntley J, LaCroix AZ, Ostfeld AM, Wallace RB, Hennekens CH. Predictors of smoking cessation and relapse in older adults. *American Journal of Public Health*. 1992; 82(9):1268–1271. [PubMed: 1503170]
- Szinovacz, ME.; Davey, A. Contexts and pathways: Retirement as institution, process, and experience. In: Adams, GA.; Beehr, TA., editors. *Retirement: Reasons, Processes, and Results*. New York, NY: Springer Publishing Company, Inc; 2003. p. 6-52.
- Van Solinge H, Henkens K. Couples’ adjustment to retirement: A multi-actor panel study. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*. 2005; 60(1):S11.

- Van Solinge H, Henkens K. Adjustment to and satisfaction with retirement: Two of a kind. *Psychology and Aging*. 2008; 23(2):422–434. [PubMed: 18573015]
- Veenhoven R. Is happiness relative? *Social Indicators Research*. 1991; 24(1):1–34.
- Vogel DL, Wei M. Adult attachment and help-seeking intent: The mediating roles of psychological distress and perceived social support. *Journal of Counseling Psychology*. 2005; 52(3):347–357.
- Wang M. Profiling retirees in the retirement transition and adjustment process: Examining the longitudinal change patterns of retirees' psychological well-being. *Journal of Applied Psychology*. 2007; 92(2):455–474. [PubMed: 17371091]
- Wang M, Shultz K. Employee retirement: A review and recommendations for future investigation. *Journal of Management*. 2010; 36(1):172–206.
- Warr P. Age and occupational well-being. *Psychology and Aging*. 1992; 7(1):37–45. [PubMed: 1558703]
- Webster JD. Attachment style and well-being in elderly adults: A preliminary investigation. *Canadian Journal on Aging*. 1997; 16(1):101–111.
- Webster JD. Attachment styles, reminiscence functions and happiness in young and elderly adults. *Journal of Aging Studies*. 1998; 12(3):315–330.
- Wensauer M, Grossmann KE. Quality of attachment representation, social integration and use of social network resources in advanced age. *Zeitschrift für Gerontologie und Geriatrie*. 1995; 28(6):444–456. [PubMed: 8581764]
- Zhou X, Gao DG. Social support and money as pain management mechanisms. *Psychological Inquiry*. 2008; 19(3-4):127–144.

Figure 1.

a: The effect of decrease in income (centered) on depression by level of avoidance

*Decline in income is centered around a mean value of 1.1 (S.D. = 2.5). Values reflect the number of income categories over which change occurred. Note that since the x axis is the centered degree of decline, a centered value of 0 is equivalent to a decline of 1.1 categories, and the range covered by x goes from - 1.4 categories (an increase in income from T1 to T2 equivalent to approximately \$7000) to +3.6 categories (a decline of approximately \$18,000).

b: The effect of decrease in income (centered) on psychosomatic complaints by level of avoidance

* Decline in income is centered around a mean value of 1.1 (S.D. = 2.5). Values reflect the number of income categories over which change occurred. Note that since the x axis is the centered degree of decline, a centered value of 0 is equivalent to a decline of 1.1 categories, and the range covered by x goes from - 1.4 categories (an increase in income from T1 to T2 equivalent to approximately \$7000) to +3.6 categories (a decline of approximately \$18,000).

c: The effect of decrease in income (centered) on number of illnesses (i.e., Ill health) by level of avoidance

* Decline in income is centered around a mean value of 1.1 (S.D. = 2.5). Values reflect the number of income categories over which change occurred. Note that since the x axis is the centered degree of decline, a centered value of 0 is equivalent to a decline of 1.1 categories, and the range covered by x goes from - 1.4 categories (an increase in income from T1 to T2 equivalent to approximately \$7000) to +3.6 categories (a decline of approximately \$18,000).

Table 1

Distribution of Household Income at T1 and T2

Income T1/ T2	1	2	3	4	5	6	7	8	9	10	11	12	13	Row total (T1)
1. Below 10,000	-	-	-	-	-	1 (.39)	-	-	-	-	-	-	-	1 (.39)
2. 10,001-15,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3. 15,001-20,000	-	-	-	-	-	1 (.39)	-	-	-	-	-	-	-	1 (.39)
4. 20,001-25,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5. 25,001-30,000	-	-	-	1 (.39)	-	-	-	-	1 (.39)	-	-	-	-	2 (.78)
6. 30,001-35,000	-	-	-	-	-	1 (.39)	-	-	-	-	-	-	-	1 (.39)
7. 35,001-40,000	-	-	-	-	-	-	-	-	-	-	-	-	1	1 (.39)
8. 40,001-45,000	-	1 (.39)	-	2 (.78)	1 (.39)	1 (.39)	-	2 (.78)	2 (.78)	-	2 (.78)	-	-	11 (4.28)
9. 45,001-50,000	-	-	-	-	1 (.39)	-	2 (.78)	1 (.39)	1 (.39)	-	1 (.39)	3 (1.17)	1 (.39)	10 (3.89)
10. 50,001-55,000	-	-	-	-	-	-	1 (.39)	3 (1.17)	3 (1.17)	6 (2.33)	1 (.39)	1 (.39)	2 (.78)	17 (6.61)
11. 55,001-60,000	-	-	-	-	-	-	3 (1.17)	6 (2.33)	3 (1.17)	-	4 (1.56)	4 (1.56)	3 (1.17)	23 (8.95)
12. 60,001-70,000	1 (.39)	-	-	-	-	3 (1.17)	4 (1.56)	3 (1.17)	3 (1.17)	2 (.78)	5 (1.95)	7 (2.72)	13 (5.06)	41 (15.95)
13. Over 70,000	1 (.39)	-	-	-	-	6 (2.33)	8 (3.11)	4 (1.56)	8 (3.11)	6 (2.33)	6 (2.33)	16 (6.23)	94 (36.58)	149 (57.98)
Column total (T2)	2 (.78)	1 (.39)	-	3 (1.17)	2 (.78)	13 (5.06)	18 (7.0)	19 (7.39)	21 (8.17)	14 (5.45)	19 (7.39)	31 (12.06)	114 (44.36)	257 (100)

Table 2

Means, standard deviations and correlations among study variables (N=257)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1) Gender (1=male, 0=female)	.62	.48																
2) Marital status (1=married, 0=not)	.72	.45	.26**															
3) Retirement status (1=fully retired, 0=employed)	.77	.41	.09	.07														
4) Education	3.22	1.28	-.49***	-.14*	-.09													
5) Time retired	5.21	1.21	-.12*	-.02	.13*	.05												
6) Age	65.2	3.71	.15*	.07	.26***	-.17	.09											
7) Income T1	11.89	1.83	.27***	.40***	.06	-.07	-.08	.04										
8) Income T3	10.87	2.56	.18**	.43***	.01	-.008	-.14*	-.09	.48***									
9) Income decline	1.10	2.50	-.04	-.20**	.001	-.02	.09	.04	.26***	-.33***								
10) Anxiety	2.45	.90	.12	.02	.01	-.09	-.09	-.11	-.08	-.10	-.12							
11) Avoidance	2.23	.91	.25***	-.04	.15*	-.16**	-.07	.11	.04	-.14*	-.001	.45***						
12) Depression T1	1.64	.53	-.22***	-.15*	-.05	.12*	-.07	-.13*	-.24***	-.21***	-.08	.23***	.12					
13) Depression T3	1.58	.52	-.11*	-.14*	-.03	.12*	-.09	-.12*	-.15**	-.15*	-.06	.36***	.19**	.57***				
14) Somatic T1	1.67	.51	-.25***	-.06	-.06	.15**	-.02	.11	-.20**	-.12	-.07	.21***	.08	.78***	.51***			
15) Somatic T3	1.61	.47	-.12*	-.01	-.001	.11	-.03	-.05	-.05	-.08	.01	.33***	.15*	.44***	.73***	.54***		
16) Ill health T1	.94	.93	.05	-.01	-.11	-.06	-.04	.04	-.04	-.12	.08	-.02	.03	.08	.05	.15*	.14*	
17) Ill health T3	1.24	1.08	.16**	.005	-.04	-.19	-.08	.16**	.03	-.04	.12*	-.02	.07	.10	.08	.09	.15*	.61***

*
 $p < 0.05$ **
 $p < 0.01$ ***
 $p < 0.001$

Table 3

The Moderating Role of Attachment Avoidance and Anxiety on the Relationship between Changes in Income and Depression, Psychosomatic Complaints and Ill Health (N=257)

Parameter	Model 1 (Depression)			Model 2 (Psychosomatic Complaints)						Model 3 (Ill Health)		
	Model 1.1	Model 1.2	Model 1.3	Model 2.1	Model 2.2	Model 2.3	Model 3.1	Model 3.2	Model 3.3	Model 3.1	Model 3.2	Model 3.3
Intercept	EST. SE. 1.08*	EST. SE. .89 .53	EST. SE. .87 .51	EST. SE. .59 .48	EST. SE. .51 .47	EST. SE. .44 .47	EST. SE. -1.7*	EST. SE. -1.22 .91	EST. SE. -1.10 .91	EST. SE. -1.22 .91	EST. SE. -1.10 .91	EST. SE. -1.10 .91
Age	EST. SE. -.00 .07	EST. SE. -.004 .007	EST. SE. -.004 .007	EST. SE. -.001 .007	EST. SE. .002 .006	EST. SE. .002 .006	EST. SE. .02 .01	EST. SE. .02 .01	EST. SE. .02 .01	EST. SE. .02 .01	EST. SE. .02 .01	EST. SE. .02 .01
Gender (1=male)	EST. SE. .08 .07	EST. SE. .01 .07	EST. SE. .02 .07	EST. SE. .03 .06	EST. SE. -.03 .06	EST. SE. -.03 .06	EST. SE. .24*	EST. SE. .12 .27*	EST. SE. .12 .29*	EST. SE. .12 .27*	EST. SE. .12 .29*	EST. SE. .12 .29*
Marital status (1=married)	EST. SE. -.07 .06	EST. SE. -.07 .06	EST. SE. -.07 .06	EST. SE. .001 .06	EST. SE. .03 .06	EST. SE. .02 .06	EST. SE. -.11 .11	EST. SE. -.11 .11	EST. SE. -.11 .11	EST. SE. -.11 .11	EST. SE. -.11 .11	EST. SE. -.11 .11
Education	EST. SE. .03 .02	EST. SE. .03 .02	EST. SE. .03 .02	EST. SE. .01 .02	EST. SE. .02 .02	EST. SE. .01 .02	EST. SE. .02 .04	EST. SE. .02 .04	EST. SE. .02 .04	EST. SE. .02 .04	EST. SE. .02 .04	EST. SE. .02 .04
Retirement status (1=fully retired)	EST. SE. .02 .06	EST. SE. .001 .06	EST. SE. -.02 .06	EST. SE. .03 .06	EST. SE. .02 .06	EST. SE. .01 .06	EST. SE. .04 .12	EST. SE. .05 .11	EST. SE. .02 .11	EST. SE. .05 .11	EST. SE. .05 .11	EST. SE. .02 .11
Time retired	EST. SE. -.01 .02	EST. SE. -.004 .02	EST. SE. -.004 .02	EST. SE. -.006 .02	EST. SE. .02 .04	EST. SE. .02 .04	EST. SE. -.02 .04	EST. SE. -.02 .04	EST. SE. -.02 .03	EST. SE. -.02 .04	EST. SE. -.02 .04	EST. SE. -.02 .03
DV T1 (<i>I</i>)	EST. SE. .54***	EST. SE. .48***	EST. SE. .48***	EST. SE. .50***	EST. SE. .44***	EST. SE. .46***	EST. SE. .44***	EST. SE. .43***	EST. SE. .43***	EST. SE. .43***	EST. SE. .43***	EST. SE. .43***
Income T1	EST. SE. -.003 .02	EST. SE. .006 .02	EST. SE. .006 .02	EST. SE. .01 .01	EST. SE. .01 .02	EST. SE. .01 .02	EST. SE. .01 .02	EST. SE. .03 .02	EST. SE. -.006 .02	EST. SE. .03 .02	EST. SE. .03 .02	EST. SE. .03 .02
Income change	EST. SE. .006 .01	EST. SE. .01 .001	EST. SE. .01 .001	EST. SE. .01 .005	EST. SE. .01 .005	EST. SE. .01 .01	EST. SE. .01 .01	EST. SE. .02 .03	EST. SE. .02 .03	EST. SE. .02 .03	EST. SE. .02 .03	EST. SE. .02 .03
Avoidance	EST. SE. .03 .03	EST. SE. .03 .04	EST. SE. .03 .04	EST. SE. .03 .02	EST. SE. .03 .02	EST. SE. .03 .02	EST. SE. .03 .03	EST. SE. .03 .06	EST. SE. .03 .06	EST. SE. .03 .06	EST. SE. .03 .06	EST. SE. .03 .06
Anxiety	EST. SE. .15***	EST. SE. .03 .14***	EST. SE. .03 .14***	EST. SE. .03 .14***	EST. SE. .03 .14***	EST. SE. .12***	EST. SE. .03 .12***	EST. SE. .03 .12***	EST. SE. .03 .12***	EST. SE. .03 .12***	EST. SE. .03 .12***	EST. SE. .03 .12***
Avoidance* anxiety	EST. SE. -.06*	EST. SE. .03 .05*	EST. SE. .03 .05*	EST. SE. .03 .05*	EST. SE. .03 .05*	EST. SE. .03 .05*	EST. SE. .03 .05*	EST. SE. .03 .05*	EST. SE. .03 .05*	EST. SE. .03 .05*	EST. SE. .03 .05*	EST. SE. .03 .05*
Income change* avoidance	EST. SE. .04**	EST. SE. .04**	EST. SE. .04**	EST. SE. .04**	EST. SE. .04**	EST. SE. .04**	EST. SE. .04**	EST. SE. .04**	EST. SE. .04**	EST. SE. .04**	EST. SE. .04**	EST. SE. .04**
Income change* anxiety	EST. SE. -.02 .01	EST. SE. -.02 .01	EST. SE. -.02 .01	EST. SE. -.02 .01	EST. SE. -.02 .01	EST. SE. -.02 .01	EST. SE. -.02 .01	EST. SE. -.02 .01	EST. SE. -.02 .01	EST. SE. -.02 .01	EST. SE. -.02 .01	EST. SE. -.02 .01
R ² /ΔR ²	.34	.41	.43	.29	.36	.38	.643.02	.640.86	.636.92	.643.02	.640.86	.636.92
R ² /ΔR ² (Δ)	.07***	.07***	.02*	.07***	.07***	.02*	.07***	.02*	.02*	.07***	.02*	.02*

* $p < 0.05$

** $p < 0.01$

*** $p < 0.001$

I Depression at T1 for Model 1; Psychosomatic complaints at T1 for Model 2; Health at T1 for Model 3.

²For Model 3: -2ll

³For Model 3: -2ll