Personality and Individual Differences 87 (2015) 196–199

Contents lists available at ScienceDirect

Personality and Individual Differences

journal homepage: www.elsevier.com/locate/paid

Short Communication

Age differences in social comparison tendency and personal relative deprivation

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ARTICLE INFO

Article history:
Received 26 May 2015
Received in revised form 3 August 2015
Accepted 4 August 2015
Available online 25 August 2015

Keywords:
Aging
Social comparison
Social comparison orientation
Personal relative deprivation

ABSTRACT

We examined age-related differences in social comparison orientation and personal relative deprivation (PRD). In Study 1, participants ($N = 1290$) reported their tendencies to engage in social comparisons and PRD. Older adults reported lower levels of social comparison tendency and PRD, and social comparison tendency mediated the relation between age and PRD. The findings reported in Study 1 were replicated in Study 2 using a sample of participants between the ages of 18 to 30 ($n = 180$) and 60+ years old ($n = 176$). Our findings provide evidence that older adults report lower levels of social comparison tendency that, in turn, relate to lower levels of PRD.

1. Introduction

Often the only way we can determine the adequacy of our opinions and abilities is through social comparison, and we typically compare ourselves with people who are similar to us, because similar others provide the most diagnostic information for self-evaluation (Festinger, 1954). Although learning about the self through social comparison is ubiquitous (Corcoran, Crusius, & Mussweiler, 2011), Suls and Mullen (1982) proposed that the tendency to engage in social comparison weakens across adulthood, peaking around young adulthood and decreasing from middle age to older age. They argued that older adults tend to engage in social comparisons less often than younger adults due to losses of, or shifts in, interpersonal contacts, social isolation, general disengagement from society, and declines in the cognitive capacities required for social comparison (e.g., perspective taking).

Little empirical attention has been given to the development of social comparison throughout adulthood, and the evidence Suls and Mullen (1982) used to support their model was indirect (e.g., evidence pointing to the effects of age on social isolation). Researchers have examined the role of social comparison processes in psychological adjustment among older adults (e.g., Heidrich & Ryff, 1993; Robinson-Whelen & Kiecolt-Glaser, 1997), but direct evidence pointing to age-related differences in the tendency to socially compare is limited. Our first aim, then, was to explore the relation between age and tendencies to engage in social comparisons.

Our second aim was to explore one potential consequence of a weaker tendency to engage in social comparisons among older adults—namely, reduced personal relative deprivation (PRD). PRD refers to resentment originating from the belief that one is deprived of desired and deserved outcomes compared to others (for a review, see Smith, Pettigrew, Pippin, & Bialosiewicz, 2012). As Smith et al. (2012) outlined, PRD is characterized by a process whereby an individual makes a social comparison on a given outcome, believes themself to be comparatively disadvantaged, and consequently feels resentful. Despite being an important predictor of a range of outcomes (Smith et al., 2012), to our knowledge, little research has examined age-related differences in PRD. Given that experiences of PRD by definition require social comparison, social comparison tendency should positively correlate with PRD (cf. Buunk, Zurriaga, Gonzalez-Roma, & Subirats, 2003). Consequently, if older adults report weaker tendencies to engage in social comparisons, as Suls and Mullen (1982) suggest, then they might also feel less relatively deprived.

1.1. Overview of research

Across two studies we examined the relations among age, tendencies to engage in social comparisons, and PRD. For Study 1, we collated data across four existing studies where we measured participants' age, tendencies to engage in social comparisons, and PRD. Study 2 was a confirmation study where we recruited participants between the ages

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http://dx.doi.org/10.1016/j.paid.2015.08.003
0191-8869/

of 18 and 30 and over 59 years old to investigate age differences in social comparison tendencies of abilities and opinions and PRD.

2. Study 1

2.1. Method

2.1.1. Participants

Participants were 1290 adults from the USA (M_{age} = 36.55, age range = 18 to 83; SD_{age} = 12.24; 57% female) who completed a brief online survey through Amazon's Mechanical Turk (MTurk) or CrowdFlower.com for a nominal payment.

2.1.2. Procedure and measures

We collated data across four unpublished studies that explored the antecedents and consequences of PRD. Along with various other measures depending on the aims of the individual studies, participants across samples completed Gibbons and Buunk's (1999) widely-used 11-item Iowa-Netherlands Comparison Orientation Measure (INCOM). The items concern tendencies to engage in ability- and opinion-based social comparisons (e.g., "I always pay a lot of attention to how I do things compared with how others do things"; "I often like to talk with others about mutual opinions and experiences"). Participants rated the items using a 5-point scale (1 = *disagree strongly* to 5 = *agree strongly*). Responses were averaged across items (two items were reverse-scored) per Gibbons and Buunk's (1999) recommended use of the INCOM; higher scores indicate stronger tendencies to engage in social comparisons.

Participants also completed Callan, Shead, and Olson's (2011) 5-item Personal Relative Deprivation Scale (PRDS), which gauges individual differences in people's beliefs and feelings associated with comparing their outcomes with the outcomes of similar others (e.g., "I feel dissatisfied with what I have compared to what other people like me have"). The PRDS has been shown to predict theoretically relevant consequences of PRD (e.g., self-esteem, delay discounting, see Callan, Ellard, Shead, & Hodgins, 2008; Callan et al., 2011). Participants responded to the items using a 6-point scale (1 = *strongly disagree*, 6 = *strongly agree*). Responses were averaged across items (two items were reverse-scored); higher scores indicate more PRD.

2.2. Results

2.2.1. Preliminary data analyses

A series of moderated regression analyses showed that the associations among age, PRD, and tendency to socially compare did not differ significantly by sample (i.e., there were no significant interactions; all *ps* > .26). Accordingly, we collated the data across the four samples for our main analyses.

2.2.2. Correlation and mediation analyses

Table 1 shows descriptive statistics, alpha reliabilities, and correlations among the measures. Older participants reported weaker tendencies to socially compare and lower PRD. As expected, a greater general tendency to socially compare related to higher PRD.

Using Preacher and Hayes's (2008) bootstrapping procedure for testing indirect effects, we tested the indirect effect of age on PRD through tendency to socially compare (see Fig. 1). This analysis revealed that social comparison orientation mediated the relation between age and PRD (10,000 resamples; indirect effect = −.004, 95% bias-corrected and accelerated confidence interval [BCa CI]: −.006, −.003), suggesting that that one reason why older adults experience less PRD is through a weaker tendency to engage in social comparisons.

Table 1
Descriptive statistics and correlations among measures.

Measures	*M* (*SD*)	1.	2.	3.	3a.	3b.
Study 1						
1. Age	36.55 (12.24)	–				
2. PRDS	3.13 (.95)	−.20*	(.73)			
3. INCOM-11	3.34 (.69)	−.24*	.25*	(.85)		
3a. Ability	3.11 (.86)	−.29*	.33*	.92*	(.85)	
3b. Opinion	3.58 (.70)	−.10*	.07*	.82*	.54*	(.72)

Measures	*M* (*SD*)		1.	2.	3.	3a.	3b.
Study 2	18–30 years	60+ years					
1. Age	25.21 (3.19)	64.98 (3.75)	–				
2. PRDS	3.31 (1.04)	2.85 (.99)	–	(.83)			
3. INCOM-6	3.59 (.62)	3.03 (.79)	–	.20*	(.82)		
3a. Ability	3.45 (.84)	2.73 (.95)	–	.27*	.89*	(.79)	
3b. Opinion	3.73 (.69)	3.34 (.88)	–	.06	.83*	.48*	(.82)

Note. PRDS = Personal Relative Deprivation Scale, INCOM = Iowa Netherlands Comparison Orientation Measure (11 and 6-item scales). Alpha reliabilities are presented in parentheses along the diagonals.

* $p < .05$.

3. Study 2

Given the exploratory nature of Study 1, we conducted a confirmation study where we administered the INCOM and PRDS to younger (18–30) and older (60+) adults. Although Gibbons and Buunk (1999) advocated the use of the full 11-item INCOM to gauge general social comparison tendencies, Schneider and Schupp (2014) recently found that a two factor model—with the ability and opinion subscales as distinct but correlated factors—was superior to the one factor model. In another study we conducted prior to the current Study 2, we recruited younger (18–30) and older (60+) adults and administered the PRDS and 11-item INCOM. Along with finding age differences in PRD and tendencies to engage in social comparisons of abilities and opinions, we corroborated Schneider and Schupp's (2014) findings for the two-factor model. Full details of this study are available in the supplementary content.

Accordingly, using a 6-item version of the INCOM (hereafter INCOM-6) validated by Schneider and Schupp (2014), Study 2 examined age differences in social comparisons of *abilities* and *opinions* and PRD. We expected that the older adults would report a weaker tendency to socially compare in terms of abilities and opinions, and lower PRD, and that tendency to socially compare would mediate age-related differences in PRD. Because social comparisons of abilities (which concern self-evaluative questions of "how am I doing?"; Gibbons & Buunk, 1999) are more relevant to people's perceptions of their relative lot in life than are social comparisons of opinions (which concern questions of "what should I think?"), we expected the relation between age and PRD to operate primarily through social comparisons of abilities (see Table 1: Study 1, and the online supplementary content for exploratory analyses suggesting this pattern).

3.1. Method

3.1.1. Participants

Participants were 180 younger (18–30) and 176 older (60+) adults living the USA recruited through MTurk. Fifty-seven additional participants were not included because they either completed the survey twice (n = 14) or failed an attention check item ("Attention check. Please select 'strongly disagree'"; n = 43). The proportion of participants who failed the attention check did not differ between ages (12% and 8.4% for older and younger participants, respectively, p = .18).

3.1.2. Procedure and measures

Participants first reported their age to determine their eligibility to participate. Eligible participants then completed the INCOM-6 followed by the PRDS. Participants then reported their annual household income