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Narcissism, Social Experiences, and Mood in Late Life

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Abstract

Objectives: Social ties increase in importance in late life and narcissism may be deleterious to these ties. More narcissistic older adults may have more frequent social encounters than less narcissistic people and may prefer weak ties (e.g., acquaintances) over close ones (e.g., family, close friends). They may benefit more from these encounters due to their need for adulation. This study examined how daily social experiences and mood varied by narcissism among older adults.

Methods: Older adults aged 65–92 years ($N = 303$) completed the Narcissistic Personality Inventory-16 and completed ecological momentary assessments in which they reported number, type, and quality of social contacts and positive and negative mood every 3 h for 5–6 days.

Results: In multilevel models, narcissism did not predict the number or pleasantness of social encounters. But more narcissistic older adults reported a greater percentage of stressful discussions with weak ties. With regard to mood, more narcissistic people reported higher negative mood if they had more encounters with weak ties and when discussing something stressful with weak ties. Less narcissistic people reported lowered positive mood after they discussed something stressful with close ties.

Discussion: The findings present a nuanced understanding of how the self-centeredness of narcissism may be manifest in late life. More narcissistic people may be less sensitive to close partner's (e.g., family, friends) distress, but their mood may be more susceptible to negative social events, especially with weak ties (e.g., acquaintances).

Keywords: Personality, Social interaction, Well-being

Social relationships are vital for an individual's well-being at all ages, but even more so in late life (Charles & Carstensen, 2010). Yet, certain personality qualities may hinder high-quality social relationships. In particular, narcissism—characterized by self-centeredness, entitlement, aggrandizement, and interpersonal exploitativeness—may have negative implications for social relationships and social contacts (Campbell & Foster, 2002; Raskin & Terry, 1988). People who are more narcissistic may lack

the motivation to understand other people's feelings and to take other people's perspectives (Czarna et al., 2015; Konrath et al., 2014), which are essential for initiating and maintaining social relationships. Also, narcissistic individuals tend to engage in frequent social comparisons and reap positive emotional benefits by maintaining a sense of superiority over others (Krizan & Bushman, 2011). These tendencies may impede high-quality social encounters in late life, a time when positive relationships

may be particularly important for emotional well-being (Carstensen et al., 1999).

In general, individuals become less narcissistic as they age (Carlson & Gjerde, 2009; Chopik & Grimm, 2019), yet individual differences in narcissism still exist. Older adults who demonstrate a relatively high level of narcissism may manifest self-centeredness (i.e., being preoccupied with self-related thoughts; Raskin & Terry, 1988). Socioemotional selectivity theory (SST) posits that as older adults perceive their time left to be limited, they are motivated to prioritize emotionally meaningful goals and focus on high-quality social connections (Carstensen et al., 1999). Narcissistic people may have more social contacts due to their need for attention and admiration (Grapsas et al., 2020). However, the key traits of narcissism (i.e., self-centeredness, lack of empathy) often hinder pleasant interactions (Czarna et al., 2018). The negative effect of narcissism on social relationships may contribute to how narcissistic older adults interact with and react to social ties in daily lives, making it difficult for them to maintain their closest social partners. Despite potential social difficulties that may be associated with high levels of narcissism in late life, only a few studies have examined narcissism among older adults, and they mostly include case studies (see Carter & Douglass, 2018). As researchers noted, in 355 studies that examined narcissism across almost half a million participants (Grijalva et al., 2015), the maximum age across all participants was 55 years (Carter & Douglass, 2018). The current study addresses this research gap.

The current study examined whether (a) narcissism is associated with emotional well-being throughout the day, (b) narcissism is associated with the number and quality of social encounters, and (c) narcissism moderates the effect of social encounters on emotional well-being. We also examined the effect of close and weak ties separately as narcissistic people may prefer to interact with acquaintances who are less likely to be aware of their antagonistic behaviors than close social ties (Leckelt et al., 2015).

Narcissism, Daily Mood, and Social Encounters in Late Life

As a personality factor, narcissism may be demonstrated in everyday life and have an impact on individuals' mood and social experiences throughout the day. More narcissistic people may indulge in their overly positive self-concept and thus report more positive and less negative mood (Sedikides et al., 2004). A study examined the underlying mechanism of the positive associations between narcissism and life satisfaction, confirming that the link was mediated by higher self-esteem (Rose, 2002). Similarly, a study found that individuals who scored higher on narcissism reported higher energetic arousal and more hedonic tone, both representing a better mood (Maciantowicz & Zajenkowski, 2020). Another study reported that narcissism was not associated with loneliness among middle-aged adults but was

associated with decreased loneliness among older adults, indicating the possible protective role of narcissism for older adults' emotional well-being (Carter & Douglass, 2018). Although detrimental for social relationships, narcissism may benefit individuals' daily mood in late life.

Narcissism may also be associated with the number and quality of daily social encounters. Social encounters can provide more narcissistic people with opportunities to show off (Grapsas et al., 2020), which meet narcissistic people's chronic goal of obtaining external validation (Morf & Rhodewalt, 2001). As such, they may have a greater number of social encounters throughout the day and spend less time alone (Fatfouta, 2017). Indeed, a study of college students used a digital application that recorded sound 30 s every 12.5 min, which revealed that narcissistic people were more likely to engage in social activities throughout the day (Holtzman et al., 2010).

Although people scoring higher on narcissism may have a greater number of interactions, these interactions may be of poorer quality. High-quality social encounters depend on sensitivity to other people's needs and the ability to understand others (Peters et al., 2011), which are traits that more narcissistic people may be lacking (Burgmer et al., 2021). More narcissistic people also tend to prioritize their own needs and ignore their social partners' feelings, potentially lowering the quality of social encounters (Czarna et al., 2018). Taken together, compared to less narcissistic people, more narcissistic people may experience more frequent but lower-quality social encounters.

Interactions Between Narcissism and Social Encounters on Mood

In general, more social encounters are associated with better mood (Fingerman et al., 2020; Mejía & Hooker, 2015), yet we know little about the possible moderating role of narcissism in associations between social encounters and mood. Based on the Status Pursuit in Narcissism model, narcissistic people are continuously driven by a dominant status motive (Grapsas et al., 2020). As such, they may use social encounters as tools for self-promotion instead of communication and emotional goals. It is likely that the discrepancy in goals affects the outcome of encounters, such that more narcissistic people experience larger increase in positive mood and larger decrease in negative mood if they have more encounters.

Additionally, due to narcissistic people's overarching goal to increase and maintain positive self-concept, their mood may be more susceptible to surrounding social environment, especially negative social events that may threaten the positive self-concept (Zeigler-Hill et al., 2010). More narcissistic people also displayed greater mood variability in daily life, with greater reactivity to negative interpersonal events (e.g., hassles with spouse or coworkers; Rhodewalt et al., 1998). Prior studies have linked social encounter quality to higher positive and lower negative mood, and we

expected such associations to be greater among those who are more narcissistic.

Effect of Social Partner Types

Compared to close ties who have known the narcissistic people for years, weak ties (e.g., acquaintances, neighbors) may be more likely to provide responses that more narcissistic people seek, such as attention and adulation (Grijalva & Zhang, 2016). Social partners often initially perceive narcissistic people as charming and charismatic, but people's attitudes toward narcissistic people became more negative as they get to know them better (and become closer ties) due to their arrogant and dominant behaviors (Leckelt et al., 2015). Likewise, research shows that social partners who were not close rated narcissistic people as intelligent, attractive, and funny (Carlson et al., 2011). As such, more narcissistic people may prefer encounters with weak ties, as opposed to close ties.

The present study tested whether narcissistic people experience different patterns (number and quality) of social encounters with close and weak ties. Additionally, because close and weak ties represent different types of social roles corresponding with different needs (e.g., love, affiliation, adulation), we aimed to examine whether the moderating effect of narcissism on mood differs in encounters with close and weak ties.

Hypotheses and the Current Study

Drawing on data that tracked older adults' daily experiences throughout the day, we examined the following hypotheses.

- H1: Older adults who scored higher on narcissism would have more positive and less negative daily mood.
- H2: Older adults who scored higher on narcissism would have more frequent but lower-quality (less pleasant, more stressful) social encounters compared to less narcissistic people. More narcissistic people would report better quality social encounters with weak ties compared to less narcissistic people, however.
- H3: Narcissism would moderate the effects of number of social encounters on mood, such that the effects of number of social encounters would be larger for older adults who scored higher on narcissism. The moderating effect of narcissism also would be more salient for weak ties rather than close ties.
- H4: Narcissism would moderate the effects of quality of social encounters on mood, such that the effects of quality of social encounters would be larger for older adults who scored higher on narcissism. The moderating effect of narcissism also would be more salient for weak ties rather than close ties.

We adjusted for age, gender, marital status, education, racial and ethnic minority, and health. Age is negatively associated with social network size (Cornwell et al., 2008). Compared to men, women report less narcissism (Grijalva et al., 2015) and more social encounters (Kalmijn, 2003). Married older adults typically have larger social networks (Cornwell et al., 2008) and they reported better well-being (Wright & Brown, 2017). Higher education level is associated with better mood and more social contacts (Fang et al., 2018). Compared to non-Hispanic White adults, African American adults have smaller social networks but more frequent social contacts with their network members (Ajrouch et al., 2001). Better health status is associated with more contact with others (Cornwell & Waite, 2009) and better mood (Penedo & Dahn, 2005). We also controlled for the number of close social partners overall (e.g., children), because this may be associated with the number of daily encounters for some individuals (Cornwell & Waite, 2009).

Method

Participants and Procedure

Participants were from the *Daily Experiences and Well-being Study* conducted in 2016–2017. The study included 333 adults aged 65–92 years who were recruited from the greater Austin area, Texas. Participants first completed a 90- to 120-min face-to-face baseline interview including information about social partners and background information (e.g., gender, age, education). The interview was followed by a 5- to 6-day ($M = 5.33$, $SD = 1.06$) ecological momentary assessment (EMA) during which participants reported their daily experiences and mood on study-provided mobile devices every 3 h during waking hours. Finally, participants completed a survey in their homes that included a measure of narcissism. Participants received \$50 for completing the baseline interview and \$100 for completing the EMA component and the survey.

Of the 333 participants who took part in the baseline interview, 304 participants completed both the EMA and the measure of narcissism. One participant completed fewer than half items in the narcissism scale and was excluded, which left 303 participants (aged 65–89, $M = 73.85$, $SD = 6.32$) for the current study. Compared to the 30 older adults who did not participate in the full process, the 303 participants were younger ($t_{(331)} = 2.08$, $p = .046$), reported better health ($t_{(331)} = 3.28$, $p = .001$), and had a larger social network ($t_{(331)} = 2.04$, $p = .042$). They were also less likely to be ethnic or racial minorities ($\chi^2_{(1, N = 333)} = 20.80$, $p < .001$). No significant differences were found in other background characteristics. Eighteen of the excluded participants completed the measure of narcissism but did not participate in the EMA. Their levels of narcissism do not differ significantly from the eligible participants.

Measures

Self-report instrument

Narcissism.—We measured narcissism using the shortened version of Narcissism Personality Inventory (NPI-16; Ames et al., 2006). Participants chose between a narcissism-consistent (1) or narcissism-inconsistent statement (0) on 16 items (e.g., I really like to be the center of attention vs. It makes me uncomfortable to be the center of attention). We calculated the sum across all items and then divided it by the number of completed items, representing the proportion of items for which participants chose the narcissism-consistent statement (Cronbach's alpha = 0.74).

Social partners.—Participants named their close social partners with the widely used social convoy measure (Antonucci, 1986; Birditt et al., 2020; Fuller et al., 2020), which asked participants to diagram people who were close and important in their lives. On average, participants reported 15.27 social partners in their close network ($SD = 6.98$, range = 0–30). We transferred the top 10 closest social partners to the handheld device for use in the EMA. Individuals in the first 10 social network members were referred to as close social partners and those who were not in the first 10 were referred to as weak ties (e.g., acquaintance, extended family).

Participant characteristics.—Participants reported their age in years. We coded gender as 1 (*male*) and 0 (*female*). Participants indicated their education level and we recoded it into 1 (*high school or less*), 2 (*some college school*), and 3 (*college or more*) and generated dummy variables for further analysis. Participants reported their marital status as married, cohabitating/living with a partner, divorced, separated, widowed, and never married. Marital status was dichotomized as 1 (*married or cohabitating*) and 0 (*not married*). Self-reported physical health was rated as 1 (*excellent*), 2 (*very good*), 3 (*good*), 4 (*fair*), and 5 (*poor*; Idler & Kasl, 1995), and we reverse-coded the health condition so a higher score represents better health condition. Participants indicated their race as White, Black or African American, Asian, American Indian/Alaska Native, and native Hawaiian/other Pacific Islander. They also indicated their ethnicity as Hispanic/Latino and not Hispanic/Latino. We dichotomized minority status as 1 (*ethnic or racial minorities*) and 0 (*non-Hispanic Whites*).

EMA measures

Number of encounters.—At each EMA assessment, participants indicated whether they had contact with each of the 10 closest social partners in the prior 3 h, 1 (*yes*) and 0 (*no*). They also indicated whether they had contact with up to six additional social partners (i.e., weak ties) during the prior 3 h, 1 (*yes*) and 0 (*no*). We generated a variable indicating how many social partners in total the participant encountered during the 3-h interval as well as how many close and weak ties they encountered, respectively.

Quality of social encounters.—Participants also rated the pleasantness of each social encounter from 1 (*unpleasant*) to 5 (*pleasant*). As participants could have multiple encounters in one assessment, we calculated the mean pleasantness across all encounters in the prior 3 h. Because the rating was positively skewed ($M = 4.61$, $SD = 0.42$), we generated a dichotomous variable indicating whether *all* social encounters in the prior 3 h were rated as pleasant (i.e., reported 5 [*pleasant*] across all encounters), coded as 1 (*yes*) and 0 (*no*). Participants also reported whether they discussed anything stressful during each encounter in the prior 3 h, 1 (*yes*) and 0 (*no*). We then generated a dichotomous variable representing whether they discussed anything stressful in any social encounters that happened in the prior 3 h, 1 (*yes*) and 0 (*no*).

Mood.—Every 3 h throughout the day, participants rated to what extent they felt four positive (e.g., proud, calm) and five negative (e.g., irritated, sad) emotions on a scale from 1 (*not at all*) to 5 (*a great deal*). Most of the items were selected from a list of prototypical emotion features (Shaver et al., 1987) and adapted to a 5-point scale from the original 4-point scale. Two items (nervous/worried, proud) were retrieved from the Positive and Negative Affect Schedule (Watson et al., 1988). We calculated the average score of the four positive emotions as positive mood (Cronbach's alpha = 0.69) and the average score of the five negative emotions as negative mood (Cronbach's alpha = 0.72).

Analytic Strategy

First, we examined descriptive statistics and estimated bivariate correlations between narcissism, the key variables, and the covariates. Then, we estimated multilevel regression models to test the hypotheses at the 3-h assessment level. All continuous covariates were centered at the grand mean for a better interpretation of the intercept. All models were adjusted for participant age, gender, marital status, minority status, education, health, and social network size. To test all of our hypotheses, we used two-level multilevel models in which assessments (Level 1) nested within participants (Level 2). We considered three-level models (assessments nested within days, and days nested within participants) but remained at two-level models given the lack of variance at the daily level (i.e., social encounter and mood patterns were consistent across days). All models were performed using Stata 17.

We first examined whether older adults who scored higher on narcissism reported more positive mood and less negative mood throughout the day (H1). Positive mood and negative mood were assessed at each 3-h interval and served as outcomes in two separate models, with narcissism as the predictor.

Next, we tested whether older adults who scored higher on narcissism had more frequent but lower-quality social

encounters throughout the day (H2). As for the frequency, the outcome was the number of social encounters in the prior 3 h. The outcomes to test encounter quality were (a) whether all encounters in the prior 3 h were pleasant and (b) whether participant discussed anything stressful with a social partner in the prior 3 h, 1 (*yes*) and 0 (*no*) in two separate multilevel logistic models. Additionally, to address whether social partner's type influenced narcissistic people's preferences, we estimated models for close and weak ties separately.

Finally, to test Hypothesis 3 regarding the moderating effect of narcissism on social encounters, we entered interaction terms of narcissism \times social encounters number (person-mean-centered) and narcissism \times social encounter number (person mean), as well as narcissism \times social encounters quality (person-mean-centered) and narcissism \times social encounter quality (person mean), treating mood as the outcome. This approach isolated the within-person from between-person effect and examined the cross-level interaction between narcissism and social encounters. Finally, to explicitly test whether close and weak ties played different roles, we estimated models regarding close and weak ties, respectively.

The equation below shows the cross-level interaction between narcissism and the number of social encounters. Models testing interactions between narcissism and the quality of social encounters were set up in a similar format. Encounter_pmc represents the person-mean-centered number of social encounters. Encounter_gmc represents the grand-mean-centered number of social encounters. Covariates were entered separately in the model, but because all covariates were on Level 2, for simplicity, they were written as a single item in the equation.

Level 1:

$$\text{Mood}_{ij} = b_{0i} + b_{1i}\text{Encounter_pmc}_{ij} + u_{ij}$$

Level 2:

$$b_{0i} = \beta_{00} + \beta_{01}\text{Narcissism}_j + \beta_{02}\text{Encounter_gmc}_j + \beta_{03}\text{Covariates}_j + d_{0i}$$

$$b_{1i} = \beta_{10} + \beta_{11}\text{Narcissism}_j + d_{1i}$$

Composite representation:

$$\begin{aligned} \text{Mood}_{ij} = & \beta_{00} + \beta_{01}\text{Narcissism}_j + \beta_{02}\text{Encounter_gmc}_j \\ & + \beta_{10}\text{Encounter_pmc}_{ij} \\ & + \beta_{11}(\text{Narcissism}_j \times \text{Encounter_pmc}_{ij}) \\ & + \beta_{03}\text{Covariates}_j + d_{0i} + d_{1i}\text{Encounter_pmc}_{ij} \\ & + u_{ij} \end{aligned}$$

Results

Table 1 presents descriptive statistics of the key variables. On average, participants encountered 2.84 social partners ($SD = 1.38$) in the prior 3 h, 1.47 ($SD = 0.90$) close ties

Table 1. Sample Descriptive Information

	Participants ($N = 303$)		
	<i>M</i>	<i>SD</i>	Range
<i>Demographic characteristics</i>			
Age	73.86	6.32	65–89
Self-rated health ^a	3.60	1.00	1–5
Social network size ^b	15.27	6.98	0–30
Narcissism ^c	0.20	0.17	0–0.75
		Proportions	
Female		0.55	
Married		0.59	
Racial/ethnic minority		0.29	
Education			
High school or less		0.14	
Some college		0.28	
College or more		0.58	
<i>Experiences throughout the day^d</i>			
Positive emotion scale ^e	3.45	0.71	1–5
Negative emotion scale ^f	1.23	0.29	1–2.45
Social encounters number ^g	2.84	1.38	0–13.35
		Proportions	
Social encounters pleasantness ^h		0.68	
Stressful discussion ⁱ		0.22	

^a1 (*poor*), 2 (*fair*), 3 (*good*), 4 (*very good*), and 5 (*excellent*).

^bNumber of social partners named as a social convoy.

^cProportion of narcissism-consistent responses.

^dReported every 3 h, assessment $n = 5,984$.

^eMean of four items (proud, content, loved, and calm).

^fMean of five items (nervous/worried, irritated, bored, lonely, and sad).

^gNumber of social partners encountered in the prior 3 h.

^hWhether all social encounters in the prior 3 h were pleasant as 1 (*yes*) and 0 (*no*).

ⁱWhether any encounters involving stressful discussion in the prior 3 h, 1 (*yes*) and 0 (*no*).

and 1.37 ($SD = 0.80$) weak ties. Participants indicated 80% of all social encounters as pleasant. Participants discussed something stressful in 22% of all social encounters. They were more likely to discuss something stressful with close ($M = 19\%$) than weak ($M = 15\%$) ties. Pleasantness was negatively correlated with whether the encounter involved a stressful discussion ($r = -0.34, p < .001$).

The Main Effect of Narcissism on Mood and Social Encounters

Hypothesis 1: We expected people who scored higher on narcissism to have better mood. Narcissism was not associated with positive or negative mood, or number of social encounters with either total, close, or weak ties (see [Supplementary Table 1](#) for null findings).

Hypothesis 2: We expected people who scored higher on narcissism to report less pleasant social encounters and more encounters with stressful discussions. Narcissism was not a significant predictor of social encounter pleasantness with close or weak ties. Older adults who were more narcissistic

were more likely to have stressful conversations with weak ties (OR = 3.59, $p = .016$); each one-point increase in narcissism was associated with a 3.59 times increase in the odds of discussing something stressful with weak ties (Table 2).

Narcissism Moderating Number of Social Encounters on Mood

Hypothesis 3: We predicted that narcissism would moderate the effects of number of social encounters on mood, with larger effects for older adults who scored higher on narcissism. We did not observe significant interactions in models including close ties (Table 3).

We observed a significant interaction between narcissism and number of encounters with weak ties (e.g., acquaintances) on positive mood ($B = -0.95, p = .002$; Table 3). Simple slopes tests revealed that people who scored lower on narcissism had higher positive mood if they had more encounters with weak ties in the prior 3 h ($B = 0.21, p = .006$); this effect was not significant for those who scored higher on narcissism (Figure 1).

We observed a significant interaction between narcissism and the number of encounters with weak ties (e.g., acquaintances) on negative mood ($B = 0.31, p = .012$; Table 3). That is, people who scored higher on narcissism had higher negative mood if they had more social encounters with weak ties during the prior 3 h ($B = 0.08, p = .002$); the effect was not significant for those who scored lower on narcissism (Figure 1).

Narcissism Moderating Quality of Social Encounters on Mood

Hypothesis 4: We expected narcissism to moderate the effect of social encounter quality (e.g., pleasantness; whether it was a stressful encounter) on positive and negative

mood. We did not observe significant interactions between narcissism and pleasantness of social encounters with either close or weak ties. However, narcissism moderated the effect of having stressful encounters on positive and negative mood.

The interaction between narcissism and stressful encounters with close ties on positive mood was significant ($B = 0.50, p < .00$; Table 4). For people who scored lower on narcissism, discussing something stressful with a close tie was associated with decreased positive mood ($B = -0.22, p < .001$; Figure 2), whereas for people who scored higher on narcissism, discussing something stressful with close ties was not associated with positive mood.

The interaction between narcissism and stressful encounters with weak ties on negative mood was also significant ($B = 0.25, p = .038$; Table 4). Discussing something stressful with weak ties was associated with higher negative mood for people who scored higher ($B = 0.17, p < .001$) and who scored lower on narcissism ($B = 0.09, p = .002$), but the effect was stronger for those who were more narcissistic (Figure 2).

Sensitivity Tests

Due to the skewness of the narcissism score, we also tested the models using tertiles to convert narcissism to a categorical variable. The overall pattern of narcissism (i.e., main effect, moderating effect) remained the same. We also recoded social encounter quality in several ways: proportion of pleasant encounters, average pleasant score across all encounters during the prior 3 h; all yielded the same pattern of results. Because of the excessive zeros of the number of social encounters, we also estimated zero-inflated Poisson models, and the models showed similar results with the previous models (i.e., narcissism was not associated with total number of social encounters, encounters with close ties,

Table 2. Multilevel Logistic Model for Narcissism Predicting Pleasantness and Stressful Social Encounters^a ($N = 303$)

	Pleasantness						Stressful social encounters					
	Close ties			Weak ties			Close ties			Weak ties		
	B	SE	OR	B	SE	OR	B	SE	OR	B	SE	OR
Fixed effects												
Intercept	1.95***	0.53	7.00	1.34**	0.43	3.83	-1.82***	0.37	0.16	-2.27***	0.37	0.10
Narcissism ^b	0.56	0.79	1.74	0.34	0.63	1.41	-0.03	0.54	0.97	1.28*	0.53	3.59
<i>Covariates</i>												
Random effects												
Variances (intercept)	3.42***	0.45		2.01***	0.29		1.33***	0.20		0.99***	0.20	
-2 log pseudo-likelihood	3,795.37			3,281.30			3,921.47			2,490.33		

Notes: OR = odds ratio. All continuous predictors are centered on the grand mean. Models adjusted for the effects of age, gender, marital status, education, minority status, health, and social network size but omitted from the tables.

^aStressful social encounters represent encounters that included a stressful discussion.

^bProportion of narcissism-consistent responses.

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

Table 3. Multilevel Linear Model Results for Narcissism × Number of Social Encounters Predicting Positive and Negative Mood

	Positive mood ^a				Negative mood ^b			
	Close ties		Weak ties		Close ties		Weak ties	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Fixed effects								
Intercept	3.38***	0.17	3.31***	0.16	1.18***	0.07	1.22***	0.07
Narcissism ^c	0.65	0.42	1.50**	0.47	0.05	0.21	-0.24	0.19
Encounter with close ties ^d (WP)	0.03***	0.01	—	—	-0.00	0.00	—	—
Encounter with close ties ^d (BP)	-0.04	0.05	—	—	0.04**	0.01	—	—
Encounter with close ties ^d (WP) × Narcissism	-0.01	0.04	—	—	0.01	0.01	—	—
Encounter with close ties ^d (BP) × Narcissism	-0.25	0.23	—	—	0.04	0.07	—	—
Encounter with weak ties ^e (WP)	—	—	0.02***	0.00	—	—	-0.00**	0.00
Encounter with weak ties ^e (BP)	—	—	0.05	0.05	—	—	0.03	0.02
Encounter with weak ties ^e (WP) × Narcissism	—	—	-0.01	0.03	—	—	0.01	0.01
Encounter with weak ties ^e (BP) × Narcissism	—	—	-0.95**	0.31	—	—	0.31*	0.12
<i>Covariates</i>								
Random effects								
Variances (intercept)	0.45***	0.04	0.44***	0.04	0.07***	0.01	0.07***	0.01
Variances (slope)	0.00***	0.00	0.00***	0.00	0.00***	0.00	0.00***	0.00
Covariance	-0.00***	0.00	0.00***	0.00	-0.00***	0.00	-0.00***	0.00
Variances (residual)	0.16***	0.00	0.16***	0.00	0.06***	0.00	0.06***	0.00
-2 log likelihood	7,388.16		7,374.96		1,311.12		1,307.61	

Notes: Participants $n = 303$. Assessments $n = 5,984$. BP = between-person; WP = within-person. Models adjusted for the effects of age, gender, marital status, education, minority status, health, and social network size but omitted from the tables.

^aAverage of four items (proud, content, loved, and calm).

^bAverage of five items (nervous/worried, irritated, bored, lonely, and sad).

^cProportion of narcissism-consistent responses.

^dNumber of social encounters with close ties in the prior 3 h.

^eNumber of social encounters with weak ties in the prior 3 h.

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

or encounters with weak ties). We examined associations between narcissism and encounters with larger groups of people (rather than encounters with a single social partner); the associations were not significant.

Discussion

Prior studies have examined the influence of narcissism on social relationships (Campbell & Foster, 2002), but a few studies have considered whether narcissism plays a role in social encounters and mood in a daily context (Holtzman et al., 2010). Although narcissism is generally low in late life (Chopik & Grimm, 2019), this study found subtle differences between individuals with different levels of narcissism on their everyday social experiences and mood.

Narcissism, Social Encounters, and Mood

Prior studies suggested narcissism may predict a greater number of social encounters to provide a social avenue to show off (Grapsas et al., 2020), yet narcissism was

not associated with the number of encounters in the current study. Besides actual social contacts, there are other strategies available to achieve a high social status (e.g., self-serving bias; Dufner et al., 2019). Older adults may be more accustomed to adjusting self-appraisal (Grapsas et al., 2020) rather than engaging in actual social contacts. Future research can investigate whether more narcissistic older adults prefer these strategies to enhance their self-concept.

Although narcissism was not associated with the number of social encounters, as expected, more narcissistic people had more encounters where they discussed something stressful. The findings from this study are in line with previous literature that narcissism was associated with worse social encounter quality (Campbell & Foster, 2002). In previous studies, more narcissistic people also reported more stressful experiences in the prior 6 months including social stressors (e.g., rejection by a person you loved; Orth & Luciano, 2015). In this light, it is possible that more narcissistic older adults were more sensitive to negative topics and conversations and more likely to perceive them as stressful encounters. The convoy model suggests that maintaining high-quality social contacts is important in protecting older adults' emotional

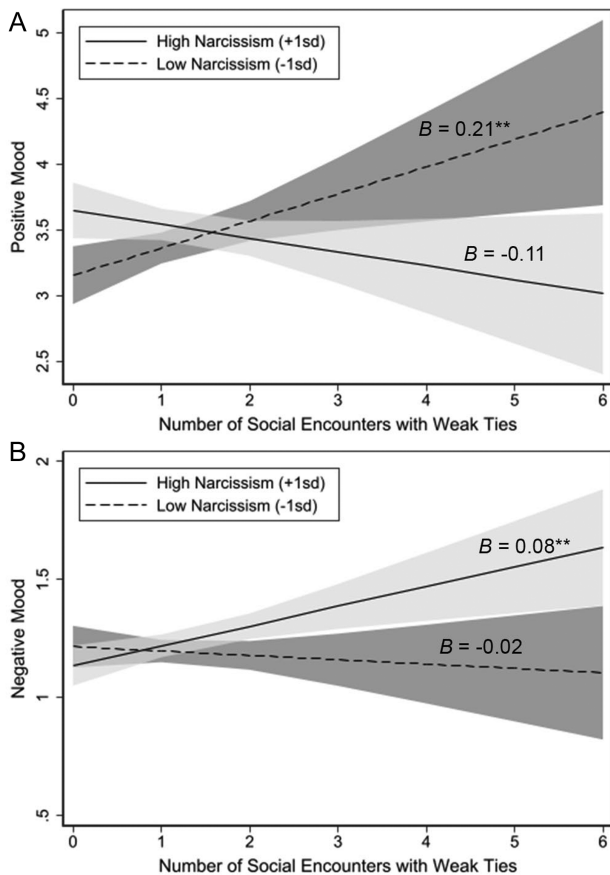


Figure 1. Figure A shows the predicted level of positive mood by narcissism and varying numbers of social encounters with weak ties. Figure B shows the predicted level of negative mood by narcissism and varying numbers of social encounters with weak ties. All other covariates were held at constant. * $p < .05$, ** $p < .01$, *** $p < .001$.

well-being, and the quality may be more predictive than the number of encounters in terms of emotional and physical outcomes (Antonucci et al., 2014). In this light, the lack of high-quality social encounters may lead narcissistic older adults to greater risks of developing worse emotional well-being and physical outcomes over time. Previous studies that tracked participants from middle to late adulthood have associated unhealthy narcissism (e.g., hypersensitivity) with worse psychological outcomes (Cramer & Jones, 2008). We speculate that low-quality social encounters are an explanatory factor of this link, given its importance stated in the convoy model.

Counter to expectations, narcissism did not predict positive or negative mood. Prior studies have relied on retrospective reports of mood over longer periods of time (Sedikides et al., 2004), rather than reports throughout the day. Daily positive and negative mood may be influenced by proximal life events rather than certain personality traits. That is, although narcissism may affect the average level of positive and negative mood, its effect may not manifest in a snapshot of everyday life.

Close and Weak Ties

Narcissism was not associated with mood directly, but it influences older adults' mood through social encounters. More narcissistic people have higher *negative* mood if they had a greater number of encounters with weak ties. This may be because more narcissistic people have higher expectations of weak ties (e.g., adulation) and their needs are harder to satisfy (Morf & Rhodewalt, 2001). Interestingly, the moderating effect of narcissism was only observed for the number of encounters with weak ties. SST also suggests the different functions that close and weak ties may serve in late life. Specifically, older adults prioritize close ties that are the most beneficial to their emotional well-being (Charles & Carstensen, 2010). It is likely that close ties play a similar role for mood, regardless of the narcissism level. Yet for more narcissistic people, the goal of encounters with weak ties may be self-promotion (Grapsas et al., 2020), which is not easily satisfied in daily life.

We also examined the interaction between narcissism and encounter quality. Regardless of the level of narcissism, older adults showed consistent patterns of higher positive mood and lower negative mood if they had pleasant social encounters, and the reverse pattern (lower positive and higher negative mood) if they discussed something stressful with social partners.

However, after considering close and weak ties, we observed how narcissism influences the quality of social encounters and mood. Less narcissistic people's positive mood was lower after discussing something stressful with close social partners; more narcissistic people remained unaffected. In line with prior studies that associated narcissism with self-centeredness and empathetic difficulties (Krizan & Bushman, 2011; Raskin & Terry, 1988), findings indicate that more narcissistic people are insensitive to close partners' feelings and thus can maintain their emotions unaffected by negative surroundings (Wurst et al., 2017).

On the other hand, more narcissistic people experience a greater increase in negative mood after discussing something stressful with weak ties. This finding suggests that having stressful conversations with weak ties may be more upsetting to narcissistic people as they expect to receive admiration and positive feedback from those weak ties (Leckelt et al., 2015). When these encounters do not develop as they wish (i.e., discuss something stressful), narcissistic people become more intolerant and less patient. The convoy model highlights the necessity of including multidimensional characteristics of the social network, including the number, quality, and type of social connections (Antonucci et al., 2014). By examining the number and quality of social encounters with close and weak ties separately, the current study linked individuals' personal characteristics (i.e., narcissism), multiple dimensions of daily social encounters, and well-being together. Instead of being tied to the actual number of encounters, narcissism was associated with older adults' emotional well-being, and such associations

Table 4. Multilevel Linear Model Results for Narcissism × Quality of Social Encounters on Mood

	Stressful social encounters															
	Pleasantness				Negative mood ^b				Positive mood ^b							
	Positive mood ^a		Weak ties		Close ties		Weak ties		Close ties		Weak ties		Close ties			
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE		
Fixed effects																
Intercept	2.66***	0.18	2.70***	0.18	1.57***	0.07	1.41***	0.08	3.59***	0.16	3.46***	0.17	1.15***	0.06	1.23***	0.06
Narcissism ^c	0.01	0.69	-0.33	0.66	0.19	0.29	0.69*	0.28	0.18	0.34	0.42	0.34	0.07	0.13	-0.06	0.13
Close ^d (WP)	0.20***	0.02	—	—	-0.18***	0.02	—	—	-0.14***	0.02	—	—	0.19***	0.02	—	—
Close ^d (BP)	1.00***	0.14	—	—	-0.35***	0.06	—	—	-0.83***	0.20	—	—	0.60***	0.08	—	—
Close ^d (WP) × Narcissism ^c	-0.29	0.15	—	—	0.02	0.10	—	—	0.50***	0.14	—	—	-0.05	0.10	—	—
Close ^d (BP) × Narcissism ^c	0.16	0.83	—	—	-0.04	0.34	—	—	0.03	1.13	—	—	0.36	0.43	—	—
Weak ^e (WP)	—	—	0.22***	0.02	—	—	-0.11***	0.01	—	—	-0.10***	0.03	—	—	0.13***	0.02
Weak ^e (BP)	—	—	0.92***	0.14	—	—	-0.20***	0.06	—	—	-0.46*	0.23	—	—	0.31***	0.09
Weak ^e (WP) × Narcissism ^c	—	—	0.12	0.13	—	—	-0.09	0.09	—	—	-0.15	0.16	—	—	0.25*	0.12
Weak ^e (BP) × Narcissism ^c	—	—	0.73	0.89	—	—	-0.66	0.37	—	—	-0.80	1.23	—	—	1.29**	0.49
<i>Covariates</i>																
Random effects																
Var (intercept)	0.38***	0.03	0.41***	0.04	0.07***	0.01	0.07	0.01	0.42***	0.04	0.47***	0.04	0.06***	0.01	0.07***	0.01
Var (slope)	0.04***	0.01	0.01***	0.01	0.02***	0.00	0.01	0.00	0.05***	0.01	0.04***	0.01	0.03***	0.01	0.04***	0.01
Covariance	-0.03***	0.02	0.01***	0.01	-0.02***	0.00	-0.01	0.00	-0.00***	0.02	0.00***	0.02	0.02***	0.00	0.01***	0.01
Var (residual)	0.14***	0.00	0.16***	0.00	0.05***	0.00	0.06	0.00	0.14***	0.00	0.17***	0.00	0.05***	0.00	0.06***	0.00
-2 log likelihood	5,341.14		4,089.41		522.28		957.85		5,430.48		4,217.05		409.71		922.96	

Notes: BP = between-person; WP = within-person. Models adjusted for the effects of age, gender, marital status, education, minority status, health, and social network size but omitted from the tables.

^aAverage of four items (proud, content, loved, and calm).

^bAverage of five items (nervous/worried, irritated, bored, lonely, and sad).

^cProportion of narcissism-consistent responses.

^dQuality of social encounters with close ties in the prior 3 h.

^eQuality of social encounters with weak ties in the prior 3 h.

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

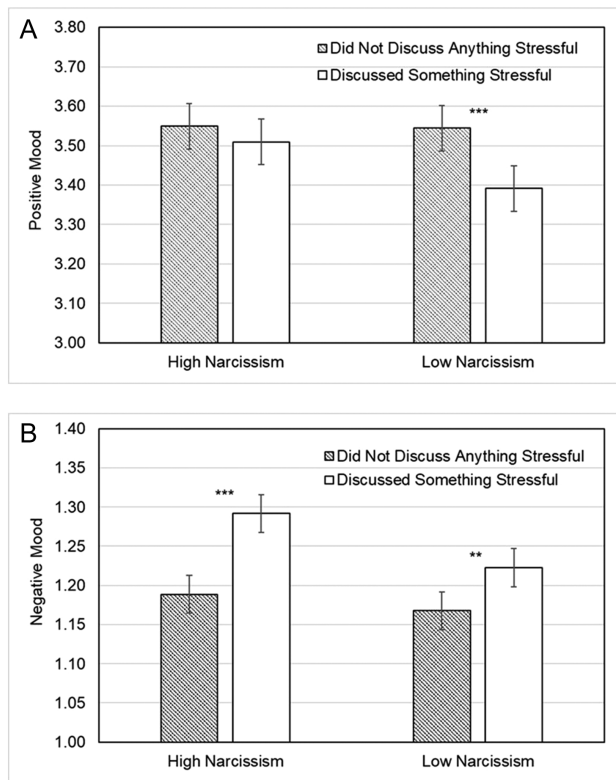


Figure 2. Figure A shows the predicted level of positive mood by narcissism and whether social encounters with close ties in the prior 3 h involved anything stressful. Figure B shows the predicted level of negative mood by narcissism and whether social encounters with weak ties in the prior 3 h involved anything anything stressful. * $p < .05$, ** $p < .01$, *** $p < .001$.

depended on whom they encountered (i.e., close or weak ties) and what they discussed during the encounter.

Taken together, we did not find narcissism to be associated with older adults' positive and negative mood directly. On the one hand, in regard to emotional well-being, more narcissistic people may benefit from their indifferent attitudes toward stressful encounters with close ties. On the other hand, more narcissistic people may be more vulnerable because of their unrealistic expectations to weak ties. Future studies may investigate more fine-grained mechanisms by which narcissism drives an individual's well-being in late life (Miller et al., 2021).

Limitations and Conclusions

The study is limited by several factors. First, the local effect sizes (assessment level) in the current study are small (less than 0.01). It is common to observe small local effect sizes in multilevel settings and the effect would be stronger considering the accumulative effect during a longer period (Lorah, 2018), yet future studies to replicate the results are still needed.

Additionally, narcissism may include many facets, including vulnerability, but this study only focused on grandiose narcissism (Miller et al., 2011). Grandiose narcissism

is characterized by aggressiveness and power orientation, whereas vulnerable narcissism reflects the incompetent, defensive, and anxious side of narcissism (Krizan & Herlache, 2018). Future research should address the role of vulnerable narcissism in late life.

Moreover, the study only considered participants' narcissism, whereas individuals' personality traits may have affected their social network. For example, close social partners of more narcissistic people may have generated strategies that allow more narcissistic older adults to be unaware of social tensions (Fingerman & Charles, 2010). Social encounters are dynamic processes that involve more than one person, and all members may influence conversation content and quality. Also, it was unclear whether the stressful topic they discussed was related to the participant or the social partner. Thus, it is worthwhile to consider the personality traits of participants' social partners.

Overall, the current study explores how narcissism intertwines with daily social encounters to influence older adults' emotional well-being. Findings demonstrate narcissism's unique role in predicting social encounter quality as well as its moderating effect on encounters and mood throughout the day. Additionally, the study suggests that narcissistic people may harbor different expectations of their close and weak ties, offering a new perspective to examine the impact of being narcissistic in late life.

Supplementary Material

Supplementary data are available at *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences* online.

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Conflict of Interest

None declared.

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