Benefits of Having Friends in Older Ages: Differential Effects of Informal Social Activities on Well-Being in Middle-Aged and Older Adults

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Objectives. It has been considered a fact that informal social activities promote well-being in old age, irrespective of whether they are performed with friends or family members. Fundamental differences in the relationship quality between family members (obligatory) and friends (voluntary), however, suggest differential effects on well-being. Further, age-related changes in networks suggest age-differential effects of social activities on well-being, as older adults cease emotionally detrimental relationships.

Method. Longitudinal representative national survey study with middle-aged (n = 2,830) and older adults (n = 2,032). Age-differential effects of activities with family members and friends on changes in life satisfaction, positive affect (PA), and negative affect (NA) were examined in latent change score models.

Results. In the middle-aged group, activities with friends and families increased PA and life satisfaction and were unrelated to NA. In the older age group, family activities increased both PA and NA and were unrelated to changes in life satisfaction, but activities with friends increased PA and life satisfaction and decreased NA.

Discussion. Social activities differentially affect different facets of well-being. These associations change with age. In older adults, the effects of social activities with friends may become more important and may act as a buffer against negative effects of aging.

Key Words: Adult development—Social integration—Subjective well-being.

Social connections are important for individual well-being (Pavot & Diener, 1993). People with closer social relations tend to be more optimistic about their future, and they are healthier (Antonucci, 2001; Cohen & Janicki-Deverts, 2009). Social relations also affect subjective well-being (SWB) by providing the individual with the opportunity for participation (Berkman, Glass, Brissette, & Seeman, 2000) and activities in a social context.

Participating in social activities has been noted as particularly important for older people and has been coined a key factor in successful aging (Rowe & Kahn, 1997). A number of studies support the idea that the level of activity engagement in general improves SWB and health in older adults (Adams, Leibbrandt, & Moon, 2011; Chen & Fu, 2008; Fernández-Ballesteros, Zamarrón, & Ruiz, 2001; Menec, 2003). Informal social activities have been identified as being the domain of activities that has the strongest association with SWB (Adams et al., 2011; Litwin & Shiovitz-Ezra, 2006). Recently, Huxhold, Fiori, and Windsor (2013) have demonstrated that informal social activities in older adults (65 and older) are associated with a number of key aspects of successful aging over and above network structure and social support potential. Engaging in social activities is particularly beneficial for older adults if they perceive themselves as agentic during their performance (Herzog, Franks, Markus, & Holmberg, 1998).

However, activity engagement requires self-regulatory and emotional effort (Hess, Emery, & Neupert, 2012; Hess & Ennis, 2012; Sonnenstag & Jeldén, 2009). If this effort exceeds individual resources, social activities could be detrimental for well-being and health (Segerstrom, 2008; Windsor, Anstey, & Rodgers, 2008). Furthermore, a key aspect of social activities relates to the context of the particular social relation they are performed within. It has been demonstrated that social relation may not only have positive, but also have negative aspects (Newsom, Rook, Nishishiba, Sorkin, & Mahan, 2005; Rook, 1984). Therefore, this study will focus on the effects of the type of social relations (i.e., family members vs. friends) with which social activities are performed with indicators of individual well-being.

Differential Effects of Social Interactions With Family and Friends

Social relationships within the family are the main source of support and social integration in later life and therefore central to older adults’ SWB (Antonucci, Jackson, & Biggs, 2007; Katz, 2009; Koropeckyj-Cox, 2002; Lowenstein, 2007; Silverstein & Bengtson, 1994). In a related vein,
friendship relations are also a significant source of enjoyment and socializing (Pinquart & Sörensen, 2000). Thus, good relationships with family members and with friends are important for older adults and have a positive influence on their SWB. SWB is a crucial indicator of successful aging (Freund & Baltes, 1998), and numerous studies document beneficial effects of SWB on health, the occurrence of critical life events, and mortality (Diener, 2012).

However, it has also been proposed that the influences of social interactions on SWB differ if they are performed with family members or with friends (Dupertuis, Aldwin, & Bosse, 2001; Rook & Ituarte, 1999). For example, although both family and friend relations provide emotional support, they differ with regard to instrumental support, which is more prominent in family relations, whereas companionship, social integration, and reaffirmation of self-worth are more characteristic of friendship relations (Messeri, Silverstein, & Litwak, 1993). A recent study showed that the effects of support on well-being depended on the source of support and the quality of the relationship between provider and recipient (Merz & Huxhold, 2010): Instrumental support provided by family members increased NA and impaired PA if the relationship quality was low. In contrast, instrumental support from friends was associated with higher PA and lower NA regardless of the relationship quality.

Social interactions with kin or nonkin can also have additive effects. Dupertuis and colleagues (2001) found that older men with high perceived support from family sources alone experienced more depressive symptoms than their peers who received support both from their families and friends. In a related vein, Fiori, Antonucci, and Cortina (2006) have demonstrated that family-focused personal networks are associated with lower mental health than networks that include family and friend relationships (i.e., diverse networks). However, they also found that family-focused and diverse networks did not differ in terms of their effects on physical health.

Social interactions with family members or friends differ with regard to relationship structure. Although family relations are more or less predetermined, friendship relations are formed on a voluntary basis and with peers who share characteristics, cohort experiences, and lifestyles (Chen & Fu, 2008). Probably because of this voluntary nature, relationships with friends require more maintenance effort than with family relations (Roberts & Dunbar, 2011). They are also more based on reciprocity than family relations (Dupertuis et al., 2001). This structural difference might also explain the finding that the perceived quality of family relations tends to be lower than friendship relations, as family obligations increase the likelihood of perpetual negative interaction, and unsatisfying family relations are more difficult to dissolve than unsatisfying relations with friends (Birditt, Jackey, & Antonucci, 2009; Krause & Rook, 2003). Moreover, according to Rook and Ituarte (1999) friendship relations are a better source of companionship than family relations, which implies that they may also be more important for informal social activities.

Do the Effects of Informal Social Activities Change With Age?

On average, the frequency of informal social activities decreases with advancing age, which is probably a consequence of age-related declines of functional status (Huxhold et al., 2013). This decline might apply even more informal social activities with friends because friendship relations require more investment of resources (Roberts & Dunbar, 2011).

Socioemotional selectivity theory predicts that the limited future time perspective of older adults is associated with a focus on emotionally meaningful social interactions (Carstensen, Isaacowitz & Charles, 1999), which further underlines such effects. In a related vein, the strength and vulnerability model assumes that older adults avoid negative social interactions in particular (Charles, 2010). Thus, both perspectives would predict that informal social activities that have low emotional meaning or could trigger negative emotions are likely to be reduced. As a consequence of this floor effect, the effects of informal social activities may become more positive in older ages. In contrast to this assumption, empirical studies on this moderating effect of age on the relationship between activities and well-being found ambiguous results (Adams et al., 2011). One reason for these findings might be that family relations are more difficult to cease than voluntary friendship relations (Birditt et al., 2009; Krause & Rook, 2003, Litwak, 1981). Therefore, it is plausible to predict that informal social activities with friends, but not with family, will be more positively associated with SWB in older adults than in younger adults. Previous studies that have shown that the association of social support provided by friends with SWB increases with increasing age suggest this assumed age effect (Li, Fok, & Fung, 2011; Stafford, McMunn, Zaninotto, & Nazroo, 2011), but differential effects of age and relationship structure have not yet been examined.

Aims and Hypotheses

Although there is a good rationale to assume that the effects of informal social relations on SWB may not be uniformly positive (see argumentation earlier), the literature on activities in older adults reports mainly positive associations with SWB. A potential reason for these findings may be that the relationship between activities and well-being might be bidirectional, as high well-being has been shown to increase activity engagement (Fredrickson & Branigan, 2005). This study therefore uses a methodology that can account for this bidirectional relationship, latent change modeling (McArdle, 2009). We examine age-differential effects of family and friend activities on three different facets of SWB, namely...
PA, NA, and life satisfaction, which goes beyond previous research. This study tests three hypotheses in particular:

H1: Older adults perform less informal social activities than middle-aged adults, and this age effect is particularly pronounced in activities with friends.

H2: Informal activities are on average positively related to SWB, but informal activities with friends have a stronger effect on SWB than activities with family members.

H3: There are age differences in that the association between informal social activities with friends and SWB is stronger in older adults than in middle-aged adults. No age differences are expected for informal social activities with family members.

**Methods**

**Sample**

Data for this study were drawn from the German Aging Survey (DEAS), an ongoing population-based, representative survey of community-dwelling individuals in Germany between 40 and 85 years with in-home interviews and questionnaires. DEAS has a cohort-sequential design and national probability sampling with three survey waves in an interval of 6 years (1996, 2002, and 2008; Engstler & Motel-Klingebiel, 2010). The base samples of 1996 (N = 4,838) and 2002 (N = 3,084) were reassessed in subsequent waves. In this study, we use longitudinal data of individuals from 2002 (T1) and 2008 (T2) because these measurement points assessed all meaningful control variables. The final sample consisted of N = 2,032 older adults (65 and older, mean age 73.73 years, 47.9% female participants, 64% with partner) and 2,830 middle-aged adults (40 and older, mean age 53.30, 49.2% female participants, 86.4% with partner). Of these, 665 older adults and 1,327 middle-aged adults took part in T1 and T2. Drop out analyses suggest that follow-up participants were on average younger, healthier, better educated, and had higher incomes than the baseline sample. Effect sizes of the differences between participants who dropped out of the study and those who remained in the study did not exceed d = 0.5 in both age groups, indicating a small-to-medium selectivity effect (Lindenberger, Gilberg, Pötter, Little, & Baltes, 1996). We accounted for sample attrition by using the full information maximum likelihood (FIML) procedure in MPlus.

**Measures**

To examine longitudinal associations across domains, measures at both time points were T-standardized (M = 50, SD = 10) using the mean and standard deviation at T1 (2002) of the respective age group, all other analyses were performed using the raw scores.

**Social activities.**—Participants were asked to report their engagement in various social activities in the year preceding the interview on a list of nine items: (a) inviting or visiting friends, (b) visiting cultural events, (c) visiting sport events, (d) courses or lectures, (e) going for walks, (f) sports, (g) artistic work, (h) board games, and (i) regular meetings with a certain group of people. Except for item one, participants were asked whether they had performed this activity together with their partner or other relatives (family activities) or with friends, other people, or in a club or association (friend activities). The frequency of every activity was measured ranging from one (< once per month) to five (daily). Time invested in family or friend activities was derived by summing these answers over all family and friend activities.

**Subjective well-being.**—Life satisfaction was assessed with the Satisfaction With Life Scale (Pavot & Diener, 1993) on five items using a 5-point scale from 1 (strongly disagree) to 5 (strongly agree); Cronbach’s α T1/ T2 = 0.84/0.85). Emotional well-being was assessed with the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988). Participants indicated on a 5-point scale from 1 (never) to 5 (very often), how often they experienced 10 positive and 10 negative affective states in the last month (Cronbach’s α T1/T2 = 0.87/0.99).

**Control variables.**—All analyses were controlled for age, sex, partner status at T1 (1 = having a partner, 0 = no partner), health status, and socioeconomic status (SES), as these factors relate to social interactions and network characteristics (van Groenou & van Tilburg, 2003). SES was indicated by education assessed by the international standard classification of education (ISCED; UNESCO, 1997). Health was indicated by self-rated health (single item; “How would you rate your present state of health?” with answers from 1 (very bad) to 5 (very good) and functional health assessed with the physical functioning subscale of the SF-36 (Ware & Sherbourne, 1992; Cronbach’s α T1/ T2 = 0.94/0.93).

**Statistical Analyses**

We used latent change score (LCS) models (McArdle, 2009) to predict changes in SWB between T1 and T2 from social activities at T1. The three facets of SWB (life satisfaction, PA, and NA) were indicated with two parcels of items each (means from the overall items). Social activities (time spent on social activities with family members or friends) were entered into the model as manifest variables.

To evaluate measurement invariance within and across age groups, we performed comparative fit index (CFI) difference tests, which are more apt to detect invariance than the conventionally used chi-square difference tests especially with large sample sizes (Cheung & Rensvold, 2002). LCS decomposes the score of a T2 variable into the T1 level and between T1 and T2. This LCS carries all advantages of latent variables, such as being free from...
measurement error, and it can be related to other variables in the model. To examine our main hypotheses, we regressed change in the different facets of well-being on the T1 levels of social activities (β parameters in the model) and additionally controlled both baseline and change variables for age, sex, partner status, education, and subjective and functional health (controlling for functional and subjective health at T2 in the model changed the path coefficients of interest only marginally but worsened the model fit tremendously. Thus, they were left out of the analysis). Differential effects between time spent on family versus friend social activities were examined using nested model comparisons. Figure 1 shows a generic LCS model (not specific to well-being aspect). We regressed changes in well-being on changes in social leisure activities on but only in order to increase the statistical power to detect directional associations. Associations between changes are merely cross-sectional. Therefore, we will refrain from interpreting the associations between changes in the discussion. Instead, we focus on the associations of levels of social leisure activities at T1 with changes in well-being.

**Results**

**Age Group Differences in Informal Social Activities**

Overall, middle-aged adults performed more social activities than older adults (Δχ² = 366.97, df = 4, p < .05). Across both measurement occasions, there were larger differences between younger and older adults in activities with friends than in activities with family members (Δχ² = 10.45, df = 2, p < .05). We did not find an age group by time point interaction with respect to informal activities with friends (Δχ² = 0.16, df = 1, p > .05). In contrast, we found a significant interaction of age group by time point with respect to activities with family (Δχ² = 7.60, df = 1, p < .05). This indicates that older adults reduced their informal social activities between the two time points with family members more than their activities with friends (Figure 2).

**Differential Effects of Informal Social Activities on Changes in SWB**

Contrasts in CFI statistics suggested measurement invariance between the measurement points (equal factor loadings...
resulted in CFI losses of 0.01 and less; Cheung & Rensvold, 2002). However, we were not able to set the variances of the changes to be equal across groups. Thus, we could not contrast the regression weights of predictions of changes between groups directly.

We examined if levels of informal social activities predicted changes in the three facets of well-being separately in both age groups. We contrasted a model with the respective regression paths set to zero to a model in which activities with friends and activities with family members were set to predict changes in one facet at equal strength. In the second step, we contrasted the regression weights of informal social activities with friends with informal social activities with family members by releasing the equality constraint. These contrasts are possible because interindividual differences in levels of activities were standardized to T-scores within each age group.

The overall model fit of the final LCS model was good ($\chi^2 = 809.59$, $df = 223$, root mean square of approximation = 0.032, CFI = 0.98). All latent changes had significant variances. In the following, we will report only the effects of levels of informal social activities at T1 on changes in SWB (directional effects). All other directional regression weights are depicted in Table 1. Path coefficients reported in Table 1 and in the following sections represent standardized beta coefficients from the respective models.

**Middle-aged group (40–64 years).**—High levels of informal social activities at T1 were associated with increases or maintenance in PA ($\beta = 0.08$, $\Delta \chi^2 = 10.01$, $df = 1$, $p < .05$) and life satisfaction ($\beta = 0.08$, $\Delta \chi^2 = 9.95$, $df = 1$, $p < .05$) across 6 years. Levels of activity were unrelated to NA ($\beta = 0.01$, $\Delta \chi^2 = 0.19$, $df = 1$, $p > .05$). Contrasts indicated no significant differences in effects if informal social activities were performed with friends or with family members ($p > .05$ in all contrasts).

**Older age group (65 years and older).**—Social activities positively predicted changes in PA ($\beta = 0.09$, $\Delta \chi^2 = 5.96$, $df = 1$, $p < .05$). The regression weights did not differ between activities with friends and activities with family ($\Delta \chi^2 = 1.58$, $df = 1$, $p > .05$). Predicting changes in life satisfaction from social activities with friends and with family members fixed to equal regression weights improved the model fit significantly if contrasted to a model, in which the association between levels of social activities and changes in life satisfaction were set to zero ($\Delta \chi^2 = 4.67$, $df = 1$, $p < .05$). Releasing the equality constraint improved the model fit further ($\beta_{\text{friends}} = 0.14$, $\beta_{\text{family}} = 0.02$, $\Delta \chi^2 = 3.86$, $df = 1$, $p < .05$), which indicates that only social activities with friends predicted changes in life satisfaction. In contrast, if social activities from both sources were fixed to predict changes in NA with equal strength, the increase in model fit was not significant ($\Delta \chi^2 = 0.01$, $df = 1$, and $p > .05$). Estimating the regression weights freely resulted in a further significant increase in model fit ($\Delta \chi^2 = 5.48$, $df = 1$, $p < .05$). Examining the regression weights, we found that the associations of social activities with friends and of social activities with family members nullified each other ($\beta_{\text{friends}} = -0.08$, $\beta_{\text{family}} = 0.08$, $\Delta \chi^2 = 5.48$, $df = 1$, $p < .05$). In
### Table 1. Predictors of 6-Year Changes in Subjective Well-Being (SWB) in Middle-Aged and Older Adults

| Predictor level at T1 | Middle-aged adults | | Older adults | | |
|-----------------------|--------------------|------------------|------------------|------------------|------------------|------------------|
|                       | Life satisfaction | Positive affect | Negative affect | Family activities | Friend activities | Life satisfaction | Positive affect | Negative affect | Family activities | Friend activities |
| Intercept             | 6.33              | 13.27*           | 37.39*           | 21.17*           | 29.02*           | 17.03*           | 18.36*           | 51.06*           | 26.50*           | 23.47*           |
| Residual variance     | 39.29*            | 40.49*           | 52.84*           | 80.23*           | 79.05*           | 43.06*           | 40.83*           | 53.83*           | 66.78*           | 74.71*           |
| Predictor changes     |                   |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Family activities     | 0.08*             | 0.08*            | 0.01             | -0.64*           | n/a              | 0.02             | 0.09*            | -0.08*           | -0.61*           | n/a              |
| Friend activities     | 0.08*             | 0.08*            | 0.01             | n/a              | -0.57*           | 14*              | 0.09*            | 0.08*            | n/a              | -0.59*           |
| Life satisfaction     | -0.57*            | 0.04             | 0.00             | 0.13*            | -0.04            | -0.61*           | 0.21*            | -0.11            | 0.08             | -0.07            |
| Positive affect       | 0.07              | -0.57*           | -0.04            | 0.00             | 0.08*            | -0.17*           | -0.72*           | -0.08            | 0.00             | 0.04             |
| Negative affect       | 0.06              | 0.03             | -0.63*           | 0.06             | -0.03            | -0.05            | -0.03            | -0.66*           | -0.04            | -0.01            |
| Age                   | 0.10*             | 0.03             | -0.08*           | 0.03             | -0.04            | 0.08             | -0.12*           | -0.09            | -0.10            | -0.08*           |
| Sex                   | 0.01              | 0.04             | 0.07*            | -0.01            | 0.14*            | 0.00             | -0.05            | 0.13*            | -0.04            | 0.15*            |
| Education             | 0.04              | 0.06             | -0.02            | 0.03             | 0.04             | -0.01            | 0.00             | 0.10*            | 0.08*            | 0.03             |
| Partner status        | 0.02              | -0.07*           | 0.02             | 0.15*            | 0.01             | 0.09             | -0.12*           | 0.04             | 0.13*            | 0.03             |
| Subjective health     | 0.08              | 0.05             | -0.10*           | 0.01             | 0.01             | 0.07             | 0.02             | -0.14*           | -0.04            | 0.06             |
| Functional health     | 0.05              | 0.00             | 0.03             | 0.02             | -0.02            | 0.11             | -0.02            | 0.05             | 0.02             | 0.09             |
| Notes: r = correlation coefficient; n/a = not applicable. Intercepts cannot be interpreted directly. Path coefficients are reported as standardized β coefficients. *p < .05.
this age group, activities with family at T1 were associated with increasing NA across time, whereas high levels of activity with friends at T1 were predictive of decreases in NA.

**DISCUSSION**

All three hypotheses were only partly confirmed. As expected, older adults engaged in less informal social activities than middle-aged adults. On average, they also engage in more informal activities with their families than with their friends. Surprisingly, with increasing age, older adults seem to reduce their level of informal social activity with their family members more than the activities with their friends.

Our results imply that in middle age, engaging in informal social activities is generally beneficial for SWB. High levels of activity predicted increasing levels of PA and life satisfaction but were unrelated with NA. In this age group, it seems not to matter with whom informal social activities are performed with. In the older age group, however, the specific company seems to play a role (albeit not with respect to changes in PA): Only informal social activities with friends were associated with increases or maintenance of life satisfaction. In addition, informal social activities with friends were associated with reductions in NA, but social activities with family members were even associated with increases in NA in this age group.

H1: Older adults perform less informal social activities than middle-aged adults, and this age effect is particularly pronounced in activities with friends.

Our analyses contrasted the frequency of informal social activities with friends and with family members between the middle-aged and the older age groups. Older adults performed less social activities than their younger counterparts even after controlling for interindividual differences in health, education, and partner status. In comparison with the middle-aged adults, the older group showed disproportionately less activities with their friends. These findings are in line with the argumentation that engaging in informal social activities is resource demanding. Older adults are, on average, not only less healthy than middle-aged adults but also have less cognitive and motivational resources that may enable them to get involved in effortful activities (Hess et al., 2012; Hess & Ennis, 2012). Friendship relations require more investing effort than family relations (Roberts & Dunbar, 2011). This may explain why older adults differ from middle-aged adults in particular in informal social activities with friends. However, older adults reduced their social activities with friends less than their activities with their family members across the 6-year interval. This finding can neither be explained by a resource-driven perspective nor is it likely to be a consequence of participants losing their romantic partner, as the number of persons bereaved between 2002 and 2008 was very small. One potential explanation could be that the major reductions in activities with friends had taken place before the age of 65. Friends who remain in the network in older ages may be selected in accordance to the emotional needs of the aging individual (Carstensen, Isaacowitz & Charles, 1999; Charles, 2010) and thus remain in the network for a longer time. The nature of activities with family members could also change with increasing older ages, as the family mostly is the primary source of support for older adults (Antonucci et al., 2007). Advancing into old age, social support from the family may become more important for older adults than informal social activities with their family members.

H2: Informal activities are on average positively related to SWB, but informal activities with friends have a stronger effect on SWB than activities with family members.

Our results suggest that in middle age, it is beneficial to perform leisure activities together with social partners. It can help to maintain or even increase feelings of fun, interest, and general satisfaction with one’s life circumstances. Accordingly, in middle-aged adults, it did not matter whether social activities were performed with family members or friends. Therefore, we could not find evidence that supports the second part of our hypotheses that activities with friends are more beneficial for SWB than activities with family members. In older adults, however, the picture seems to be different.

H3: There are age differences in that the association between informal social activities with friends and SWB is stronger in older adults than in middle-aged adults. No age differences are expected for informal social activities with family members.

Our analyses revealed that age differences in the associations between informal social activities and SWB differed with regard to the particular facet of SWB under observation.

High levels of social activities were associated with increases or maintenance in PA in older adults with similar effects as in the middle-aged group, and it seems to make no difference whether the activities were performed with friends or family members.

Social activities were unrelated to NA in middle-aged adults. In the older age group, however, informal social activities with family members were associated with increases or maintenance of NA, but high levels of social activities with friends were associated with decreases in NA. Engaging in informal social activities may require effort and may sometimes be frustrating if conflicts arise with the social interaction (Hess et al., 2012; Rook, 1984). In older age, motivational and cognitive resources that may play a role in shared leisure activities decline (Hess et al., 2012). Therefore, engaging in social activities with friends may become more demanding. Moreover, it has been shown that conflicts within the family are relatively stable across the life span (Krause & Rook, 2003). According to the strength and vulnerability model (Charles, 2010), older adults are...
better than younger adults in navigating their social environment. At the same time, older adults suffer more than younger adults if negative social interactions cannot be avoided. Older adults may have generally less opportunities to use their social skills in their family relations because these relationships have a strong normative component (Litwak, 1981). Combining these two arguments, it seems plausible to assume that familial conflicts that occur within shared leisure activities may particularly affect the SWB of older adults because they are more vulnerable to negative social interactions.

Our finding is in contrast to previous research arguing that informal social activities are generally beneficial for SWB (Adams et al., 2011). In our view, only specific analyses, such as in this article, allow to detect the association between high levels of social activity and increases in NA because the LCS approach takes into account reciprocal influences. Adams, Leibbrandt, and Moon (2011), for example, argue that high levels of well-being may sometimes be more important for performing activities than the influence of activities on well-being. We controlled for the effects of T1 SWB and for the concurrent reciprocal influences between activities and SWB across the 6-year interval by regressing changes in SWB on changes in social activities. Detrimental effects of activities can only be examined by controlling for these reciprocal influences. In contrast to the negative influence of social activities with the family, informal social activities with friends were associated with decreases in NA. Silverstein and Parker (2002) found that leisure activities buffer against the negative effects of functional impairment, widowhood, and lack of social support but did not differentiate with whom the activities were performed with. The socioemotional selectivity theory (Carstensen, Isaacowitz & Charles, 1999) and the strength and vulnerability model (Charles, 2010) predict that older adults will let go of social relations that are emotionally meaningless or even increase the likelihood of negative interactions. Due to the voluntary nature of friendship relations, it might be easier to be selective with friends than with family members (Krause & Rook, 2003). This expectation of differential selectivity is in line with our finding that age group differences were on average greater for social activities with friends than with activities with family members.

In light of this reasoning, it is plausible to assume that activities performed with friends that remain in the social network of older adults after an emotionally driven selectivity process are particularly helpful. Consequently, our findings add to the results from the study by Silverstein and Parker (2002) that only social activities with friends may act as a buffer against the negative consequences of aging and are therefore associated with decreases in NA.

The finding that social activities with family members were only beneficial for life satisfaction in middle-aged adults but not in the older age group might seem puzzling at first sight, and we can only speculate about the reasons. It could be that the role of the family changes in older ages, as social support becomes increasingly important for older adults as a buffer against various negative effects of age-related decline (Bierman & Statland, 2010). The primary provider of social support in older ages is the family (Antonucci, 2001). This may have consequences on how older adults evaluate the relationships with friends and family members: Friends could remain the main source of companionship, for which it is important to perform activities together, whereas family members might increasingly be perceived as crucial providers of social support rather than interaction partners for informal social activities. Consequently, social activities with family members may be less important for life satisfaction of older adults than of younger adults. The changing role of the family may also be the reason why older adults in our sample decreased their activities with their family members more than their activities with their friends during the 6-year period.

Limitations and Strengths

All measures were self-reported and related to potentially long recall periods. This might imply that the recall of activities could be subject to under- or overestimation based on current affective status. However, our results controlled for baseline differences in SWB. This suggests that effects on long-term SWB changes are independent of baseline differences. The limitation to two measurement points with a time difference of 6 years might mask more complex interacting dynamics between higher SWB and social interactions, in particular with regard to PA and NA, which have been shown to fluctuate over shorter time spans and as a result of various life events (Diener, 2012). We interpret our results as indicating changes in affect dispositions rather than short-term fluctuations, but the possibility that affect measures change as a result of short-term influences needs to be born in mind. Future studies might target these dynamic interactions using more measurement points in shorter time intervals. Moreover, with the data set at hand, we were unable to distinguish between different relationships within the family. It has been shown, however, that relationships with a partner or with children are evaluated quite differently and show different developmental trajectories (Birditt et al., 2009).

Moreover, our measures of informal social activities broad measure of social integration of older adults. Our analyses did not consider the quality of the relationships with friends or with family members. Merz and Huxhold (2010), for example, have shown that the negative impact of instrumental support provided by family members is moderated by the relationship quality. Thus, future analyses should investigate if the consequences of performing informal social activities with family members with whom the older adult shares a high-quality relationship differ from the effects of performing social activities in the context of low-quality family relations.
Implications and Conclusion

Our study shows that it makes a difference in terms of NA and life satisfaction with whom one engages in social activities for older adults but not for middle-aged adults. These differential effects might be due to the structural and functional differences between family-based and friend-based social networks that influence the emotionally driven selectivity process in older ages. Informal social activities with friends are beneficial for all three aspects of SWB in older adults. Future research might want to examine mediators of these effects, in particular the role of individual expectations with regard to activity outcomes. Our results have strong implications for mental health promotion in older adults, as they suggest supporting older adults in building and maintaining friend-based social networks, for example, by encouraging volunteering in old age in elder-helping-elder programs (Butler & Eckart, 2007) or programs aiming at increasing informal social interactions, such as cultural programs (Cohen et al., 2006), university programs (Fernández-Ballesteros, Molina, Schettini, & Del Rey, 2012), or occupational therapy programs (Hay et al., 2002).

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