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Social Class and Social Worlds: Income Predicts the Frequency and Nature of Social Contact

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Abstract

Does access to money predict social behavior? Past work has shown that money fosters self-sufficiency and reduces interest in others. Building on this work, we tested whether income predicts the frequency and type of social interactions. Two studies using large, nationally representative samples of Americans ($N = 118{,}026$) and different measures of social contact showed that higher household income was associated with less time spent socializing with others (Studies 1 and 2) and more time spent alone (Study 2). Income also predicted the nature of social contact. People with higher incomes spent less time with their families and neighbors and spent more time with their friends. These findings suggest that income is associated with how and with whom people spend their time.

Keywords

money, income, social class, social connections, social support

Money seems to impede sociality. Exposure to money increases the likelihood that people will elect to work and play alone (Mogilner, 2010; Vohs, Mead, & Goode, 2006), eases the pain of social rejection (Zhou, Vohs, & Baumeister, 2009), and dampens compassion (Molinsky, Grant, & Margolis, 2012). Enduring access to money produces similar effects. People who are wealthier are more likely to disengage from social interactions (Kraus & Keltner, 2009) and show less compassion toward people in distress compared to their less affluent counterparts (Stellar, Manzo, Kraus, & Keltner, 2012). In short, having or thinking about money appears to heighten self-reliance and dampen attention and responsiveness to others.

We built on this work by positing that money changes how much time people spend socializing. We proposed that people with higher incomes would spend less time socializing with others and more time alone. We also proposed that income would predict the types of relationships in which people invest. Specifically, we expected that people with more money would spend less time with family and neighbors and more of their limited social time with friends.

Money and the Frequency of Social Connections

Money fosters self-sufficiency because it allows people to satisfy their needs without relying on others (Kraus, Piff, & Keltner, 2011; Lammers, Galinsky, Gordijn, & Otten, 2012; Zhou et al., 2009). Access to greater material resources means less reliance on one's family or community for aid with food, shelter, or childcare. Conversely, for people with limited means, external threats such as the loss of a job, a broken vehicle, or family illness, can upset a fragile financial balance (Gallo & Matthews, 2003; Kraus et al., 2011; Lachman & Weaver, 1998). Social ties can help people emotionally and materially cope with problems and threats (Cobb, 1976; Kraus et al., 2011). A neighbor can help care for a sick child, or relatives can offer housing to the newly unemployed. Consequently, we posited that poorer people might devote extra time attending to relationships that could help them psychologically or materially manage crises. Hence, our first prediction was that less access to money (in the form of lower income) would predict more time spent socializing.

Money and the Types of Social Connections

Our second prediction was that income would affect the types of relationships that people foster and maintain. In particular, we expected that people with higher incomes would be less likely to spend time with family and neighbors. Social ties vary in the kinds of support that are expected and received (Adams & Blieszner, 1995; Wellman, 1992; Wellman & Wently, 1990;

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Wood & Robertson, 1978). Family members typically provide the most substantial instrumental support, such as financial assistance with large purchases or care for elderly parents (Antonucci & Akiyama, 1995; Wellman, 1992; Wellman & Wortey, 1990). Neighbors tend to provide small-scale or sporadic instrumental support, such as help with unexpected childcare needs or home repairs (Wellman & Wortey, 1990). For people with limited financial resources, these social ties are likely to be crucial for managing existing and impending challenges. Hence, people with limited resources might be particularly attuned to the relationships that are most strongly associated with giving and receiving instrumental support. This led us to expect that people with lower incomes would spend more time with relatives and neighbors compared to people with higher incomes.

We were less confident about the relationship between income and time spent with friends. On the one hand, access to money tends to dampen interest in and compassion toward others. To our knowledge, these effects have not been shown to vary by relationship type. This reasoning suggests that greater income might predict less time spent with friends.

On the other hand, people with higher incomes might elect to spend their limited social time with friends rather than relatives or neighbors. Compared to family, friends tend to provide less instrumental support (Antonucci & Akiyama, 1995). Indeed, Americans strongly prefer asking family members rather than friends for instrumental support (Travis, 1995). Moreover, unlike many family or community relationships, friendships are voluntary (Antonucci, Akiyama, & Takahashi, 2004; Wellman, 1992). Whereas family and neighborhood ties often are based on kinship or geographic proximity, friendships are based on preferences, values, and shared interests. Because people with greater financial resources are less likely to need others for material, pragmatic, or instrumental help, they may be more likely to attend to relationships that reflect common interests and values. From this perspective, money frees people to be socially connected with those they choose rather than those who can provide resources. Accordingly, people with higher incomes may allocate more of their social time to friends.

The Current Studies

We tested whether income predicts the frequency and type of social interactions using two large data sets consisting of nationally representative samples of American adults. These studies used different metrics of time spent with others. Study 1 tested whether household income predicted the number of evenings spent socializing each year as well as the amount of time spent with family, neighbors, and friends. Study 2 drew on a large time use survey and examined whether household income predicted the number of minutes in a day that people spent socializing with family and friends as well as the amount of time spent alone.

Study 1

Participants and Measures

Study 1 consisted of 29,399 respondents from the General Social Survey (GSS; Smith, Hout, & Marsden, 2012). The GSS has been administered annually or semiannually since 1972 and consists of nationally representative samples of American adults. Twenty-three administrations of the GSS included questions about the frequency of social contact with relatives, neighbors, and friends and were included in our analyses. Respondents were asked, "How often do you spend a social evening with relatives/someone who lives in your neighborhood/friends who live outside the neighborhood?" (1 = *almost daily*, 2 = *several times a week*, 3 = *several times a month*, 4 = *once a month*, 5 = *several times a year*, 6 = *once a year*, 7 = *never*). Because these options do not capture regular time intervals, we transformed them into days per year: 1 = *300 days*, 2 = *208 days*, 3 = *48 days*, 4 = *12 days*, 5 = *4 days*, 6 = *1 day*, and 7 = *0 day* (Glanville, Anderson, & Paxton, 2013). We created a composite item for the three types of socializing and analyzed each type of relationship separately.[1]

Income was measured using inflation-adjusted household income (GSS variable: "realinc"). The GSS collects income categorically, and categories have changed over time. Consequently, GSS statisticians created a comparable measure of income across all years by assigning each respondent the median income level of their category and adjusting for inflation (Ligon, 1994). This variable was log transformed.[2]

We controlled for demographic variables known to affect the frequency and nature of social contact. Age is a strong predictor of how often and with whom people socialize, and changes in socialization patterns over the life span are nonlinear (Carstensen, 1995). Hence, all analyses controlled for age and age^2. Analyses also controlled for gender (0 = *female*, 1 = *male*), marital status (using dummy variables for married, widowed, divorced, separated, and never married), household size, race, and hours worked in the previous week, which can affect the frequency and type of time spent with others (Schor, 2008). Analyses also controlled for city size (1 = *open country* to 7 = *city greater than 250,000*) because people in rural communities tend to have more frequent contact with family members compared to people in urban settings (Hofferth & Iceland, 1998). Race was measured using the three levels of race collected by the GSS across all survey years (Black, White, and Other). More detailed racial categories were not included in the survey until later years. Household size and hours worked were log transformed to minimize the influence of extreme outliers. We included dummy variables for survey year, given evidence that time spent socializing has declined (Putnam, 2000). Respondents were included if they had valid data for all independent, dependent, and control variables.

Results

Simple correlations showed a significant negative correlation between household income and total time spent socializing

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Table 1. Results From OLS Regression Analyses Predicting Time Spent Socializing With Relatives, Neighbors, or Friends by Household Income, GSS Data, 1974–2012, Study 1.

Variable	Total Time Spent Socializing	Relatives	Neighbors	Friends
Income (log)	−6.433*** (1.257)	−3.844*** (0.723)	−6.926*** (0.648)	4.337*** (0.575)
Age	−7.353*** (0.382)	−1.948*** (0.219)	−2.003*** (0.197)	−3.401*** (0.175)
Age^2	0.052*** (0.004)	0.014*** (0.002)	0.014*** (0.002)	0.024*** (0.002)
Male	3.275 (2.234)	−10.948*** (1.282)	9.039*** (1.152)	5.185*** (1.022)
Marital				
Widowed	54.930*** (4.643)	12.282*** (2.664)	20.982*** (2.394)	21.666*** (2.063)
Divorced	47.003*** (3.661)	5.910*** (2.101)	13.992*** (1.888)	27.101*** (1.674)
Separated	42.863*** (6.057)	2.204 (3.475)	14.793*** (3.123)	25.866*** (2.769)
Never married	67.521*** (3.451)	−0.183*** (1.980)	27.114*** (1.780)	40.589*** (1.578)
Hours working (log)	−7.134*** (0.694)	−1.311*** (0.398)	−4.831*** (0.358)	−0.977*** (0.317)
Household size (log)	−14.069*** (3.465)	9.289*** (1.988)	−10.825*** (1.787)	−12.533*** (0.966)
Race				
Black	28.100*** (3.320)	22.851*** (1.905)	7.886*** (1.712)	−2.638 (1.518)
Other	1.476 (5.232)	12.469*** (3.002)	−5.726*** (2.698)	−5.268** (2.392)
City size	−3.096*** (0.387)	−2.385*** (0.222)	−1.427*** (0.200)	0.717*** (0.177)
Year fixed effects	Yes	Yes	Yes	Yes
R^2	.10	.03	.07	.11

Note. $N = 29{,}399$. Robust standard errors are in parentheses. Gender was coded 0 for female and 1 for male. Marital status was coded using dummy variables with married as the reference category. Race was collected across all years as White, Black, and Other Race. We included dummy variables for race and used White as the reference category. OLS = ordinary least squares.
*$p < .05$. **$p < .01$. ***$p < .001$.

($r = -.13$, $p < .001$), time spent socializing with family ($r = -.07$, $p < .001$), and time spent socializing with neighbors ($r = -.16$, $p < .001$). Household income was negatively correlated with time spent with friends ($r = -.03$, $p < .001$), an effect driven entirely by marital status and age, both of which were highly correlated with household income and socializing patterns. Controlling only for marital status and age revealed that household income positively predicted time spent with friends ($b = 2.74$, $SE = 0.53$, $p < .001$). Moreover, controlling for marital status and age, household income remained a negative predictor of total time spent socializing ($b = -16.21$, $SE = 1.16$, $p < .001$), time spent with relatives ($b = -7.64$, $SE = 0.67$, $p < .001$), and time spent with neighbors ($b = -11.32$, $SE = 0.60$, $p < .001$).

We next sought to isolate the effect of income on socializing patterns, controlling for the presence of additional confounding variables. Table 1 presents the results of models using ordinary least squares (OLS) regressions. All models show the relationship between income and time spent with others controlling for variables known to affect income and social behavior. As predicted, people in households with higher incomes reported spending significantly less time socializing with others. These effects emerged even after accounting for possible income differences in time spent working, family size, and age. Moreover, income predicted the kind of relationships to which people devoted time. People in households with higher incomes spent significantly less time with relatives and neighbors and significantly more time with friends (Table 1).

We generated predicted values for the number of evenings spent socializing across the income distribution of this sample to examine the magnitude of these effects. Predicted values were generated using the regression output to derive estimates of time spent socializing at different levels of income. All other variables were held at their mean levels. These values indicated that people with the higher incomes (+1 *SD*) spent 6.4 fewer evenings socializing with other people each year than people with the lower incomes (−1 *SD*).

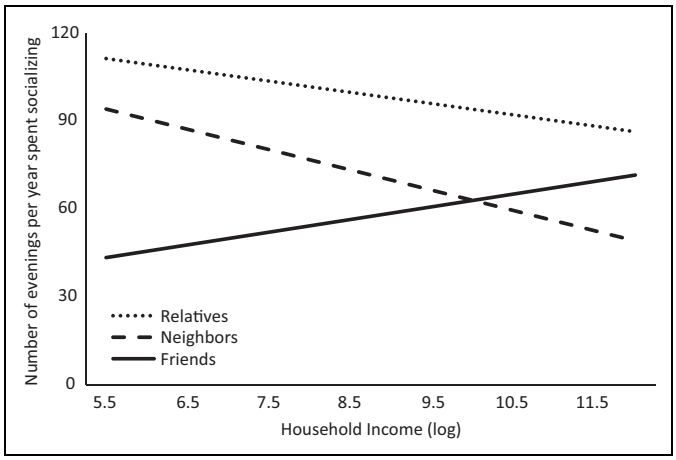

Figure 1. Household income as a predictor of the number of evenings spent with relatives, neighbors, or friends; Study 1.

Furthermore, predicted values indicated that people in households with higher incomes (+1 *SD*) spent 5.8 fewer evenings with family and 10.3 fewer evenings with neighbors each year compared to people in households with lower incomes (−1 *SD*). Conversely, people with higher incomes (+1 *SD*) spent an additional 6.5 evenings a year with friends compared to people with lower incomes (−1 *SD*; Figure 1).

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Robustness Checks

We tested the robustness of these effects in several ways. First, we examined whether these effects were driven by differences in living arrangements. Second, we examined whether differences in geographic mobility across income provided a structural explanation for why people with higher incomes socialize less.

Living arrangements. One possible explanation for the effects is that people with lower incomes may be more likely to reside with relatives due to financial constraints. This reasoning would suggest that people with lower incomes spend more time socializing with family members simply because of housing circumstances. We therefore tested whether the results held even among people who live alone ($N = 6{,}704$), using the control variables in Table 1. If the effects were driven by differences in living circumstances, then we should see different patterns among people who live alone than we observed in the overall sample. Similar patterns, in contrast, would support the idea that these effects are driven by different motivations for social connection. The results supported the motivation hypothesis. As predicted, among people living alone, income was negatively correlated with total time spent with others ($r = -.04$, $p < .001$), time spent with relatives ($r = -.08$, $p < .001$) and neighbors ($r = -.10$, $p < .001$), and positively correlated with time spent with friends ($r = .11$, $p < .001$). Moreover, including the control variables in Table 1, income negatively predicted time spent with others ($b = -6.25$, $SE = 2.62$, $p < .02$), time spent with relatives ($b = -5.06$, $SE = 1.44$, $p < .001$) and neighbors ($b = -7.10$, $SE = 1.46$, $p < .001$), and positively predicted time spent with friends ($b = 5.86$, $SE = 1.26$, $p < .001$). The effects of income on socializing patterns do not appear to be accounted for by living arrangements.

Geographic mobility. Another possibility is that mobility differences across income can explain the results. Wealthier people often live farther away from their families of origins, in part because of greater access to employment and educational opportunities (Bell, 1998). Consequently, they may spend less time socializing with family because of geographic separation or because they are new to the community and less familiar with their neighbors. We first examined whether people living in households with higher incomes were more likely to be geographically removed from their childhood homes. The GSS asked participants, "When you were 16 years old, were you living in this same (city/town/ county)?" with response options: (1) "same state, same city" (40.76%), (2) "same state, different city" (25.77%), and (3) "different state" (33.46%). Simple correlations showed that household income was positively correlated with living in a different state ($r = .05$, $p < .001$) and different city ($r = .08$, $p < .001$).

To examine whether mobility differences accounted for the observed effects, we added mobility as a three-level control variable to the models in Table 1. Similar results emerged. Household income predicted total time spent with others ($b = -11.51$, $SE = 1.22$, $p < .001$). Additional analyses examined whether income predicted social patterns among people who moved away from or stayed where they lived in their teen years. All three groups showed similar effects; income negatively predicted total time spent with others ($b_{\text{same city/state}} = -6.81$, $SE = 2.04$, $p < .001$; $b_{\text{same state/different city}} = -4.91$, $SE = 2.53$, $p < .05$; $b_{\text{different city/state}} = -6.40$, $SE = 2.08$, $p < .01$). These results attest to the robustness of the basic effects. People with higher incomes tended to live farther from their childhood communities. However, their mobility did not account for their propensity to spend less time with others.

Study 2

Study 2 assessed the robustness of Study 1's results using a different metric of time spent with others, a different sample, and a different time span. Data were drawn from 10 administrations of the American Time Use Survey (ATUS) from 2002 through 2011 (total $N = 88{,}627$). The ATUS consists of a large, nationally representative sample of Americans, all of whom participated in the Current Population Survey (CPS), a large survey used to calculate the national unemployment rate. Several months after respondents completed the CPS, a subsample of respondents was recruited to participate in the ATUS. In this survey, people were asked to precisely reconstruct each activity during the previous day and exactly how much time they spent in each activity.

Our analyses focused on the number of minutes respondents spent socializing with immediate and extended family members ($M = 318.67$, $SD = 293.09$), friends ($M = 56.22$, $SD = 142.74$), and by oneself outside the workplace ($M = 302.92$, $SD = 260.59$). Although in Study 1 the range of evenings per year spent socializing was relatively constrained, in Study 2, the number of minutes spent on any activity could range from 0 to 1,440 min. For each of our dependent variables, we had considerable outliers (e.g., 1,440 min spent socializing with friends) which resulted in highly right-skewed variables. To correct for this and create a more normal distribution, we took the square root of each variable (Cohen, Cohen, West, & Aiken, 2013).[3]

Annual household income was assessed during the CPS phase of the study and measured using the following scales: 1 (< US$5,000), 2 (US$5,000–7,499), 3 (US$7,500–9,999), 4 (US$10,000–12,499), 5 (US$12,500–14,999), 6 (US$15,000–19,999), 7 (US$20,000–24,999), 8 (US$25,000–29,999), 9 (US$30,000–34,999), 10 (US$35,000–39,999), 11 (US$40,000–49,999), 12 (US$50,000–59,999), 13 (US$60,000–74,999), 14 (US$75,000–99,999), 15 (US$100,000–149,999), and 16 (US$150,00 and above). Because this coding system did not reflect consistent intervals of income, we created a continuous measure of income using the midpoint of each interval (Young, Lim, & Morgan, 2014). Average household income was US$58,713 ($SD$ = US$46,373). This figure was log transformed.[4]

As in Study 1, we also controlled for age, gender, marital status, household size, race, and the amount of time spent at

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Table 2. Results From OLS Regression Analyses Predicting the Number of Minutes Spent With Relatives, Friends, or Alone by Household Income, Study 2, 2002–2011.

Variable	Time Alone	Time With Relatives	Time With Friends
Income (log)	0.455*** (0.030)	−0.439*** (0.032)	0.633*** (0.028)
Age	0.270*** (0.008)	0.053*** (0.009)	−0.226*** (0.002)
Age^2	−0.002*** (0.000)	−0.001*** (0.000)	0.002*** (0.000)
Male	0.646*** (0.048)	−1.914*** (0.050)	0.516*** (0.045)
Marital			
Unmarried partner present	0.670*** (0.143)	−10.176*** (0.177)	0.042 (0.121)
No spouse or partner present	4.470*** (0.065)	−8.989*** (0.071)	2.032 (0.058)
Household size (log)	−3.623*** (0.082)	7.120*** (0.090)	−1.446*** (0.079)
Time working	−0.007*** (0.000)	−0.013*** (0.000)	−0.004*** (0.000)
Race			
Black	0.665*** (0.075)	−0.819*** (0.087)	−0.470*** (0.068)
American Indian	−0.307 (0.286)	0.516 (0.315)	−0.162 (0.259)
Asian	0.174 (0.137)	−0.574 (0.136)	0.125 (0.133)
Hawaiian/Pacific Islander	0.636 (0.548)	−0.857 (0.550)	0.510 (0.599)
Multirace and other	0.115 (0.204)	−0.118 (0.224)	−0.389* (0.193)
Day of week dummies	Yes	Yes	Yes
Year dummy variables	Yes	Yes	Yes
R^2	.294	.493	.096

Note. $N = 88{,}627$. Robust standard errors are in parentheses. Gender was coded 0 for female and 1 for male. Marital status was coded using dummy variables with married as the reference category. Race was coded using dummy variables, with White as the reference category. Year ranged from 2002 to 2011. OLS = ordinary least squares.
*$p < .05$. **$p < .01$. ***$p < .001$.

work. Marital status was coded by the ATUS as follows: (1) "spouse present" (51.99%), (2) "unmarried partner present" (3.02%), and (3) "no spouse or unmarried partner present" (44.99%). Race was assessed using the six major racial categories in this study: (1) White (82.63%), (2) Black (12.20%), (3) American Indian (0.74%), (4) Asian (2.84%), (5) Hawaiian/Pacific Islander (0.19%), and (6) Multirace and Other (1.40%). In a follow-up question, some respondents were also asked whether they identified as Spanish, Hispanic, or Latino ($N = 11{,}490$). Subsidiary analyses used responses to this question to gauge effects across ethnicity.

Dummy variables were added for the day of the week, given that socializing increased substantially on the weekend and varied by weekend day. As in Study 1, respondents were included if they had valid data for all variables.

Results

People reported that they spent more time with family members ($M = 318.67$ min, $SD = 293.09$) than friends ($M = 56.22$, $SD = 142.74$). They also spent a considerable amount of time by themselves outside the workplace ($M = 302.92$, $SD = 260.59$). Simple correlations showed that higher household income was negatively related to time spent alone ($r = -.16$, $p < .001$), positively related to time spent with family ($r = .18$, $p < .001$), and not significantly related to time spent with friends ($r = -.00$, $p = ns$). These simple correlations suggest that household income was positively associated with more time spent with others.

Yet, the patterns shown in the simple correlations were entirely attributable to two variables significantly related to both income and time allocation, age and marital status. Married people both had greater household incomes and different socializing patterns. As in Study 1, being married rather than unmarried was highly correlated with income ($r = .38$, $p < .001$). Moreover, people who were married spent substantially less time alone ($r = -.30$, $p < .001$) or with friends ($r = -.18$, $p < .001$) and more time with family ($r = .53$, $p < .001$). Also, as in Study 1, age was correlated with both household income ($r = -.14$, $p < .001$) and time spent alone ($r = .36$, $p < .001$), time spent with relatives ($r = -.13$, $p < .001$), and time spent with friends ($r = -.12$, $p < .001$). Indeed, controlling only for age and marital status, household income positively predicted time spent alone ($b = 0.12$, $SE = 0.03$, $p < .001$) and with friends ($b = 0.42$, $SE = 0.03$, $p < .001$) and negatively predicted time spent with family ($b = -0.63$, $SE = 0.04$, $p < .001$).

Table 2 presents OLS regressions controlling for other robust differences across income, such as household size and time spent working. Consistent with our predictions and replicating the results of Study 1, people with higher household incomes spent more time alone (hence less time socializing). Furthermore, higher income was associated with less time with family and more time with friends. Figure 2 depicts time spent alone and time spent with others across all levels of income. All else equal, people with high (+1 *SD*), compared to low (−1 *SD*), household incomes spent an additional 10 min alone, 22 min with friends, and 26 fewer min with family each day.

Robustness Checks

As in Study 1, we conducted additional analyses to better understand the nature of these effects, test for robustness, and

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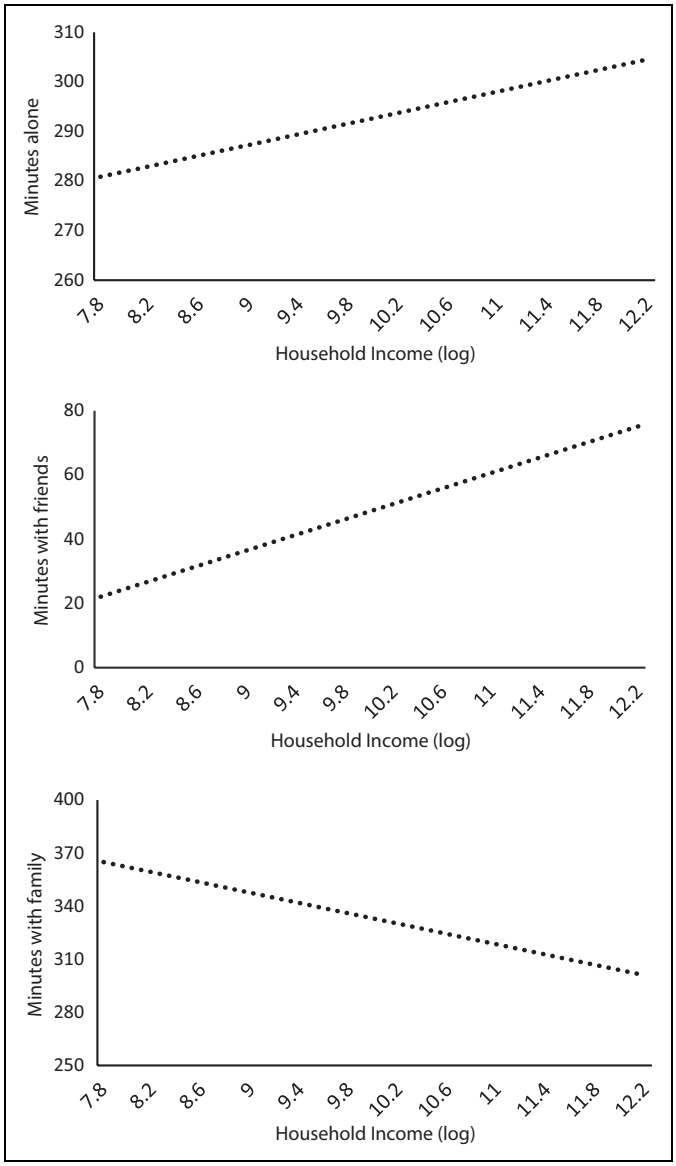

Figure 2. Number of minutes in the previous day spent alone, with friends, and with family; Study 2.

rule out potential competing explanations. Study 2 included more detailed measures of time spent with family members as well as a more detailed categorization of race. These variables enabled us to test whether the effects were driven by differences in time spent caring for children and whether these effects emerged across races.

Childcare. One possible explanation for our findings is that people with lower incomes spend more time with family members because they are less able to afford childcare outside the home. We tested this possibility using a variable that captured the number of minutes in the previous day spent caring for household children. Regression analyses including the control variables in Table 2 found that household income negatively predicted time spent caring for children ($b = -.81$, $SE = 0.09$, $p < .001$). Nonetheless, similar results emerged in all models controlling for the amount of time spent caring for household children. Moreover, controlling for time spent caring for household children, income continued to negatively predict time spent with family ($b = -.42$, $SE = 0.03$, $p < .001$) and positively predict time spent with friends ($b = .63$, $SE = 0.03$, $p < .001$) and time spent alone ($b = .45$, $SE = 0.03$, $p < .001$).

Race and ethnicity. We tested whether similar effects emerged for Black and Hispanic respondents because past work has shown that people of Hispanic origin tend to spend more time with immediate and extended family (R. J. Taylor & Chatters, 1988), and African Americans tend to spend more time in the community (R. L. Taylor, 1994) compared to others. To test whether similar effects emerged across races and ethnicities, we reran the regressions shown in Table 2 among respondents who self-identified as Black or African American ($N = 10{,}984$) as well as among respondents who self-identified as Hispanic ($N = 11{,}490$).

Similar results emerged within both samples. Among African Americans, household income negatively predicted time spent with family ($b = -0.42$, $SE = 0.09$, $p < .001$) and positively predicted time spent with friends ($b = 0.32$, $SE = 0.07$, $p < .001$) and time spent alone ($b = 0.42$, $SE = 0.08$, $p < .001$) using the controls in Table 2. The same pattern was seen among Hispanics. Household income negatively predicted time spent with family ($b = -0.39$, $SE = 0.08$, $p < .001$) and positively predicted time spent with friends ($b = 0.58$, $SE = 0.07$, $p < .001$) and time spent alone ($b = 0.60$, $SE = 0.08$, $p < .001$). These patterns mirror those reported for the full sample, suggesting that the effects are not due to differences in race or ethnicity as a function of income.

General Discussion

Two studies using large, representative samples of American adults and spanning multiple decades and different metrics of time spent with others showed support for the hypotheses that money predicts how and with whom people spend their time. People with higher incomes reported spending fewer evenings socializing (Study 1) and a smaller fraction of their day in the company of others (Study 2). Moreover, income predicted how people allocated their social time. People with higher incomes spent less time socializing with family and neighbors and more time socializing with friends. Although past work has shown that both transient exposure and enduring access to money reduce attunement to others, our findings build on this work by showing that income predicts how and with whom people spend their discretionary time.

These findings might also address why, in recent years, people's social worlds seem to have shrunk. Americans report having fewer friends (McPherson, Smith-Lovin, & Brashears, 2006) and being more disengaged from community life than in the past (Putnam, 2000). Our findings suggest that rising wealth might help explain these trends. Americans have

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become considerably wealthier since World War II, with inflation-adjusted median household income more than doubling (U.S. Census Bureau, 2014). Our results suggest that rising household income may help explain why people seem to be spending less time interacting with others.

The results should be viewed in light of some limitations. First, although we reasoned that access to money influences how and with whom people spend their time, we cannot rule out the possibility that how people choose to spend time affects their income. People who put little value on social relationships may invest more in their careers and accordingly earn higher wages than others. Yet, the results showed that income is linked to different types of social engagement, even after accounting for time spent working. This suggests that the findings are not an artifact of discretionary time but instead relate to how people choose to spend that time. In addition, while we reasoned that access to more money affects how and with whom people elect to spend their time, we cannot rule out the possibility that circumstantial differences across incomes may drive the effects. For instance, greater household resources may be negatively associated with proximity to neighbors, thereby creating a structural impediment to social contact. Even so, this possibility could be a manifestation of the desire for social distance rather than a driver of these effects.

Second, our reasoning suggests that people with more financial resources voluntarily configure social worlds that are more autonomous and, when electing to be social, more geared toward friendship than family or community. Yet given that income is negatively associated with compassion (Stellar et al., 2012) and decoding social cues (Kraus & Keltner, 2009), it is possible that people with more money are less desirable interaction partners. As such, people may be less drawn to more prosperous relationship partners. If so, then the rich may inhabit different social worlds than the poor but for different reasons than our theorizing would suggest. Contrary to this reasoning, we found that income was positively associated with time invested in friendships, the most voluntary of the relationship types we examined. This seems to suggest that people with greater resources are deliberate architects of their social worlds.

Finally, whereas our analyses focused on the quantity of social interactions, future work could focus on the quality of those interactions. One possibility is that the greater need for material and emotional support among the poor increases investment in social relationships but also strains these relationships. Consequently, people with lower incomes may spend more time with other people but may have less fulfilling relationships. Similarly, if people are more likely to receive emotional rather than instrumental support from friends, then it is possible that people with higher incomes have better quality relationships, even if they spend less time with others. These and other inquiries would continue to reveal why and how access to money contributes to the social fabric of people's lives.

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Notes

1. We examined whether the effects were driven by extreme outliers by transforming each measure of socializing by taking the square root, an approach used by other researchers analyzing these data (Glanville et al., 2013). Similar results emerged when the dependent variables were transformed.
2. Household income was log transformed because we expected that relative increases in household income were more influential than absolute changes in income. Moreover, this approach is consistent with how other scholars have used these data (e.g., Alesina & Ferrara, 2002; Oishi, Kesebir, & Diener, 2011). To test whether our results were robust to other specifications of income, we remodeled all equations using a nontransformed version of income. Similar results emerged across all four analyses in Table 1. Household income (in thousands) negatively predicted total time spent with others ($b = -0.15$, $SE = 0.04$, $p < .001$), time spent socializing with relatives ($b = -0.16$, $SE = 0.02$, $p < .001$), time spent with neighbors ($b = -0.12$, $SE = 0.02$, $p < .001$), and positively predicted time spent with friends ($b = 0.12$, $SE = 0.02$, $p < .001$).
3. We also tested to see whether these results were robust to the untransformed dependent variable. Using the control variables shown in Table 2 and untransformed dependent variables, we found similar effects across all models.
4. As in Study 1, we also tested whether these results were robust to an untransformed measurement of income. Similar results emerged when income was not log transformed. Controlling for the variables shown in Table 2, household income (in 1,000s) remained positively related to time spent alone ($b = 0.10$, $SE = 0.01$, $p < .001$) and time spent with friends ($b = 0.14$, $SE = 0.01$, $p < .001$) and negatively related to time spent with family ($b = -.103$, $SE = -0.10$, $p < .001$).

References

Adams, R. G., & Blieszner, R. (1995). Aging well with friends and family. *American Behavioural Scientist*, *39*, 209–224.

Alesina, A., & La Ferrara, E. (2002). Who trusts others? *Journal of Public Economics*, *85*, 207–234.

Antonucci, T. C., & Akiyama, H. (1995). Convoys of social relations: Family and friendships within a life span context. In R. Blieszner & V. H. Bedford (Eds.), *Handbook of aging and the family* (pp. 355–371). Westport, CT: Greenwood Press/Greenwood Publishing Group.

Antonucci, T. C., Akiyama, H., & Takahashi, K. (2004). Attachment and close relationships across the life span. *Attachment & Human Development*, *6*, 353–370.

Bell, C. (1998). *Middle class families: Social and geographical mobility* (*Vol. 133*). Abingdon, England: Psychology Press.

Carstensen, L. (1995). Evidence for a life-span theory of socioemotional selectivity. *Current Directions in Psychological Science*, *4*, 151–156.

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Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, *38*, 300−314.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. New York, NY: Routledge.

Gallo, L. C., & Matthews, K. A. (2003). Understanding the association between socioeconomic status and physical health: Do negative emotions play a role? *Psychological Bulletin*, *129*, 10−51.

Glanville, J. L., Andersson, M. A., & Paxton, P. (2013). Do social connections create trust? An examination using new longitudinal data. *Social Forces*, 545−562.

Hofferth, S., & Iceland, J. (1998). Social capital in rural and urban communities. *Rural Sociology*, *63*, 574−598.

Kraus, M. W., & Keltner, D. (2009). Signs of socioeconomic status: A thin-slicing approach. *Psychological Science*, *20*, 99−106.

Kraus, M. W., Piff, P. K., & Keltner, D. (2011). Social class as culture: The convergence of resources and rank in the social realm. *Current Directions in Psychological Science*, *20*, 246−250.

Lachman, M. E., & Weaver, S. L. (1998). The sense of control as a moderator of social class differences in health and well-being. *Journal of Personality and Social Psychology*, *74*, 763−773.

Lammers, J., Galinsky, A. D., Gordijn, E. H., & Otten, S. (2012). Power increases social distance. *Social Psychological and Personality Science*, *3*, 282–290.

Ligon, E. (1994). *The development and use of a consistent income measure for the General Social Survey*. Chicago, IL: National Opinion Research Center, The University of Chicago.

McPherson, M., Smith-Lovin, L., & Brashears, M. E. (2006). Social isolation in America: Changes in core discussion networks over two decades. *American Sociological Review*, *71*, 353−375.

Mogilner, C. (2010). The pursuit of happiness time, money, and social connection. *Psychological Science*, *21*, 1348−1354.

Molinsky, A. L., Grant, A. M., & Margolis, J. D. (2012). The bedside manner of homo economics: How and why priming an economic schema reduces compassion. *Organizational Behavior and Human Decision Processes*, *119*, 27−37.

Oishi, S., Kesebir, S., & Diener, E. (2011). Income inequality and happiness. *Psychological Science*, *22*, 1095−1100.

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York, NY: Simon and Schuster.

Schor, J. (2008). *The overworked American: The unexpected decline of leisure*. New York, NY: Basic Books.

Smith, T. W., Marsden, P., Hout, M., & Kim, J. (2012). *General Social Surveys, 1972–2012 [Machine-readable data file]*. Retrieved from http://www3.norc.org/gss+website/download/

Stellar, J. E., Manzo, V. M., Kraus, M. W., & Keltner, D. (2012). Class and compassion: Socioeconomic factors predict responses to suffering. *Emotion*, *12*, 449−459.

Taylor, R. J., & Chatters, L. M. (1988). Church members as a source of informal social support. *Review of Religious Research*, *30*, 193−203.

Taylor, R. L. (1994). Minority families in the United States: A multicultural perspective. In R. L. Taylor (Ed.), *Minority families and social change* (pp. 204−248). Englewood Cliffs, NJ: Prentice Hall.

Travis, S. S. (1995). Families and formal networks. In R. Blieszner & V. H. Bedford (Eds.), *Handbook of aging and the family* (pp. 459–473). Westport, CT: Greenwood.

U.S. Census Bureau. (2014). Table F-1. Income Limits for Each Fifth and Top 5 Percent of Families (All Races). Retrieved from http://www.census.gov/hhes/www/income/data/historical/families/index.html

Vohs, K. D., Mead, N. L., & Goode, M. R. (2006). The psychological consequences of money. *Science*, *314*, 1154−1156.

Wellman, B. (1992). Which types of ties and networks provide what kinds of social support. *Advances in Group Processes*, *9*, 207−235.

Wellman, B., & Wortley, S. (1990). Different strokes from different folks: Community ties and social support. *American Journal of Sociology*, *96*, 558−588.

Wood, V., & Robertson, J. F. (1978). Friendship and kinship interaction: Differential effect on the morale of the elderly. *Journal of Marriage and the Family*, *40*, 367−375.

Young, C., Lim, C., & Morgan, S. L. (2014). Time as a network good: Evidence from unemployment and the standard workweek. *Sociological Science*, *1*, 10−27.

Zhou, X., Vohs, K. D., & Baumeister, R. F. (2009). The symbolic power of money: Reminders of money alter social distress and physical pain. *Psychological Science*, *20*, 700−706.

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