
Available from: http://dx.doi.org/10.1080/03075079.2015.1045481

This is an Accepted Manuscript of an article published by Taylor & Francis in Studies in Higher Education on 24/06/15, available online: http://www.tandfonline.com/10.1080/03075079.2015.1045481

Accessed from: http://hdl.handle.net/1959.13/1328567
Time and Money Explain Social Class Differences in Students’ Social Integration at University

Mark Rubin\(^a\) and Chrysalis L. Wright\(^b\)

\(^a\)The University of Newcastle, Australia
\(^b\)University of Central Florida

This self-archived version is provided for non-commercial and scholarly purposes only. The APA (6\(^{th}\) ed) style reference for this article is as follows:


Correspondence concerning this article should be addressed to Mark Rubin at the School of Psychology, the University of Newcastle, Callaghan, NSW 2308, Australia. Tel: +61 (0)2 4921 6706. Fax: +61 (0)2 4921 6980. E-mail: Mark.Rubin@newcastle.edu.au
SOCIAL CLASS AND SOCIAL INTEGRATION AT UNIVERSITY

Abstract
Working-class students tend to be less socially integrated at university than middle-class students (Rubin, 2012a). The present research investigated two potential reasons for this working-class social exclusion effect. First, working-class students may have fewer finances available to participate in social activities. Second, working-class students tend to be older than middle-class students and, consequently, they are likely to have more work and/or childcare commitments. These additional commitments may prevent them from attending campus which, in turn, reduces their opportunity for social integration. These predictions were confirmed among undergraduate students at an Australian university ($N = 433$) and a USA university ($N = 416$). Strategies for increasing working-class students’ social integration at university are discussed.

Keywords: first-generation students; social class; social inclusion; social integration; socioeconomic status
Time and Money Explain Social Class Differences in Students’ Social Integration at University

Research conducted in the USA and Australia has found that working-class students tend to be less socially integrated at university than middle-class students (for recent evidence, see Langhout, Drake, & Rosselli, 2009; Martin, 2012; Ostrove & Long, 2007; Rubin & Wright, in press; Soria, Stebleton, & Huesman, 2013; Stuber, 2009; for meta-analyses, see Robbins, Le, Davis, Lauver, Langley, & Carlstrom, 2004; Rubin, 2012a). For example, in a recent meta-analysis of 35 studies that sampled over 62,000 students, Rubin (2012a) found that working-class students participated in fewer formal activities (e.g., campus-based clubs, societies, and organizations) and fewer informal social activities (e.g., number of friends on campus, dates, parties, nonclassroom conversations). They also felt less of a sense of belonging to their institutions.

This social class difference in social integration at university is important because it relates to social class differences in academic outcomes. Compared to middle-class students, working-class students are less likely to be academically engaged (e.g., Martinez, Sher, Krull, & Wood, 2009; Nuñez & Cuccaro-Alamin, 1998; Soria, 2012), less likely to obtain good grades and develop intellectually (e.g., Robbins, Allen, Casillas, Peterson, & Le, 2006; for a meta-analysis, see Robbins et al., 2004), less likely to stay enrolled in their courses and complete their degrees (e.g., Inman & Mayes, 1999; Robbins et al., 2006; for a meta-analysis, see Robbins et al., 2004), and less likely to be satisfied with their university experience (Martin, 2012).

Social integration provides a potential remedy for these social class differences. Social integration is beneficial for students’ academic performance, persistence and retention (for meta-analyses, see Napoli & Wortman, 1996; Robbins et al., 2004; for narrative reviews, see McConnell, 2000; Pascarella & Terenzini, 1991, 2005; Tripp, 1997). It leads to better learning, cognitive growth, critical thinking, and personal and moral development (for reviews, see Gellin, 2003; Hernandez, Hogan, Hathaway, & Lovell, 1999; McConnell, 2000; Moore, Lovell, McGann, & Wyrick, 1998; Pascarella & Terenzini, 1991, 2005). It also leads to greater satisfaction with the university experience (Martin, 2012) and changes in students’ attitudes and behaviours that improve their employment prospects (e.g., Moore et al., 1998, p. 8; Stuber, 2009, p. 880).

Given that social integration leads to better academic outcomes, and given that working-class students tend to lack social integration, a potentially important means of improving working-class students’ academic outcomes is to increase their social integration at university (Rubin, 2012b). Consistent with this view, Ostrove and Long (2007) found that sense of belonging at college mediated the relation between social class and academic adjustment.

However, before we attempt to improve working-class students’ social integration at university, we first need to understand why they tend to lack this integration. It is only after we have a clear understanding about the reasons for this lack of integration that we will be in a position to develop evidence-based interventions that address this issue. The present research investigated two potential reasons for social class differences in social integration at university: time and money.

Time and Money as Mediators of Social Class Differences in Social Integration

Rubin and Wright (in press) recently found that age differences help to explain social class differences in students’ friendships at university. Following Rubin (2012a), these researchers assumed that older students tend to have less time than younger students to develop friendships
because they spend more time engaged in other commitments. However, Rubin and Wright did not provide direct evidence of this age difference in time commitments, and they assessed student friendships rather than social integration more generally.

The present study aimed to build on the work of Rubin and Wright (in press) by testing several mediational paths that relate students’ social class, age, time, and money to their social integration at university. These paths are illustrated in Figure 1.

**Time.** As indicated in Figure 1, we predicted that students’ age and time commitments would mediate the effect of their social class on their level of social integration at university. Specifically, we predicted that working-class students would tend to be older than middle-class students because, unlike middle-class students, they tend not to enrol at university immediately after leaving school (James, 2002). Consistent with this prediction, a substantial body of research has found that university students’ social class is negatively related to their age (e.g., Inman & Mayes, 1999; Kasworm & Pike, 1994; Nuñez & Cuccaro-Alamin, 1998; Rubin & Wright, in press; Shields, 2002; Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996).

We also predicted that older students would tend to have less time than younger students to engage in social activities at university because they have more paid work and childcare commitments. These additional commitments were expected to limit the amount of time that students spend on campus which, in turn, was expected to limit the opportunity to engage in social activities. Consistent with these predictions, previous research has found that older and working-class students tend to spend more time working for pay in off-campus jobs (Astin, 1993; Inman & Mayes, 1999; Kuh, Gonyea, and Palmer, 2001; Martinez et al., 2009; Nuñez, & Cuccaro-Alamin, 1998; Shields, 2002; Soria et al., 2013; Stuber, 2009; Terenzini et al., 1996), and working for pay limits the amount of time that students have available to socialize (Manthei & Gilmore, 2005; Moreau & Leathwood, 2006). In addition, some research suggests that working-class students tend to have more dependent children than middle-class students (Terenzini et al., 1996), and that they tend to spend more time looking after their siblings, children, or other people’s children (e.g., Hurtado et al., 2007; Kuh et al., 2001).

We also expected that older students would tend to live further from university due to less flexible accommodation arrangements with their families and, consequently, that they would tend to have a longer commute to university. Again, travel time to university was expected to be negatively related to time spent on campus and, consequently, to social integration. Consistent with this prediction, Kuh et al. (2001) found that older and working-class students were more likely to drive to university, rather than to walk to their campus or to live on campus, and that people who drove to university tended to be less socially and academically engaged at university (see also Bean & Metzner, 1985, p. 508).
SOCIAL CLASS AND SOCIAL INTEGRATION AT UNIVERSITY

Money. We also predicted that satisfaction with finances for socializing would mediate the effect of students’ social class on their level of social integration. Specifically, working-class students should be less satisfied with their finances and, consequently, less likely to engage in social activities at university because social activities often cost money (e.g., society membership fees, social events, on-campus drinks and meals; e.g., Bean, 1985; Cabrera, Nora, & Castañeda, 1992; Martin, 2012; Stuber, 2009, p. 895). Consistent with this possibility, students’ concerns about finances are negatively related to their sense of belonging and contact with other students (Bean, 1985; Hefner & Eisenberg, 2009; Hurtado et al., 2007). In addition, the receipt of financial aid is positively associated with social integration (Bean, 1985; Cabrera et al., 1992; Oliver, Rodriguez, & Mickelson, 1985).

Method

Institutions

We tested our theoretical model with students who were recruited from two universities that were located in different countries: Australia and the United States of America (USA). In both countries, we selected large, multi-campus, non-elite, public universities that did not focus solely on external or mixed-mode education and that had a good representation of working-class students. We reasoned that if we found similar results at the Australian and USA universities, then our results would be less likely to be limited to either university setting and more likely to be generalizable across the university settings.

The Australian institution was a three- and four-year university in New South Wales. The USA institution was a four-year university in Florida. The Australian university had fewer student enrolments (37,450) than the USA university (59,740) and a smaller student-to-faculty ratio (Australian university: 21.84; USA university: 31.10).

Participants

Australian sample. Australian participants were undergraduate students who were enrolled in first-year psychology courses that were optional for students who were enrolled in a variety of different degrees. We collected data from 433 students (approximately 65% of the first-year psychology population). However, 10 students declined their informed consent at the end of the study and so were excluded from the data analysis. These exclusions left a total of 423 participants (minimum response rate of 97.69%) who had a mean age of 22.24 years (SD = 6.78), ranging from 17 to 59 years. The sample contained 25.53% men (108 men, 315 women). This gender imbalance is typical for psychology courses.

Based on the subjective measure of social class (see below for details), 20.09% of participants described themselves as working-class, 10.87% as lower middle-class, 33.59% as middle-class, 18.44% as upper middle-class, and .99% as upper-class. The remaining participants did not respond to this question, or they indicated that they did not know their social class (12.06%).

USA sample. Unlike the Australian sample, which only included freshmen, the USA sample included freshmen (20.91%), sophomores (14.66%), juniors (31.97%), and seniors (32.45%). However, this difference between Australian and USA samples was not expected to have a significant effect on our results because Rubin’s (2012a) meta-analysis found that the size of the relation between social class and social integration did not vary significantly between studies.
that only sampled first-year students and studies that sampled students from other years or all years of study.

The USA sample included data from 430 students (approximately 6.62% of the population of 6,500 students who undertake research participation). However, 3 students withdrew from the research partway through the survey, and 11 declined their informed consent at the end of the study. These 14 participants were excluded from the data analysis, leaving a total of 416 students (minimum response rate of 96.74%).

Similar to the Australian sample, the mean age of participants in the USA sample was 22.00 years ($SD = 4.72$) and ranged from 18 to 51 years. Most participants (57.5%) were enrolled in science degrees, with the next highest percentage (10.6%) being enrolled in health and public affair degrees. The sample contained 32.93% men (137 men, 279 women).

Based on the subjective measure of social class, 17.31% of participants described themselves as working-class, 15.87% as lower middle-class, 33.17% as middle-class, 16.83% as upper middle-class, and 1.44% as upper-class. The remaining participants did not respond to this question, or they indicated that they did not know their social class (15.34%). This distribution of social class categories was very similar to that for the Australian sample.

**Combined sample.** We conducted our analyses on the Australian and USA samples both separately and combined. The combined sample consisted of 839 students (29.20% men; 245 men, 594 women) who had a mean age of 22.12 years ($SD = 5.85$), ranging from 17 to 59 years. Based on the subjective measure of social class, 18.71% of participants described themselves as working-class, 13.35% as lower middle-class, 35.40% as middle-class, 17.64% as upper middle-class, and 1.19% as upper-class.

**Procedure and Measures**

At both universities, the study was advertised via an online research participant pool system. Participation was voluntary, and participants were awarded course credit in exchange for their participation.

The research instrument consisted of an online self-report survey that was titled “Social Life at the University.” The modal time for participants to complete the survey was 8 minutes.

**Social class.** We included measures of social class at the end of the survey in order to avoid cuing students to the relevance of this variable prior to their reports of social integration (Langhout et al., 2009). Following previous research in this area, we assessed social class using measures of parental education, income, and occupation as well as measures of self-identified social class identity (for a review, see Rubin, 2012a).

Students indicated the highest education level of (a) their mother and (b) their father. We used the following categories for the USA survey: no formal schooling, elementary school, middle school (junior high school), high school (secondary education), university or college - but did not graduate, university or college - graduated with an undergraduate degree (e.g., Bachelors), university or college - graduated with a postgraduate degree (Masters or Phd), don’t know. In the Australian survey, we adjusted these categories for the Australian context.

Students also indicated how they thought most people would rate the occupation of (a) their mother and (b) their father in terms of its prestige and status on an 11-point scale anchored extremely high status and prestige (11) and extremely low status and prestige (1), with a don’t know option available. They also provided a subjective indication of their family income during
SOCIAL CLASS AND SOCIAL INTEGRATION AT UNIVERSITY

childhood using a 5-point scale anchored well above average (5) and well below average (1), with a don’t know option available.

Finally, students completed three subjective measures of social class (e.g., Ostrove & Long, 2007; Soria et al., 2013; Rubin & Wright, in press; for a discussion, see Rubin, Denson, Kilpatrick, Matthews, Stehlik, & Zyngier, 2014). Participants indicated the social class that they felt best described (a) themselves, (b) their mother, and (c) their father using a 6-point scale: poor (1), working class (2), lower middle-class (3), middle-class (4), upper middle-class (5), upper class (6), with a don’t know option available.

**Social integration.** To measure the extent of social integration, we asked participants to estimate the number of university friends who were important to their identity and sense of self (e.g., Rubin & Wright, in press; Sandler, 2000). Participants also reported the number of friends at university with whom they had communicated via face-to-face conversations, text messages, e-mail, and phone during the last week (4 items). To measure interpersonal contact time, we asked participants to report the number of hours per average week of the semester that they had socialized with friends at university. Finally, to obtain a general assessment of the extent of social integration at university, we asked participants to complete an adapted version of the 5-item Community Participation subscale of Herro and Gracia’s (2007) Perceived Community Support Questionnaire using a 7-point response scale (7 = strongly agree, 1 = strongly disagree).

We also included four measures of the quality of social integration at university (e.g., Langhout et al., 2009; Martinez et al., 2009; Sandler, 2000). Participants responded to these quality measures using a 7-point Likert-type scale anchored strongly agree (7) and strongly disagree (1).

First, we included a single item that measured the closeness of students’ university friendships: “I feel close to my friends at the university.” Second, we included an adapted version of Rubin and Wright’s (in press) Relevance of University Friends to Identity scale (4 items). Third, we included an adapted version of Hawthorne’s (2006) Friendship Scale (6 items). Finally, we used a modified and extended version of Hurtado and Carter’s (1997) sense of belonging measure (6 items). We randomized the order of presentation of the social integration measures and the items within each measure for each participant. To view the specific items that we used in our measures of social class and social integration, please see the online supplementary information that is available at [http://bit.ly/1KUgShZ](http://bit.ly/1KUgShZ).

**Explanatory variables.** We also included measures that were expected to explain the relation between social class and social integration at university. We included a 2-item measure that assessed participants’ satisfaction with their finances for socializing at university: “I can’t afford to spend money on social activities at the university” (reverse scored), and “I have enough money to go out with friends from the university.” We also included a set of items that asked students to think about an average week during the semester and then to indicate approximately how many hours in this average week they would normally engage in a number of activities, including “work for pay (including travelling to and from work),” “look after your own children, siblings, or someone else’s children (unpaid),” and “be at the university campus.” A single item measured participants’ travel time to university: “Approximately how long does it take you to travel from the place where you currently live to your campus’ student union?” Participants were asked to give their responses in minutes rounded to the nearest 5 minutes. Single items were used to assess participants’ accommodation arrangements, enrolment status, which campus they
attended most often, degree program, possession of scholarships and financial assistance, gender, and age.

Data Reduction

The data for several variables were not normally distributed. In order to produce more normal distributions, we used a log 10 transformation on these variables.

The degree of communication with friends items, Community Participation subscale, Relevance of University Friends to Identity scale, Friendship Scale, sense of belonging scale, and satisfaction with finances for socializing scale all had acceptable internal reliabilities in the Australian sample (Cronbach αs = .66, .81, .91, .88, .92, & .83 respectively), the USA sample (Cronbach αs = .79, .87, .94, .83, .92, & .76 respectively), and both samples combined (Cronbach αs = .75, .84, .92, .86. .92, & .79 respectively). Consequently, we computed mean values for each of these scales.

After conversion to z scores, the eight measures of social integration had a good mean correlation with one another and good internal reliability in the Australian sample (r = .52; Cronbach α = .89), the USA sample (r = .48; Cronbach α = .88), and both samples combined (r = .49; Cronbach α = .88). Similarly, after conversion to z scores, the eight measures of social class had a good mean correlation with one another and good internal reliability in the Australian sample (r = .37; Cronbach α = .82), the USA sample (r = .37; Cronbach α = .82), and both samples combined (r = .37; Cronbach α = .82). Consequently, we computed a composite measure of social integration and a composite measure of social class based on the mean of the relevant z scores of each separate index (for a similar approach, see Rubin & Wright, in press). Note that, we treated social class as a continuous variable in our analyses, rather than a categorical variable, because the continuous variable approach has been shown to achieve greater statistical power (Sirin, 2005).

Results

Table 1 presents the mean values, standard deviations, minimum and maximum values, and Cronbach alpha values for the key variables (untransformed where appropriate) as well as the zero-order correlation coefficients for the relations between these variables (transformed where described above).

To begin with, we should note that there was no significant difference in students’ social integration in the Australian university (M = -.02, SD = .71) compared to the USA university (M = .02, SD = .78), t(837) = .93, p = .355. However, there was a small-to-medium sized positive relation between social class and social integration across the sample, r(839) = .24, p < .001, and this relation was evident in both the Australian sample, r(416) = .22, p < .001, and the USA sample, r(423) = .26, p < .001. One way to illustrate the overall effect is to consider it in the context of a binomial distribution (Rosenthal & Rubin, 1982). If we categorized students as being either integrated or not integrated, then a social class effect of r = .24 would entail 62.00% of middle-class students being integrated compared to only 38.00% of working-class students.

Our original theoretical model (see Figure 1) did not produce a good fit to our data using the combined sample, χ² = 96.16, df = 15, p < .01, comparative fit index (CFI) = .87, root mean square error of approximation (RMSEA) = .08, p value of close fit (PCLOSE) < .01. Following best practice in in structural equation modelling, we added additional paths to our theoretical model based on a priori theory and evidence in order to improve its fit. Four of these paths were subsidiary paths that involved relations between our explanatory variables rather than between our key variables of social class and social integration. First, we added a positive path from time spent
at work to satisfaction with finances for socializing. This path is consistent with research that has found that the more time students spend at work, and the more money they earn, the more satisfied they are with their life and finances (Franke, 2003). Second, we added a negative path from time spent caring for children to time spent at work, indicating the zero-sum nature of a person’s overall time (Jacobs, Gerson, & Jacobs, 2009, p. 26). We also added two positive paths from time spent travelling to university. One of these paths went to time spent at work, and the other went to time spent caring for children. These relations were added based on research showing that people who live further from university are more likely to be nontraditional (older and/or working-class) students who have paid jobs (Kuh et al., 2001) and spend more time caring for children (Hurtado et al., 2007; Kuh et al., 2001; Terenzini et al., 1996).

We also added two paths involving our key variables of social class and social integration. First, we added a negative path from social class to time spent looking after children, indicating that, regardless of their age, working-class students tended to spend more time looking after children than middle-class students (e.g., Hurtado et al., 2007; Kuh et al., 2001). Second, we added a negative path from time spent travelling to university to social integration, indicating that, regardless of time spent on campus, social integration increases as time spent travelling to university decreases. This additional path is appropriate given that social integration with university peers can take place off campus as well as on campus (Henry, 2012), and the opportunity for off-campus social integration increases as the travel time to the university decreases and the density of local students increases (e.g., Daggett, Gutkowsi, & Pe, 2003).

After the addition of the above six paths, the adjusted model had a good fit to the combined data set, \( \chi^2 = 11.11, df = 9, p = .27, \text{CFI} = 1.00, \text{RMSEA} = .02, \text{PCLOSE} = .98 \). Inspection of the residuals and modification indices revealed no ill-fit in the model.

Figure 2 includes the parameter estimates for the structural coefficients in the adjusted model based on the combined data set. Standardized coefficients appear on each path, with unstandardized coefficients in parentheses. All paths were significant at the \( p < .01 \) level, with the exception of the path that linked time spent looking after children with time spent on campus, which was marginally significant at the \( p < .10 \) level.

The adjusted model was a good-fitting model for the USA sample, \( \chi^2 = 10.47, df = 9, p = .31, \text{CFI} = 1.00, \text{RMSEA} = .02, \text{PCLOSE} = .87 \). However, the path from time spent caring for children to time spent working for pay was not significant in this sample.

The adjusted model was also a good fit for the Australian sample, \( \chi^2 = 15.55, df = 9, p = .08, \text{CFI} = .98, \text{RMSEA} = .04, \text{PCLOSE} = .61 \). However, inspection of modification indices revealed that model fit could be improved further by adding a path from social class to time spent working for pay. Given that prior research has established that working-class students tend to spend more time in paid work (Astin, 1993; Inman & Mayes, 1999; Kuh et al., 2001; Martinez et al., 2009; Nuñez, & Cuccaro-Alamin, 1998; Shields, 2002; Soria et al., 2013; Stuber, 2009; Terenzini et al., 1996), we added this path to the Australian model in order to improve model fit. After this path was added, the fit of the model was improved, \( \chi^2 = 9.97, df = 8, p = .27, \text{CFI} = .99, \text{RMSEA} = .02, \text{PCLOSE} = .82 \), and inspection of the residuals and modification indices revealed no ill-fit in the model. However, the following paths were no longer significant: (a) social class to time spent caring for children, (b) time spent caring for children to time spent on campus, (c) student age to time spent travelling to university, and (d) time spent travelling to university to time spent on campus.

Table 2 provides the structural coefficients for significant paths in the adjusted models for the combined, Australian, and USA samples. All paths are significant at the \( p < .05 \) level apart
from the path from time spent caring for children to time spent on campus in the combined sample ($p < .10$), students’ age to time spent working for pay in the Australian sample ($p < .10$), and time spent working for pay to satisfaction with finances in the USA sample ($p < .10$).

Discussion

As predicted, satisfaction with finances for socializing mediated the effect of students’ social class on their level of social integration. In particular, working-class students tended to be less satisfied with their finances and, consequently, less socially integrated at university. In addition, students’ age and time commitments mediated the effect of social class on social integration. Working-class students tended to be older than middle-class students, older students tended to have more paid work and childcare commitments and take longer to travel to university than younger students, students with more of these commitments tended to spend less time on campus, and students who spent less time on campus tended to be less socially integrated at university. Hence, consistent with our theoretical model, working-class students tended to be social excluded at university because they were both financially poor and time poor.

Differences Between the Australian and USA Samples

The above findings tended to hold true across the Australian and USA samples. However, there were some notable differences between these samples.

First, social class predicted working for pay in the Australian sample but not in the USA sample, and it predicted time spent caring for children in the USA sample but not in the Australian sample. Speculatively, these differences may reflect a difference in cultural norms, with Australian working-class norms being more associated with paid employment and American working-class norms being more associated with childcare. What is important from the present perspective is that working-class students from both countries spent more time than middle-class students engaged in these activities, and that these time commitments were negatively related to the time that they spent on campus and engaging in social activities with their peers.

Second, time spent caring for children and time spent travelling to university did not predict time spent on campus in the Australian sample. These discrepancies may be due to local differences in the availability of childcare facilities and convenient public transport between the Australian and USA universities. For example, the Australian university had four on-campus childcare centers, whereas the USA university had only one childcare center that was located at the main campus.

Third, student age was not significantly related to time spent travelling to university in the Australian sample, and time spent caring for children was not significantly related to time spent working for pay in the USA sample. We are unclear about the reasons for these discrepancies.

Limitations and Future Research

An important limitation of the present research is that it used a cross-sectional correlational research design. Consequently, we are unable to make definitive statements about the causal direction of the relations that we identified.

A further limitation is that we restricted our investigation to two large, multi-campus, non-elite, public universities that did not focus on external or mixed-mode education. Future research should determine whether our findings are equally applicable to smaller, single-campus, elite, and private universities as well as universities that employ more external or mixed-model forms of education.
Finally, our two samples underrepresented men relative to their respective university populations. In his meta-analysis, Rubin (2012a) found no evidence that gender moderates the size of the relation between social class and social integration. Hence, we do not believe that this gender imbalance represents a major threat to the validity of our findings. Nonetheless, future research should recruit more representative samples in order to ensure that its conclusions can be appropriately generalized to both men and women.

Implications

The present research builds on recent qualitative research that has identified time and money as salient constraints for mature-aged working-class students at university (Stone & O'Shea, 2013). In particular, the present research highlights two key pathways along which improvements in working-class students’ social integration may take place.

First, working-class students’ social exclusion at university is related to their dissatisfaction with finances for socializing. An obvious remedy to this problem is for universities to subsidize social integration opportunities in order to allow students who have less money to participate. Certainly, previous research has found that financial aid can increase social integration (Bean, 1985; Cabrera et al., 1992, p. 585; Oliver et al., 1985, p. 12).

Second, working-class students’ tend to be older than middle-class students, and older students tend to spend more time travelling to university, working for pay, and/or caring for children. These time commitments prevent students from spending time on campus which, in turn, reduces their opportunity for social integration. There are a number of complementary approaches that may be used to address this second pathway. In order to reduce travel time, universities can improve on-campus and close-to-campus family accommodation for older students who are more likely to want to live with one or more family members (Rubin & Wright, in press). Universities can also subsidize on-campus childcare facilities and implement affirmative action schemes that facilitate the on-campus employment of working-class students. In addition, universities can foster greater social integration within the classroom, allowing working-class students to combine their social integration with their academic integration in a time-effective manner. Finally, universities can develop online forms of social integration that do not require campus attendance (e.g., through social media sites such as Facebook and Twitter).

In conclusion, the present research indicates that working-class students are less integrated at Australian and USA universities because they lack both the time and the money that is necessary to engage in social activities. Previous research has shown that this lack of social integration has deleterious implications for working-class students’ academic outcomes. Future research should explore interventions that are designed to improve working-class students’ social integration and that take into account their time and money limitations.

References


SOCIAL CLASS AND SOCIAL INTEGRATION AT UNIVERSITY

SOCIAL CLASS AND SOCIAL INTEGRATION AT UNIVERSITY


Rubin, M., & Wright, C. L. (in press). Age differences explain social class differences in students’ friendship at university: Implications for transition and retention. Higher Education. doi: 10.1007/s10734-014-9844-8


Table 1
Zero Order Correlation Coefficients

<table>
<thead>
<tr>
<th>Measure</th>
<th>M</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>α</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Social class</td>
<td>-0.15</td>
<td>0.68</td>
<td>-2.11</td>
<td>1.83</td>
<td>.82</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2. Social integration</td>
<td>.00</td>
<td>.74</td>
<td>-2.21</td>
<td>2.22</td>
<td>.88</td>
<td>.24**</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>3. Age</td>
<td>22.12</td>
<td>5.85</td>
<td>17</td>
<td>59</td>
<td>n/a</td>
<td>-.20**</td>
<td>-.28**</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>4. Time – travel to uni (mins)</td>
<td>26.59</td>
<td>23.55</td>
<td>0</td>
<td>160</td>
<td>n/a</td>
<td>-.09**</td>
<td>-.22**</td>
<td>.15**</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>5. Time – paid work (hrs/week)</td>
<td>14.05</td>
<td>14.79</td>
<td>0</td>
<td>80</td>
<td>n/a</td>
<td>.00</td>
<td>-.08*</td>
<td>.09**</td>
<td>.18**</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>6. Time – child care (hrs/week)</td>
<td>6.56</td>
<td>22.32</td>
<td>0</td>
<td>168</td>
<td>n/a</td>
<td>-.20**</td>
<td>-.15**</td>
<td>.47**</td>
<td>.17**</td>
<td>-.04</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>7. Satisfaction w/ finances</td>
<td>4.38</td>
<td>1.56</td>
<td>1</td>
<td>7</td>
<td>.79</td>
<td>.25**</td>
<td>.17**</td>
<td>-.08*</td>
<td>-.06</td>
<td>.12**</td>
<td>-.11**</td>
<td>–</td>
</tr>
<tr>
<td>8. Time – on campus</td>
<td>25.44</td>
<td>33.71</td>
<td>0</td>
<td>168</td>
<td>n/a</td>
<td>.06</td>
<td>.27**</td>
<td>-.23**</td>
<td>-.19**</td>
<td>-.19**</td>
<td>-.16**</td>
<td>.00</td>
</tr>
</tbody>
</table>

* p < .05. ** p < .01.
### Table 2

**Standardised Structural Coefficients in the Models for the Combined, Australian, and USA Samples**

<table>
<thead>
<tr>
<th>Path</th>
<th>Combined</th>
<th></th>
<th>Australian</th>
<th></th>
<th>USA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff</td>
<td>SE</td>
<td>Coeff</td>
<td>SE</td>
<td>Coeff</td>
<td>SE</td>
</tr>
<tr>
<td>Social class → Age</td>
<td>-.20</td>
<td>.00</td>
<td>-.21</td>
<td>.01</td>
<td>-.21</td>
<td>.01</td>
</tr>
<tr>
<td>Social class → Time – paid work</td>
<td>-</td>
<td>-.11</td>
<td>-.11</td>
<td>.04</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Social class → Time – childcare</td>
<td>-.10</td>
<td>.02</td>
<td>-</td>
<td>-</td>
<td>-.17</td>
<td>.03</td>
</tr>
<tr>
<td>Social class → Satisfaction w/ finances</td>
<td>.25</td>
<td>.08</td>
<td>.16</td>
<td>.11</td>
<td>.32</td>
<td>.11</td>
</tr>
<tr>
<td>Age → Time – travel to uni</td>
<td>.15</td>
<td>.14</td>
<td>-</td>
<td>-</td>
<td>.35</td>
<td>.23</td>
</tr>
<tr>
<td>Age → Time – paid work</td>
<td>.12</td>
<td>.28</td>
<td>.10</td>
<td>.33</td>
<td>.20</td>
<td>.50</td>
</tr>
<tr>
<td>Age → Time – childcare</td>
<td>.43</td>
<td>.19</td>
<td>.52</td>
<td>.23</td>
<td>.33</td>
<td>.33</td>
</tr>
<tr>
<td>Time – travel to uni → Time – childcare</td>
<td>.09</td>
<td>.04</td>
<td>.08</td>
<td>.06</td>
<td>.10</td>
<td>.07</td>
</tr>
<tr>
<td>Time – travel to uni → Time – paid work</td>
<td>.18</td>
<td>.06</td>
<td>.17</td>
<td>.08</td>
<td>.14</td>
<td>.10</td>
</tr>
<tr>
<td>Time – paid work → Satisfaction w/ finances</td>
<td>.12</td>
<td>.08</td>
<td>.18</td>
<td>.13</td>
<td>.08</td>
<td>.10</td>
</tr>
<tr>
<td>Time – childcare → Time – paid work</td>
<td>-.12</td>
<td>.05</td>
<td>-.19</td>
<td>.06</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Time – travel to uni → Time – on campus</td>
<td>-.12</td>
<td>.04</td>
<td>-</td>
<td>-</td>
<td>-.16</td>
<td>.07</td>
</tr>
<tr>
<td>Time – paid work → Time – on campus</td>
<td>-.16</td>
<td>.02</td>
<td>-.17</td>
<td>.02</td>
<td>-.12</td>
<td>.03</td>
</tr>
<tr>
<td>Age → Time – on campus</td>
<td>-.17</td>
<td>.18</td>
<td>-.16</td>
<td>.16</td>
<td>-.21</td>
<td>.35</td>
</tr>
<tr>
<td>Time – childcare → Time – on campus</td>
<td>-.07</td>
<td>.03</td>
<td>-</td>
<td>-</td>
<td>-.13</td>
<td>.05</td>
</tr>
<tr>
<td>Time – travel to uni → Social integration</td>
<td>-.13</td>
<td>.06</td>
<td>-.09</td>
<td>.09</td>
<td>-.18</td>
<td>.10</td>
</tr>
<tr>
<td>Time – on campus → Social integration</td>
<td>.19</td>
<td>.06</td>
<td>.23</td>
<td>.12</td>
<td>.17</td>
<td>.07</td>
</tr>
<tr>
<td>Satisfaction w/ finances → Social integration</td>
<td>.11</td>
<td>.02</td>
<td>.14</td>
<td>.02</td>
<td>.10</td>
<td>.02</td>
</tr>
</tbody>
</table>
Figure Captions

*Figure 1.* Theoretical Model Illustrating the Paths Through Which Social Class Predicts Social Integration at University

*Figure 2.* Structural Equation Model Illustrating the Paths Through Which Social Class Predicts Social Integration (Combined Sample)