

Working while studying: Impact on marketing students' experience of group work
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Abstract

Around 70% of Australian students have reported working more than 12 hours a week. Recent large scale research in the UK suggests that there is a negative relationship between hours worked and academic achievement. There is, however, no research to the authors' knowledge as to how the number of working hours affect student learning in groups, and whether students in groups with varying work patterns report different learning outcomes compared to groups with similar work patterns. This study reports that, overall, greater working hours decreases students' perceptions of the value as well as their experience of group work, and that this occurs more with 2nd and 3rd year than 1st year students. It also reveals that, students studying in groups with a large proportion of members working more than 2 days a week displayed significantly more negative appraisals of their experience at the end of a project than their peers in groups where few students were working.

Literature Review

Undergraduate students majoring in Marketing are required to engage in multiple group projects throughout their undergraduate study. The educational value of group learning activities in professional programs is well established, and group projects have become an integral part of university marketing education. The benefits of group projects, however, can only be achieved if students fully engage in such activities. Recent research (Hansen, 2006 and Paswan and Gollockota 2004) has revealed that many university students report negative experiences of group work and this has extended to marketing students (McCorkle, Reardon, Alexander, Kling, Harris and Iyer 1999). According to students, the reasons for negative experiences are multiple but socio-dynamic aspects dominate, for example, peers' lack of commitment to contribute to the group effort.

Both a positive and negative factor in group learning leading to these outcomes has been the element of group diversity. Some researchers in marketing education (Amato and Amato 2005 and Hernandez 2002) have suggested that more diverse student teams in terms of gender and ethnic makeup will produce more positive outcomes of group learning, even when different communication styles existed within a group. This relationship, however, appears to be moderated by group cohesion (Deter-Schmelz, Kennedy and Ramsey 2002). Amato and Amato (2005) also suggest that students need skills to manage personality differences in groups in order to achieve benefits of diversity in skills and backgrounds. Group Cohesion may be more difficult to achieve when students have different working patterns. A recent large-scale UK study, across a number of universities and academic disciplines (Callender, 2008) stressed the detrimental impact of term-time employment on students' academic achievement. The present study examines the extent to which a substantial work commitment is detrimental to marketing students' engagement in the valuable learning opportunity presented by group work.

The study focuses on students' general attitude towards group work, as well as on students' multi-dimensional appraisals of a specific group project as it evolves over a semester. Students' retrospective reflections of their group processes are also examined. Data analysis is carried out at individual level as well as small group level.

Three hypotheses were generated for this study

H1: Students' general attitude towards group work, as well as appraisals of a specific group project will be related to their paid work commitment (more than two days a week assumed to represent the threshold where work starts interfering with academic study).

H2: Prior experience of group work at university (2nd/3rd year versus 1st year students) will mediate the impact of work commitment on attitude and appraisals towards such activities, with first year students expected to be more affected on the ground that they are still adjusting to university study at the same time as coping with paid employment.

H3: Students who undertake a group project in a small group where at least half of the group members have substantial work commitments will display more negative attitudes and appraisals of that project than those who carry out the project in a group where at least half of the group members are not engaged in paid work outside study.

Methodology

Participants were 222 marketing students (n=81 enrolled in a 1st year unit and n=141 enrolled in a 2nd or 3rd year unit). Each unit required students to complete a group assignment in small self-selected groups of 3-4 students over a period of 8 weeks. In each unit, students received a group mark for the group work, which formed 20-25% of their individual mark for the whole marketing unit.

Procedure and research instruments

Participants completed a matched questionnaire in class, at the beginning and end of the group project. The beginning questionnaire elicited information on their weekly paid work commitments (5 categories, ranging from none to less than 5 hours, between 5-15 hours, between 15 and 30 hours, and above 30 hours). On both occasions, students rated their multi-dimensional appraisals of their current specific group assignment (SAGA instrument), their general views about mixing international and local students for group assignments, as well as their general attitude towards group work.

The contextualised version of the SAGA (Students' Appraisals of a Group Assignment) instrument (Volet, 2001), containing six sub-scales (5 items each) is designed for repeated administration. It is used to measure students' appraisals of Cognitive benefits, Motivating influence, Affect, Management, Group assessment and Interpersonal aspects of their current group project. Sample items are: 'Interacting with peers for this group assignment will enrich my knowledge and understanding' (Cognitive Benefits); 'Group assessment is unacceptable for this assignment' (Group Assessment). Items are rated on a 4-point Likert scale from 1=Strongly disagree to 4=Strongly agree. The psychometric properties of the 6 sub-scales were established using Rasch analysis and a software program called RUMM 2020 (Andrich, Sheridan & Luo, 2005). The tests of fit of the model showed satisfactory targeting of the responding population and separation indexes (similar to Cronbach alpha), ranging from 0.65 to 0.76.

The 5-item Cultural mix scale, also developed and analysed according to principles of Rasch measurement is used to assess students' general view about completing assignments in groups comprising both international and local students. Its psychometric properties were good with a separation index of 0.85. Finally, the measure of general attitude towards group work was a single-item scale (1 Not positive to 4 Very positive).

Only data from groups for which we had a full data set (survey responses were received from every member) was retained for the group analyses. The group analyses, therefore,

involved comparing the attitudes and appraisals over the duration of the group assignment of 17 students (from 4 groups where at least half of their members worked more than two days a week) with those of 21 students (from 5 groups where at least half of their members did not have paid employment).

Results

Work patterns were collapsed into three categories, with 74 students (33%) working over two days a week, 80 (35.5%) working between 1-15 hours, and 71 (31.5%) who did not have any paid work commitments. The distribution was relatively even across year levels. Table 1 shows the means, standard deviations overall by work category on the two occasions.

There was substantial support for **H1** (Students' general attitude towards group work, as well as appraisals of a specific group project will be related to their paid work commitment). While students general attitude towards group work was not related to their work patterns at the beginning of the group assignment it was strongly the case at the end ($p < .01$) with all results in the expected direction. Furthermore, four of the six appraisals of the specific group assignment were significantly related to students' work commitments on both occasions (Cognitive benefits, $p < .001$, $p < .05$; Motivating influence, $p < .05$, $p < .01$; Affect, $p < .001$, $p < .01$; and Management $p < .01$, $p < .05$). Students' general attitude towards mixing local and international students for group assignments was also highly significantly related to students' work patterns on both occasions ($p < .001$; $p < .001$) suggesting that students expected to experience increased challenges if they undertook group assignments in diverse groups. Students' concerns in that regard appear inconsistent with recent research evidence that students who completed their assignment in culturally diverse groups report greater satisfaction with the role of their group and greater social cohesion, than their counterparts who stayed in homogenous groups (Kimmel & Volet, submitted).

There was no support for **H2** (Prior experience of group work at university, [2nd/3rd year versus 1st year students] will mediate the impact of work commitment on attitude and appraisals towards such activities, with first year students expected to be more affected on the ground that they are still adjusting to university study at the same time as coping with paid employment). In fact, a significant opposite pattern emerged. For 1st year students, amount of paid work was not related to any attitude or appraisal measures, except Cultural mix, with on both occasions students heavily engaged in paid work showing a more negative attitude towards mixing ($p < .05$; $p < .01$). In contrast, 2nd/3rd year students' work patterns were significantly related to all attitude and appraisal measures on both occasions (except Interpersonal).

Finally, strong support was found for **H3** (Students who undertake a group project in a small group where at least half of the group members have substantial work commitments will display more negative attitudes and appraisals of that project than those who carry out the project in a group where at least half of the group members are not engaged in paid work outside study). Mixed between-within subjects ANOVA was carried out for peers working pattern (high versus low) by time for general attitude towards group work and the six appraisals of the group assignment. There was no interaction effect overall, but main effects for peers working pattern ($p < .01$) and for time ($p < .01$) overall. Univariate tests revealed two interaction effects, one for Affect ($p < .05$) and one for Group assessment ($p < .05$), with on both occasions students in low-working groups not changing their attitudes or appraisals over time, and those in the high-working groups displaying significantly more negative appraisals at the end. Table

1 shows all the group differences within occasions and the significant patterns of change over time for each group.

Table 1: Appraisals of a specific group assignment, general attitude towards group work and towards cultural mix by peers working pattern and over time

<i>Measure</i>	Pre-task	Post-task	Change
Peers working pattern	Mean (<i>SD</i>)	Mean (<i>SD</i>)	p
<i>SAGA measures</i>			
<i>Cognitive benefits</i>			
High working	1.23 (1.92)	0.38 (2.24)	* ↓
Low-working	2.85 (1.80)*	2.05 (1.89)*	ns
<i>Motivating influence</i>			
High working	0.39 (1.37)	-0.66 (1.71)	** ↓
Low-working	1.22 (1.31) ^m	0.94 (1.45)**	ns
<i>Affect</i>			
High working	0.61 (1.98)	-0.60 (2.42)	** ↓
Low-working	2.32 (1.34)**	2.22 (2.89)***	ns
<i>Interpersonal</i>			
High working	0.07 (0.61)	0.19 (1.65)	ns
Low-working	0.83 (1.38)*	1.46 (1.38)*	ns
<i>Management</i>			
High working	0.06 (1.16)	-0.63 (1.00)	** ↓
Low-working	0.34 (0.81)	0.44 (1.41)**	ns
<i>Group Assessment</i>			
High working	0.63 (1.06)	-0.47 (1.74)	** ↓
Low-working	1.87 (1.38)**	1.70 (1.60)***	ns
<i>General attitude to:</i>			
<i>Group work</i>			
High working	2.24 (0.90)	1.88 (0.80)	* ↓
Low-working	2.86 (0.57)	2.95 (0.74)***	ns
<i>Cultural mix</i>			
High working	0.36 (1.42)	-0.63 (2.39)	ns
Low-working	2.56 (1.79)**	2.17 (1.95)***	ns

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$, ^m=marginal, $p < .10$.

Working: $N = 17$; Low-working $N = 21$

Conclusion

The results suggest the need for group learning as pedagogy to be carefully considered by marketing educators, as it appears that students' learning in groups is adversely affected by substantial hours of part time employment. It seems that this becomes more of a problem in second and third year as the demands for student projects, for example, a market research study by a group of students become greater.

One way of accommodating the issue might be for marketing educators to allocate some class time for the group activities. Two-hour formats of workshops may enhance the quality of group work processes and outcomes, as teachers would have opportunities to provide support to individual groups. The use of online learning tools such as group manager in Blackboard may also help students communicate and exchange information such as documents more readily than is traditionally the case. How groups cope when a

large proportion of their members are constrained by their members' work commitment is not well known.

One limitation of the present study is the fact that the group analyses could only be conducted with those groups where all members had completed both the beginning and end questionnaires. This would have excluded groups that disintegrated since under such circumstances probably only a few members completed the end questionnaire. The experience of such groups needs to be understood as well. There is clearly a need for in-depth qualitative research on the challenges of group learning in marketing education, in particular when many students work and study at the same time. The literature on the dynamics of group learning has stressed the significance of group cohesion (Deter-Schemlitz et al, 2002) and of students' capacity for managing personality differences (e.g. Amato & Amato, 2004) but less is known about how students manage, individually and perhaps sometimes collectively, the challenges of external constraints to group learning. How groups successfully negotiate the high work commitments of their members in order to achieve positive outcomes needs to be better understood in order for teachers to provide the best support to student groups.

Overall, the results of our research confirm the larger study in the UK by Callender (2008), who noted the negative impact across the board of students engaging in substantial amounts of part-time work. The present study goes even further by demonstrating that students who have high work commitments also display more negative attitudes towards working in culturally mixed groups than those who have low work commitments. This finding is of serious concern for multicultural societies and work environments that feature cultural diversity. Since a capacity for productive teamwork is well recognised by employers as a critical graduate attribute, educators should not consider giving up on group work. It is these authors' belief that if they did, the quality of students' higher education, and in particular the quality of professional preparation for the workplace, could be compromised. Addressing this issue at the educational level, however, can only be limited. The problem of students having high part-time work commitments while they are studying full-time is a broader issue that needs to be tackled at the political level.

Callender (2008) noted that many of the students in his study reported working in low paid jobs, often below the hourly rate for the minimum wage, which raises an equity issue. These students specified that they were working as a means of paying off their student loans, since the government had not maintained financial support. Callender pointed to the fact that students with high work commitments typically came from less wealthy families, so it is possible that present government policy of a minimal student support may entrench disadvantage by forcing students from poorer backgrounds to work more and achieve less because they have to work to support themselves. He suggests that there may well be a trade off between the financial support provided to students and the quality of graduates in the future. The situation may be similar in other countries, like Australia and New Zealand. While our research did not address this issue, this is an important avenue for future research on a much larger national study.

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