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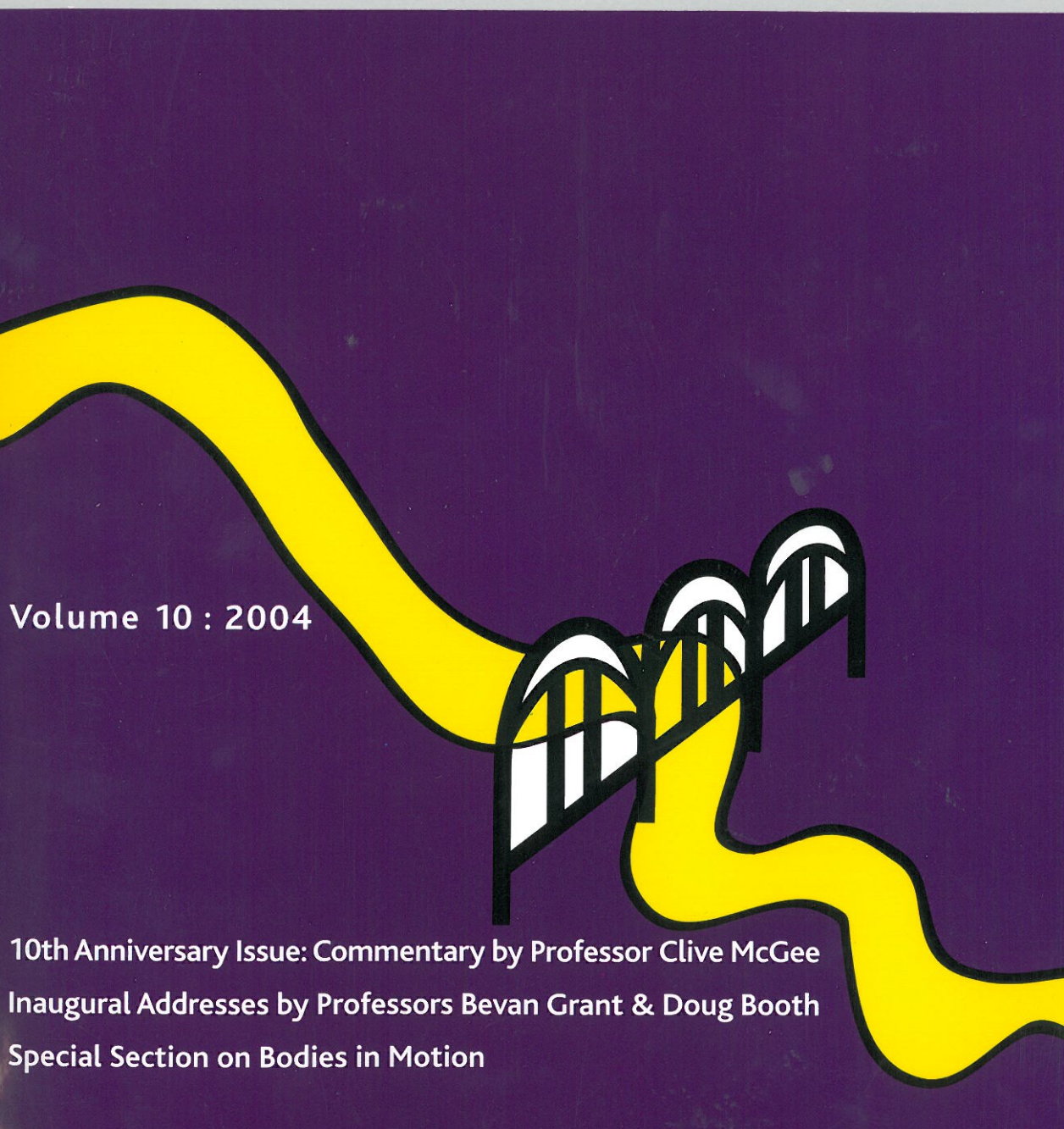

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JUGGLING PRIORITIES: A COMPARISON OF YOUNG AND MATURE AGE STUDENTS' USE OF TIME DURING THEIR FIRST SEMESTER OF TEACHER EDUCATION

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ABSTRACT *In recent years the profile of students enrolling in tertiary education has changed. Where the majority of students were once straight from school, single and not dependent on employment outside college, a much larger segment of the student population now comprises students of diverse ages with a variety of life experiences, dependent families and reliance on paid employment. Students no longer have the luxury of being able to dedicate their time to study relatively free of other obligations. This article reports a study designed to find out how a random sample of students allocated their time during their first semester of study. The manner in which younger and mature age students allocated their time is compared and issues associated with students' time allocation are discussed. The older students reported better time management skills than the younger students and their grades were significantly higher. The findings of this study have implications for developing and delivering programmes of study to best meet the needs of an increasingly diverse student population.*

INTRODUCTION

Over the last 15 years, the profile of students entering the Christchurch College of Education School of Primary Teacher Education has changed. No longer are our first year students young, single, financially unburdened and fresh-faced but rather a diverse range of individuals, many bringing with them maturity, a multitude of life experiences and a more realistic appreciation of the demands of school teaching in the 21st century. In addition to their wealth of life experiences, however, they are frequently encumbered with children, mortgages, employment in the workforce and a multitude of other commitments.

Teacher education courses traditionally have been designed for a clientele of school-leavers. To a greater or lesser extent, higher education institutions are still geared to the needs of students without family, financial and other commitments (Trueman & Hartley, 1996), even though the demographics of those in tertiary education have changed (Jefferies, 1997; Baxter & Britton, 2001). Diversity in culture, educational backgrounds, age, ability and responsibilities characterises today's students, and this diversity impacts on every aspect of college life. We increasingly hear from students at the college of the difficulties resulting from scheduled and inflexible course times, too many assignments, teaching approaches developed for young learners and the never-ending stress resulting from the conflicting demands of college, children, work, partners and a host of other demands. In addition, while some of our students have a tendency to blame these factors for late assignments, absences and similar barriers to successful completion

of requirements, others attribute their inability to meet college requirements simply to poor time management.

A directive from college management to cut back on assignments so as to lessen demands on our changing student population has been resisted by lecturers, who see the quality of their courses undermined. This directive provided the impetus for this study, as without real data it is difficult to pinpoint exactly how much time our students are actually spending on college requirements and if this time is indeed excessive. From my own observations and reading of the literature, I suspected that, overall, students do not spend inordinate amounts of time on college-related tasks but that they would differ along age lines (younger and mature; defined below) in the amount of time they allocate to these and other activities, such as socialising, and that this time allocation would be evident in their achievement scores.

I also considered that comparing how younger students and mature age students allocate their time in their first semester of study would highlight how each group prioritises time and whether mature age students are disadvantaged in the time they can give to study. Exploring time allocation and related issues also would provide much-needed information to inform debate and decisions on whether changes in college programme structure and/or delivery are necessary to increase study-related success for students with multi-faceted demands on their time. I further felt a New Zealand study would provide local data and contribute to the cross-national perspectives arising out of time-allocation studies conducted with students in other countries (e.g., Britton & Tesser, 1991; Macan, Shahani, Dipboye & Phillips, 1990; Trueman & Hartley, 1996).

Although this paper focuses on the differences between young and mature age students in terms of allocation of time and academic achievement, I acknowledge that study-related success is, of course, dependent on and inter-related with many other factors, both micro and macro, than time engaged in study. For example, at the macro level, educational reforms over the last 15 years have put pressure on teacher education institutions to recruit and retain students in the face of rising fees and bad press for the profession. Consequently, many students arrive already burdened with mortgages yet forced to take out student loans and work substantial numbers of hours a week in paid employment to meet financial obligations. The demise of studentships, bonds and minimal fees that previously served as major incentives to prospective teachers have resulted in a simultaneous demise in applicants, further compounded by media attention to the daily challenges encountered in professions involving the care of young people (Cushman, 2001). Also, institutions no longer have the luxury of selecting only those students most likely to succeed but, rather, must also accommodate students with multifarious commitments and varying degrees of aptitude to study (Education Policy Response Group, 1999). Moreover, according to the Education Policy Response Group (1999), competition between an increasing number of providers and unprecedented growth in modes of delivery and programme structure mean that tertiary education institutions cannot be lax in keeping abreast of innovations that may maximise the attractiveness and durability of their courses. In regard to other factors that may impact on students' time allocation, comparisons based on gender, accommodation, living arrangements, care-giving responsibilities and highest qualification upon entry will be reported in papers currently in progress.

REVIEW OF RELATED LITERATURE

Students' time is a limited resource, and students' management of time has implications for their success in tertiary institutions. Students who arrive at tertiary institutions with inaccurate expectations of work requirements can experience difficulty in allocating time for study. Two Australian studies conducted over eight university campuses found most students underestimate the difficulty and amount of tertiary study and the time required (McInnis, James & Hartley, 2000; Watson & Johnson, 2003). Poor time management attitudes and skills have been linked to poor academic performance, low productivity and high stress levels (Burt & Kemp, 1994; Lahmers & Zulauf, 2000). Proper allotment of study time is therefore pivotal to good performance and, furthermore, may be linked to higher achievement (Britton & Tesser, 1991).

For many students, the first semester experience appears to be critical (Allen, 1993; McInnis, 2001). The patterns of learning that affect students' ability to persist and achieve are firmly established in the first few months of tertiary education (McInnis et al., 2000). McInnis and James (1995) found students are most likely to defer study or drop out in the first year, particularly the first semester. For students who make the transition from secondary school, Peel (1996) suggests that adjusting to different learning contexts and modes of assessment, different perspectives on discipline-based knowledge and different pedagogies is not easy. McInnis and James (1995) found school-leavers to be less certain of their roles, less diligent in their study habits and less academically oriented than older students. Tait and Entwhistle (1996) attribute this situation to the inability of many students to adopt appropriate study skills and an appropriate approach to learning, while McInnis et al. (2000) argue that secondary schools are a poor training ground for university life. Kantanis (2002) similarly claims that the tertiary institution is challenging in terms of size, diverse community, competitive environment, learning and teaching styles, procedures, institutional practices and culture. The study environment is less regulated than the secondary school, and learning to manage time within it provides a major challenge for many young people.

Studies by Noone and Cartwright (1998) and Tinto (1993) further suggest that students' survival in this transition year depends on successful mediation of many factors. While these writers consider the major adjustments during this period to centre on acclimatisation to the academic demands of tertiary study, they also emphasise the adjustments required to what may be viewed as a social testing ground for school-leavers. The social nature of the tertiary environment can contribute positively to academic performance but it can also undermine it (McInnis et al., 2000). A smooth transition to tertiary education and academic achievement depends, therefore, on successfully negotiating the social transition. Kantanis (2002) defines social transition as the interactions with people that lead to friendships and the development of support networks as well as the comfort level experienced in the physical environment.

While school-leavers are the target group for most study guides and orientation experiences, fewer of our first year students can now be classified as school-leavers. In line with international trends (McInnis et al., 2000), increasing numbers of tertiary students at the Christchurch College of Education fit the label 'mature age'. This nomenclature varies from country to country. In the UK, students over age 21 are called 'mature students'. In Australia, the term 'mature-aged' refers to those over the age of 25, and in the USA 'non-traditional' or 'adult' refers to those over 22 (Trueman & Hartley, 1996). In New Zealand, mature

students are defined by the student-funding regimes as those over 25. In the current study, however, students under 21 are defined as 'young', and those 21 or over as mature age, on the premise that 20 to 21 years of age is commonly viewed in New Zealand as the legal age for assuming most adult responsibilities.

Although the only commonality 'mature age students' can be guaranteed to have is that they are older, they are, by virtue of their age, more likely than young students to have partners, children, employment, financial obligations and many other responsibilities. Tertiary study for an increasing number of our diverse student population is a juggling act. The advent of unforeseen circumstances such as a sick child means the time management strategies needed to keep all the balls in the air are likely to be undermined, leading to excessive stress (Jarvis, 2001; Scott, Burns & Cooney, 1996). In Wilson's (1997) study of 70 mature age students, factors such as age difference, isolation from the social life of the university, different kinds of motivations, the nature of institutional support and relationships with lecturers variously influenced the quality and degree of adjustment to tertiary study. For mature age students of different cultural and ethnic backgrounds, these factors may be further compounded by cultural barriers, family commitments, attitudes towards higher education and low self-esteem (Fa'afoi & Fletcher, 2002; Jefferies, 1997). Not adequately understanding or planning for the nature of tertiary study, in association with the still common perception in tertiary institutions that students are people with no or few other major commitments, can heighten the burden of responsibility on individual mature age students (Blaxter & Tight, 1994; Britton & Baxter, 1999).

A number of studies (e.g., Blaxter & Tight, 1994; Hayes, King & Richardson, 1997; Macan et al., 1990; Trueman & Hartley, 1996) have examined the differences in academic performance between mature age students and young students. While there is some evidence that increasing age is positively associated with academic performance (Hoskins, Newstead & Dennis, 1997; Simonte, 1997), most of the studies found little difference. It could be postulated, however, that mature age students have more demands to cope with and have developed better time management skills that generalise to a tertiary context. Blaxter and Tight (1994) and Etcheverry, Clifton and Roberts (1993) offer support for this premise. They found that while time management is a critical skill for all students, mature age students need more *refined* time management skills than younger students. What they do achieve, they accomplish in smaller segments of well-planned time. Macan et al. (1990) and Richardson (1994) also found that not only do most mature age students display better study habits but they tend to engage in 'deeper' learning than young students. The authors explain that this 'deep' approach entails a search for meaning, unlike the 'surface' approach, where reproduction or recitation of material is the focus. This 'deep' approach appears to be facilitated by the life skills of planning and decision-making that are an inherent part of adult life (Richardson, 1994). Overall, most studies in this area agree that mature age students typically have high expectations of success, high levels of motivation, definite goals and a strong focus (see, in particular, Constable, 1997; George & Maguire, 1998; Oliver, 2003), and that these expectations fuel their commitment to managing their time in a way that will allow them to succeed.

The reasons why mature age students take up study highlight this commitment. Discussions with mature age students at Monash University in Australia (Kantanis, 2002) found that, for these students, engaging in study is often the realisation of a long-anticipated goal. The decision may have involved a major change from, or break with, their past lives and identities (Baxter & Britton,

2001). Both these studies found the personal investment for mature age students in their entry to tertiary education is high and that high motivation levels accompany this investment. Despite high motivation, however, mature age students are often more anxious than young students about their ability to cope academically, especially if enrolment follows a break from education (Kantanis, 2002). Constable (1997) found mature age students initially lack confidence and often need help with technology but that, as courses progress, confidence increases and they become more directed in their approach.

The majority of studies referred to here rely on surveys, interviews, analysis of narratives and ratings on Likert-type time management scales to determine students' time allocation to certain activities. The use of the relatively precise time-use data technique to determine time allocation used within the present study was seen to provide a more precise measure and to have the potential for easier and more accurate replication within other institutions. Statistics New Zealand (1999) validates the employment of time-use data for providing information on the living patterns of specific population groups. With these considerations in mind, the decision to conduct a time allocation study with Year 1 students at the Christchurch College of Education promised to provide the most accurate and useful data through which one could gain an insight into the time management skills of the college's student population.

This study reports on the number of hours that mature age students compared to young students allocated to 13 different categories of daily activity. The resultant profiles provide an insight into how the two groups of students manage the various demands on their time. A further comparison to determine whether allocation of time across the age groups was related to educational outcomes, in this case, grade point averages, is also reported.

METHOD

From the 190 students who had confirmed their enrolment in the School of Primary Teacher Education in late January 2003, 100 were randomly selected to participate in the Time Allocation Research Project. Ten days before the first day of orientation at the college, these 100 students were mailed a letter inviting them to participate. Accompanying the letter was an information sheet regarding the study, a consent form and a demographic data sheet. Demographic information included gender, age, country of birth, cultural group, highest qualification, nature of living arrangements (nine options), type of accommodation (six options), main activity outside college and work status. Students were asked to return their consent and demographic data forms in the freepost envelope provided.

The 100 students were invited to an initial meeting during the first week of orientation where the reason for the study was discussed and student responsibilities detailed. Students were given the opportunity to withdraw from the study. As a result of this meeting, 50 students decided to participate, and a second meeting was held four days before the first day of lectures (3 March 2003), the starting day for time allocation recording. At this meeting, students were provided with a diary, data-recording sheets for 18 weeks, freepost envelopes and further information regarding the contact details of the seven lecturers in the research team. To keep students engaged in the study, the research team considered it important to meet with them on a regular basis. Each student consequently signed up for a suitable time to meet fortnightly with one of the seven lecturers. Students could select from a range of times centred on student and

lecturer timetables. At the fortnightly meeting, students submitted completed forms and raised any concerns (e.g., clarification of coding, confidentiality).

Students used a stylised time-activity matrix for data recording. Time-use data collection involves recording information at specified time intervals so that the amount of time spent on a given activity can be analysed. This method was selected because completion is not onerous and activity matrices score a medium ranking on all input and output criteria when compared with other methods of time use data collection (Statistics New Zealand, 1999). Activities were measured in 30-minute blocks, 24 hours a day, seven days a week for 18 weeks. Students were supplied with information sheets on coding and shown how to make decisions regarding coding and recording. Codes were based on those in the New Zealand Department of Statistics Timeline Study (Statistics New Zealand, 1999), with some modification to reflect the lifestyles of a diverse student population. The recording sheets required no actual writing; students were simply required to mark vertically through the appropriate coding symbol on the data collection sheet, using the 13 codes listed at the bottom of the sheet (see Figure 1).

Participant Code: _____ Research Lecturer: _____

	Monday	**Tuesday**	**Wednesday**
6.00 am	ACDEFHILOPRSU	ACDEFHILOPRSU	ACDEFHILOPRSU
6.30 am	ACDEFHILOPRSU	ACDEFHILOPRSU	ACDEFHILOPRSU
7.00 am	ACDEFHILOPRSU	ACDEFHILOPRSU	ACDEFHILOPRSU
7.30 am	ACDEFHILOPRSU	ACDEFHILOPRSU	ACDEFHILOPRSU
8.00 am	ACDEFHILOPRSU	ACDEFHILOPRSU	ACDEFHILOPRSU
8.30 am	ACDEFHILOPRSU	ACDEFHILOPRSU	ACDEFHILOPRSU
9.00 am	ACDEFHILOPRSU	ACDEFHILOPRSU	ACDEFHILOPRSU
9.30 am	ACDEFHILOPRSU	ACDEFHILOPRSU	ACDEFHILOPRSU
10.00 am	ACDEFHILOPRSU	ACDEFHILOPRSU	ACDEFHILOPRSU

Key:

A–Alternative study	C–College time	D–Domestic work	E–Entertainment & social
F–Family care	H–Homework study	I – Individual time	L–Leisure, sport & culture
O–Own care	P–Paid work	R–Religious activity	S–Sleep
U–Unpaid work			

Figure 1. Form Used by Students to Allocate Time to Daily Activities

Emphasis was placed throughout the implementation phase on the importance and value of the study. As the college research funding did not allow money for incentives, students could not be recompensed. However, the provision of a one-year diary, photocopy cards, fortnightly confectionery, a celebratory lunch and certificates on completion of the study served to acknowledge the appreciation of the research team.

The data (i.e., the coding symbols) from each participant were collated according to the 30-minute time slots of the form, and fortnightly and total means for each coding symbol were calculated. The use of means rather than totals allowed contributed data by participants who did not complete the study to be included in the analysis. The demographic data for each participant then allowed time data to be analysed with reference to the demographic categories. Analysis of

variance was used to test whether differences in time allocation between the younger and older groups of students were significant. Significance was set at the .05 level.

Hours allocated on a weekly basis to each of the 13 activities were calculated so that comparisons between weeks when students were in class, on teaching practice in schools, in on-site intensives and on study break could be made. Grade point averages (GPAs) were also calculated for each student by assigning a numerical value from 1 to 10 to each letter grade achieved and averaging these results over the nine courses undertaken in the first semester. As two of the courses were graded pass/fail they were then assigned fairly conservative numerical values that did not overly skew the existing GPAs, and all papers were averaged to give each participant a GPA that was a value out of 10. However, this caused a large ceiling effect, possibly because those who dropped out of the study and therefore did not submit transcripts tended to have lower GPAs. To remove this effect and force a normal distribution, 5 was subtracted from each GPA score, giving participants a GPA out of 5.

RESULTS

The 50 students who agreed to participate in the study represented slightly more than 25 per cent of the first year intake and a 50 per cent consent response from those initially approached. Of the 50 students who started the 18 weeks of data collection, 28 completed the full period. Because of the small number of study participants, it would be imprudent to make broad generalisations. However, given that the numbers in each gender and age category are representative of current groupings at the college, the results provide useful issues for consideration and further research.

Figure 2 shows the proportions of males and females among the participating students, along with a breakdown of their ages. Thirty-nine of the students were women and 11 were men, which is a typical proportional representation of a Year 1 intake in the School of Primary Teacher Education. While the largest number of students fell in the 18–20 year age group, 46 per cent of Year 1 students were over 25 years of age. The spread of males tended to be found across the younger age groups, whereas females ranged in age from 17 to over 46. Because of the small number of males in each age group, it was not feasible to break down the time allocation results by gender, although Macan et al. (1990) found time management behaviours correlated significantly with both gender and age, with female and older students performing better.

Table 1 shows how the average young student (defined above, and in line with international terminology, as under 21 years of age) in our sample compared with the average mature age student in terms of time allocation across the 13 activity categories. The mature age student was more likely to miss classes but to compensate for this by spending significantly more time engaged in homework-type activities, $F\ (1,\ 46) = 4.68$, $p < .05$. He or she also allocated more hours to domestic work, $F\ (1, 46) = 7.74$, $p < .05$, and family care, $F\ (1, 46) = 23.57$, $p < .05$. The younger student also spent more time socialising, $F\ (1, 46) = 8.85$, $p < .05$.

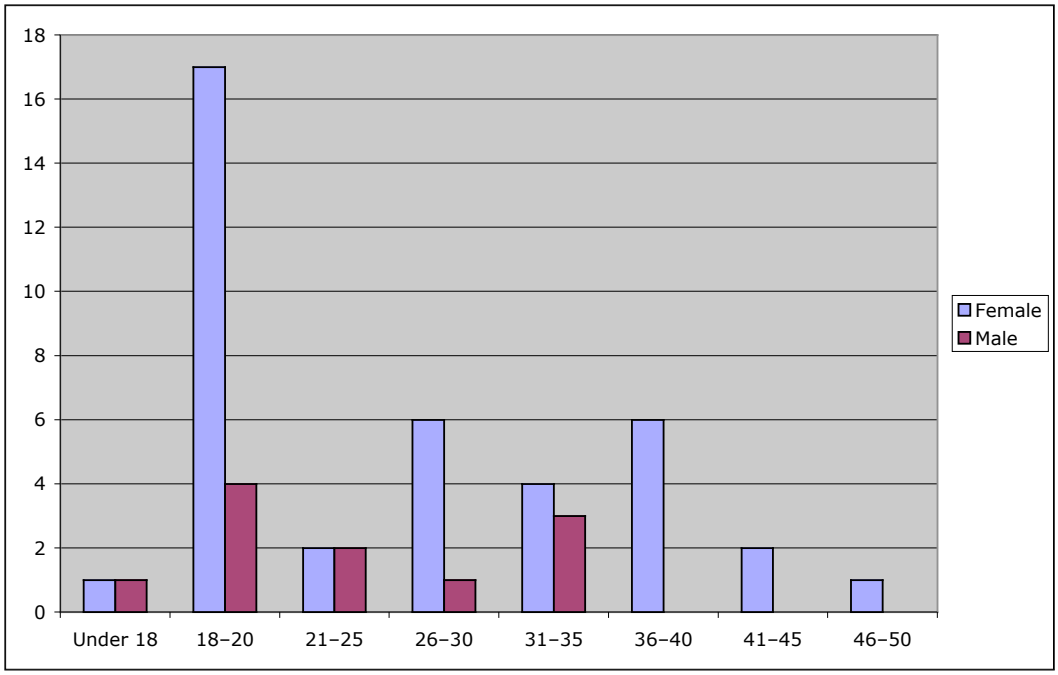

Figure 2. Gender and Age Distribution of Year 1 Students

Table 1. Students' Time Allocation over a One-week Period

Coding category	Young student mean ($N = 23$)	Mature student mean ($N = 27$)
Alternative study	0.285	0.225
College time	21.26	18.465
Domestic work	3.29*	8.83*
Entertainment and social	15.815*	8.79*
Family care	3.82*	17.26*
Homework type study	11.915*	16.635*
Individual time	12.46	10.83
Sport, leisure and culture	3.235	2.8
Own care	17.89	11.635
Paid work	9.58	8.325
Religious activity	0.935	0.49
Sleep	59.485	55.84
Unpaid work	0.56	0.44

* Difference significant at .05 level

In terms of the emphasis of this present article, the mean time allocated to homework-type study ($M = 11.92$) by the young student was significantly less than the mean time allocated to this time code ($M = 16.32$) by the mature age student, $F\ (1, 46) = 4.68$, $p < .05$

The data were further broken down into three groups: under 21 years of age (N = 23), 21–30 (N = 11), and over 30 (N =16). The under-21 age group spent an average of 11.92 hours per week on homework type study compared with the 21–30 year olds, who spent an average of 14.19 hours, and the over 30s, who spent 18.56 hours. While there is a notable, but not huge, difference between the first two groups, the over 30 age group spent approximately 4.37 hours more on homework each week over the semester than the other two groups. This equates to the over-30s spending 116.3 more hours on homework in the first semester than the under 21s and 78.6 hours more than the 21–30-year-olds. The differences between the three groups were significant: F (2, 46) = 4.10, $p < .05$.

The mean GPAs for each of the three age groups (under 21s, N = 18; 21–30-year-olds, N = 4; and 31 and over, N = 14) were 3.25, 3.00 and 4.12 respectively. Once again, the results for the three groups were significant: F (2, 33) = 8.72, $p <$ .05. However, because of the small number in the middle group, the 'dip effect' evident here cannot be seen as reliable and more research is needed to confirm this finding.

DISCUSSION

The finding that mature age students tended to spend significantly more time in homework-type study than the younger students finds resonance in research by Blaxter and Tight (1994), George and Maguire (1998) and Oliver (2003). They all found that the high motivational levels of mature age students translate into sound study habits and substantial time engaged in homework-type study. The mature age students in these studies quickly settled into patterns reflecting a strong work ethic. The results also support the findings of Hoskins et al. (1997) and Simonte (1997) in that the higher the number of hours allocated to homework type activity, the better the academic results. Moreover, a Canadian study of 7,000 students (Anderson, Benjamin & Fuss, 1994) found a positive correlation between mature age and higher grades.

In the present study, the under-21 age group's allocation of time to study was well below the 1:1 (class time: study time) seen by the college to be the minimum time required for the average student to fulfil college requirements. These results could be seen to support research by McInnis et al. (2000) that younger students underestimate the amount and difficulty of work required and do not allocate time to study as efficaciously as mature students. In addition, the finding that no group of students allocated inordinate amounts of time to college-related tasks means that this argument cannot be used to justify fewer course requirements.

Time allocated to the various activities over the period of a typical week showed major differences between the young and mature age students. The fact that the mature age students missed more college classes than the young students reinforces research by Jarvis (2001) and Wilson (1997) who showed that, despite well-developed time management skills, unforeseen circumstances such as sick children do undermine study commitments.

The tendency of mature age students to live 'imbalanced' lives during tertiary studies was demonstrated by the current student sample. The far greater number of hours allocated to domestic work and family care by mature age students supports Griffith's (2002) and Wilson's (1997) claims that tertiary study witnesses extra rather than redistributed domestic loadings, to the detriment of 'time for oneself'. In the current study, mature age students spent one-half the

time in social activities that the young students did and six hours less on their own care. That they were prepared to compromise their social and own time to this extent supports the findings of Baxter and Britton (2001) and Kantanis (2002), who found that motivational factors such as the realisation of a long-anticipated goal or major life change go hand in hand with a high personal investment in study. For the mature students, the art of 'juggling' time seemed an imperative.

Because mature age students are more likely than young students to have made major sacrifices in terms of relationships and income to enrol in tertiary education, it is likely their decision is well informed and the issue of time management carefully considered. In contrast, young students appear to take a more ad hoc approach, knowing that their more flexible lifestyle can accommodate last-minute assignment preparation if necessary. The fact that the mature age students spent more time on college-related tasks than the young students right from the beginning is not surprising. What is perhaps of more import is that the significant difference between the age groups in hours spent on a weekly basis cannot be accounted for by the older students spending time beyond college expectations on study-related activities. Their time expenditure was generally closely aligned to those expectations. Rather, the younger students' time allocation was below that of college expectations, which supports the findings of Peel (1996) and Kantanis (2002) regarding the challenges facing school-leavers. That this expectation is not explicitly drawn to students' attention at the time of enrolment or orientation is a factor that I believe needs to be addressed so that students can make well-informed decisions regarding their ability to meet expectations. Also, as alluded to by McInnis et al. (2000), it could be advisable for secondary schools to take a more active role in preparing students for tertiary study, given the number of school-leavers who currently make this choice.

However, before I embark on a discussion of possible strategies tertiary institutions might employ to lessen the stress of the juggling act, it needs to be pointed out that the establishment of a market economy for higher education in the last 15 years must also be seen as a major contributor to the predicament in which many tertiary students now find themselves. The move from a system of tertiary education characterised by low fees and relatively generous student allowances to substantially higher fees, means-tested allowances and a government-funded loan scheme has to be seen as a crucial player, as witnessed in student demonstrations and protests in recent years. The need for part-time employment, which is seen in this study to average more than 8 hours per week, alongside full-time study, results in less time for family, less time for college commitments and minimal opportunity for a balanced lifestyle. This current scheme discriminates against mature students and particularly penalises Maori and women (Peters, 1997). While there is a dire need for more Maori teachers, the neo-liberal agenda of the last 15 years has only served to further discriminate against students from disadvantaged socio-economic backgrounds, affecting their participation in tertiary education and causing financial hardship.

Despite this more salient aspect, much of the recent research on first year students in higher education has pointed to a need for tertiary institutions to modify practices and procedures to more closely meet the needs of mature age students. While acknowledging that mature age students are more heavily penalised in the current economic climate, this study supports previous findings that young students are perhaps the more problematic group in terms of their chances of tertiary academic success (McInnis et al., 1995). This study also supports research (Long, Carpenter & Hayden, 1995) suggesting that school-

leavers need to delay enrolment at tertiary institutions for at least a year to gain life experiences removed from the educational environment. Until this is mandatory, however, colleges must work to address the needs of students who are unable to make the transition from high school without a negative impact on either, or both, their social life or academic life. For many young students, the two are inextricably intertwined. As Kantanis (2002) notes, a smooth transition is dependent on successfully accommodating both.

Almost all tertiary institutions begin the academic year with an orientation programme designed to familiarise enrolling students with the academic and social culture. Given the diversity of first year students, the potential of the orientation programme in determining the future success of all students has perhaps been underestimated. Institutions may need to more critically evaluate their orientation programmes to determine if the needs of the various sub-groups of students are being met or whether a more needs-based orientation programme is warranted. As an example, the fact that older students often struggle with technology is well documented (Crotty, 1998; Kantanis, 2002) and could be addressed in a pre-enrolment module. However, results of this study indicate that mature age students do not struggle with the newfound freedom that the tertiary environment might allow some younger students and which may, for this latter group, contribute to an excessively social lifestyle and consequent early attrition.

For younger students, assistance in the development of sound study and time management skills needs to be seen as an integral part of the orientation process. While it is apparent that many orientation programmes do have a study skills component, these sessions are rarely tailored to the needs of different subgroups. Nor, scattered amongst long nights of socialising and other more hedonistic events, are they necessarily timetabled for maximum impact. With more strategic placement and opportunities for re-visitation at critical times, they may be more effective in aiding the development of a studying culture. Furthermore, there is evidence that first year students attending tertiary institutions that identify students struggling with these skills early in the first year, and that address them through a structured programme, experience high levels of success (Lake, 1998).

While the mature age students in this study devoted more time to study than their younger classmates, it needs to be acknowledged that time allocation does not necessarily equate with the best use of time, and that their need for study skills assistance consequently should not be dismissed. Additionally, the allocation of evening and weekend hours to homework may lead to financial or relationship issues. While we encourage our student teachers to address the needs of the whole child in the classroom, we tend to ignore the fact that their own transition to college may be accompanied by much personal upheaval and trauma. Ready access to guidance and counselling services and support groups may enable mature students to discuss transition issues with others experiencing similar issues and to develop social and support networks that have been identified as important for achieving academic success (Crosson, Field, Gallacher & Merrill, 2000; Emmitt, Callaghan, Warren & Postill, 2002).

In addition, institutions cannot assume that policies and practices that work with young students are appropriate for mature age students. More flexibility in both the mode of delivery and mode of assessment are essential if institutions are to avoid disadvantaging mature students. Skills and life experiences need to be acknowledged and accommodated by lecturers and an effort made to build confidence to cope in a competitive academic environment. Despite the divergence

evident among the mature age students in this study, most studies of this age group have come up with the reasonably consistent findings that these people have higher levels of life skills, better time management, highly desirable approaches to study and higher levels of persistence, and that the emotional, and often financial, investment they make in their study means they place a very high premium on it (George & Maguire, 1998; Kantanis, 2002). Nonetheless, a lack of attention to mature age students' needs may undermine this dedication by increasing the pressure on those who have to integrate roles as parents, partners and students and struggle to balance parenting, work and study. Orientation programmes must recognise that while the main issue for young students is fitting into the tertiary environment, for mature students it is fitting the tertiary environment into their lives.

Furthermore, for mature age Māori and Pasifika students, the powerful cultural norms of "whanau" and "whanaungatanga" may further impact on the ability to participate in and adapt to the tertiary environment (Fa'afoi & Fletcher, 2002; Jefferies, 1997). The development of wananga (Māori teacher education providers) has partially addressed this issue but at this time wananga do not enrol the majority of Maori student teachers (Te Puni Kokiri, 2001). Professional development opportunities that enable all higher education lecturers and support staff to have a better understanding of the cultural norms that set Maori apart from other ethnic groups, and which allow for whanau grouping options in course delivery, could only enhance the environment for Maori students.

When considering the disparate age groups, one needs to be wary of the 'one size fits all' assumption and accept that, within the groups, not only cultural and socio-economic factors but also individual qualities such as personality, coping strategies, communication skills, intelligence, learning style, academic background, maturity, flexibility, perseverance and commitment all play a significant part in the transition experience. Considering age in isolation from other influential factors belies the complexity of the issue. I would suggest that further research is needed to explore why some students facing a multitude of conflicting demands seem able to cope with both these and their studies while others, seemingly under less pressure, do not cope. There is a need to determine the coping strategies that successful students adopt and to use this information to advantage in the planning of appropriate orientation and course delivery experiences. While the provision of non-traditional modes of delivery and assessment are being used with increasing success (Kantanis, 2002; Lake, 1998; McInnis et al., 2000), more effort must be expended to ensure 'best fit' between students and their programmes. Every student, regardless of age and demographic profile, needs to be provided with comprehensive pre-enrolment information to make an informed decision regarding the realities and expectations of study and with ongoing support throughout their study to help them meet those expectations. Furthermore, until the government responds by increasing the level of the tertiary subsidies to institutions, providing low interest or interest-free loans, more scholarships and easier access to student allowances and tax rebates, it will fall on the not-so-broad shoulders of institutions such as ours to implement both logical and creative measures to ease the stress on our clientele.

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