This study examined the effects of living on- or off-campus on the grades of first-year students at York University (Ontario). A total of 1,848 first-year students were surveyed by mail in February-March 1995, with a response rate of 65 percent. Data were also obtained from administrative records. The survey found that 74 percent of respondents lived with their parents, 15 percent lived in campus dormitories, 3 percent lived with a spouse, 2 percent lived off-campus alone, 3 percent lived off-campus with a friend, and 1 percent lived in temporary housing arrangements. Three percent listed "other" as their residence. The results indicated that students who lived with their spouses scored far higher, and students who lived with their parents scored slightly higher grade point averages than those who lived on-campus, even after controlling for Ontario Academic Credit marks and faculty of enrollment. Students living with their parents reported higher levels of classroom involvement than any other group of students. (Contains 26 references.) (MDM)
PLACE OF RESIDENCE AND FIRST YEAR MARKS

J. PAUL GRAYSON
PLACE OF RESIDENCE AND FIRST YEAR MARKS

J. PAUL GRAYSON
Institute for Social Research

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Foreword

The Institute for Social Research produces four types of articles in its publication series:

• Working papers;
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The following is a working paper.

Acknowledgements

A number of individuals at the ISR contributed to various phases of the research on which the following report is based. In no particular order I would like to thank: Darla Rhyne, David Northrup, John Tibert, Greg Hanson, and Anne Oram. I would also like to thank Bill Bruce for his assistance with name generation and Linda Grayson and Mike Ornstein for helpful comments made on an early draft of the report.
Other Publications on York Students

Racial Origin and Withdrawal from University
  J. Paul Grayson (1996)

Under- and Over- Achievement in First Year
  J. Paul Grayson (1996)

The Retention of First Year Students in Atkinson College: Institutional Failure or Student Choice?
  J. Paul Grayson (1996)

Value Added in Generic Skills Between First and Final Year: A Pilot Project (ISR Working Paper)
  J. Paul Grayson (1996)

Race and First Year Retention on a Canadian Campus

Place of Residence and First Year Marks

The Health of First Year Students

The First Generation at York University

The College-University Linkage: An Examination of the Performance of Transfer Students in the Faculty of Arts at York University
  Stephen Bell (1995)

Globe and Mail Reports, Student Experiences, and Negative Racial Encounters
  J. Paul Grayson (1994)

Comparative First Year Experiences at York University: Science, Arts and Atkinson
  J. Paul Grayson (1994)

A Characterization of Areas of Racial Tension Among First Year Students: A Focus Group Follow-Up to a Large Survey
  J. Paul Grayson (1994)

Race on Campus: Outcomes of the First Year Experience at York University
  J. Paul Grayson (1994)

'Racialization' and Black Student Identity at York University
  J. Paul Grayson with Deanna Williams (1994)
The Social Construction of 'Visible Minority' for Students of Chinese Origin
   J. Paul Grayson with Tammy Chi and Darla Rhyne (1994)

Who Leaves Science? - The First Year Experience at York University
   J. Paul Grayson (1994)

The Characteristics, Needs, and Expectations of Students Entering York University
   J. Paul Grayson (1993)

Gender and Minority Group Differences in Desired Outcomes of Adult Post-Secondary Education: The Student Perspective
   J. Paul Grayson (1993)

Outcomes and Experiences of First Year Science in Two Universities
   J. Paul Grayson (1993)

Improving First Year Science Education in a Commuter University
   J. Paul Grayson (1993)

The Experience of Female and Minority Students in First Year Science
   J. Paul Grayson (1993)

Response Effects: Variations in University Students' Satisfaction by Method of Data Collection
   David A. Northrup and Michael Ornstein (1993)

Student Withdrawals at York University: First and Second Year Students, 1984-85
   Gordon Darroch, David A. Northrup and Mirka Ondrack (1989)
Summary

Research conducted in the United States has shown that students living in residence have greater gains in areas such as intellectual development, and are more likely to stay in university and complete their degrees, than students who live off-campus. While there are some dissenting voices, research has also demonstrated that place of residence has little, if any, impact on marks. In a study of York University, a large commuter university, it is shown that place of residence does affect first year marks; however, students who live at home with parents have higher first year grade point averages than residence students. Part of the explanation for this phenomenon can be found in the fact that despite their place of residence off-campus, students living with their parents, and students living with a spouse, have higher rates of classroom involvement than students living in other arrangements either on- or off-campus. In essence, living off-campus with parents or a spouse does not represent a disadvantage in terms of first year marks.
Introduction

In Canada it is difficult to estimate the numbers of students who live on and off campuses. While at some institutions, such as Mount Allison and Queen’s, residence living in first year is the norm, information on other universities indicates that large numbers of first year students live with their parents. For example, a first year study at the University of Alberta found that two-thirds of students lived at home with their parents (Holdaway and Kelloway, 1987:60). The figures for the University of Manitoba (U of Manitoba, Sept. 1991), the University of Victoria (U of Victoria, 1992), and Dalhousie (Christie, 1988) are 66%, 61%, and 42% respectively. At York University, in 1995, approximately 74% of first year students reported living at home with their parents while only 15% lived on campus. For students living off campus, on average, it took 45 minutes to commute one way to the university.

In data collected at the University of Guelph in 1993 on first year students in seven universities it was found that 56% would be living at home with parents. Interestingly, only 28% specified this as their preferred living arrangement. The most desired living location was on-campus; however, while 36% of students identified on-campus living as their first choice, only 28% actually expected to be in residence on campus.¹

In the United States a great deal of research has been done on the consequences of living on and off campus.² While there are contrary findings, in general, living on or near campus has been found to have a positive impact on desired outcomes of the university experiences. As Pascarella and Terenzini summarize:

Residential living is positively, if modestly, linked to increases in aesthetic, cultural, and intellectual values; a liberalizing of social, political, and religious values and attitudes; increases in self-concept, intellectual orientation, autonomy, and independence; gains in tolerance, empathy, and ability to relate to others; persistence in college; and bachelor’s degree attainment (1991:611).

In part findings such as these can be attributed to the greater degree of involvement

¹ I would like to thank Brian Pettigrew at the University of Guelph for making these data available.

in campus life on the part of residence as compared to commuter students.

Despite positive effects such as these, Pascarella and Terenzini (1980) also found that some residences contribute to intellectual growth more than others. Indeed, the climate in some residences may be inimical to growth and academic achievement. More importantly, a literature review found some studies indicating that residence living has little effect on academic achievement (Bowman and Partin, 1993; Pascarella and Terenzini, 1991:422).

The little research conducted in Canada on the effects of residence living is consistent with studies conducted in the United States. For example, in a survey conducted at the University of Manitoba (U of Manitoba, November 1990), it was found that while 53.4% of first year students in residence were satisfied with their intellectual development since enrolling, the figure for those not in residence was only 41.4%. At Trent University, residence students were more likely than commuter students to highly rate a number of their college experiences (Wong, 1994).

As universities strive to create optimal learning environments for their students, it is important for each institution to know if those living on or off campus are advantaged or disadvantaged in terms of specified outcomes of the university experience. Research into matters such as these may facilitate the development and implementation of institutionally specific policies designed to ameliorate any negative effects of residence location. Consistent with this objective, the current article focuses on the effects of residence location on the first year grades of students at York University.

York University

York University, with approximately 40,000 students, is located on the northern fringe of Metropolitan Toronto. While single and multiple family dwellings can be found to the west and south of the campus, commercial and industrial establishments characterize development to the east. The area to the immediate north of the campus is only partially developed. On average, surveys show that first year students not living on campus spend 1.5 hours commuting to and from the university.

Data Sources

Information on residence location and first year grades was obtained from two sources. The first was a mail survey of 1,848 first year students in all faculties conducted in February and March of 1995 with a response rate of approximately 65%. The second was administrative records, utilized primarily for Ontario Academic Credit marks (OACs) and first year grade point averages (GPAs).
The Impact of Place of Residence

The living arrangements of first year York students are summarized in Graph 1. Overall, the largest single number of students, 74%, live at home with their parents. A further 10% and 5% live in double and single residence rooms respectively. Three percent live with a spouse, 2% off-campus alone, and 3% off-campus with a friend. Of the remaining students, 1% were in temporary living arrangements and 3% listed 'other' as their residence.

Information in Table 1 indicates that places of residence vary considerably with faculty of enrolment. Fine Arts has the fewest number of students (47%) living with parents while administrative studies (82%) has the greatest number living at home. Similarly, both Fine Arts and Glendon College have the greatest number of students living in double and single residences - 36% and 33% respectively. By way of contrast, only 7% of Administrative Studies students report living in residence. The figures for Science, Environmental Studies, and Arts are 12%, 14%, and 10% respectively.

As seen in the upper half of Table 2, average OAC marks and GPAs vary considerably by faculty. For example, the highest OAC marks and GPAs, 87% and 6.9 respectively, are achieved by students in Administrative Studies. The lowest OACs, 76%, are found among Glendon students; however, Science students score the lowest average GPA, 4.7.

Because students in different faculties achieved different average OACs and GPAs, and because faculties vary in the percentage of their students in different living arrangements, it is necessary to control for both OAC marks and faculty of enrolment when assessing the impact of residence location on GPA. For example, students in Administrative Studies have both the highest OAC marks and GPAs. Also, more live at home than students in other faculties. As a result, care must be taken not to attribute the high GPAs of business students to their living at home.
<table>
<thead>
<tr>
<th>Faculty</th>
<th>With Parents</th>
<th>Residence Double</th>
<th>Residence Single</th>
<th>With Spouse</th>
<th>Off-Campus Alone</th>
<th>Off-Campus With Friends</th>
<th>Temporary</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine Arts</td>
<td>47%</td>
<td>30%</td>
<td>6%</td>
<td>4%</td>
<td>3%</td>
<td>5%</td>
<td>1%</td>
<td>4%</td>
<td>100%</td>
</tr>
<tr>
<td>Glendon College</td>
<td>52%</td>
<td>8%</td>
<td>27%</td>
<td>5%</td>
<td>2%</td>
<td>3%</td>
<td>0%</td>
<td>3%</td>
<td>100%</td>
</tr>
<tr>
<td>Science</td>
<td>73%</td>
<td>7%</td>
<td>5%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>1%</td>
<td>4%</td>
<td>99%</td>
</tr>
<tr>
<td>Environmental Studies</td>
<td>80%</td>
<td>10%</td>
<td>4%</td>
<td>1%</td>
<td>3%</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
<td>100%</td>
</tr>
<tr>
<td>Arts</td>
<td>80%</td>
<td>8%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>3%</td>
<td>1%</td>
<td>3%</td>
<td>101%</td>
</tr>
<tr>
<td>Administrative Studies</td>
<td>82%</td>
<td>6%</td>
<td>1%</td>
<td>4%</td>
<td>6%</td>
<td>0%</td>
<td>0%</td>
<td>2%</td>
<td>101%</td>
</tr>
</tbody>
</table>
Table 2: Average OAC Marks and GPA by Faculty and Place of Residence

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Average OAC Marks*</th>
<th>Average GPA**</th>
<th>GPA Adjusted for OAC and Faculty***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Studies</td>
<td>87% (148)</td>
<td>6.9 (152)</td>
<td></td>
</tr>
<tr>
<td>Arts</td>
<td>77% (831)</td>
<td>5.1 (842)</td>
<td></td>
</tr>
<tr>
<td>Environmental Studies</td>
<td>81% (82)</td>
<td>6.0 (88)</td>
<td></td>
</tr>
<tr>
<td>Fine Arts</td>
<td>80% (375)</td>
<td>5.8 (406)</td>
<td></td>
</tr>
<tr>
<td>Glendon</td>
<td>78% (328)</td>
<td>5.2 (362)</td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td>80% (444)</td>
<td>4.7 (475)</td>
<td></td>
</tr>
<tr>
<td>Residence Location</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With Parents</td>
<td>79% (1129)</td>
<td>5.4 (1260)</td>
<td>5.6 (959)</td>
</tr>
<tr>
<td>Residence Double</td>
<td>81% (193)</td>
<td>5.1 (212)</td>
<td>5.4 (167)</td>
</tr>
<tr>
<td>Residence Single</td>
<td>79% (105)</td>
<td>5.5 (125)</td>
<td>5.3 (89)</td>
</tr>
<tr>
<td>With Spouse</td>
<td>78% (29)</td>
<td>6.2 (57)</td>
<td>6.6 (21)</td>
</tr>
<tr>
<td>Off-Campus Alone</td>
<td>79% (34)</td>
<td>5.4 (49)</td>
<td>5.4 (25)</td>
</tr>
<tr>
<td>Off-Campus With Friend(s)</td>
<td>76% (50)</td>
<td>4.6 (58)</td>
<td>5.1 (40)</td>
</tr>
<tr>
<td>Temporary</td>
<td>74% (9)</td>
<td>4.0 (11)</td>
<td>4.4 (9)</td>
</tr>
<tr>
<td>Other</td>
<td>80% (52)</td>
<td>5.4 (57)</td>
<td>5.5 (40)</td>
</tr>
</tbody>
</table>

* Differences for Faculty sig. at .0000 level.
Differences for Residence Location sig. at .0004 level.

** Differences for Faculty and Residence Location sig. at .0000 level.

*** Faculty and Residence Location sig. at .0000 level.
Covariate sig. at .000 level.
Interaction Faculty and Residence Location sig. .161 level.
when in fact they may be a result of students' high OACs and/or their participating in the Administrative Studies program. Control of factors such as these can be achieved through covariate analysis as outlined in the lower portion of Table 2.

From column one of the lower half of the table it can be seen that OAC marks vary by residence location and that differences are statistically significant. For example, the highest OAC marks were achieved by students who would later live in double residences; the lowest by students who would live in temporary accommodation. Similarly, GPAs vary by residence location. As seen from column two, students with the highest scores, 6.2 on average, were living with spouses. The grades of this group may reflect higher age than the majority of first year students, a certain degree of emotional stability as provided by the nuclear family unit, and a greater than average commitment to studies. Students with the lowest GPAs, 4.0, at the time of the survey, were in temporary accommodations.

Once controls are introduced for OAC marks and faculty, it can be seen from the third column in the lower half of Table 2 that the highest GPAs are received by students living with spouses. The average for this group is 6.6. The second highest GPAs, 5.6, are attained by students living at home with parents. Those in 'other' accommodation have GPAs of 5.5. Students living in double residence rooms and off-campus alone each score, on average, 5.4 while students in single residence rooms achieve GPAs of 5.3. Relatively low GPAs are earned by students living off-campus with friends and those in temporary locations -- 5.1 and 4.4 respectively.

While some other research has indicated that residence living has little effect on academic achievement, the important finding of this study is that at York, with relatively long commutes to campus, living with parents in first year does not depress marks. Indeed, net of OAC marks and faculty of enrolment, students living with parents do better than any other group with the exception of students living with spouses.

**Explanation**

In a study of factors contributing to first year marks at York University, it was found that classroom involvement was particularly important (Grayson, 1995). In short, increases in classroom involvement were associated with increased first year marks. In this instance classroom involvement was measured by asking students what percentage of their classes and tutorials/labs/studios they attended, and how many times in the previous month they had visited a campus library. On average, students attended 90% of their lectures (S.D. 19.4), 92% of their tutorials, labs, or studios (S.D. 12.5), and visited a library on campus 8.8 times in the previous month (S.D. 7.8). Z-scores were calculated for each of these variables and then averaged.

Because classroom involvement is a particularly important factor in academic
achievement in the current analysis, the classroom involvement of students living in various residential locations was analysed holding both OAC marks and faculty of enrolment constant. The results of the analysis are summarized in Table 3.

When examining the data in the table, it should be borne in mind that z-scores have a mean of zero and, for all practical purposes, a high score of 3 and a low score of -3. The z-scores for classroom involvement are found in column one of Table 3. The column figures indicate that the highest z-score for classroom involvement, with OAC marks and faculty of enrollment held constant, was for students living at home with parents (.05). Students living with a spouse, with a score of .01, ranked second. This score indicates that students living with a spouse have an average classroom participation rate. Students in all other living locations had lower than average involvement rates. Students in temporary accommodations, with a z-score of -39, had the lowest classroom involvement levels.

Table 3: Classroom Involvement Adjusted for OAC Marks and Faculty

<table>
<thead>
<tr>
<th>Classroom Involvement Adjusted for OACs and Faculty</th>
<th>Number of Percentile Points Below Involvement for Students Living With Parents</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Parents</td>
<td>.05</td>
<td>1149</td>
</tr>
<tr>
<td>With Spouse</td>
<td>.01</td>
<td>2</td>
</tr>
<tr>
<td>Off-Campus Friends</td>
<td>-.11</td>
<td>4</td>
</tr>
<tr>
<td>Off-Campus Alone</td>
<td>-.10</td>
<td>4</td>
</tr>
<tr>
<td>Residence Double</td>
<td>-.17</td>
<td>7</td>
</tr>
<tr>
<td>Residence Single</td>
<td>-.14</td>
<td>6</td>
</tr>
<tr>
<td>Temporary</td>
<td>-.39</td>
<td>15</td>
</tr>
<tr>
<td>Other</td>
<td>-.08</td>
<td>3</td>
</tr>
</tbody>
</table>

Faculty and Residence Location sig. at .000 level.
Covariate sig. at .001 level.
Interaction Faculty and Residence Location sig. at .417 level.

In column 2 of Table 3, using the z-score for students living with parents as the reference point, differences between z-scores have been translated into area under the normal curve. Column figures indicate that the involvement rate of students
living with spouses was 2 percentile points lower than for students living with parents. Those living off-campus with a friend and off-campus alone were each 4 percentile points lower in terms of involvement than students living with parents. Students living in a double residence room scored 7 points lower, and those in single residence rooms 6 points lower, than students at home with their parents. Students in temporary and 'other' locations scored 15 and 3 percentile points lower respectively than students living with parents. It is important to note that differences based on residence location are statistically significant.

Taken together, figures in Table 3 indicate that despite their off-campus location, students living with parents have higher classroom involvement than any other group of students. Without further research it is difficult to say whether or not this rate of involvement is a result of family pressure or support. It is also difficult to identify with certainty why students living in residence have relatively low levels of classroom involvement. Perhaps, as has been found in other research, certain residences may support climates somewhat at variance with the value of academic achievement.

In the introduction it was seen that data collected at the University of Guelph indicates that the single most preferred place of residence for first year students was on campus. While some students may be attracted to residence life in anticipation of a high quality social life, others are no doubt equally, if not more, concerned with the convenience of residence living and the expectation that living on campus will allow them to take full advantage of university offerings.

While there may be advantages to residence life not dealt with in this article, at least at York University, students, faculty, and staff can rest assured that not living in residence does not detract from first year academic achievement. Indeed, students living with spouses scored far higher, and students living with parents slightly higher, GPAs than students in residence, even after controls had been imposed for OAC marks and faculty of enrolment. At a large commuter university like York this is encouraging news. It suggests that one very important objective of many students, getting good marks, is not jeopardized by living with parents off-campus.
Place of Residence and First Year Marks

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