# The Influence of <br> Gender and Area of Specialty on Salary for Telecommunication Graduates 

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THE displacement of traditional broadcast media by cable (Wirth \& Baldwin, 1989) presents both a challenge and an opportunity for jobseekers in telecommunication, particularly women. Broadcasting has traditionally been criticized for its lack of female representation. For example, males still occupy $75 \%$ of news directorships (Stone, 1988a, 1988b, 1992). Those seeking to enhance access for women express hope that this problem might be overcome by employment and ownership avenues with new media technologies (US Commission on Civil Rights, 1977; Ziegler \& White, 1990). The spectre of these changes, perceived or actual, raises questions about the role of women in the transitional broadcasting workforce of the 1990s. This study investigates the influence of gender and professional experience on earning potential for a sample of graduates of a radiotelevision/telecommunication program.

Several studies have addressed the training and hiring of journalists (e.g. Burgoon, Bernstein, Burgoon \& Atkin, 1984; Becker, Fruit, Caudill, Dunwoody \& Tipton, 1987; Reed \& Grusin, 1989). In a recent annual survey of students in the field, Becker (1989) found a leveling of enrollment in mass communication, after a $41 \%$ increase from 1976; two-thirds of those graduates were women. Yet, while men continue to out-earn women in most professions, Becker found no such differences in the media. Of over 30,000 Bachelor's degree recipients in mass communication for 1987-88, half found work with media-related companies, while $12 \%$ were unemployed six months after graduation. Roughly $10 \%$ were employed in radio and television broadcasting. Given the minor role of gender in past studies of media employment, it is useful to consider its influence amidst a wider range of job attributes. Focusing on the broadcast area, Becker and Engleman (1989) noted the following
with regard to broadcasting majors from the class of 1987:

- $32.5 \%$ found work in a radio or TV station, $27 \%$ found work outside of the media, $20 \%$ in other media;
- $55 \%$ of all broadcast news hires were in television;
- $55 \%$ of those hired were female, compared to an overall graduate pool that was $66 \%$ female.

Despite the preponderance of female undergraduates, critics maintain that aggregate numbers are not fully explanatory, as the media elite is still dominated by males in their thirties and forties (Beam, 1986; Peterson, 1987; Robinson, 1976; Weaver \& Wilhoit, 1986; Ziegler \& White, 1990; Stone, 1992). A 1988 study found, for instance, that fewer than $30 \%$ of broadcast professionals were women (National Association of Broadcasters, 1988). Yet, even though men typically out-earn women in media positions (Wilson, 1984; Stone, 1992), differences disappear when we control for the effects of seniority, rank and area of specialty (N.A.B., 1988).

In exploring earning power by area of specialty, industry surveys from the mid-to-late 1980s show that graduates in public relations had the highest starting salaries, followed by advertising, daily newspapers and broadcasting (Dow Jones, 1985; Becker \& Engleman, 1990). Further evidence suggests that the average starting salary for graduates in broadcasting is $\$ 12.792 /$ year (Radio Week. 1989). A more recent study found salary gains of $8.2 \%$ for 1987 and $11.3 \%$ for 1988 among all mass communication graduates, with broadcast employees earning a median salary of \$293/week in 1988 (Becker \& Engleman, 1990).

Current study. While past work provides information on general employment trends, we know very little about the relative influence of gender and training on income in today's job market. This study revisits these earnings dimensions across a group of graduates sharing a common base of curricular instruction. Although such a sample carries obvious external validity limitations, the commonality of instruction across respondents provides a helpful baseline for comparison not found in nationwide studies. All students were required to complete a broadcast core including history, law, media and society, audience research, criticism and production. This relative uniformity of background should, thus, allow us to more clearly separate the influences of undergraduate preparation from those related to respondent background or area of specialty.

Based on the reviewed literature, we would expect to see few gender-based differences in salary or professional specialty. To the extent that salary differences are apparent, they are more likely to result from differences in the length and nature of one's work experience. That is, those of higher seniority are likely to earn more, as are those working in larger (out of state) markets. Also, drawing from national trends in media salaries, we would expect that graduates working outside of the media would command higher incomes. Moreover, students working in broadcasting are likely to earn the least, with radio professionals ranking at the bottom. More formally,

H1: Respondents with more work experience in their current job description are likely to report higher incomes than those with less such experience.
H2: Respondents working in broadcasting are likely to earn less than their counterparts in other professions.

In addition, two research questions were posed:

RQl: Are there gender-based differences in earnings power among telecommunication graduates?

RQ2: What is the relative influence of demographic and work experience factors on salary?

## METHODOLOGY

Data reported here are based on a census of graduates from a B.A. program in RadioTelevision at a large midwestern university. Department and university alumni records were consulted to generate a mailing list for all Department graduates from 1984-88. A two-page mail survey was then sent to graduates during the Spring of 1990. Respondents were instructed to complete the survey and return it to the departmental adviser within a two-week period. All told, 171 (or $51 \%$ ) of our graduates completed the questionnaire, after adjusting for surveys that were undeliverable. While not comprehensive, this response rate compares favorably with other mail surveys of industry professionals (Dillman, 1979; Wackman, 1987).

In terms of specific operational measures, respondents were asked to characterize their present employment status according to the following categories: professional, temporary, continuing education or seeking employment. More specific measures asked respondents to indicate whether they were involved in production news or sales/management aspects (dummy coded) across the following job descriptions: radio, TV, nonbroadcast video, other media (e.g. advertising, newspapers) and nonmedia areas. ${ }^{1}$

Gender was also dummy-coded ( O if male, 1 if female). Data on ethnicity, however, were dropped from analysis, owing to cell power concerns (nonwhites comprised less than $8 \%$ of our graduate and respondent base). Annual salary was recorded (open ended), along with amount of work experience since graduation (coded in years). Location of employment was also recorded ( 1 if outside of state where degree was earned, $O$ if in-state).

Data were inputted and analyzed with the SPSSX program for mainframe computers. Specific tests involved cross tabulation analysis to generate comparisons involving gender by income and professional specialty. Comparisons involving income and length of experience were further analyzed with oneway ANOVA mean contrasts; those involving gender were assessed with T-tests. The relationship between gender and professional specialty was measured with the Lambda statistic. Finally, a stepwise multiple regression equation was formulated to predict yearly income. Specific predictors included years of work experience, along with dummy coded measures of gender, market location and professional area. Prior to the initiation of regression runs, Pearson correlation tests were run to test for possible multicollinearity. None of the intracorrelations was greater than .4. Significance levels for all tests were set at $\mathrm{p} \leq .05$, unless otherwise stated.

Sample. All told, $90 \%$ of our respondents identified themselves as full-time employed professionals, $4 \%$ were temporaries, another $4 \%$ were graduate students and $2 \%$ were unemployed. Among full-time employees, over two-thirds were working in the media, with the remaining $31 \%$ working outside of the media. Roughly $70 \%$ were working within the state in which the university was located. Males comprised $63 \%$ of our sample, which corresponds roughly with departmental enrollment figures for the period under study. Nearly $83 \%$ of the undergraduate degrees were granted during Spring term.

## RESULTS

When examining the role of work experience (Table 1), we find support for Hypothesis 1 , as income increases with work experience. Specifically, those with one year of work experience (since graduation in 1988) earned significantly less than their counterparts with four and five years of experience. The latter group also out-earned graduates with only two years of postgraduation experience.

## TABLE 1

## SALARY BY YEARS OF EXPERIENCE

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Years working: $\underline{5}$ yrs 4 yrs $\underline{3 y r s} \underline{2}$ yrs $1 \underline{y r}$ <br> | Salary | $3.8^{1}$ | 3.5 | 3.2 | 3.0 | $2.8^{2.3}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | <br> 1. Oneway anova contrast ( 5 yrs v. 2 yrs.) significant at $\mathrm{p} .=.042$ <br> 2. Oneway anova contrast ( 5 yrs v .1 yr ) significant at p. $=.017$ <br> 3. Oneway anova contrast ( 4 yrs v .1 yr ) significant at $\mathrm{p} .=.06$

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With regard to professional specialty (Table 2), we see that those working outside of the media earn the most-and significantly more than those in radio. Absolute mean values suggest that those working in other media and nonbroadcast video do relatively better then their broadcast counterparts, but mean comparisons are not statistically differentiated. Hypothesis 2 is thus partially supported.

TABLE 2

## SALARY BY PROFESSIONAL AREA

| Group | Mean salary |
| :--- | :---: |
| Television | 2.86 |
| Radio | 2.79 |
| Nonbroadcast | 2.96 |
| Nonmedia | $3.40^{*}$ |
| Other media | 3.53 |

*T-test involving nonmedia versus radio profession significant at $\mathrm{p}=.044$.

Table 3 (page 54) reports differences in professional orientation and earnings by gender (RQ 1). When considering the professional orientation of all graduates, we find the largest
number in nonmedia professions ( $30.7 \%$ ), followed by nonbroadcast video ( $27 \%$ ), radio ( $24 \%$ ), other nonbroadcast media ( $8.5 \%$ ) and television ( $8 \%$ ). While women were represented in each of these professional categories, they were proportionately underrepresented in radio and nonbroadcast video categories (Table 3a). Female professionals were, however, overrepresented in nonmedia jobs.

## TABLE 3 <br> GENDER DIFFERENCES BY SALARY \& PROFESSIONAL ORIENTATION

|  | Overall Number | Male | Female |  |
| :---: | :---: | :---: | :---: | :---: |
| a) Proportions |  |  |  | Lambda (prob.) |
| Radio | 41 | 74\% | 26\% | -. 12 (.05) |
| Television | 14 | 71.4\% | 28.6\% | - (N.S.) |
| Nonbroadcast | 46 | 77.8\% | 22.2\% | -. 12 (.04) |
| Other Media | 15 | 73.3\% | 26.3\% | - (N.S.) |
| Nonmedia | 53 | 53.7\% | 46.3\% | . 13 (.04) |
| b) Mean values |  |  |  |  |
| Salary | 3.24 | 3.42 | 2.95 | N.S. |
| Yrs. experience | 3.12 | 3.76 | 2.84 | . 000 |

Note: Gender was dummy coded ( $0=$ male, $1=$ female )

Absolute mean values (Table 3) suggest that males earn more than females, but the univariate difference is not statistically significant. Lambda measures of association do, however, indicate a weak inverse association between female gender (dummy coded) and income ( $\mathrm{r}=-.13$ ).

This relationship survives the controlling influence of other independent variables in the multivariate results (Table 4). The larger prediction equation explains only a modest degree $(11 \%)$ of variance in salary (RQ 2). The most powerful predictor was location in a market outside of their alma mater's state. Involvement in radio, however, was an inverse predictor of salary; that is, those working outside of the radio profession were likely to earn more money.

## DISCUSSION

Perhaps our most telling finding is that males continue to outearn their female counterparts, when other factors are controlled for in the regression analysis. This difference is determined, in part, by the different career paths selected by women. The fact that female graduates were overrepresented in nonmedia jobs may be symptomatic of their disillusionment with conventional broadcast career options. However, the finding that fewer women

# TABLE 4 <br> MULTIPLE REGRESSION RESULTS 

## Prediction equation for salary

R Square $=.11, \mathrm{p}=.0002(\mathrm{~F}=7.03 ; \mathrm{df}=3,171)$

| Variable | Standardized beta |  | Prob. <br> Out of State |
| :--- | :---: | :---: | :---: |
|  | .249 |  | .0007 |
| Female Gender | -.176 |  | .0168 |
| Radio Job | -.174 |  | .0175 |

are involved in the low paying radio profession may simply indicate that they are more interested in pursuing higher paying careers outside of the media. Alternatively, men may be better able to relocate in response to the volatile job turnover situations characteristic of broadcasting. Women, on the other hand, are more likely to act as family caregivers (Wilson, 1984) -a role that may prompt an earlier exit from the ephemeral media workforce.

Gender is hence linked with another key earnings attribute-nature of work experience. The positive influence of work experience is not surprising, confirming our expectation that those with more experience are likely to earn more money. While much of this influence may be a function of seniority, it seems likely also that lower-paid or less skilled employees would "shake-out" of their media position relatively sooner. Those remaining in the field would logically advance as their skills dictate, developing closer ties with client accounts, contacts with other companies and other benefits associated with rank. Thus, despite low entry-level salaries, the earnings potential of our respondents increases rather handsomely over time.

Otherwise, radio-television graduates working outside of the broadcasting are likely to earn more money. The implications of that finding are, of course, limited by our respondent base. Even so, they support study expectations, and confirm the findings of nationwide surveys. As Becker \& Engleman note, "(l)ow salaries are still a fact of life" for graduates in mass communication (1990: 25).

It should be noted, however, that even nonmedia jobs utilize skills garnered in communications education. In particular, programs such as this offer useful courses in writing, editing, audience research, sales/promotion and critical interpretation-all of which are crucial skills in nonmedia professions. Such employment flexibility is advisable in an area such as radio, where the 1987 national average salary was $\$ 246 /$ week (or roughly $\$ 2$ better than government aid for dependent children). In light of the transitional nature of the present marketplace, involving a shift towards non-broadcast video and new telecommunication carriers, it will be critical to make students aware of nonbroadcast options.

The positive relationship between work experience and salary also provides qualified support for our study expectations. If anything, these relationships were attenuated by the large number of categories used for comparison. That is, given that respondents were split across five categories for length of work experience and area of specialty, significance levels for mean comparisons may have been suppressed. Perhaps further work could apply this framework across more geographically varied samples.

While such a sample would provide a basis for generalization, the commonality of training evidenced in a department-based study does offer certain advantages as a supplement to large, multidisciplinary samples of students from across the nation (e. g., Becker \& Engleman, 1990). In that regard, the educational background of our sample is relatively similar, despite limitations in external validity.

It is important for communication educators to continue documenting these job specialization and earnings dimensions, as declining higher education budgets place greater pressure on administrators to justify budget allocations. This is especially true at a time when communications as a discipline has come under attack from those in more conventional disciplines within the humanities (Gaudino, 1989).

Communication programs can easily justify their place in the academy, given that $60 \%$ of the workforce is involved in communications-related careers (Dizard, 1988). This represents a new "communications" age-just as steam technology heralded the industrial age 300 years ago. As one commentator noted, students will need to prepare themselves for five or more career changes in the information economy of the next century (Naisbett, 1982). Our own finding that corporate video is the largest media employer of graduates-despite the lack of a formal course sequence in that area-is further evidence of that change. The academy must meet challenges presented by this fluid job market, preparing students for "fall-back" options in the event that conventional job descriptions decline. Given that basis for change, it will be important to repeat this type of research across more comprehensive samples and time intervals.

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${ }^{1}$ More detailed job descriptions were recorded for each medium (e.g., account executive, producer, etc.), but that information was not analyzed, owing to low cell frequencies.

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