Many psychology majors are not ready to make the commitment to a graduate program or specific career training at completion of the bachelor's degree. The goal of this paper is to highlight the importance that the undergraduate psychology research program plays in developing the skills graduates need to make a successful transition into work. In addition, a basic structure is included for faculty to use in assisting students in exploring career choices. Comments from recent psychology graduates are included to convey the successful transfer of skills gained through participating in research and the study of psychology.

The Employment Patterns of Psychology Majors
The career patterns of psychology graduates are worth noting. A study of 16,000 bachelor degree graduates in 1990 (approximately 1% of all the bachelor degree recipients that year) was conducted by the U.S. Department of Education and reported by Gary Steinberg, Bureau of Labor Statistics. In "The Class of '90: One Year After Graduation", Occupational Outlook Quarterly, Summer 1994, Steinberg reports on eleven major fields of study and finds that 60% of the psychology majors reported being employed full time, 14% employed part time, and 7% unemployed. For comparison, the average of all the fields was approximately 72% of the respondents reporting full time employment.

What were these psychology graduates doing? Of the psychology graduates, 65% reported that they were employed in positions related to their major field; 69% reported positions which held career potential; and 47% were in positions in which a 4 year degree was required. Interestingly, only 20% of the psychology graduates reported working in the fields traditionally associated with psychology, such as public affairs or social services. The remaining graduates report employment in fields as diverse as sales, teaching, and biological science. The chart in Figure 1 illustrates the breakdown of employment settings for psychology majors:

Ms. Lorig is a National Certified Counselor and Director of the Career Development and Placement Office, Washington and Lee University, Lexington, Virginia.

![Diagram showing employment patterns of psychology majors](image-url)
While this employment report on the Class of 1980 is helpful in understanding the initial pursuits of psychology majors, what do current employment trends project in terms of career patterns and the subsequent impact on the recently hired graduates?

According to one report, "on the average, a student leaving college today can be expected to have three, four, or five careers and 10, 11, or 12 jobs during a work life that will last 40,50 years." (Source: "The Counselling Demise of the Single-Career Career," David L. Birch, Journal of Career Planning and Employment, Winter 1990, p. 4,0.) A slightly different estimate was provided by Rhea A. Nagle, Journal of Career Planning and Employment, Summer 1987, who cites Department of Labor estimates that the average worker will hold four to six jobs in two or three different career areas. These estimates indicate a new career pattern which will include numerous job changes during the career of today's graduate.

Skills for Success

The variety of job-related skills sought in college graduates are the same transferable skills needed to survive the restructuring of corporations, government, and nonprofit organizations. A 1984 survey conducted by the National Association of Colleges and Employers (formerly the College Placement Council) indicated that the most highly sought skills by employers of undergraduates are oral communication skills, interpersonal skills, problem-solving skills, teamwork skills, flexibility skills, analytical skills, written communication skills, proficiency in a field of study, research skills, and computer skills.

Research as a Skill Builder

Analytical Skills

Research in psychology or other disciplines is a key means of developing these highly rated analytical, problem-solving, and communications skills. The student conducting research must have an understanding of research design, data analysis, and results reporting. While the students often believe these skills are useful only in the laboratory, this view is too narrow. Doug Maia (Washington and Lee Class of 1994), Research Assistant, Project Performance Corporation, an environmental policy and economic analysis firm, reports he uses each day the skills he developed from his involvement in research. He cites a list which includes: "comfort with and understanding of statistics, data analysis, the ability to find and catalogue information effectively, the ability to summarize technical information in an easily comprehensible format, computer skills, problem-solving, developing hypotheses, analyzing available information, and finding a solution."

In reviewing the company presentations made to undergraduates, a common theme conveyed by employers is the desire to locate new employees who are active and eager learners with a desire to solve problems in a team environment. This is underscored by comments of recent psychology graduates who have succeeded in the world of business, non-profits, and government. According to one recent graduate, "Most employers are looking foremost for problem-solvers. This is a critical format which was mentioned throughout the course of my work experience." He further states, "The employers know what the research major is capable of doing the skills can add value to every project. The background of the psychology major produces a strong grounding in each of the above defined skill areas."

Team Work Skills

Through the research experience, not only does the psychology major apply classroom learning, but he/she extends the application of knowledge in the team-oriented research environment. In experiments run by a team of investigators, students are challenged to work collaboratively in defining the experimental design, developing the basic hypothesis, organizing the schedule for data collection, recruiting subjects, interpreting the results, and writing the final written report. In work, graduates will encounter many demanding projects in which they will need to be confident in their roles while contributing toward timely completion of the tasks for multiple projects.

Oral Communication Skills

Through preparing human subjects for the research and making the presentations of results in professional meetings, the psychology student has numerous opportunities to develop crucial communication skills. It is not uncommon for newly hired graduates to meet with senior-level management and CEOs and to make presentations to prospective clients.

According to Ashley Myler [Washington and Lee Class of 1994], Assistant Director of Development, The Myeli Project, "People skills are developed and refined by the actual subjects in studies. Trying to convince students to participate in a 2 hour language experiment so that I could analyze brain activity helped me in my current position as development coordinator. I am now convinced people donate in their own way. You also develop personal traits like patience and determination, and learn to keep trying if you err the first time."

A perhaps subtle development also takes place in the student who for the first time assumes the role of an expert or professional in leading a research project. Controlling the goals of the experiment to co-investigators, completing a confidential inside report on subjects, and responding to any unexpected
emergency during data collection pro-
provide important opportunities for the
student to build confidence and profes-
sional demeanor. For the graduate who
enters into his/her first position as a
mental health worker, this confidence
and the ability to "think on your feet"
are crucial in achieving success or fail-
ure when working with young adoles-
cents, according to Tom Mason, (Wash-
ington and Lee Class of 1994), coun-
selor and teacher, with New Dominion.
residential academic and treatment pro-
gram for adolescents males.

Witten Communication Skills
The ability to write clearly and con-
cisely is a highly sought skill by em-
ployers in all fields including consult-
ing, banking, social service, and pub-
lishing. "Whether it is communication
on the status of our research to doctor-
or MS patients, researching "new" de-
velopments in myelin repair, or orga-
izing international meetings, strong
written communication skills are essen-
tial to succeed," comments Myler. Psy-
chology research students are comfort-
able writing both long essays and the
short, succinct report using APA style. This experience provides excellent train-
ing for writing focused and brief reports in any field.

Computer Skills
Research in psychology often involves
computers, and psychology graduates are
in a position to create for themselves.
This is an automatic value to employers
who seek computer knowledge that is
beyond the understanding of their current
staff. To do so means that the graduate
will be able to use the research tools of
the internet, the World Wide Web, Lexis/
Nexis, Medline, and growing number of
other electronic tools. Even creating a
personal home page is seen as an exam-
ple of interest and ability. Stu-
dents should take care, however, as po-
tential employers may look at their home
page to judge their computer supcri-
sity and suitability for employment.
If students wish to toy with their computer
skills and mention their home page,
they are advised to treat the home page
as an extension of the resume.

During research courses, psychol-
gy students often gain knowledge of
statistical software such as SPSS, SAS,
or BMDP. During the interview, stu-
dents may find that their potential em-
ployer uses none of the software with
which they have had experience. Like-
wise, students may have considerable
experience with one computer platform
while an employer may use another.
Students often see such differences as
liabilities when they are not. Encourage
students to analyze the programs of
computers and software more than the
differences. If they can learn computer
software in the laboratory, they can learn
a second set of software skills for their
new employer and they can learn them
even better. The ability to use spread-
sheets, databases, and other general soft-
ware will make the psychology gradu-
ate even more attractive to the employer
whether it is the large business or the
small non-profit organization. With the
continued explosion in the information
based society, the ability to collect, cat-
tegorize, analyze, manipulate, and re-
port information will be one of the key
skills that will keep psychology gradu-
ates adapting to employment restruc-
turing.

Skills: What Next?
The psychology major is blessed or
cursed by having a wide range of career
paths from which to choose. First, en-
courage the student to assess his/her
skills and interests. This includes a can-
did review of both the success and fail-
ures in academics, work, activities, and
research projects. Define the strengths
and weaknesses in each of these areas of
experience. For instance, a student who
knows that he/she dislikes selling can
avoid those positions which require ex-
tensive use of the selling or promotional
skills. Perhaps the most crucial step for
bright undergraduates is to acknowledge
the areas in which they have succeeded,
but in which they did NOT enjoy using a
specific set of required skills.
The popular book What Color is
Your Parachute contains a number of
questions to be used to identify skills
and interests. Many college and univer-
sity career offices offer a variety of
assessment tools (Strong Interest In-
vory; or computerized career guid-
ance systems (SIGI-Plus® and Dis-
cover®). Each of these assessment tools
is designed to evaluate the individual's
interests and values, to define possible
career fields that incorporate the unique-
ness of the individual's pattern.

Next, consider the degree to which
the graduate wants to use the specific
course content in the pursuit of a career.
A common trap into which students fall
is the assumption that the training in the
major is narrowly applied only to fields
directly related to psychology SIGI-
Plus® includes examples of the profes-
sions in which a psychology major could
apply their specialized knowledge in psychology:

<table>
<thead>
<tr>
<th>TABLE 2. SAMPLE OF EMPLOYMENT OPTIONS USING PSYCHOLOGY MAJOR (SIGI Plus®)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Interviewer</td>
</tr>
<tr>
<td>Mental Health Worker</td>
</tr>
<tr>
<td>Labor Relations Specialist</td>
</tr>
<tr>
<td>Sales Representative</td>
</tr>
<tr>
<td>Technical Writer</td>
</tr>
<tr>
<td>Teacher, Social Studies</td>
</tr>
</tbody>
</table>

Psychology majors may also have
business as a primary area of interest or
desire to pursue a path that does not
require a specific knowledge of psy-
chology. A broader list of options, not
restricted by major, includes:

<table>
<thead>
<tr>
<th>TABLE 3. SAMPLE OF EMPLOYMENT OPTIONS NOT DEFINED BY MAJOR (SIGI Plus®)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising Copywriter</td>
</tr>
<tr>
<td>Bank Service Representative</td>
</tr>
<tr>
<td>Public Relations Specialist</td>
</tr>
<tr>
<td>Media Buyer</td>
</tr>
<tr>
<td>Human Resources Administrator</td>
</tr>
</tbody>
</table>

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Having identified the enjoyable skills, the student will want to identify which of the occupations on his/her list makes use of the preferred skills. The Occupational Outlook Handbook is an excellent resource for this step of research. Included in each career description is the nature of the work, working conditions, training qualifications and advancement, earnings, job outlook, and related occupations.

Following the identification of occupations with similar interests, clarify what type of organization sounds interesting and what type of working environment is desirable.

- Are they seeking a small organization with opportunity to gain a variety of skills?
- Are they seeking a highly competitive environment with high stress?

- Are they interested in working in an office with coworkers or from their home while managing a sales territory?
- Are they ready to wear traditional business attire or do they prefer to have no established dress code?

Employment fields can be divided into the primary categories of business, government, or nonprofit sector. Ask what type of industries, issues, or products or services are most interesting.

The typical undergraduate’s knowledge of occupations tends to be quite limited. The Middle Atlantic Placement Association’s Community and Public Service Network developed a summary that can be used quite successfully with undergraduates who have identified their 

--- continued on the following page ---

Washington and Lee University junior psychology major, Meg Randol, in the research lab preparing Zathary Lee, freshmen, for data collection while professor Tyler Lorig makes the final adjustments with the electronic cap.
skills yet are uncertain about the options of where to apply these skills. By examining a detailed checklist of options in the nonprofit sector, government and business sectors, a student may begin to select preliminary areas for exploration. For example, under the category of the nonprofit sector are Arts, Culture, Humanities; Education/Instruction; Environment & Animals; Health; Human Services; Associations; and Religion/Reliant. The business sector includes such varieties as: Information and Communications; Production and Manufacturing; Health Care; Finance and Consumer Products. Government options include: Advocacy; Employment and Labor; Energy; as well as Science and Space. This list of options may be a useful starting point for the faculty member who wants to begin preliminary discussions with psychology majors seeking employment. However, a referral to the university’s career planning office is encouraged for the student seeking more in-depth self-assessment and comprehensive career exploration.

To make career choices and to succeed in the process of seeking employment, psychology majors should be encouraged to examine the skills that they gain through their major and especially the laboratory research experiences. The employment interviewing and selection process is very competitive and one in which the interviewer seeks from the candidate illustrations of the candidate’s skill set. The student who has succeeded in the laboratory research experience will have vivid examples illustrating the many applications of their skills in communication, research, problem-solving and team work. With the mastery of these skills, the psychology graduate with research experience has the data with which to make a successful transition into work.

**TABLE 4. RESOURCES FOR PSYCHOLOGY MAJORS**

<table>
<thead>
<tr>
<th>Resources for Exploration of Career Opportunities</th>
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</table>

**Resources on Occupations**

<table>
<thead>
<tr>
<th>Resource</th>
<th>Title</th>
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</table>


**Electronic Resources**

| JobWeb: the gateway to career planning and employment information, job-search articles and tips, job listings, and career information for students, recent graduates and alumni (http://www.jobs-web.com) |

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