This document looks at the research that has been conducted on the student development concept and considers its nature, effectiveness, and deficiencies. Research in student development is defined as research that attempts to ascertain if a particular theory-based student development intervention or treatment resulted in the theorized effect or result. Also included is research that attempts to test or validate student development theory and research that deals with peripheral student development issues such as instrument design and validation; descriptions of conditions or programs; and philosophical ruminations about student development. A review of the research literature on the efficacy of student development interventions is summarized and its conclusions are discussed: that the amount of formal research on student development over a 14-year period (ending in 1987) was disappointing; that studies generally lacked control or comparison groups; and that evidence appeared to endorse the probability of a student development effect. The next section of the paper looks at research conducted since 1987. This more recent research conducted from 1987 through 1990 is then compared to research conducted from 1977 through 1980 and a set of 11 observations and recommendations is offered. (NB)
My assignment this afternoon is to look at the research that has been
done on the student development concept and to come to some sort of a judgment
concerning its nature, effectiveness, and deficiencies. I'll conclude with
several observations and recommendations.

What do I mean when I talk about research in student development? What
I have in mind is research that attempts to ascertain if a particular theory-
based student development intervention or treatment resulted in the theorized
effect or result. Did it work? I'm also interested in research that attempts
to test or validate student development theory, as well as research that deals
with peripheral student development issues such as instrument design and
validation; descriptions of conditions or programs, i.e., "How many student
development educators present at ACPA conventions?"; or even philosophical
ruminations about student development.

Thrasher and Bloland (1989)

I'm first going to summarize for you the only published article of which
I'm aware that has examined the research on the efficacy of student
development interventions. I refer, of course, to the review of the research
literature that Fred Thrasher and I published in the Journal of Counseling
and Development (Thrasher & Bloland, 1989).

What we did was to survey the research literature for every published
work, regardless of quality, that reported on the implementation and
evaluation of a theory-based student development intervention program between
1973 - about the time student development as a concept began appearing in the
literature - to 1987. The studies reviewed had to 1) be grounded in student
development theory, 2) be a college-level intervention and 3) have been
evaluated. The search yielded about 145 documents that appeared to meet the
criteria; most of which, however, did not qualify upon inspection.
It soon became evident that there were two types of studies: intentional interventions and incidental interventions. Those dealing with "intentional interventions" involved programs that had been specifically designed to bring about a change in some student development variable. These studies were most often experimental or quasi-experimental and could be termed "proactive".

The second type of intervention was termed "incidental" if it was an accepted on-going dimension of the college experience, i.e., the effect of residence hall living, participation in student activities, or just plain college attendance. In other words, the environment was the treatment. Any developmental gains were seen as incidental to the experience itself. These studies were most likely to be ex post facto or correlational investigations.

Of the 12 studies categorized under the "intentional" rubric, we were able to identify 4 developmentally designed program interventions of which 2 yielded significant results. There were 6 developmentally designed academic courses of which 4 presented significant positive results, 1 reported mixed results, and 1 was non-significant. There were 2 comprehensive student programs, both of which showed significant results, 1 positive and 1 negative.

Although 8 of the 12 studies yielded what might be termed significant and positive results, there were some serious flaws in most of them. For example, significance was obtained for only a portion of the variables studied; one study relied on positive student comments; the reliability and validity of some of the instruments were questionable or not reported; several studies did not employ control groups leaving a question concerning whether the intervention was, in fact, the major factor in the significant differences observed; most designs were not tightly drawn and extraneous variables were present; and the external validity or generalizability of several studies was seriously compromised.

Moving on to the "incidental" interventions, we found 15 studies that met our criteria. The 4 studies on residence hall living had positive results, 3 significant. Two investigations on student activities were noted, 1 positive and significant and 1 with inconclusive results. There were 4 studies looking at the total college experience itself as the developmental
intervention; 3 were positive of which 2 were significant while the 4th yielded variable results. There were another 5 studies whose interventions didn't fit the other classifications. One of these was not significant while 4 were significant, 3 positive and 1 negative.

Most of the investigations of incidental interventions suffered from the differential selection of subjects - perhaps the students comprising the comparison groups, i.e., residence halls students vs. commuter students - were different prior to the incidental intervention; the external validity of many studies was questionable; self-reported data were often used without acknowledgment.

We concluded on the basis of our extensive review, utilizing somewhat restrictive but rigorous criteria, that 1) the amount of formal research on student development over a 14-year period was disappointing; 2) these studies generally lacked control or comparison groups, thereby lending themselves to a number of rival hypotheses; 3) however, even given these problems, the preponderance of what little evidence we were able to uncover appeared to endorse the probability of a student development effect.

Research Production in Student Development

Our review (Thrasher & Bloland, 1989) ended with several 1987 studies. As I thought about this paper I decided to look at what has occurred since 1987 in research on student development. My overview consisted of a content analysis of the Journal of College Student Development (formerly the Journal of College Student Personnel), the NASPA Journal, and the Journal of the National Association for Women Deans, Administrators, and Counselors, now called Initiatives. After I had completed this analysis of some 598 articles I thought it would be interesting to compare these recent figures with a similar four-year period, 1977-1980, a period shortly after the beginnings of the student development movement but sufficiently removed so that a literature could be expected to have grown. This earlier period added another 498 articles for a total of 1184 articles examined.

I was searching for articles in the three journals that met several broad criteria: 1) they described themselves in the title or the abstract as
somehow student development related; that is, they tested student development theory, dealt with research methodology relevant to student development, examined student development assessment instruments, or reviewed related literature. If student development was not mentioned in the title or abstract I eliminated it even though it may have been developmentally oriented. 2) They had to be research reports, that is, the study attempted to investigate, mostly by empirical means, some facet of student development. I was not interested in research on any other aspect of student affairs - just student development research. Using these criteria, I eliminated 76 essays on student development from my analysis.

What I found was most interesting - and disappointing. I'm first going to throw some figures at you. They won't be difficult to handle because, unfortunately, we are not talking about a very large N. And please bear in mind that my classification of a particular study might very well differ from yours.

The number of studies devoted to research in these three journals doubled in the period between 1977-80 and 1987-90. Most of the increase was represented by the Journal of College Student Development which almost tripled its student development research content, from 12 to 33, although the ratio to its total content still was not impressive, from 3.5% in the earlier period to 13% in the later period. The NASPA Journal dropped its student development research content from 4% to 2% while the NAWDAC Journal published only 2 research articles on student development.

An examination of the types of research designs utilized provide a rough index of the sophistication of the research being published. The most powerful approach for determining the effect of one factor, or factors, upon another would be the true experimental design. You may recall that the true experimental design is characterized by the random assignment of subjects to treatment and control groups so that the two groups have no major differences between them before treatment begins. The true experimental and the quasi-experimental designs (no random assignment, intact groups) permit the researcher to make more definitive statements on cause and effect, which ought
to be a prime consideration in assessing the effect of a student development intervention.

Having said that, I could identify only 4 studies in all three journals in the two four-year periods surveyed that could be readily categorized as either quasi or true experimental designs. In fairness it should be noted that it is most difficult to achieve random assignment in field studies although quasi-experimental studies which can use pre-formed, intact groups ought to be feasible.

Of the non-experimental designs those describing phenomena involving relationships between variables without suggesting cause and effect, I found 5 descriptive studies, 7 correlational studies, and 8 survey investigations. I defined ex post facto, or causal-comparative, designs as those that study cause and effect by comparing groups of students on variables that cannot be manipulated experimentally because the causal events have already occurred. For example, an ex post facto study might ask "Are there significant developmental differences between inner-city students and those who came to college from a rural background?" There were 12 such studies, 8 of which were theory-based. It is notable that 11 of the 12 were conducted in the 1987-90 time frame; I could identify only 1 in the earlier period. The ex post facto design appeared to be the most popular design and lends itself well to the study of student development effects because it does not require experimental manipulation while yet accommodating itself to robust statistical treatment.

A fourth major design category lumps all qualitative methodologies together. In spite of an increasing interest in promoting more qualitative designs I was able to identify only 6, 4 of them in the recent 4-year period, and 2 in the earlier period.

Longitudinal studies have also been called for in order to measure the long-term effect of student development interventions. Each time I ran into a longitudinal study I classified it as such although several could just as well have been categorized as correlational, ex post facto, or quasi-experimental.
There were 8 studies that could reasonably be classified as longitudinal, 6 of them conducted and reported in the later time frame, 1987-90.

I established several other categories for studies that didn’t fit the generally recognized research design divisions but which reported on studies that contributed to the on-going research needs of those studying student development. For example, there were 3 articles dealing with research methodologies that may be useful to student development investigations. Five articles discussed the development of research instruments concerned with the measurement of developmental variables, and there were 2 reviews of the research literature.

Some Observations and Recommendations

After completing these two analyses of the research literature on student development, I was left with a number of impressions. What follows is a series of eleven observations that either imply certain recommendations or make them explicit.

1. As noted earlier, there was a surprising number of studies reporting significant results that did not employ control or comparison groups. As a consequence, any observed effect could lend itself to rival hypotheses - that is to say, it may not have been the student development intervention being studied that caused the significant result.

2. Because of the difficulties inherent in implementing true experimental conditions when one is doing research with students in their environment, it is understandable that so few of these are done. Yet, if one designed a specific and circumscribed intervention on an easily measured variable, as in a developmental course, it ought to be possible to employ random assignment and control groups. The same is true of quasi-experimental studies, or longitudinal field studies.

3. A major problem is insufficient time in treatment. Can one reasonably expect that a developmental variable would be affected by a treatment of, say, one hour a week for six weeks, for example? The pressure for results, a dissertation or publication, means that the quick and dirty approach is almost endemic in the field. One can’t blame the researchers but
the result is less than potent treatments. Consider also that only the most statistically significant studies hit the journals. How many unpublished dissertations found no student development effect?

4. Because practically no experimental research is being done, the results are subject to selection bias, i.e., the posttesting differences may have been inherent in the sample selected and not due to the treatment.

5. Certainly differential treatment has been a problem in several studies - groups in different institutions or using different leaders or instructors for comparison groups. Any significant developmental change may well be due to inherent differences in the institutions or leaders, not the treatment.

6. There is practically no replication of studies; in part, I suspect, because the published studies don't provide enough information about the nature of the treatment for others to duplicate it. How do we know that the observed effect is not simply idiosyncratic to that situation unless we can see the same effect in different settings and with different populations?

7. Methods of data analysis have become much more sophisticated today than they were ten years ago. We have such methodologies as discriminant analysis, LISREL, canonical correlation, path analysis, causal modeling, factor analysis, MANOVA designs, and the like being utilized.

8. Researchers today are using a wider variety of student development theories and models than was true ten years ago, probably because more are available.

9. Very little qualitative investigation on student development is published in our journals; this despite the open invitation from Brown in his first editorial as Editor of the Journal of College Student Personnel (1983) in which he said that "solid experimental research must be balanced with good qualitative studies" (p. 3). He later stated that the so-called emerging paradigm may best be investigated through qualitative approaches that "often let the theory emerge from the data rather than be preordained before conducting ... studies" (Brown, 1988, p. 99).
10. There has been some discussion of meta-analysis (Manke & Erwin, 1988, pp. 549-552) or integrative research reviews in which the results of a number of related studies on a single topic can be pooled. Unfortunately, in the area of student development, there haven’t been enough studies on a single topic to integrate - thus the need for replications. In fact, there are very few reviews of the research literature at all. I was able to identify only 2 in the 8-year period I sampled. It is imperative that, as the body of research on student development expands, we begin to synthesize it, whether through traditional literature reviews or meta-analysis.

11. And finally, there is the variable problem. We not only need better and more sensitive instruments but need to reduce the current anarchy in our studies of student development. Each lonely graduate student or isolated professor picks out his or her favorite variable and runs a study which then reigns as the only study ever conducted or likely to be conducted on that variable, hardly the way to study a unified coherent field. Without restricting in any way the creativity of independent researchers as they follow their intuitions, we might collectively specify a set of variables that are important to generalized student development, devise a set of standardized instruments to measure them, and then concentrate a number of studies on these variables in many institutions.

It would then be possible for a body of unified knowledge to emerge from the collective data and we could begin to see if student development intervention and programming really works.

Summary

In summary, I will readily admit that my criticisms of the extant research on student development might well be made of many other applied fields, particularly in the human sciences. Great credit is due the person who undertakes to thread his or her way through the mine fields of research in an effort to shed light on a research problem of concern to the field and its advancement.

But, at the same time, good intentions are not enough in the grim hard marketplace of ideas. Unless our research can begin to come up with some
well-designed studies that yield positive data with the fewest threats to internal and external validity and on variables that are important - that matter - the student development concept is going nowhere because we won't have anything but good intentions to back it up. And politically on the campus, even good research on student development may be irrelevant if the concept is not accepted as a worthwhile investment for an institution.

For a field so devoted to student development that we have changed the name of our professional association and our journal to demonstrate that devotion, we have precious little research evidence to justify that wholesale affection - and what we do have is not very reassuring considering the need.

We are left with the question, "Is there such a thing as intentional student development?". I would answer by saying, "I really don't know. There is some tentative evidence that developmental change may be demonstrated for some narrowly-focused developmental variables under certain conditions with specific populations - at least once!"

References


