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ABSTRACT
        This study attempted to discover the distribution of
feelings of security and insecurity in the population of Illinois
Central College (ICC) and whether significant differences exist among
various subgroups. A 10 per cent stratified random sample of students
were administered Maslow's Security-Insecurity Inventory. No
significant difference was found between ICC students and Maslow's
norm population. No significant difference was found among the
curriculum groups of business, health, technical, and agricultural
students, or between transfer and terminal students. Day students,
however, were found to differ at the .01 level of significance from
night students. They showed less confidence, less stability, and a
greater concern with self-identity in relation to present and future
worlds. The author stated that the insecure person tends to be more
dogmatic, less effective in critical thinking, and less creative than
the secure person. He recommended that student personnel workers
facilitate security-need satisfaction by offering students a safe,
confidential relationship with an understanding adult, and that
instructors offer warm encouragement, success experiences, and
increased individual attention to help aleviate students' feelings of
insecurity. (MC)

PSYCHOLOGICAL SECURITY-INSECURITY OF

ILLINOIS CENTRAL COLLEGE STUDENTS

DAVID R. GROUT

A Thesis Submitted in Partial

Fulfillment of the Requirements

for the Degree of

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D. R. G.

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CHAPTER I

INTRODUCTION

Introductory Statement

No affective need of junior college students is as
vitally important to success both within and without the
classroom as is the need for psychological security.
Until student needs for psychological security are satis-
fied beyond some basic level, academic and social behavior
will be dominated by this pressing, unfulfilled need.
Psychologically insecure students are likely less creative,
less able to perform critical thinking, and are in general,
less effective as persons in all realms of their function-
ing than psychologically secure students.

That satisfaction of security needs may be a neces-
sary precondition to critical thinking and thus, effective
decision making, is suggested by Kemp's research on the
effects of dogmatism on critical thinking. In his study,
Kemp used Rokeach's Dogmatism Scale (Form E) to form two
groups of students, those characterized as open-minded and
those who were close-minded. He then used two problems
that were in part related to security needs to test these
students' ability to perform critical thinking. Kemp

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found open-minded students to be superior to close-minded in critical thinking at the .01 level of significance.[1]

According to Kemp, intolerance of ambiguity likely impels the insecure, close-minded person to conclude decision-making processes before fully considering all relevant alternatives. The close-minded person likely distorts or narrows the problem, thus changing it from one which offers a form of threat, to one which allows satis-faction of security needs.[2] Kemp writes of the difference between the open- and close-minded:

> Decisions whose outcomes would provide more security, greater maintenance of the status-quo, and more approval from authority fig-ures would be more acceptable to the close-minded . . . those decisions which may offer a greater breadth of experience and more independence, and which encompass a wide range of facts and lead to broader and sat-isfying relationships with people are more attractive to those with open minds.[3]

Maslow theorizes that the need for physical and psychological security may dominate behavior of the in-secure person. Capacities of such a person, e.g. recep-tors, effectors, and the intellect, are used primarily

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[1] Gratton C. Kemp, "Effect of Dogmatism on Critical Thinking," School Science and Mathematics, 60:316-318 (April, 1960).

[2] P. 318.

[3] Gratton C. Kemp, Intangibles in Counseling, p. 178.

as tools for satisfying this pressing need.[4] The child-like spontaneity characteristic of creativity found in all self-actualizing people (Maslow's super healthy people) is likely throttled and inhibited by such a pressing and behavior determining need.[5] The implication of these ideas is that junior college students who are psychologically insecure will not develop and exercise their creativity fully in their junior college work.

Insecure students whose creativity is stifled, and whose ability to think critically is concomitantly hampered by closure, cannot function in a truly effective way in any area of endeavor. Thus, social as well as academic success commensurate with individual potentials is highly unlikely for such students. The result of attempting junior college work for such insecure students may well be failure, or dropping out of school.

It is the contention of this writer that all student needs affecting success in junior college work should be the concern of junior college staff. Operationally, no dichotomies exist between various functioning areas; for example, needs of students are simultaneously

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[4]A. H. Maslow, Motivation and Personality, p. 84.

[5]p. 224.

cognitive and affective. Studies reviewed by Hall and
Lindzey show "that perceiving, learning, remembering, and
thinking are influenced by needs, interests, moods and
emotions."[6] Certainly most junior college staff would
agree that perceiving, learning, remembering, and thinking
are important concerns. Few would say or show through
actions, however, that needs, interests, moods, and emo-
tions are their concern. Yet, if cross-influences exist,
as Hall and Lindzey's review suggests, all psychological
functions of students that may alter success in junior
college work need to be understood by junior college
staff.

Sanford writes of the college student's personality,
and implications for curriculum and personnel planning:

> . . . the person functions as a unit . . . we
> cannot make any categorical separation of the
> "intellect" and the rest of the person. Changes
> in what might be called the intellect, changes
> in knowledge and in modes of thought, if they
> amount to anything, would bring with them changes
> in the rest of the personality, just as changes
> in the rest of the personality leave the indi-
> vidual in a different state of receptivity to
> knowledge and facts.[7]

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[6] Calvin S. Hall and Gardner Lindzey, _Theories of
Personality_, p. 522.

[7] Nevitt Sanford, "Implications of Personality
Studies for Curriculum and Personnel Planning," in Robert
L. Sutherland and others, eds., _Personality Factors on
the College Campus_, p. 6.

Although Sanford is concerned with the four-year college student, his view has implications for the junior college student as well. That is, personality change both influences and is influenced by, experiences in the junior college classroom. It follows that a change in satisfaction of psychological security needs of students may facilitate or restrict learning, depending on the direction of such change.

That student needs should be met by services offered is a common theme within the field of student personnel services. Mueller, for example, writes, "the factors which . . . establish the philosophy of college personnel work have always included . . . the needs and characteristics of students."[8] Although Mueller is writing about the four-year college, the goal of need satisfaction of students is also expressed at the junior college level by many writers (Blocker, Plummer, and Richardson, 1965; Medsker, 1960; Brumbaugh, 1954; and

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[8]Kate Hevner Mueller, Student Personnel Work in Higher Education, p. 501.

Raines, 1965).[9]

Concern with student need satisfaction is expressed at Illinois Central College (ICC) where this study was conducted. In a statement of policy concerning the working objectives of student personnel services at ICC, Dr. Niehaus, Dean of Student Personnel Services, writes that "the prevailing student personnel policy is characterized by a recognition and understanding of individual needs. . . ."[10]

Only when affective as well as cognitive and other needs are understood can student personnel workers at ICC and elsewhere more effectively seek to implement the often expressed goal of providing services to satisfy student needs. It is not enough to say that these needs are important; research must provide a clear picture of affective needs so that services offered will truly

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[9]Clyde E. Blocker and others, The Two-Year College: A Social Synthesis, p. 240; Leland L. Medsker, The Junior College: Progress and Prospect, p. 7; A. J. Brumbaugh, "Student Personnel Work in Transition," Junior College Journal, 25:18 (September, 1954); Max R. Raines, "Report to the Carnegie Corporation on Appraisal and Development of Junior College Student Personnel Programs," in Report to Carnegie Corporation, November, 1965, Junior College Student Personnel Programs; Appraisal and Development, p. 8.

[10]Illinois Central College, Student Personnel Services: The Vital Link, n.p.

satisfy needs of students.

Knowledge of affective needs is not the sole concern of the student personnel workers in a junior college. These needs are also of vital importance to instructional staff. Garrison writes that emotional problems are a common classroom occurrence, and that junior college teachers should, therefore, act in the role of teacher-counselor in fulfilling their normal professional duties.[11] Taylor reports that individual conferences with students are necessary for student success, and that a full understanding of students' affective needs would facilitate more effective communication between himself and students in these interviews.[12] Bossone recommends the teacher of remedial English provide warm encouragement to the insecure remedial student through use of teacher-student conferences so as to facilitate student success.[13] Roueche writes that male remedial students are more

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[11]Roger H. Garrison, "Teaching as Counseling," Junior College Journal, 34:12 (October, 1963).

[12]Interview with Karl K. Taylor, Instructor in Communications, Illinois Central College, East Peoria, Illinois, June 9, 1969.

[13]Richard M. Bossone, The Writing Problems of Remedial English Students in Community Colleges of the City University of New York, City University Research and Evaluation Unit for Special Programs, 1969, p. 54.

sensitive to loss of status involved in remedial courses than females. "Male students exhibiting high anxiety are the first to see the class as conflicting with their own personal motivations and the first to drop out of the course."[14]

A knowledge of affective needs of students will help the junior college bring democratic ideals of the open-door policy into a reality of experience for its students. The ideals extended by this policy to what is likely the most heterogeneous student body in higher education today include: (1) the provision of opportunities so each American may achieve whatever his ambitions and abilities allow, and (2) education of a continuing nature for all people. If the sole function of the junior college is to weed out the unfit through rejection at mid-semesters, it will have failed in seeking these democratic ideals. Instead, the junior college must seek to rehabilitate students who are educationally handicapped. For those students not damaged by competition and devaluation of prior educational experience, the junior college must

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[14]John E. Roueche, Salvage, Redirection, or Custody?, Monograph of the ERIC Clearinghouse for Junior College Information, American Association of Junior Colleges, 1968, p. 46.

offer the opportunity for further development.[15] Under-
standing affective needs such as the need of students for
psychological security will help the junior college suc-
ceed in the rehabilitative and developmental tasks posed
by the democratic ideals expressed in the open-door
policy.

Given that pressing needs for psychological secu-
rity may dominate patterns of thinking, perceiving, and
behaving, and that such influence is detrimental to stu-
dent success in the junior college, it becomes vital for
junior college staff to understand student needs for
psychological security. Of what use is the open door,
and the junior college's location near home, if after
entering, students fail because needs for psychological
security block effective learning and decision making?
It is clear that the junior college can best succeed as a
student centered institution if security needs of its
students are understood by a concerned staff.

Statement of Problem

The problem, then, is: How are feelings of
psychological security-insecurity distributed generally

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[15]James D. McHolland,"From Stress to the Release
of Human Potential," address delivered to the Illinois
College Personnel Association, September 27, 1968, Chicago,
Illinois.

through the entire population of a given junior college, and are there any differences in feelings or psychological security-insecurity among various groups within this over-all population?

Null Hypotheses

The following null hypotheses were tested:

1. There is no significant difference between the mean level of security-insecurity of the over-all, general population of students at Illinois Central College and the mean level of security-insecurity found by Maslow (N = 2,020) as given in Table VI of the Manual for the Security-Insecurity Inventory.

2. There is no significant difference between the form of the distribution of security-insecurity among Illinois Central College students and the form of the distribution found by Maslow (N = 2,020) as given in Table VI of the Manual for the Security-Insecurity Inventory.

3. There is no significant difference among mean levels of security-insecurity as found in: (1) Business students; (2) Health students; (3) Technical students; and (4) Agriculture students, of Illinois Central College.

4. There is no significant difference between mean
levels of psychological security-insecurity in
Day and Night students at Illinois Central
College.

5. There is no significant difference between mean
levels of psychological security-insecurity in
Transfer and Terminal students at Illinois
Central College.

6. The difference in psychological security-
insecurity between Day and Night Transfer
students does not differ significantly from
the difference in psychological security-
insecurity between Day and Night Terminal
students.

Definition of Terms

The term "security" is defined by the summation of
the security subsyndromes; the term "insecurity" is de-
fined by the summation of the insecurity subsyndromes.
These subsyndromes are contained in Table 1.

The term "need" is defined as "the lack of some-
thing which, if present, would tend to further the
welfare of the organism . . . it is implied . . . that the

TABLE 1

SECURITY-INSECURITY SUBSYNDROMES[a]

Insecurity	Security
1. Feeling of rejection, of being unloved, of being treated coldly and without affection, or of being hated, of being despised.	1. Feeling of being liked or loved, or being accepted, of being looked upon with warmth.
2. Feelings of isolation, ostracism, aloneness, or being out of it; feelings of "uniqueness."	2. Feelings of belonging, of being at home in the the world, of having a place in the group.
3. Constant feelings of threat and danger; anxiety.	3. Feelings of safety; rare feelings of threat and danger; unanxious.
4. Perception of the world and life as dangerous, threatening, dark, hostile, or challenging; as a jungle in which every man's hand is against every other, in which one eats or is eaten.	4. Perception of the world and life as pleasant, warm, friendly, or benevolent, in which all men tend to be brothers.
5. Perception of other human beings as essentially bad, evil, or selfish; as dangerous, threatening, hostile, or challenging.	5. Perception of other human beings as essentially good, pleasant, warm, friendly, or benevolent.
6. Feelings of mistrust, of envy or jealousy toward others; much hostility, prejudice, hatred.	6. Feelings of friendliness and trust in others; easy affection for others.
7. Tendency to expect the worst; general pessimism.	7. Tendency to expect good to happen; general optimism.

TABLE 1 (continued)

8. Tendency to be unhappy or discontented.

9. Feelings of tension, strain, or conflict, together with various consequences of tension, e.g., "nervousness," fatigue, irritability, nervous stomach, and other psychosomatic disturbances; nightmares; emotional instability, vacillation, uncertainty, and inconsistency.

10. Tendency to compulsive introspectiveness, morbid self-examination, acute consciousness of self.

11. Guilt and shame feelings, sin feelings, feelings of self-condemnation, suicidal tendencies, discouragement.

12. Disturbances of various aspects of the self-esteem complex, e.g., craving for power and for status, compulsive ambition, over-aggression, hunger for money, prestige, glory, possessiveness, jealousy of jurisdiction and prerogative, overcompetitiveness and/or the opposite; masochistic tendencies, over-dependence, compulsive submissiveness, ingratiation,

8. Tendency to be happy or content.

9. Feelings of calm, ease, and relaxation; unconflicted; emotional stability.

10. Tendency to outgoingness; ability to be world-, object-, or problem-centered rather than self- or ego-centered.

11. Self-acceptance, tolerance of self, acceptance of the impulses.

12. Desire for strength or adequacy with respect to problems rather than for power over other people; firm, positive, well based self-esteem; feeling of strength; courage.

TABLE 1 (continued)

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inferiority feelings,
feelings of weakness and
helplessness.

13. Continual striving for
and hunger for safety
and security; various
neurotic trends, inhibi-
tions, defensiveness,
escape trends, ameliora-
tive trends, false goals,
fixations on partial
goals; psychotic tenden-
cies, delusions, hallu-
cinations, etc.

13. Relative lack of
neurotic or psychotic
tendencies; realistic
coping systems.

14. Selfish, egocentric, in-
dividualistic trends.

14. "Social interest" (in
Adlerian sense); co-
operativeness, kindli-
ness, interest in
others; sympathy.

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[a]A. H. Maslow, "The Dynamics of Psychological
Security-Insecurity," Character and Personality, 10:334-
335 (1942).

need or lack in question directly evokes action. . . ."[16]

The term "junior college" is used synonymously with
"community college" in this study and refers to post-high
school public two-year institutions that function, at

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[16]Horace B. English and Ava C. English, A Compre-
hensive Dictionary of Psychological and Psychoanalytical
Terms, p. 338.

least in part, as a service to their community.

The term "Transfer student" in this study is defined as the student enrolled in a junior college for the purpose of attaining sufficient credits for transfer to a four-year institution and the completion of a Baccalaureate. At Illinois Central College, the transfer student is enrolled in curriculums designated in Table 2 by three consecutive digits, the series beginning with zero, e.g., 010 and 090.

The term "Terminal student" refers to those students who do not expect to continue their formal full-time collegiate training beyond the junior college.[17] Terminal students at Illinois Central College are enrolled in curriculums designated in Table 2 by three consecutive digits, the series beginning with a number other than zero, e.g., 110 and 900.

"Night students" in this study are those students attending classes at Illinois Central College from 5:30 P.M. till 10:00 P.M. only.

"Day students" are those students at Illinois Central College attending classes from 8:00 A.M. till 5:00 P.M., plus those whose classes are scheduled both

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[17]Leland L. Medsker, The Junior College: Progress and Prospect, p. 7.

TABLE 2

CURRICULUMS AT ILLINOIS CENTRAL COLLEGE

Transfer Curriculums

010	Pro-Agriculture	070	Pre-Medicine
020	Architecture and Art	071	Pre-Pharmacy
030	Business Administration	072	Pre-Dental
	and Commerce	073	Pre-Veterinary
040	Education	074	Pre-Nursing
050	Pre-Engineering	075	St. Francis Hospital
060	Liberal Arts and Sciences	090	General Studies

Terminal Curriculums

100	Agriculture Business	330	Registered Nurse
101	Agriculture Production and Management	401	Architectural Drafting Technology
200	Accounting	402	Engine Power Technology
205	Commercial Art	403	Chemical Technology
210	Business Management	404	Data Processing Technology
215	Secretarial		
216	Medical Secretarial	405	Electronics Engineering Technology
217	Legal Secretarial		
218	Executive Secretarial	406	Industrial Electronics Technology
219	Co-operative Office Education		
		410	Mechanical Technology
220	Office Machines and Procedures	411	Machine Design
		412	Manufacturing
221	Clerk Typist	413	Internal Combustion Engines
301	Operating Room Assistant		
		420	Industrial Drafting Technology
310	Physical Therapy Assistant		
		430	Auto Mechanics
320	Medical Record Technician	601	Police Administration
		900	Continuing Education

during the day and evening sessions.

The term "Agriculture student" refers to students enrolled at Illinois Central College in curriculums 010, 100 and 101.

"Business student" in this study means those students enrolled in curriculums 030, 200, 210, 215, 216, 217, 218, 219, and 221.

The term "Health student" includes all students at Illinois Central College enrolled in curriculums 070, 071, 072, 073, 074, 075, 301, 310, 320, and 330.

"Technical student" refers to all Illinois Central College students enrolled in curriculums 401, 402, 403, 405, 406, 410, 411, 412, 413, 420, 430, and 601.

Limitations of the Study

This study is restricted to an examination of psychological security-insecurity as measured by Maslow's S-I Inventory. Although 14 subdefinitions are included in the syndrome of security-insecurity as subsyndromes, the S-I Inventory yields only a single score. Thus, results of this study reflect security-insecurity only at the syndrome level. No information on feelings of students within subsyndromes is available from this study.

The study might best have been conducted earlier in the school year than it was. Data collection dates

were April 16, 17 and 18, 1969, after the last date in the
second semester for students to withdraw from classes
because of failing grades. The researcher assumes some of
the first semester students who were very insecure left and
did not enroll for second semester classes. Also, some
per cent of second semester students had withdrawn or left
by the time data was collected. This study may have, there-
fore, been conducted at a time when only the most psychologi-
cally secure students of the school year were left on campus.

The use of a self-report test to reveal basic needs
that are theorized as largely unconscious may be a limita-
tion of this study.[18] The self-report design of Maslow's
S-I Inventory seems to contradict his theory, and yet the
construction of this instrument was determined by the
ability of each item to discriminate between those who
were clinically judged by Maslow and others to be insecure
and secure.[19] This procedure suggests that unconscious
motivations may influence conscious awareness of feelings,

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[18]A. H. Maslow, "A Theory of Human Motivation,"
Psychological Review, 50:389 (July, 1943).

[19]A. H. Maslow and others, "A Clinically Derived
Test for Measuring Psychological Security-Insecurity,"
The Journal of General Psychology, 33:22-24 (July, 1945).

and that the S-I Inventory may bo measuring the largely
unconscious basic nood of psychological security. How-
ever, it is more likely that tho S-I Inventory only
measures conscious feelings. This study may, therefore,
not refloct information concerning important unconscious
determinants of psychological security-insecurity.

CHAPTER II

REVIEW OF RELATED LITERATURE

Need for Research

Few studies have researched personality character-
istics of junior college students. Cross (1968) concludes
such research "is very scanty indeed."[1] Butler (1968),
after reviewing available literature, writes that he found
no research studying needs of junior college students.[2]
Blocker and Plummer (1965),[3] and Moomaw (1967)[4] point out
that most studies describe various intellectual factors,
e.g. test scores and grade point average, of junior college
students. Roueche (1967) writes that the typical institu-
tional research study has been concerned only with the
transfer student who leaves the junior college in pursuit

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[1]K. Patricia Cross, The Junior College Student: A
Research Description, p. 51.

[2]Robert R. Butler, Differences in Need Press Vari-
ables as Perceived by University and Junior College Stu-
dents, Research in Education ED 023 386, p. 3 (1968).

[3]Clyde E. Blocker and Robert H. Plummer, The Two-
Year College: A Social Synthesis, p. 106.

[4]Robert Clayton Moomaw, "Need Press Differences
Among Community College Students," Unpublished doctoral
dissertation, Ohio State University, 1967, p. 9.

of the B.A. degree.[5] The search of literature made by
this author confirms the observations of those writers.

Research on personality characteristics of junior
college students is needed for junior colleges to become
truly effective student-centered institutions. Plans and
decisions of junior college staff should, as normative
practice, be based on as complete knowledge as possible
of student personality needs and characteristics. That
such has not been the case is dramatically implied by the
dearth of research in this area.

It seems clear that the junior college student is
different in many ways than the typical student attending
a four-year institution. The junior college student is
less able academically, comes generally from a lower
socioeconomic background, and is part of a more hetero-
geneous student body, than his counterpart in four-year
colleges and universities. It does not seem wise to use
research performed outside the junior college as a basis
for decisions affecting students within the junior college.

Finally, research should study all members of the
junior college population. Medsker writes that "programs

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[5]John E. Roueche, "Gaps and Overlaps in Institu-
tional Research," Junior College Journal, 38:21 (November,
1967).

and services are planned for full-time, day students and the assumption is usually made that what is good for them will be good for all others."[6] Research on personality needs and characteristics of all students of the junior college, e.g. night students, should be conducted to test the validity of this assumption.

Scope of the Review

Review of literature for this study includes three areas of concern relevant to understanding security-insecurity needs of junior college students. First, the theoretical foundations of security-insecurity will be reviewed. The second area concerns studies conducted on junior college populations for the purpose of researching security-insecurity needs. Research with implications for any of the 14 subsyndrome definitions of security-insecurity will be reviewed. The last area of concern reviews research studies that have used Maslow's Security-Insecurity Inventory as instrumentation.

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[6]Leland L. Medsker, "The Junior College Student," in Report to Carnegie Corporation, November, 1965, Junior College Student Personnel Programs: Appraisal and Development, p. 24.

Theoretical Foundations of
Security-Insecurity

This section reviews briefly the concept of psychological security as found in the theories of Sullivan, May, Rokeach, and Maslow. The most comprehensive treatment of security-insecurity feelings is presented by Maslow. His theory is, therefore, presented last.

Security is an important concept in Sullivan's interpersonal theory. When the usual pattern of interpersonal exchanges is disrupted, tension and anxiety result. Activities performed to dispel this tension and anxiety are termed by Sullivan, "security operations." These operations seek to restore a feeling of safety and self-esteem to the person, and they "always interfere with whatever other tensions and energy transformations they happen to coincide with."[7]

Anxiety, an undifferentiated and diffuse feeling, is seen by May as threatening the security base forming the core or essence of personality.[8] Anxiety results when

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[7]Harry Stack Sullivan, The Interpersonal Theory of Psychiatry, p. 373.

[8]Rollo May, The Meaning of Anxiety, pp. 191-193.

values essential to this security base, or pattern, are threatened. If the person chooses a nonproductive, negative way of coping with this anxiety, his thinking may become more dogmatic and rigid, and generally he will have a lessened capacity for self-awareness.[9]

Part of Rokeach's Open and Closed Belief System is a characteristic of the central-peripheral dimension similar to Maslow's fourth subsyndrome of security-insecurity. For Rokeach, the open mind sees the world as essentially friendly, while the closed mind perceives the world as a threatening place.[10] The person who is closed, acts to remove this threat and to allay feelings of anxiety. This need to defend against threat is one of two motives proposed by Rokeach; the other is the need to know. The relatively closed person may protect against threat by rejecting anxiety creating information. At the same time, the illusion is created that whatever information is allowed into the belief system satisfies the need to know and understand. Both needs are, therefore, satisfied, and the closed mind perpetuates itself.[11]

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[9] Pp. 224-225.

[10] Milton Rokeach, The Open and Closed Mind, p. 56.

[11] Pp. 68-70.

Feelings of security are grouped into different levels of generalization by Maslow. He terms his concept of security-feelings a syndrome, and defines a syndrome as "a general flavor which can be detected or savored in practically everything that the person does, feels, or thinks."[12] The syndrome obeys laws of its own that are not necessarily the same as those laws governing the parts making up the syndrome. The totality of various personality syndromes tends to be integrated and each may be reflected in any single behavioral response.

> As John Doe laughs and responds to a joke, we
> can theoretically tease out from among the
> various determinants of this unitary act, his
> security level, his self-esteem, his energy,
> his intelligence, etc.[13]

Studies performed at the syndrome level are referred to by Maslow as studies at the first level of magnification; studies performed on subsyndromes, e.g., the craving for power subsyndrome of the security-insecurity syndrome,[14] are studies at the second level of magnification; and

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[12]A. H. Maslow, "The Dynamics of Psychological Security-Insecurity," *Character* *and* *Personality*, 10:331 (1942). (Hereafter "Security-Insecurity")

[13]A. H. Maslow, "Dynamics of Personality Organization," *The* *Psychological* *Review*, 50:549 (November, 1943). (Hereafter "Personality")

[14]Maslow, "Security-Insecurity," p. 335.

studies performed on ways a subsyndrome may be expressed, e.g., a hungering for money, are studies at the third level of magnification.[15]

Maslow theorizes five basic needs arranged in a hierarchy according to their prepotency: (1) physiological needs, (2) safety needs, (3) love needs, (4) esteem needs, and (5) self-actualization needs.[16] As lower order needs are satisfied, needs at the next level in the hierarchy gain in potency and press for satisfaction. The emergence of a need into a position of potency comes about gradually as an increasing per cent of the need immediately below it is satisfied. The organism's need for safety, for example, would have to be 75 per cent satisfied before the needs next in the hierarchy, love needs, may 90 per cent emerge.[17] Most needs are never fully satisfied, and behavior may be an expression of several needs simultaneously being felt in varying per cents of potency.

Although the definition of the security syndrome contains a reference to the need for love (subsyndrome 1)

[15]Maslow, "Personality," p. 543.

[16]A. H. Maslow, "A Theory of Human Motivation," Psychological Review, 50:394 (July, 1943). (Hereafter "Theory")

[17]Pp. 388-389.

and self-esteem (subsyndrome 12), this syndrome is pre-
potent primarily within the safety need level of the
hierarchy.[18] If the security needs are well satisfied
early in life, the individual may not be motivated pri-
marily by safety needs except in times of emergencies,
such as war or societal disorganization. Otherwise,
usually only in the neurotic and near-neurotic individu-
al, or in the economic and social underdog, will an ex-
pression of the security needs be clearly seen.[19] The
compulsive-obsessive neurotic provides the best example
of behavior to satisfy security needs in his frantic
attempts to "order and stabilize the world so that no
unmanageable, unexpected, or unfamiliar dangers will ever
appear."[20]

Maslow identifies 15 reactions of insecure persons
that are expressions of the security-insecurity syndrome:

1. In every insecure person with whom the
    writer has worked he has always found a
    continual, never dying longing for
    security.

2. Almost continual action toward regaining
    this individually defined security was

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[18]Maslow, "Security-Insecurity," pp. 334-335.

[19]Maslow, "Theory," pp. 378-379.

[20]P. 379.

found in all cases.

3. Discouragement reactions may be a response
. . . to anything . . . that drives home
the realization of rejection, being hated,
loss of love, etc.

4. Revenge reactions for love already lost or
for a threatened loss [may be found].

5. Defense reactions to prevent further loss
of love [may be found].

6. Ameliorative reactions to make the bad sit-
uation more bearable [may be found].

7. Attack reactions upon the situations which
bring about the insecurity in the attempt
to change or improve them [may be found].

8. The undermining of self-esteem [may be
found].

9. The insecure person will tend always to
hide from himself as long as possible the
conscious realization of rejection, of
loss of love and respect.

10. Other processes that perpetuate the ad-
justment or the life style [will also re-
flect the person's insecurity].

11. The effects of all of these reactions on
other people serve further to perpetuate
and to re-enforce the insecurity.

12. Limiting the base of security (or safety)
[may be found].

13. Neurotic exaggeration of the drive for
security [may be found].

14. The setting up of habits that may outlive
their original functions [may be found].

15. <u>The tendency to defend the system of de-
fenses</u> [may be found].21

These reactions are interpreted by the writer to be at the
third level of magnification. Such behavior as may be
expressive of any of these 15 emerge, according to Maslow's
theory, when the need for psychological security becomes
relatively prepotent over other needs in the hierarchy.

<div align="center">

<u>Studies of Security-Insecurity
of Junior College Students</u>

</div>

This researcher found no studies of security-
insecurity of junior college students. Only a few studies
were found with even tangential relationships to the
problems of security-insecurity. While it is difficult
to draw implications from such peripheral studies, they
are reviewed in this section for whatever value they may
have in gaining a better understanding of security-
insecurity problems in the junior college.

Psychological insecurity in general mathematics
remedial students is suggested by research identifying
their significant characteristics as:

1. A dislike for and lack of confidence in
handling mathematics;

2. An approach to testing characterized by
nonflexible organization;

21Maslow, "Security-Insecurity," pp. 336-342.

3. Emotional disturbances associated with awareness of personal inadequacy;

4. Lack of self-confidence in relations with instructors;

5. A prevalent prediction of unfavorable outcomes for self and peers in school situations.[22]

The third characteristic listed is probably the most important finding for purposes of this review; all five points, however, are presented to give a fuller picture of this kind of junior college student.

Cross summarizes Warren's study as representative of the description of personality characteristics of junior college students that seems to be emerging. In comparison to students at a private college, "junior college students were the most cautious, prudent, and controlled, most apprehensive and rigid in their concerns over grades and academic standing."[23] The implication is that junior college students may be more insecure than four-year college students.

[22]Research Problems in Mathematics Education, Cooperative Research Monograph No. 3, p. 16 (1960), quoted by John E. Roueche, Salvage, Redirection, or Custody?, Monograph of the ERIC Clearinghouse for Junior College Information, American Association of Junior Colleges, 1968, p. 14.

[23]Cross, p. 33.

Part of the suggested greater insecurity of junior college students may be due to lack of opportunities for development of confidence within the junior college environment. Butler found that students responding to Stern's College Characteristics Index saw the junior college "as providing less opportunity for activities in which students are encouraged to develop leadership and self-assurance."[24]

Data presented by Panos suggests that students entering the junior college are insecure concerning their academic abilities. In Panos' study, 6,860 entering students of 7 junior colleges rated themselves on intellectual self-confidence. Students from these colleges who rated themselves above average in self-confidence ranged from a high of 33.1 per cent at one college to a low of 12.3 per cent at another.[25]

Risk-taking preference was a part of research done by Stewart. In Stewart's study, several items were classified as to degree of risk involved, e.g. the subject was asked if he would sacrifice high wages in return for

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[24]Butler, pp. 5-6.

[25]Robert J. Panos, Some Characteristics of Junior College Students, American Council on Education Report Number ACE-RR-Vol-No-2-1966, p. 17.

assurance he would not lose his job, or if he would rather have high pay in a job where the risk of losing all was high. Females were found by Stewart to prefer the low risk job; responses of males revealed no conclusive pattern. Inferences concerning sex differences in psychological security-insecurity cannot, however, be made with confidence as Stewart points out that "women may perceive a ready source of steady income as a realistic consideration in view of possible future plans for marriage and family."[26]

Studies Using the S-I Inventory

Studies using the S-I Inventory can be grouped into two categories: (1) research with implications for the validity of the instrument, and (2) studies providing information concerning the characteristics of secure and insecure persons.

Hanawalt predicted girls in a correctional home and persons in a school for the deaf would be psychologically insecure. When he tested these groups using the S-I Inventory, Hanawalt found both to be insecure as

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[26]Lawrence H. Stewart, Characteristics of Junior College Students in Occupationally Oriented Curricula, University of California Report No. R-1966-1, pp. 13-14.

predicted.[27] Hanawalt also studied validity of the S-I
Inventory by asking six girls who were advanced psychology
majors and who had met together as a class for two semes-
ters to rate each other on security-insecurity. A
correlation of .80 was found between self-rating of the
girls and test scores on the S-I Inventory.[28]

A comparison was made between the Minnesota Multi-
phasic Personality Inventory (MMPI) and the S-I Inventory
by Mehlman and Kaplan to see if these two instruments
would similarly group healthy students as healthy, and
less than healthy students as non-healthy. These authors
found the S-I Inventory and the MMPI to discriminate be-
tween healthy and unhealthy "individuals in a comparable
fashion."[29]

The S-I Inventory was given to 260 high school
seniors from a midwestern city of approximately 25,000 by
Gough. Scores were found to be unrelated to intelligence,
academic performance, or socioeconomic level of subjects.

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[27]Nelson G. Hanawalt, (review of the S-I Inventory),
in Oscar K. Buros, ed., The Fifth Mental Measurements
Yearbook, p. 107.

[28]P. 107.

[29]Benjamin Mehlman and Janice E. Kaplan, "A Com-
parison of Some Concepts of Mental Health," Journal of
Clinical Psychology, 14:122 (April, 1958).

The S-I Inventory was found, however, to be related to some scales on the MMPI. Gough writes:

> Certain sex differences in the correlations indicated that hypochondriacal complaints play a more prominent role in the security and insecurity of girls than of boys, and that feminine tendencies in boys have graver social consequences than masculine tendencies in girls.[30]

Muench questions the validity of the S-I Inventory. When S-I Inventory scores before and after psychotherapy were compared to therapists' judgments of client progress, little agreement was found. Muench concludes either the S-I Inventory does not measure what it should, or the judgments of therapists are inaccurate.[31]

Several studies give insights into characteristics of secure and insecure persons. Bennett and Jordan found that secure persons are more impunitive than insecure individuals, while insecure persons are more extrapunitive; secure and insecure groups did not differ on intropunitiveness.[32] Hanawalt correlated the S-I Inventory with

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[30]Harrison G. Gough, "A Note on the Security-Insecurity Test," _Journal of Social Psychology_, 28:261 (November, 1948).

[31]George A. Muench, "An Investigation of Time-Limited Psychotherapy," _Journal of Counseling Psychology_, 12:296-297 (Fall, 1965).

[32]Carson M. Bennett and Thomas E. Jordan, "Security-Insecurity and the Direction of Aggressive Responses to Frustration," _Journal of Clinical Psychology_, 14:166-167 (April, 1958).

the Pressey Interest-Attitude Test and concludes,
"apparently, emotionally immature as well as mature people
can feel secure."[33]

A rank order correlation technique was applied by
Ferrara and Milofsky to S-I Inventory scores and the
degree of reduction in contradictory information. A
correlation significant at the .05 level was found and
Ferrara and Milofsky, interpreting their result, write
that "the insecure individual who experiences greater
stress . . . has a greater need to escape from cognitive
dissonance, even if this escape requires the suppression
of information."[34]

Gill and others placed 249 college juniors and
seniors into three groups on the basis of S-I Inventory
scores: (1) secure, (2) average, and (3) insecure,
students. These groups then took Rokeach's Dogmatism
Scale (Form E), and Thurstone's Closure Flexibility Scale.
In addition, grade point average data was obtained as an
indication of academic ability. Gill and others write of
the interesting differences found:

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[33]Hanawalt, p. 107.

[34]Anthony J. Ferrara and Charles A. Milofsky,
"Insecurity as a Factor in the Resolution of Contradic-
tion," Psychological Reports, 14:790 (June, 1964).

Groups demonstrating a high degree of security
not only tend to think more openly but as a
group are more effective academically. This
is more true for girls than boys. It appears
at least up to a certain point that how secure
an individual feels may be a direct indication
of his effectiveness as a person and thus his
academic ability.[35]

Summary of Literature Review

The review of literature related to psychological

security-insecurity reveals several important points.

First, several theorists use psychological security

as an important part of their theories of motivation and

personality. These are Sullivan, May, Rokeach, and Maslow.

Of these theorists, Maslow treats psychological security-

insecurity in the greatest detail and most extensively.

Although these theorists differ from one another, all

express the common view that psychological insecurity

tends to act as a motivating force causing undesirable

behavior. For May and Rokeach, the person is likely to

be dogmatic if he is insecure; for Sullivan and Maslow,

insecurity beyond some point tends to dominate behavior

and the person will act to satisfy his security needs.

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[35]Newell T. Gill and others, The Effect of Security
as an Independent Variable on Selected Variables Related
to Perception, Cognition, and Academic Achievement, Re-
search in Education ED 011 796, p. 19 (September, 1966).

That studies of psychological security-insecurity
of junior college students are not available is the
second point of this summary.

Third, few studies of personality characteristics
of junior college students have any implications to offer
concerning the security-insecurity of these students.
Those that do have implications seem to be showing that
junior college students as a group may be somewhat in-
secure. When compared to students in four-year institu-
tions, junior college students may be more insecure.

Fourth, few studies have been published using the
S-I Inventory as instrumentation. Those found by this
researcher suggest the instrument may be valid and may
agree with the MMPI in important ways. Also, research
studies suggest the insecure person is more rigid and
dogmatic in his thinking than the secure person, and is
less academically able, as well.

CHAPTER III

DESCRIPTION OF RESEARCH PROCEDURES

Population and Samples

Population

Junior college students of Illinois Central College, East Peoria, Illinois, who were enrolled for the second semester of the 1968-69 school year, served as the population for this study. Illinois Central College serves District #514, a public junior college Class I district in central Illinois composed of Peoria, Tazewell, Woodford, Marshall, and McLean Counties. The combined population of these five counties is approximately 330,000.

Illinois Central College was selected for this study because of the convenience of its proximity to Illinois State University, and because of the combination of both rural and urban areas within District #514. Illinois' third largest city, Peoria, is located within a few miles of ICC. The population of Peoria and the towns nearby represents slightly more than one-third of the total population in District #514. In addition to being a major river, rail, air, and truck terminal for Illinois, Peoria has industries that include beverage distilling, and the manufacturing of farm machinery,

air-conditioning and heating equipment, diesel engines,
earth-moving equipment, and many others. Urban population
centers in District #514 also include Bloomington in
McLean County, and Pekin in Tazewell County.[1]

Illinois Central College serves a large rural area
throughout its five counties. Farming is the major
industry in the rural area with corn, soybeans, wheat,
oats and hay leading crops, and beef and pork leaders in
meat production.

It was the hope of the researcher that the combina-
tion of students from both rural and urban backgrounds
would more likely provide information concerning
psychological security-insecurity that could be general-
ized in whole or in part, to many other junior colleges.
It was felt that a study conducted at Illinois Central
College might be of more value than a similar study con-
ducted solely on an urban or exclusively rural, junior
college. The representation of both urban and rural
groups in the student body is suggested by the listing of
new students enrolled during the Fall Semester, 1968, by
high school attended, as shown by Table 3 below. Although
both urban and rural groups are represented at ICC, "the
large majority of students commute from urban communities

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[1]Ray E. Howser, "Peoria," Encyclopedia Americana,
1963, vol. 21, pp. 559-560.

TABLE 3

NEW STUDENTS AT ICC FALL SEMESTER 1968-69
BY HIGH SCHOOL ATTENDED[a]

High School	Number of New Students
Pekin Community High School	178
Richwoods Community High School	142
Peoria High School	138
East Peoria High School	126
Manual High School	117
Limestone Community High School	95
[b]Washington Community High School	84
Woodruff High School	79
Spalding Institute	64
Academy of Our Lady	53
[b]Metamora Township High School	47
Bergan High School	39
Morton Community High School	35
[b]Chillicothe Community High School	33
[b]Eureka High School	25
[b]Roanoke-Benson High School	19
[b]Tremont High School	17
[b]Elmwood Community High School	15
[b]Deer Creek-Mackinaw High School	15
[b]Dunlap Township High School	14
[b]Farmington Community High School	13
[b]Princeville Community High School	13
[b]El Paso High School	11
[b]Timber Township High School	8
[b]Brimfield Community High School	6

[a]"Illinois Central College Student Body Overview Information," mimeo compiled by Student Personnel Services Staff, Illinois Central College, April 16, 1969, p. 2.

[b]Indicates schools that may be considered as located in predominantly rural areas.

of over ten thousand population."[2]

Descriptive data other than enrollment figures for
the ICC student population Second Semester, 1968-69, are
not available. A descriptive analysis of the student
body is available, however, for the Spring Semester, 1968,
as well as the age distribution of students for the Fall
Semester, 1968-69. The assumption is made that the data
furnished up to a year earlier than the date the study
was completed is descriptive of the population enrolled
Second Semester, 1968-69.

The age distribution of ICC students follows in
Table 4. Excluding the category of unknown students
(N = 200), 45 per cent of ICC students are between the
ages of 16 and 19; 40 per cent are between the ages of
20 and 29; and 15 per cent are age 30 or older. The
average age probably lies in the interval 20-29.

Twice as many men as women attend Illinois Central
College.[3] During the Spring Semester, 1968, the ratio of
freshmen male students to freshmen female students was

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[2]Glenn Roberson, "A Descriptive Analysis of Illi-
nois Central's Student Body Spring Semester 1968," p. 3.
Unpublished manuscript.

[3]Illinois Central College, Student Personnel Ser-
vices: The Vital Link, p. 13.

TABLE 4

AGE DISTRIBUTION OF ICC STUDENTS
FALL SEMESTER 1968-69[a]

Age	Frequency
16-17	8
18	991
19	736
20-29	1,527
30-39	380
40-49	159
50-59	35
60-Over	2
Unknown	200
Total Enrolled	4,038

[a]"Illinois Central College Student Body Overview Information," mimeo compiled by Student Personnel Services Staff, Illinois Central College, April 16, 1969, p. 9.

"slightly under two to one."[4] The ratios of all male students to female students by day and evening attendance were 3:1 to 3:2, respectively.[5]

Most students at Illinois Central College are single. Thirty-eight per cent of all students in 1968

[4]Roberson, p. 3.

[5]p. 3.

were married, with a large difference noted between day and night students. Of the day students, only 13 per cent were married while 68 per cent of the night students were married.[6]

The student body comes predominantly from stable, middle class homes. Eighty-seven per cent of students reported both parents reside at home while 13 per cent said one or both parents were deceased.[7] Only 7 per cent of heads of students' households are from professional vocations, 5 per cent are unskilled workers, and "the great majority of students, parents, or spouses are employed in the managerial, clerical, sales, skilled and semi-skilled occupations."[8] Fifteen per cent of students' parents had attended school less than eight years, 50 per cent had finished at least one year of high school, and approximately 20 per cent of "family heads had attended at least one semester or quarter of college."[9]

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[6]P. 4.

[7]P. 7.

[8]P. 7.

[9]P. 7.

Approximately 30 per cent of all students are
transfer students,[10] 70 per cent of whom came from the
University of Illinois, Illinois State University, Western
University, Bradley University, or Canton Junior Col-
lege.[11] Of the entire student body, approximately 96 per
cent reside inside District #514.[12]

Illinois Central College students enjoyed average
success in their academic work in high school. Their
"college test scores are above average for high school
seniors, but below average for four-year college fresh-
men."[13] The Composite ACT Score, when compared to other
junior colleges, is two percentile points lower with a
relative weakness in mathematics indicated.[14]

Many ICC students desire to enter the professions,
and a majority plan to transfer to a four-year institution
for completion of a Baccalaureate. Students' vocational
choices tend to be unrealistic, often expressing status

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[10]p. 5.

[11]p. 9.

[12]p. 9.

[13]Illinois Central College, p. 14.

[14]Roberson, p. 5.

values and not real interests.[15]

Enrollment figures by curriculum number and schedule type for all students enrolled at Illinois Central College Second Semester, 1968-69, are given in Table 5 below. The total number of students enrolled is 3,347.

In summary, the population chosen for this study is heterogeneous in age, marital status, sex, type high school attended, and enrollment choices. These factors indicate that Illinois Central College students are typical of students in many other junior colleges. Heterogeneity of socioeconomic background was also indicated, although more ICC students may come from the middle class than at other junior colleges. Clark, for example, found in a sample (N = 95) of San Jose Junior College students, that 23 per cent came from homes where the student's father was an upper white-collar worker, 60 per cent from homes of lower white-collar and upper blue-collar workers, and the remainder, 17 per cent, from homes where the father was a lower blue-collar worker.[16] Apparently, more San Jose Junior College students than ICC students come from the extreme upper and lower categories. A more complete

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[15]Illinois Central College, p. 14.

[16]Burton R. Clark, The Open Door College: A Case Study, p. 54.

TABLE 5

ILLINOIS CENTRAL COLLEGE ENROLLMENT
SECOND SEMESTER, 1968-69

Curriculum	Day	Evening	Total
010	20	1	21
020	21	...	24
030	132	...	176
040	214	48	262
050	56	8	64
060	323	42	365
070	???	...	132
090	486	65	552
100	36	0	36
200	50	19	69
210	119	25	144
221	3	...	7
301	9	0	9
310	9	1	10
320	?	0	7
350	38	4	42
401	203	65	268
410	27	10	37
420	15	0	15
430	1	0	1
460	6	4	10
601	11	5	16
900	146	932	1,078

study should be conducted, however, before definite con-
clusions are drawn. Academic ability is also heteroge-
neous, although the overall ability level may be slightly
lower than at other junior colleges.

Samples

A total of 400 students was selected from the total
population representing samples of: (1) the overall,
general population; (2) Business students; (3) Agriculture
students; (4) Technical students; (5) Health students;
(6) Night Transfer students; (7) Night Terminal students;
(8) Day Transfer students; and (9) Day Terminal students.
Further specifications of samples may be found under Sampling Procedure.

Sampling Procedure

Machine records print-out sheets were furnished
by Illinois Central College. These sheets contained the
names of all students enrolled at the beginning of the
second semester, 1968-69, within the sampling areas
listed in Samples above.

An identical procedure was followed for the selection of samples from each print-out sheet. First, each
name was assigned an identification number within a series
appropriate to the total number of names on the sheet.
For example, the general population print-out listed
3,347 names; accordingly, these names were assigned the

identification numbers 0001 through 5547. Second, a row
and column starting point in a table of random numbers
was arbitrarily chosen. Third, identification numbers
were drawn from the table of random numbers, beginning
with the starting point and reading vertically down the
table. When the bottom of the table was reached, numbers
were chosen in a similar manner beginning at the top of
the table with the column immediately to the right of the
starting point. This procedure was continued until the
number of identification numbers desired had been selected
without duplication. The identification numbers chosen
were then matched with the corresponding numbers on the
print-out sheets and the students' names adjacent to the
identification numbers represented the sample members or
units.

Duplications were expected since students are
simultaneously members of the overall, general popula-
tion, of a given schedule type and curriculum type, e.g.
Night Transfer, and perhaps also of one of the four
academic areas chosen. Thirteen duplications resulted
from drawing 400 identification numbers from the table

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[17]J. G. Peatman and R. Schafer, "A Table of Random
Numbers from Selective Service Numbers," Journal of
Psychology, 14:295-297 (1942), reprinted in Merle W. Tate,
Statistics in Education, pp. 568-569.

of random numbers. The total number of students invited
to participate in the study was, therefore, 387.

A letter of invitation was sent on April 9, 1969,
to each student randomly selected for the nine sample
groups. A postcard reminder was also sent each student
on April 12, 1969. Examples of the letter of invitation
and the reminder postcard are included as Appendix A and
Appendix B, respectively.

Maslow's Security-Insecurity Inventory was admin-
istered to students April 16 through 19, 1969, in the
College Room of the Illinois Central College Student
Union. Students reported initially to the counseling
offices where they were directed to the College Room. In
the College Room, students identified themselves to the
researcher and were given an instrument package consisting
of directions, nine questions asking for descriptive
information, and the S-I Inventory. The package was
designed to be self-administering so that students could
participate in the study whenever they had free time.
Students were instructed where to begin in the package
and to use as much time as they felt was needed in order
to give accurate answers. As estimated in the invitation
letter, 15 to 20 minutes was required, on the average,

to answer all questions. A complete instrument package
is contained in this study as Appendix C.

Provision for Test Interpretation

Confidentiality of student answers was strictly
observed. Students were instructed not to affix their
name on any portion of the instrument package. A small
card attached to the package listed the name and Survey
Identification Number assigned each subject of the study.
Students were to remove these cards and keep them when
leaving the testing room. If a student subsequently
desired a test interpretation, he was to report to the
Illinois Central College counseling offices and give his
counselor the card listing his name and Survey Identifica-
tion Number. The counselor then requested the research
send the questionnaire with corresponding number so that
the requested test interpretation could be conducted.

It is of interest that only three students re-
quested test interpretations. One of the three, however,
as a result of the interpretation interview, was referred
to a nearby mental health clinic to receive psychological
help.

The Security-Insecurity Inventory

Purpose

The purpose of the Security-Insecurity Inventory
is to measure inner, conscious feelings of psychological

security-insecurity as defined by Maslow.[18] By summing
answers to questions related to 14 subsyndromes of the
security-insecurity syndrome, this instrument provides a
numerical index indicating the degree of internal balance
within a person between the poles of psychological secu-
rity and insecurity. The higher the score, the more
insecure a person is; the lower, the more secure one
feels.

Since psychological security is one of the deter-
minants of mental health, if not synonymous with it,
Maslow suggests the S-I Inventory be used as a screening
device with large populations. Individuals with "neu-
rotic" symptoms but with moderate scores on the S-I
Inventory are likely suffering from situational problems
rather than severe neurosis or personality disorders.[19]
These are persons who may benefit from counseling within
the junior college. Students, however, with extremely
high scores on the S-I Inventory may have psychological
problems too serious for counseling by junior college
counseling staff. These insecure students might best be

[18]A. H. Maslow and others, Manual for the Security-
Insecurity Inventory, n.p. (Hereafter Manual)

[19]A. H. Maslow and others, "A Clinically Derived
Test for Measuring Psychological Security-Insecurity," The
Journal of General Psychology, 33:37 (July, 1945).
(Hereafter "Test")

considered for referral to a mental health agency outside the college where more highly trained help is available, and where the program design may accommodate serious personality problems.

The primary use of the test is intended by Maslow to be "with large groups, whether for various types of research, for survey purposes in any given population, or for comparison of populations."[20] The S-I Inventory is not designed or intended to be used as a tool of individual diagnosis, and Maslow warns against using it as a substitute for clinically studying the individual.[21]

Reliability

Because feelings of security change with time, reliability calculations utilizing internal consistency techniques are seen by Maslow as more appropriate than test-retest methods. Utilizing the split-halves, odd-even method, a reliability of .86 was obtained; splitting the form with approximately equal representation from each subsyndrome in the halves resulted in a .91 reliability coefficient. Pages one, two, and three, when correlated with the total score, produced reliability coefficients

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[20]P. 37.

[21]P. 38.

of .92, .91, and .92, respectively.[22] All these coeffi-cients indicate that the S-I Inventory is an instrument
of high internal consistency reliability.

Validity

A validity coefficient of approximately .90 is
claimed by Maslow.[23] A threefold argument is used to
support this claim. First, clinical studies of known
secure and insecure clients provided original and subse-
quent data for validity of test items. An item analysis
technique was also utilized to ensure only those items
that discriminated well were retained. Content validity
was assured throughout test construction by adhering
closely to the definitions of subsyndromes of security-
insecurity. Secondly, the test was given to students who
served as the criterion for concurrent validation through
reporting how well they thought the test had estimated
their feelings of security. This method of validation is
the only evidence of predictive validity given by Maslow.
Eighty-eight per cent reported the S-I Inventory to be
fairly or extremely accurate in estimating levels of

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[22]Maslow and others, _Manual_, n.p.

[23]Maslow and others, "Test," p. 29.

security.[24] Third, over a period of five years or longer, Maslow examined construct validity by comparing test scores with kind and seriousness of client problems. High agreement was found between test scores and types of psychological problems.[25]

Webster, reviewing the S-I Inventory in Buros' Fifth Mental Measurements Yearbook writes:

> It may be said immediately that it is doubtful that there are other personality tests the authors of which have exercised such great care to ensure item validity. The test can be recommended without reservations as a valid measure of security-insecurity, as this trait is described by the authors.[26]

Hanawalt, another reviewer in Buros' book, is critical of the lack of predictive validity studies, but concludes, "the validity is as good as can be expected."[27]

The S-I Inventory is likely particularly valid for use with junior college populations because the validation studies were conducted with college students generally

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[24]p. 29.

[25]Pp. 29-33.

[26]Harold Webster, (review of the S-I Inventory), in Oscar K. Buros, ed., The Fifth Mental Measurements Yearbook, pp. 107-108.

[27]Nelson G. Hanawalt, (review of the S-I Inventory), in Oscar K. Buros, ed., The Fifth Mental Measurements Yearbook, p. 107.

between the ages of 17 and 23. Illinois Central College, however, like many other junior colleges, has an extremely heterogenous age distribution, and the use of the S-I Inventory for all students in the population may be questioned. Further study is indicated before the instrument can be endorsed without qualification for junior college use.

Design of Study

The problem of this study was translated into two major questions: (1) how are feelings of psychological security-insecurity distributed generally throughout the entire population of Illinois Central College students; and (2) are there any differences in feelings of psychological security-insecurity among various groups within the overall population? These two questions were restated in null hypothesis form and the sample data was statistically analyzed to determine the significance of any differences found.

The null hypotheses follow, plus a description of the statistical treatment used to test each hypothesis.

Null Hypothesis 1: There is no significant difference between the mean level of security-insecurity of the overall, general population of students at Illinois Central College and the mean level of security-insecurity

found by Maslow (N = 2,020) as given in Table VI of the _Manual for the Security-Insecurity Inventory._

Treatment 1: A two-tailed test using z as test statistic was conducted at the .01 level of significance to test the hypothesis of no difference in means.

Null Hypothesis 2: There is no significant difference between the form of the distribution of security-insecurity among Illinois Central College students and the form of the distribution found by Maslow (N = 2,020) as given in Table VI of the _Manual for the Security-Insecurity Inventory._

Treatment 2: The form of the distribution of security-insecurity of Illinois Central College students was compared to the rectangular distribution of deciles in Table VI of Maslow's manual by using a frequency chi-square test at the .01 level of significance.

Null Hypothesis 3: There is no significant difference among mean levels of security-insecurity as found in: (1) Business students; (2) Health students; (3) Technical students; and (4) Agriculture students, of Illinois Central College.

Treatment 3: A preliminary test using Hartley's F-max statistic was conducted to test the assumption of

homogeneity of variance at the .05 level of significance.
The null hypothesis was then tested using a one-way
analysis of variance technique at the .01 level of sig-
nificance.

Null Hypothesis 4: There is no significant differ-
ence between mean levels of psychological security-
insecurity in Day and Night students at Illinois Central
College.

Null Hypothesis 5: There is no significant differ-
ence between mean levels of psychological security-
insecurity in Transfer and Terminal students at Illinois
Central College.

Null Hypothesis 6: The difference in psychological
security-insecurity between Day and Night Transfer stu-
dents does not differ significantly from the difference
in psychological security-insecurity between Day and Night
Terminal students.

Treatment of Null Hypotheses 4, 5, and 6: A two-
way analysis of variance technique at the .01 level of
significance was utilized to test hypotheses 4, 5, and 6
within the same test.

In addition to testing the above null hypotheses,
descriptive data including sex, age, standing in high
school class, marital status, and religious preference,

of all samples was tabulated as an aid to understanding significant differences that were found. An item analysis utilizing a chi-square test of independence for each item of the S-I Inventory was also performed to determine which items of the instrument discriminated between groups differing significantly in feelings of psychological security-insecurity.

CHAPTER IV

RESULTS

Response of Samples to Approach

The approach used for data collection in this study
was a letter of invitation and reminder postcard from the
Director of Counseling at Illinois Central College re-
questing students to use free minutes on campus for the
purpose of completing survey forms. Data to be collected
was assembled into a self-administering instrument pack-
age. The researcher identified each student by name so
as to match data collected with the appropriate sample.
Students were then instructed concerning where to begin
in the instrument package, and each student was allowed
to complete the survey forms within the testing room at
his own rate of speed.

It is the hope of the researcher that percentages
reported from this approach may serve as guidelines for
future research designs with junior college populations.
Designs utilizing random samples are difficult to achieve
operationally because of varying time schedules of indi-
vidual students. Most students come on campus for classes,
then leave, and many do not stay extra periods of time or
return to participate in extra-curriculum activities.
Research may be conducted within classes, e.g. psychology

classes, but such a procedure may bias results. The approach used in this study was designed to avoid sample bias and to yield accurate pictures of populations sampled.

Three hundred eighty-seven different students were sent letters and postcards of invitation. Of this number, 191 students came to participate in the survey. One of these students, after reading the questions within the S-I Inventory, refused to answer. The total number who completed all forms was, therefore, 190 or 49 per cent of the 387 invited.

In addition to the 190 students who responded to invitations, 13 others volunteered to participate in the survey. The instrument package was administered to these students. They have not, however, been included in response percentages that follow in Table 6.

Per cent return figures in Table 6 are understated. It is impossible to pinpoint by total or by sample, how much higher these return figures should be. Data was collected after the last date in the second semester for students to withdraw from classes because of failing grades. Illinois Central College officials estimated that as many as 25 per cent of those enrolled at the beginning of the semester had dropped out by the date of data collection. Yet, all samples were selected from lists of

TABLE 6

RESPONSE OF SAMPLES
TO APPROACH USED

Population Sampled	Number Invited	Number of Responses	Per Cent Return
General Population	230	112	48.7
Business Students	30	12	40.0
Health Students	30	14	46.7
Technical Students	30	14	46.7
Agriculture Students	30	17	56.7
Night Transfer Students	50	27	54.0
Night Terminal Students	73[a]	24	32.9
Day Transfer Students	94[a]	42	44.7
Day Terminal Students	47[a]	27	57.4

[a]Sample N taken from total representation within General Population Sample return (N = 112); number invited figure is a projection based on the percentage of this group within the total population of 3,347 ICC students.

students enrolled at the beginning of the semester. If officials' estimates are accurate, the return may have been as high as 66 per cent.

Because of the likelihood return per cent figures are inaccurate, it is difficult to interpret data within Table 6. Returns suggest the highest per cent of response from invitations may be expected from Day Terminal, Agriculture, and Night Transfer students. Such

a suggestion, however, must be considered highly tentative
as a basis for planning future research designs.

Security-Insecurity Within the
General Population

One of the major questions posed in this study was
how are feelings of psychological security-insecurity dis-
tributed generally throughout the entire population of
Illinois Central College students? The first two null
hypotheses were tested by treatments one and two,
respectively, to answer this question.

Null Hypothesis 1: There is no significant differ-
ence between the mean level of security-insecurity of
the overall, general population of students at Illinois
Central College and the mean level of security-insecurity
found by Maslow ($N = 2,020$) as given in Table VI of the
Manual for the Security-Insecurity Inventory.

Treatment 1: A two-tailed test using z as test
statistic was conducted at the .01 level of significance
to test the hypothesis of no difference in means.

A mean of 18.6 was computed for the General Popula-
tion Sample of 112 students. This sample mean compares
closely with Maslow's stated mean of 19.5 for his

population of 2,020.[1] The z test found no significant difference between these means, and the null hypothesis was retained.

Null Hypothesis 2: There is no significant difference between the form of the distribution of security-insecurity among Illinois Central College students and the form of the distribution found by Maslow (N = 2,020) as given in Table VI of the Manual for the Security-Insecurity Inventory.

Treatment 2: The form of the distribution of security-insecurity of Illinois Central College students was compared to the rectangular distribution of deciles in Table VI of Maslow's manual by using a frequency chi-square test at the .01 level of significance.

It was desired to use 200 or more scores to test this null hypothesis. Accordingly, a composite sample termed "Form of Distribution Composite Sample" was formed as shown in Table 7 below. This procedure resulted in 203 separate scores of security-insecurity.

Since the assumption of random sampling from the overall population was not followed in compiling the Form

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[1]A. H. Maslow and others, Manual for the Security-Insecurity Inventory, n.p.

TABLE 7

MAKEUP OF FORM OF DISTRIBUTION
COMPOSITE SAMPLE

Population Sampled	Selection Method	Sample Size
General Population of Students	Random	112
Business Students	Random	12
Health Students	Random	14
Technical Students	Random	14
Agriculture Students	Random	17
Night Transfer Students	Random	27
Undetermined	Volunteers	13
Subtotal		209
Duplicate scores		-6[a]
Total		203

[a]Four Night Transfer, one Health, and one Business
Student were also selected for the General Population
Student Sample.

of Distribution Composite Sample, generalizations from the
chi-square test cannot be made concerning the population
of all students at ICC unless the composite sample can be
shown to be truly representative of the total population.
Table 8 shows that the composite sample is closely similar
to all students enrolled Second Semester, 1968-69, in per-
centages of day, night, transfer and terminal enrollments.

TABLE 8

COMPARISON OF FORM OF DISTRIBUTION COMPOSITE SAMPLE AND SECOND SEMESTER 1968-69 ENROLLMENT

Description	Per Cent
ICC Students Enrolled Day	61.7
Sample Students Enrolled Day	63.0
ICC Students Enrolled Night	38.3
Sample Students Enrolled Night	37.0
ICC Students in Transfer Programs	47.8
Sample Students in Transfer Programs	53.2
ICC Students in Terminal Programs	52.2
Sample Students in Terminal Programs	46.8

Other data on the characteristics of the Illinois Central College student population enrolled Second Semester, 1968-69, are not available. Further comparisons were made, therefore, between the General Population Sample (N = 112) data, and the Form of Distribution Composite Sample. Two assumptions were made. First, it was assumed that the random sample of 112 students from the total enrollment of 3,347 students is a representative sample of the overall, general population. Second, it was assumed that a comparison between the General Population

Sample and the Form of Distribution Composite Sample is
meaningful for purposes of determining whether or not
generalizations can be drawn from the frequency chi-
square test about the Second Semester, 1968-69, popula-
tion of ICC students.

Table 9 compares descriptive data of the General
Population Sample with that of the Form of Distribution
Composite Sample. Seven per cent more students in the
composite sample are male than in the General Population
Sample; the composite sample has seven per cent fewer
females. There is also a small difference in marital
status, six per cent more of the General Population Sample
being married than in the composite group, while the
direction is reversed but with an equal per cent differ-
ence for the single category. In other categories there
is very close agreement.

The most important comparison for purposes of the
frequency chi-square (x_f^2) test is between the per cent
of scores within each of Maslow's deciles for the General
Population and Form of Distribution Composite Samples.
Changes in per cent values by decile between the two
samples are reflected through score frequencies in a
changed value of the test statistic, x_f^2. Thus, changes
in per cents in this comparison might influence the outcome

TABLE 9

COMPARISON OF DESCRIPTIVE DATA FORM OF
DISTRIBUTION COMPOSITE SAMPLE AND
GENERAL POPULATION SAMPLE

Descriptive Category	Per Cent General Population Sample	Per Cent Form of Distribution Composite Sample
Sex		
Male	50	57
Female	50	43
High School Rank		
Top third	36	36
Middle third	50	51
Lower third	14	13
Marital Status		
Single	69	63
Married	29	35
Other	2	2
Religious Preference		
Protestant	55	57
Catholic	28	26
Jewish	0	0
Other	17	17

of the test itself. Note within Table 10 that the change

in five of the decile categories would tend to increase

the value of x_f^2, while five of the categories would

decrease the value. The average change in per cents by

decile category decreasing x_f^2 is 1.6 per cent. The

average change increasing x_f^2 is .8 per cent. Use of the

composite sample instead of the General Population Sample

for purposes of computing x_f^2 will, therefore, tend to

decrease slightly the value of the test statistic, and

such use should be considered as questionable for values

very close to the critical region.

A chi-square value of 12.62 was computed as the

value of the test statistic, and the null hypothesis of

no difference in distribution forms was retained. This

value is not close to the critical region, $x_f^2 \geq 21.67$,

and the use of the Form of Distribution Composite Sample

may be accepted, therefore, on the grounds that:

(1) such use does not change the outcome of the test;

and (2) the composite sample is representative of the

overall population of Illinois Central College students.

TABLE 10

COMPARISON OF GENERAL POPULATION AND FORM
OF DISTRIBUTION COMPOSITE SAMPLES
BY PER CENT SECURITY-INSECURITY

Maslow's Decile Classification[a]	Per Cent General Population Sample	Per Cent Form of Distribution Composite Sample
Very Insecure	6.3	6.9
Insecure	7.2	6.9
Tendency to be insecure	14.3	12.3
Average	11.6	9.3
Average	8.0	7.0
Average	12.5	14.3
Average	9.8	9.3
Tendency to be secure	8.0	12.3
Secure	8.0	9.9
Very secure	14.3	11.8

[a]A. H. Maslow and others, Manual for the Security-
Insecurity Inventory, n.p.

The form of the distribution of the composite sam-
ple is shown in Figure 1 below. This distribution, as
Maslow's, is positively skewed with the greatest score
frequencies found in the secure portion of the score
range. The frequency distribution of scores for Figure 1
is contained in this study as Appendix D.

FIGURE 1

FORM OF DISTRIBUTION COMPOSITE SAMPLE
FREQUENCY POLYGON
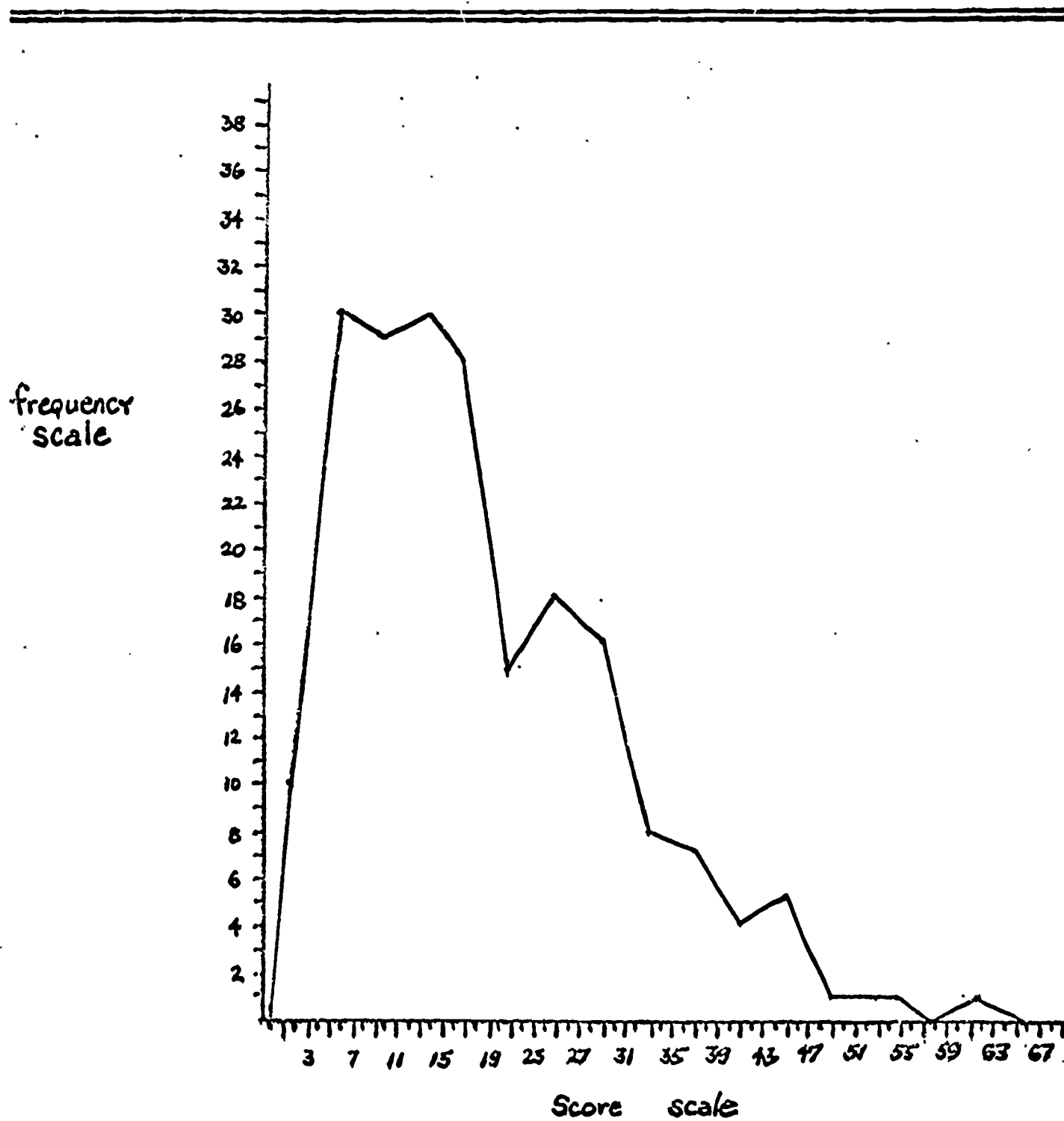
Security-Insecurity Differences
Among Curriculum Groups

The second major question of this study asked are
there any differences in feelings of psychological secu-
rity-insecurity between various groups within the overall
population? The third null hypothesis as tested by the
third treatment was included in the study to help answer
this question.

Null Hypothesis 3: There is no significant differ-
ence among mean levels of security-insecurity as found in:
(1) Business students; (2) Health students; (3) Technical
students; and (4) Agriculture students, of Illinois Central
College.

Treatment 3: A preliminary test using Hartley's
F-max statistic was conducted to test the assumption of
homogeneity of variance at the .05 level of significance.
The null hypothesis was then tested using a one-way
analysis of variance technique at the .01 level of signifi-
cance.

The preliminary test revealed that the assumption
of homogeneity of variance applies to the populations
sampled. The one-way analysis of variance test did not
result in a significant value of the test statistic, F,
and the null hypothesis was retained. Table 11 below

summarizes the one-way analysis of variance between curriculum groups.

TABLE 11

ANOVA SUMMARY OF CURRICULUM GROUPS

Sources	ss	df	ms	F
Experimental Groups	143.3	3	47.7667	.411
Within Groups	6,165.6	53	116.3321	
Total	6,308.9	56		

Security-Insecurity Differences between Schedule and Curriculum Types

Schedule types Day and Night, and curriculum types Transfer and Terminal, were examined to help answer this study's second major question, are there any differences in feelings of psychological security-insecurity among various groups within the overall population? Null Hypotheses four, five, and six and corresponding treatment provided answers for this examination.

Null Hypothesis 4: There is no significant difference between mean levels of psychological security-insecurity in Day and Night students at Illinois Central College.

Null Hypothesis 5: There is no significant differ-
ence between mean levels of psychological security-
insecurity in Transfer and Terminal students at Illinois
Central College.

Null Hypothesis 6: The difference in psychological
security-insecurity between Day and Night Transfer stu-
dents does not differ significantly from the difference
in psychological security-insecurity between Day and Night
Terminal students.

Treatment of Null Hypotheses 4, 5, and 6: A two-
way analysis of variance technique at the .01 level of
significance was utilized to test hypotheses 4, 5, and 6
within the same test.

Two-Way Analysis of Variance

Unequal numbers were obtained for the matrix cells,
Day Transfer, Day Terminal, Night Transfer, and Night
Terminal, through the response to the sampling approach.
To equalize numbers of scores within cells, it was neces-
sary to select out 18 Day Transfer, 3 Day Terminal, and
3 Night Transfer scores. This selection was accomplished
by a random technique. The number of scores within each
cell after the random draw was 24. The matrix of scores
is presented in this study as Appendix E.

Table 12 summarizes the results of the two-way
analysis of variance test. No difference in mean levels

of psychological security-insecurity between Transfer and Terminal students was found, nor was any interaction found between schedule and curriculum types. Null Hypotheses 5 and 6 were, therefore, retained. Null Hypothesis 4, however, was rejected. The difference in mean levels of psychological security-insecurity between Day and Night students was significant at the .01 level. Day students, on the average, achieved a more insecure score than did Night students.

TABLE 12

SCHEDULE AND CURRICULUM TYPES
TWO-WAY ANOVA SUMMARY

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F
Rows (Curriculum Type)	19.26	1	19.26	.17
Columns (Schedule Type)	1,953.01	1	1,953.01	17.15[a]
Interaction	82.51	1	82.51	.73
Within Cells	10,475.71	92	113.87	
Total	12,530.49	95		

[a]$p < .01$

The rejection of Null Hypothesis 4 was verified by a further test. No difference between mean levels of psychological security-insecurity in Day and Night students was hypothesized. Scores randomly taken from the cells of the two-way analysis of variance matrix were again put into their appropriate cells. Separating matrix columns then provided random samples of Day and Night students. The hypothesis was then tested using a two-tailed test with z as test statistic. The outcome of this test indicated rejection of the null hypothesis, and was significant at the .01 level. Day students were confirmed to be, on the average, less psychologically secure than Night students.

Table 13 clarifies the difference in feelings of psychological security-insecurity between Day and Night students. All classification categories are as listed in the test manual except for the Average category. Four deciles are listed separately by Maslow, each corresponding to the term, "Average." These four are summed within Table 13 as an aid in pointing out significant differences. Note that over 30 per cent of Day students scored in the top three categories as compared to nearly 20 per cent of Night students. Nearly 15 per cent more Day than Night students scored in the Average category, while over 25 per

cent more Night students than Day students scored in the bottom three categories.

TABLE 13

COMPARISON OF DAY AND NIGHT STUDENTS
BY PER CENT SECURITY-INSECURITY

Maslow's Classification[a]	Day Students (N = 69)	Night Students (N = 51)
Very Insecure	8.7	2.0
Insecure	7.2	9.8
Tendency to be Insecure	14.5	7.8
Average	47.8	33.3
Tendency to be Secure	7.2	9.8
Secure	5.8	13.7
Very Secure	8.7	23.5

[a]A. H. Maslow and others, Manual for the Security-Insecurity Inventory, n.p.

Day and Night Student Answers

Answers given by Day and Night students were tabulated for each of the 75 items of the S-I Inventory. A test of independence utilizing the frequency chi-square statistic was then conducted for each item. The null hypothesis for each of the 75 tests was that the type

answer given, "Yes," "no," or "?," is independent of the
schedule type of student answering. The test of inde-
pendence can be thought of as testing association or
correlation between type of answer given and schedule type
of student answering. If the null hypothesis is retained,
then given the relative frequencies of a distribution of
answers to an item, one could not predict which schedule
type corresponds to the relative frequency distribution.
If the outcome of the test indicates rejection of the null
hypothesis, such prediction is possible.

Table 14 lists questions of the S-I Inventory for
which the null hypothesis of independence was rejected.
Values of the test statistic, x_i^2, and degrees of freedom
appropriate to each test are also given. The df values
vary because Cochran's suggestions for controlling small
F values were followed.[2] That is, it was necessary to re-
organize data matrices for three of the items, eliminating
the frequencies for the "?" answer because F values were
too small.

Interpretations of significant items listed in Table
14 below must be made individually by item. These inter-
pretations are listed in Table 15 which follows.

_____

[2]W. G. Cochran, "Some Methods for Strengthening the
Common x^2 Tests," Biometrics, 10:420 (December, 1954).

TABLE 14

DAY AND NIGHT STUDENT ANSWERS:
CHI-SQUARE AND DF VALUES
OF SIGNIFICANT ITEMS

Question[a]	df	x_f^2 Value
Do you get discouraged easily?	1	6.0944[b]
Are you frequently in low spirits?	1	5.3765[b]
Do you feel that you are useful in the world?	2	15.9211[c]
Do you spend much time worrying about the future?	2	9.3804[c]
Do you think of yourself often?	2	10.4274[c]
Do you feel sorrow and pity for yourself when things go wrong?	2	8.5874[b]
Are you ever bothered by a feeling that things are not real?	1	10.0226[c]

[a] A. H. Maslow and others, The S-I Inventory, n.p.

[b] $p < .05$

[c] $p < .01$

TABLE 15

INTERPRETATION OF SIGNIFICANT ITEMS
OF DAY AND NIGHT STUDENTS

Question[a]	Interpretation
Do you get discouraged easily?	Day students tend to say "Yes" as often as "No," while Night students tend to answer "No."
Are you frequently in low spirits?	Night students tend to answer "No" without exception. Day students also tend to say "No" most often but many answer "Yes," as well.
Do you feel that you are useful in the world?	"Yes" is the overwhelming choice of Night students. Most Day students also answer "Yes," but many say "No," and "?," as well.
Do you spend much time worrying about the future?	Day students tend to say "Yes," while Night students say "No." There are many exceptions, however, in both groups.
Do you think of yourself often?	Day students tend to answer "Yes," and "?," more often than Night students. "No" is the answer Night students tend to give.
Do you feel sorrow and pity for yourself when things go wrong?	Many more Day students than Night students tend to answer "?." Other differences are slight with most of both groups answering "No," although many say "Yes."

TABLE 15 (continued)

Are you ever bothered by a feeling that things are not real?	Over a third of Day students say "Yes," while almost none of the Night students answer this way.

[a]A. H. Maslow and others, The S-I Inventory, n.p.

Descriptive Data by Sample

Descriptive data including sex, age, high school rank by thirds, marital status, and religious preference, was collected from all students participating in this study. This data was tabulated to help in understanding results of statistical analyses. Table 16 presents the results of the descriptive data collection and compilation.

Discussion

The statistical analyses point to several important findings. Outcomes of testing the first and second null hypotheses indicate that the general population of Illinois Central College students is very similar in feelings of psychological security-insecurity to the population of 2,020 used by Maslow as a norm in the Manual for the S-I Inventory. Mean levels and distribution forms do not

TABLE 16

DESCRIPTIVE DATA BY SAMPLE

Sample	N	Per Cent Sex		Ave. Age	Per Cent H.S. Rank by Thirds			Per Cent Marital Status			Per Cent by Religious Preference			
		Male	Fe-male		Top	Mid-dle	Low-er	Sin-gle	Mar-ried	Other	Prot.	Cath.	Jew	Other
General Pop.	112	50	50	24.5	36	50	14	69	29	2	55	28	0	17
Business	12	83	17	22.8	8	84	8	58	42	0	57	26	0	17
Health	14	13	86	22.1	64	36	0	64	36	0	42	42	0	16
Technical	14	86	13	22.8	36	57	7	71	29	0	64	29	0	7
Agriculture	17	100	0	18.8	35	47	18	94	6	0	50	29	0	21
Day Trans.	24	67	33	21.5	21	54	25	75	25	0	76	12	0	12
Day Term.	24	29	71	21.3	33	54	13	71	29	0	46	33	0	21
Night Trans.	24	54	46	31.2	38	58	4	21	75	4	54	42	0	4
Night Term.	24	54	46	30.3	41	46	13	38	54	8	50	29	0	21

differ significantly for these two groups. Maslow seems to
have presented his 2,020 in the manual for the purposes of:
(1) demonstrating that the distribution of security-
insecurity scores is positively skewed; and (2) providing
the test user with interpretive labels for score ranges
(deciles) to indicate the degree of security-insecurity
that may be associated with any single score. Two conclu-
sions are subsequently suggested by the similarity found
between ICC students and Maslow's norm population:
(1) many more ICC students possess at least an average
amount of psychological security than feel relatively or
very insecure; and (2) labels and corresponding decile
ranges of the test manual may be used to interpret scores
of ICC students.

Following from the second conclusion is the infer-
ence that Maslow's clinical experience with types of treat-
ment successful with clients differing in degrees of
psychological security-insecurity may be applied to the
population of Illinois Central College students. It may
be seen from Table 10 that nearly 14 per cent of the Gen-
eral Population and Form of Distribution Composite Samples
scored in either the Insecure or Very Insecure categories.
These are the people Maslow speaks of when he writes:

> My experience has been that those scoring in
> the lowest decile are almost certain to be suf-
> fering from a true neurosis or else from a

> severe situational neurosis, and that very few
> people who are so diagnosed will score above
> the second lowest decile.[3]

Approximately 14 per cent, therefore, of all students at

Illinois Central College may be suffering from a true

neurosis or a severe situational neurosis. These students

may have personality disorders too serious for the junior

college counseling staff to treat. Insecure and Very

Insecure students should likely be considered for referral

to mental health agencies outside the junior college where

both the design of the program and the competency of the

staff contribute to restoring these students to an improved

state of mental health.

Table 13 shows that between the mutually exclusive

categories of Day and Night students, approximately 16 and

12 per cent respectively, scored either Insecure or Very

Insecure. Thus, the incidence of serious neurosis may be

higher among Day students than in the overall population,

while the reverse may be true for Night students.

If students who either tend to be insecure or who

are considered average are those who can be regarded as

having situational, normal kinds of problems, then the

incidence of students who might benefit from counseling

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[3]A. H. Maslow and others, "A Clinically Derived Test
for Measuring Psychological Security-Insecurity," The
Journal of General Psychology, 33:33 (July, 1945).

may be approximately 56 per cent among the overall popula-
tion, 62 per cent among Day students, and 41 per cent in
the Night student population. Situational, normal problems
are likely temporary in nature, however, and these per cent
figures should be considered as rough approximations only
for purposes, e.g., of planning counselor work load.

Data is presented by Maslow explaining the kinds of
problems students have who score as Tendency to be Secure,
or as Average, in security-insecurity feelings. He cites
percentile means of 37.4 and 59.4 for 27 clients charac-
terized as "miscellaneous problems connected with sex,
marriage, children, [and] family," and 19 clients seeking
"advice about graduate work, work in psychology, [and]
school work," respectively.[4] Maslow also lists problems
that would fall from the third through the seventh deciles
of the S-I Inventory. These range from "conflict between
strong sexual impulses and strong moral inhibitions," to
problems concerning "vocational advice."[5] That these
problems may be situational problems of normal people is
suggested by Maslow's finding that five students charac-
terized as "well adjusted, creative or both" scored in the

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[4] p. 32.

[5] p. 31.

average range of the S-I Inventory.[6]

As shown by Tables 10 and 13, approximately 30 per
cent of the overall population, 22 per cent of Day stu-
dents, and 47 per cent of Night students, scored in the
deciles characterized as Tendency to be Secure, Secure,
or Very Secure. These students likely can be considered
as having fully satisfied their needs for psychological
security.

The outcome of testing the third null hypothesis
was that there are no significant differences in mean
levels of security-insecurity among Business students,
Health students, Technical students, and Agriculture stu-
dents, at Illinois Central College. Table 16 reveals
differences in descriptive data of these four curriculum
groups. The Agriculture students are all males, while the
Health student sample was heavily female; Agriculture
students on the average were four years younger than
either the Business or Technical students; many more Health
students than Business students report they finished in the
top third of their high school classes; only 6 per cent of
Agriculture students were married, while 42 per cent of
Business students were; and equal numbers of Health stu-
dents were Protestant and Catholic, while over twice as

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[6]p. 32.

many Business and Technical students were Protestant as
were Catholic. Evidently, the amounts of differences noted
for those four curriculum groups did not influence the mean
levels of psychological security-insecurity within the
groups.

When the broader curriculum types of Transfer and
Terminal were compared under the fifth null hypothesis,
no significant difference was found in mean levels of
security feelings. This finding agrees with the outcome
of testing four curriculum groups, even though the four
groups included both terminal and transfer students.
When interaction between schedule and curriculum types was
tested under the sixth null hypothesis, again no signifi-
cant difference was found, although a highly significant
difference was found between mean levels of security in
schedule types within the same matrix. The outcomes of
testing Hypotheses 3, 5, and 6 all support the conclusion
that differences in psychological security-insecurity do
not exist at Illinois Central College between varying
curriculum classifications.

As shown in Table 12, the two-way analysis of
variance used to test the fourth null hypothesis revealed
a highly significant difference in mean levels of
psychological security-insecurity between Day and Night
students. The average Day student was found to respond in

a manner indicating less psychological security than the average Night student.

Descriptive data in Table 16 reveal differences that may contribute to the relatively greater security of Night students. These students, for example, were over nine years older, on the average, than Day students. A higher per cent of Night students came from the top third of their high school class than did Day students, while more Day students than Night came from the lower third of their graduating class. More of the Night students were married. Only 29 per cent of Night students reported they were single. Day students who were single, however, comprised 73 per cent of the Day student sample.

Another factor that may be related to the relatively greater security of Night students is provided by Roberson's analysis of ICC students enrolled Spring Semester, 1968. Roberson found that the majority of Night students were enrolled for six hours of classes or less, while the median load for Day students was 14 hours.[7] It is reasonable to assume that a comparable difference between course load exists for the population researched in this study.

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[7]Glenn Roberson, "A Descriptive Analysis of Illinois Central's Student Body Spring Semester 1968," p. 20. Unpublished manuscript.

The results of the item analyses as interpreted in Table 15 further help in understanding the security-insecurity difference between schedule types. Night students seem relatively more mature, and more sure of themselves, in their answers than do Day students. Night students seem to know who they are, while Day students appear to be struggling to forge self-identity. Day students think of themselves often, and many are bothered by a feeling that their worlds are not real. This group reports worrying much about the future; many say they are often discouraged and in low spirits. Night students, by contrast, seem more stable, perhaps more established in their worlds, as nearly all in the sample said they felt useful in the world. Many Day students could not answer the same.

Conclusive statements telling which of the above factors are related to the increased feelings of psychological security evident in Night students cannot be made. This study was not designed to discover causes of psychological security-insecurity among junior college students. The researcher offers, however, the following explanation of the difference between Day and Night students as an hypothesis for further research.

Night students are more psychologically secure as a group than Day students, probably because Day students have not solved basic problems in social and vocational areas as have Night students. Most Night students, for example, have marriages of their own and have established independence from their parents. The average Day student is still in the process of choosing a mate and establishing a home separate from his parents'. Also, most Night students have likely settled themselves into a vocation, or at least a vocational field, and have adjusted aspirations and goals in life more realistically to fit abilities, than have Day students.

Success or failure in social and academic areas of their junior college experience will likely produce a greater change in the self-concept of the average Day student than of the typical Night student. For the Night student, the junior college is probably just one of many concerns within the context of a rather stable life. For Day students, life is changing at a faster rate, and success in all areas of endeavor within the junior college is a major concern. Day students likely have much more at stake, academically and socially, that may change

self-identity, than do Night students. The psychological security of Day students is, therefore, likely threatened more often and by more kinds of variables than is the case with Night students.

CHAPTER V

SUMMARY AND CONCLUSIONS

It was the purpose of this study to discover how feelings of psychological security-insecurity are distributed throughout the entire population of students at Illinois Central College, and if significant differences exist among various subgroups within the overall population as regards security-insecurity feelings.

The population of students enrolled Second Semester, 1968-69, at Illinois Central College was sampled to obtain the necessary data. A total of 387 different students as represented in nine samples was randomly selected from the total enrollment of 3,347. The nine samples were chosen to represent: (1) the entire population; (2) Business students; (3) Health students; (4) Technical students: (5) Agriculture students; (6) Day Transfer students; (7) Day Terminal students; (8) Night Transfer students; and (9) Night Terminal students. The number of students within each sampling area who responded to the approach used and participated in this study is listed in Table 6 of Chapter IV.

Maslow's Security-Insecurity Inventory was administered to measure security-insecurity feelings of students. This instrument is a self-report questionnaire

consisting of 75 items to be answered "Yes," "No," or "?"
by the subject. The summed total of insecure answers
becomes the single score of the inventory. This score is
an index indicating position on a continuum ranging from
Very Secure to Very Insecure. A total of 14 definitions
of security-insecurity comprise the syndrome reflected
by the inventory's single score.

Data obtained were subjected to statistical analysis
utilizing five methods. The test statistic, z, was used
to test the hypothesis of no difference in mean levels
between the overall population of ICC students and Maslow's
norm mean based on 2,020 subjects. Frequency chi-square
was utilized in testing to see if the form of the distri-
bution of security-insecurity for the entire population of
Illinois Central students differed from the positively
skewed form of Maslow's population of 2,020. A one-way
analysis of variance technique was applied to data secured
from the four curriculum groups of Business, Health,
Technical, and Agriculture students. Data representing
the schedule types Day and Night, and curriculum types
Transfer and Terminal, were tested by a two-way analysis
of variance technique. A chi-square test of independence
was then conducted for each of the 75 items of the inven-
tory to determine which items had contributed to the
significant difference found.

Chapter III more completely describes the population of students at Illinois Central College from which samples were drawn. Results of statistical analyses are contained in this study in Chapter IV. The instrument package used in data collection is included as Appendix C. The letter of invitation and reminder postcard are found in Appendices A and B, respectively.

A summary of results, conclusions drawn from these findings, implications for junior college personnel workers and instructors, and implications of this study for future research comprise the remainder of this chapter.

Summary of Findings

This summary of findings presents answers to each of two parts of the problem question first stated in Chapter I of this study.

1. How are feelings of psychological security-insecurity distributed generally throughout the entire population of Illinois Central College students? No significant difference between mean levels of security-insecurity of ICC students and Maslow's norm population of 2,020 was revealed by the z test. A frequency chi-square test comparing observed score frequencies of a representative sample of the overall population

of ICC students with the decile relative frequencies of Maslow's norm population also resulted in a finding of no significant difference. The distribution of feelings of psychological security-insecurity among Illinois Central College students is, therefore, distributed similarly to Maslow's norm population; that is, positively skewed with the largest score frequencies occurring in the secure range, and with a mean score not differing significantly from 19.5.

2. <u>Are</u> <u>there</u> <u>any</u> <u>differences</u> <u>in</u> <u>feelings</u> <u>of</u> <u>psychological</u> <u>security-insecurity</u> <u>among</u> <u>various</u> <u>groups</u> <u>within</u> <u>the</u> <u>overall</u> <u>population?</u> A one-way analysis of variance revealed no significant differences in mean levels of feelings of psychological security-insecurity among the curriculum groups of Business, Health, Technical, and Agriculture students. A two-way analysis of variance test resulted in no interaction between Day and Night schedule types and Transfer and Terminal curriculum types. This analysis of variance also revealed no significant difference in mean levels of security feelings between Transfer and Terminal

students. A difference significant at the .01 level was found, however, between mean levels of psychological security-insecurity of Day and Night students. Day students were, on the average, significantly more insecure than were Night students. Each of the 75 items of the S-I Inventory as answered by random samples of Day and Night students were then examined for significant differences in answers chosen. The technique used was a frequency chi-square test of independence. Corrections were made for small F values as suggested by Cochran.[1] Three items were found to differ significantly at the .05 level, and four at the .01 level. Night student answers seemed to reflect increased maturity, more confidence, and a sense of worth and stability. Day student answers seemed to show less confidence, less stability, and a greater concern with identity of self in relation to present and future worlds. A more detailed description of item analyses may be found in Tables 14 and 15, and in the Discussion section of Chapter IV.

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[1] W. G. Cochran, "Some Methods for Strengthening the Common x^2 Tests," _Biometrics_, 10:420 (December, 1954).

Conclusions

Conclusions of this study as based on results of statistical analyses of data are these:

1. Illinois Central College students as a population do not differ significantly in mean level of security feelings or form of distribution of security-insecurity scores from Maslow's norm population of 2,020.

2. Significant differences in mean levels of psychological security-insecurity do not exist between Transfer and Terminal, or among Business, Health, Technical, and Agriculture, students at Illinois Central College.

3. The difference in psychological security-insecurity between Day and Night transfer students does not differ significantly from the difference in psychological security-insecurity between Day and Night Terminal students.

4. The average Day student at Illinois Central College tends to report feelings indicating higher degrees of psychological insecurity than does the average Night student.

5. The greatest differences between Day and Night students occur in the middle and lower score

ranges; Day students are more likely to achieve
an Average, or a Tendency to be Insecure score,
and Night students score more heavily in the
Secure and Very Secure categories.

6. Items 14, 23, 27, 29, 39, 41, and 73 of the
S-I Inventory tend to be answered differently
by Day and Night students.

Implications for Student
Personnel Workers

Student personnel workers may facilitate security
need satisfaction of students by helping to create within
the environmental press of the junior college precondi-
tions necessary for such need satisfaction. Maslow gives
examples of these preconditions as follows:

> Such conditions as freedom to speak, freedom
> to do what one wishes so long as no harm is
> done to others, freedom to defend one's self,
> justice, fairness, honesty, orderliness in
> the group are examples of such preconditions
> for basic need satisfactions. Thwarting in
> these freedoms will be reacted to with a
> threat or emergency response.[2]

The student personnel worker for whom this study
has the most important implications is the junior college
counselor. Because he can offer the student a safe,

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[2]A. H. Maslow, "A Theory of Human Motivation,"
Psychological Review, 50:383 (July, 1943). (Hereafter
"Theory")

confidential relationship with an understanding adult, one
knowledgeable in counseling techniques and practice, the
counselor is in a unique position to facilitate the satis-
faction of security needs. The counselor is ideally not a
disciplinarian of the college. Nor does he evaluate
students through assigning grades as must junior college
instructors. Students may come to the counselor and find
a relationship free from threat or evaluation. Exploration
of academic, vocational, and personal problems may result
in better decisions by students because their security
needs can be satisfied within the relationship offered by
the counselor.

Counselors at Illinois Central College may find
approximately 16 per cent of Day students and 12 per cent
of Night students to be so insecure as to need referral
to a mental health agency outside the junior college. It
is the responsibility of the counseling staff at ICC to
identify these students, interview them to assess the need
for referral, and either refer to an appropriate agency
or counsel within the junior college. If the college
accepts the responsibility for the personal growth and
success of all its students, then this effort to satisfy
security needs of those students who are most insecure
must be made.

That Insecure and Very Insecure students accepted
the confidentiality offered them by the researcher, and
that they had the courage to overcome their insecurity and
answer questions in ways openly reflecting insecure
feelings, suggests three points. First, these students
may actually want someone to know about their feelings of
insecurity; second, they may have appreciated someone
being interested in their feelings and have responded to
that interest; and last, these students would likely
respond to offered confidentiality in future counseling
relationships. The action of answering questions for many
of those scoring in the two most insecure categories may
be interpreted as a signal that psychological help would
be welcomed.

Normal students scoring as Average or Tendency to
be Insecure may feel relatively insecure as an accompani-
ment of situational, and somewhat temporary, problems.
A relationship between such problems and feelings of
insecurity is suggested by Maslow's data listing reasons
clients came for therapy and their scores by percentile
ranks achieved on the S-I Inventory.[3] The implication for

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[3]A. H. Maslow and others, "A Clinically Derived Test
for Measuring Psychological Security-Insecurity," Journal
of General Psychology, 33:30-32 (July, 1945).

this study is that roughly half of all ICC students (62 per cent of Day and 41 per cent of Night students) may benefit from counseling designed to simultaneously satisfy security needs and resolve situational, normal problems.

Need for counseling at Illinois Central College as indicated by degree of felt insecurity seems as needed in one curriculum type or area of pursuit as it is in another. For example, Business students need counseling for satisfaction of security needs as much as do Technical students. Also, both Transfer and Terminal curriculum types may be thought of as essentially the same in need for counseling designed to change or modify feelings of insecurity.

That Illinois Central College students did not differ in either mean level of security feelings or in the form of distribution of security-insecurity scores from Maslow's norm population of 2,020 suggests that the norm presented in the test manual may be used for interpreting scores of ICC students. Also, that only 7 of 75 items of the inventory were answered very differently by Day and Night students suggests that although the S-I Inventory was validated and normed on students between ages of 17 and 23, it may be used with Night students at Illinois Central College.

Implications for Instructors

Out of a given class of 20 Day students, 3 may be seriously neurotic, 12 may tend to be insecure or feel an average sense of security-insecurity, while 5 may be psychologically secure. Of a class of 20 Night students, 2 may be seriously neurotic, 8 may tend to be insecure or feel average security-insecurity, and 10 may be psychologically secure. Although these figures likely vary in practice, it is probable that every class at Illinois Central College contains a few students whose behavior may be relatively dominated by efforts to satisfy security needs.

Maslow theorizes that higher order needs such as self-actualization, and concomitantly, the fullest creativeness, may not be translated into behavior until propotent, lower order needs are relatively satisfied.[4] Thus, instructors at Illinois Central College seeking creativity in students may need to facilitate satisfaction of students' security needs in order that students may be free to express creativity.

Research cited in Chapters I and II indicates the insecure person may be more dogmatic and less effective

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[4]A. H. Maslow, "Theory," p. 383.

in critical thinking, probably because his perceptual field
narrows and important information is excluded. The secure
student may achieve higher grades than the insecure,
likely because he is more efficient and effective in
critical thinking. Considerations such as these cannot
be ignored by classroom instructors who seek to develop
students' critical thinking abilities.

Instructors should learn to recognize insecurity
in student behavior. Through warm encouragement, success
experiences, increased individualized attention, and other
teaching techniques, instructors can seek to alleviate
students' feelings of insecurity. Instructors can avoid
creating insecurity in students, e.g. through the excessive
use of threats of failure, as well. Students who do not
respond to techniques available to instructors within the
practical constraints of classroom demands, and whose
behavior continues to be dominated by a pressing need for
psychological security, should be referred to the coun-
seling offices of the junior college.

Implications for Future Research

Many possibilities for needed future research are
suggested by this initial study of security-insecurity.
Questions asked in the following four paragraphs might be
used as the basis for hypotheses of future research.

<u>Is the S-I Inventory valid as a measure of psy-
chological security-insecurity with current junior college
populations?</u> Of most importance is the need for junior
college counselors to clinically validate the S-I Inven-
tory with current populations of students. Does a stu-
dent's score predict, or accurately reflect, for example,
his general state of mental health? Once validation has
been more fully established with current populations, the
inventory may be used with increased confidence as a
quick and effective screening device for locating students
seriously in need of counseling help. That one student
at ICC who scored Very Insecure was referred to a mental
health agency after interpretation of her test score
indicates the instrument is valid with current popula-
tions; however, further support for this validation is
needed.

<u>What is the causal relationship of variables within
the junior college environment to psychological security-
insecurity of students?</u> Very little can knowingly be done
to identify or change conditions in the environmental
press of Illinois Central College that cause feelings of
security or insecurity until such studies point the way.

<u>What effects does security-insecurity have on
classroom performance?</u> The finding that insecure students

achieve lower grades than secure students needs to be con-
firmed by further research. Again, the causal relation-
ship needs to be determined. For example, do insecure
feelings cause, or contribute to, low grades, or do low
grades create the feelings of insecurity? Will techniques
of warm encouragement, success experiences, and increased
individual attention satisfy student needs for security?

At what level do feelings of psychological insecurity
narrow one's perceptual field, block critical thinking, and
contribute to dogmatism in thinking? Is a certain amount
of insecurity useful as a motivating force? At what point
or level does a student's feelings of insecurity become
so intense as to contribute to his academic demise? Is
insecurity useful within the counseling relationship, and
if so, at what point does it become detrimental to client
progress?

Studies designed to answer all or one of the above
suggested questions would provide valuable information for
junior college staff. Only when needs of students are more
fully understood can the junior college further its
accomplishments as a student centered institution in all
programs offered.

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APPENDIX A

Letter of Invitation

ILLINOIS :
CENTRAL : Public Junior College District No. 514
COLLEGE : P. O. Box 2400, East Peoria, Illinois 61611

April 9, 1969

Dear Student:

Illinois Central College is conducting a survey of
its students in cooperation with Illinois State University.
This survey is an important undertaking in our efforts to
know more about our student body.

You have been chosen to help us in this important
endeavor. The only requirement is that you answer a short
questionnaire. This will require 15-20 minutes of your
time on any of the following days or evenings:

DAYS   EVENINGS

April 17, 8:00 A.M.-5:00 P.M. April 16, 6:00 P.M.-9:00 P.M.

April 18, 8:00 A.M.-5:00 P.M. April 17, 6:00 P.M.-9:00 P.M.

Please report to the Counseling Office when you are
on campus during the above times. We will direct you to
the building and place where the questionnaires are being
completed at that time.

Sincerely,

ILLINOIS CENTRAL COLLEGE

Merlin C. Stratton
Director of Counseling

MCS:ds

110/111

APPENDIX B

Reminder Postcard
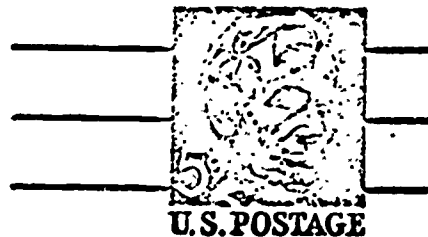
Mr. John Doe
1 Elm Street
Peoria, Illinois
61600

A REMINDER:

Please remember to come to the Counseling Office Wednesday evening April 16th from 6:00—9:00 P.M.; Thursday, April 17th 8:00 A.M.—5:00 P.M. or 6:00—9:00 P.M.; or on Friday, April 18th from 8:00 A.M.—5:00 P.M. to fill out the ICC-ISU survey.

It is very important, since only a sample of our student body is being asked to participate, that every person who was chosen come at one of the above times to fill out the survey form.

Let me thank you in advance for your time in helping us with this important endeavor.

Sincerely,
MERLIN C. STRATTON
ILLINOIS CENTRAL COLLEGE

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APPENDIX C

The Instrument Package

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START HERE, and please read ALL directions carefully.
    Answer all questions; if you do not understand what
    you are to do, please ASK the proctor who gave you
    this package.

FIRST, tear off the card attached above that has your name
    and number on it. Notice that the same number is
    printed on the upper right hand corner of each part
    of the questionnaire package. This number is your
    SURVEY IDENTIFICATION NUMBER. If you wish to dis-
    cuss the answers you give to this questionnaire with
    a Counselor, you must present your card with
    IDENTIFICATION NUMBER on it to him. We will then
    be able to locate your questionnaire by its corres-
    ponding number; otherwise, NO ONE at ICC will know
    which questionnaire is yours. To ensure complete
    confidentiality of your answers, then be sure you
    DO NOT PUT YOUR NAME ANYWHERE ON THE QUESTIONNAIRE
    PACKAGE.

SECOND, please check the SCHEDULE and CURRICULA listing
    below and fill in these two blanks:

MY SCHEDULE TYPE IS_____

MY CURRICULA NUMBER IS _____

SCHEDULE TYPE

Day Attendance (indicates that you attend classes only from
    8:00 A.M. to 5:00 P.M.)

Evening (indicates that you attend classes only from
    6:00 P.M. to 10:00 P.M.)

Both (indicates that you take courses during the
    day and evening sessions)

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CURRICULA

<u>College Transfer Curricula, Leading to Associate</u>
<u>in Arts and Associate in Science Degree</u>

010	Pre-Agriculture	070	Pre-Medicine
020	Art	071	Pre-Pharmacy
030	Business Administration	072	Pre-Dental
	and Commerce	073	Pre-Veterinary
040	Education	074	Pre-Nursing
050	Pre-Engineering	075	St. Francis Hospital
060	Liberal Arts and Science		

<u>Career Programs Curricula, Leading to</u>
<u>Associate in Applied Science Degree</u>

100	Agriculture Business	320	Medical Record Technician
101	Agricultural Production	330	Registered Nurse
	and Management	440	Architectural Drafting
200	Accounting		Technology
205	Commercial Art	402	Engine Power Technology
210	Business Management	403	Chemical Technology
215	Secretarial	404	Data Processing
216	Medical Secretarial		Technology
217	Legal Secretarial	405	Electronics Engineering
218	Executive Secretarial		Technology
219	Co-operative Office	406	Industrial Electronics
	Education		Technology
220	Office Machines and	410	Mechanical Technology
	Procedures	411	Machine Design
221	Clerk Typist	412	Manufacturing
301	Operating Room	413	Internal Combustion
	Assistant		Engines
310	Physical Therapy	420	Industrial Drafting
	Assistant		Technology
		601	Police Administration

090	General Studies	900	Continuing Education

THIRD, please fill in the following blanks:

Today's Date _____. My age is _____. Sex _____.

    Marital Status (circle one)   Single   Divorced
                                       Married
                                Separated   Widowed

    I graduated in the _____ third of
                          (top, middle, lower)
    my High School class.

    There were approximately _____ students in the

    High School I attended.

Optional: My religious preference is _____.

FOURTH, please read the following general information:

    The questionnaire is a survey of personality. It
    asks important and personal questions. Honesty,
    frankness and your sincere cooperation are required.
    The answers you give will be combined with those of
    approximately 400 other ICC students. As explained
    above, unless you identify yourself to a Counselor,
    the answers you give will remain confidential and
    will influence the survey results only as part of an
    average score.

    This survey and the very important information it
    will yield will be no better than the accuracy with
    which you answer each question. Note: THERE ARE NO
    RIGHT OR WRONG ANSWERS, but only answers that are
    true for you.

FIFTH, turn directly to the GENERAL INSTRUCTIONS within the
    questionnaire itself. Read these directions and
    begin work. Work at whatever speed is comfortable
    to you.

THE S-I INVENTORY

A. H. MASLOW
Brandeis University

with the assistance of

E. BIRSH
I. HONIGMANN
F. McGRATH
A. PLASON
M. STEIN

NAME_____DATE_____AGE_____
    (or pseudonym)

Underline one: Single Married Divorced

                Separated   Widowed

Education_____School_____
      (highest grade reached)

Occupation_____

Height_____Weight_____

Underline one: Catholic Protestant Jewish; or, if other

              (write in)_____

GENERAL INSTRUCTIONS

Read Carefully

If at all possible answer all questions, being sure to choose only one answer, "Yes," "No," "?" (undecided). Write an X under the answer that is <u>nearest</u> true for you. Your answers and any comments you may wish to add will, of course, be considered strictly confidential.

	Answers		
	YES	NO	?

1. Do you ordinarily like to be with people rather than alone?.................................

2. Do you have social ease?.................................

3. Do you lack self-confidence?.................................

4. Do you feel that you get enough praise?.................................

5. Do you often have a feeling of resentment against the world?.................................

6. Do you think people like you as much as they do others?.................................

7. Do you worry too long over humiliating experiences?.................................

8. Can you be comfortable with yourself?.................................

9. Are you generally an unselfish person?.................................

10. Do you tend to avoid unpleasantness by running away?.................................

	Answers		
	YES	NO	?

11. Do you often have a feeling of lone- liness even when you are with people?...................

12. Do you feel that you are getting a square deal in life?.....................................

13. When your friends criticize you, do you usually take it well?.............................

14. Do you get discouraged easily?.........................

15. Do you usually feel friendly toward most people?.................................

16. Do you often feel that life is not worth living?.......................................

17. Are you generally optimistic?..........................

18. Do you consider yourself a rather nervous person?..

19. Are you in general a happy person?.....................

20. Are you ordinarily quite sure of yourself?..

21. Are you often self-conscious?..........................

22. Do you tend to be dissatisfied with yourself?...

23. Are you frequently in low spirits?.....................

24. When you meet people for the first time do you usually feel they will not like you?..

25. Do you have enough faith in yourself?..................

	Answers		
	YES	NO	?

26. Do you feel in general most people can be trusted?..

27. Do you feel that you are useful in the world?..

28. Do you ordinarily get on well with others?..

29. Do you spend much time worrying about the future?..

30. Do you usually feel well and strong?...........................

31. Are you a good conversationalist?..........................

32. Do you have the feeling of being a burden to others?...

33. Do you have difficulty in expressing your feelings?..

34. Do you usually rejoice in the happiness or good fortune of others?..............................

35. Do you often feel left out of things?....................

36. Do you tend to be a suspicious person?..

37. Do you ordinarily think of the world as a nice place to live in?..............................

38. Do you get upset easily?...............................

39. Do you think of yourself often?.........................

40. Do you feel that you are living as you please rather than as someone else pleases?..

	Answers		
	YES	NO	?

41. Do you feel sorrow and pity for your-
self when things go wrong?...............................

42. Do you feel that you are a success at
your work or your job?..................................

43. Do you ordinarily let people see what
you are really like?....................................

44. Do you feel that you are not satis-
factorily adjusted to life?.............................

45. Do you ordinarily proceed on the
assumption that things usually tend
to turn out all right?..................................

46. Do you feel that life is a great
burden?..

47. Are you troubled with feelings of
inferiority?...

48. Do you generally feel "good?".......................

49. Do you get along well with the
opposite sex?..

50. Are you ever troubled with an idea
that people are watching you on
the street?..

51. Are you easily hurt?.................................

52. Do you feel at home in the world?...................

53. Do you worry about your intelligence?...............

54. Do you generally put others at their
ease?..

	Answers		
	YES	NO	?

55. Do you have a vague fear of the future?...

56. Do you behave naturally?..

57. Do you feel you are generally lucky?......................

58. Did you have a happy childhood?............................

59. Do you have many real friends?............................

60. Do you feel restless most of the time?...

61. Do you tend to be afraid of competition?...

62. Is your home environment happy?............................

63. Do you worry too much about possible misfortune?...

64. Do you often become very annoyed with people?...

65. Do you ordinarily feel contented?.......................

66. Do your moods tend to alternate from very happy to very sad?............................

67. Do you feel that you are respected by people in general?...

68. Are you able to work harmoniously with others?...

69. Do you feel you can't control your feelings?...

	Answers		
	YES	NO	?

70. Do you sometimes feel that people
    laugh at you?..

71. Are you generally a relaxed person
    (rather than tense)?.......................................

72. On the whole do you think you are
    treated right by the world?................................

73. Are you ever bothered by a feeling
    that things are not real?..................................

74. Have you often been humiliated?...........................

75. Do you think you are often regarded
    as queer?..

APPENDIX D

Form of Distribution Composite Sample
Score Frequencies

Classes	Frequency
72-75	0
68-71	0
64-67	0
60-63	1
56-59	0
52-55	1
48-51	1
44-47	5
40-43	4
36-39	7
32-35	8
28-31	16
24-27	18
20-23	15
16-19	28
12-15	30
8-11	29
4-07	30
0-03	10

Total   N = 203

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APPENDIX E

Two-Way Analysis of Variance Showing Security-
Insecurity Scores for Curriculum
and Schedule Types

Curriculum Type	Schedule Type							
	Day				Night			
Transfer	45	28	24	15	34	14	10	5
	44	27	23	15	33	13	9	4
	34	27	21	13	29	13	8	4
	31	24	18	9	20	13	7	4
	30	24	18	9	16	12	6	4
	29	24	16	2	15	10	5	1
Terminal	47	29	17	11	37	22	13	6
	46	29	17	7	32	20	11	5
	42	28	17	7	28	19	9	5
	36	23	16	7	27	16	8	4
	36	20	13	7	24	15	8	3
	35	20	12	5	22	13	7	1

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