The Singer-Loomis Inventory of Personality (SLIP) was developed by two Jungian analysts to allow examination of personality from the perspective of Jung's typology and to solve problems perceived with the Myers-Briggs Type Indicator, based on Jungian dichotomies. The SLIP is designed to clarify and describe the user's personality based on the patterning of eight cognitive modes of psychological types. It uses a five-point Likert-type scale to determine the preferred order for eight personality components. Each individual's personal profile consists of a combination of the eight modes that make up the cognitive style. The individual also has a predominant orientation (introversion or extroversion) and four functions (thinking, feeling, sensation, and intuition). The SLIP is available for individuals of high school age and older. Fifteen situations are presented, each followed by eight items to which the user must respond. From a practical point of view, the instrument is easy to administer, to take, and to score. Evidence for reliability, content validity, construct validity, and criterion validity is reviewed. A summary evaluation suggests that the SLIP appears to be a useful tool for educators, counselors, and clinicians, and is likely to be informative to those exploring Jungian personality types.

(SLD)
The Singer-Loomis Inventory of Personality:
A review and critique

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Paper presented at the annual meeting of the
Southwest Educational Research Association
Austin, Texas
January 29, 1993
General Information

Title: The Singer-Loomis Inventory of Personality (SLIP), Experimental Edition.
Authors: June Singer, Ph.D. and Mary Loomis, Ph.D.

Time to administer SLIP: Time not specified. Those taking the SLIP are told that no time limit is set, but that they should not mull over the situations. There are 120 possible responses if the user replies to all situations.

Costs: Sample package, $21.00; Test booklets, 25/$16.00; Answer sheets, 50/$35.00; Manual, $12.00; Guide, $10.00.

Purpose and Nature of Instrument

The Singer-Loomis Inventory of Personality (SLIP) was developed by two Jungian analysts to allow an examination of personality from the perspective of Jung's typology and to solve problems perceived with the Myers-Brigg Type Indicator (MBTI) of 1962, based on Jungian dichotomies. Loomis (1982) criticized the method of measuring attitude and function separately as in the MBTI. Other researchers were also critical of the polar opposites that were part of the MBTI (Jarrett, 1979, p. 320). The authors of SLIP decided that an instrument was needed to measure relative development or interactions of Jung's basic types.

The SLIP is designed to clarify and describe the user's personality based on the patterning of eight cognitive modes of psychological types. It uses a 5-point Likert type scale to determine the preferred order for eight personality components. The cognitive modes or psychological types consist of a combination of orientations and functions. The eight cognitive modes are: Introverted Thinking (IT), Extroverted Thinking (ET), Introverted Feeling (IF), Extroverted Feeling (EF), Introverted Sensation (IS), Extroverted Sensation (ES), Introverted iNtuition (IN), and Extroverted iNtuition (EN). Each individual's personal profile consists of a combination of the cognitive modes which make up the cognitive style. The individual will have a predominant orientation or attitude type, either introversion or extroversion. There are also four functions, thinking, feeling, sensation, and intuition. Thinking and feeling are judging functions that process information. Sensing and intuition are perceptual functions that receive information. There are interactions between the superior function or leading cognitive mode (most frequently used) and cognitive modes that rank second and third in score (Guide, p. 6).

The SLIP is available to help individuals from high school age and older understand their thought patterns and how they approach situations or problems. The SLIP is not an intelligence test.
test or an instrument to detect emotional problems. Although differences between personalities may become apparent among those using the instrument, it is not meant for comparing how well different people function (Manual p. 3; Booklet).

The SLIP will aid clinicians who wish to analyze and assist their clients. It may be used to point an individual towards certain kinds of employment or in assessing compatibility between a therapist and client or between an employee and various job situations. Also, educators may use it when developing educational programs to suit individuals. Interpersonal relationships may be improved by the self-knowledge derived from the SLIP (Manual, p. 3).

Mary Loomis (1982), an author of the SLIP, explained the reasoning behind the development of the instrument. Loomis explained that although previous use of Jung's types were helpful in the understanding of individuals, there was no empirical support for the bipolar nature of the theory and that there may be a flaw in the way that Jung correlated the functions.

The SLIP Interpretive Guide explains that individuals interact with the world with various methods or cognitive modes for processing and receiving information, but they rely upon some methods more than others. Natural preferences for orientations or functions seen in small children are influenced by family and school. Jung described cognitive modes as combinations of orientation (introversion, extroversion) and functions which form individual cognitive styles. Jung assumed that the functions and orientations formed opposing, bipolar or mutually exclusive pairs. The SLIP authors say that the conclusions implied by current inventories that individuals could not transcend the bipolar opposites are in error and may be a more narrow view than Jung's. The authors believe most persons use all the cognitive modes to some degree and there is evidence that very creative people do not conform to the bipolar restrictions and have flexible mental processes. The Guidebook describes each of the cognitive leading or predominant modes in detail and in relationship to the second-most used mode and the relationship of the least used mode to the overall profile (Jarrett, 1979; Loomis & Singer, 1980; Meier & Wozny, 1978).

The SLIP instrument contains fifteen situations, each followed by eight items to which the user responds. The following example (Situation #4) comes from the test booklet:
I see a report on television about a catastrophe in a distant land. I would
25. volunteer to contact my neighbors for contributions for relief for the victims.
26. advocate a commission to inquire into exactly what occurred and what the situation
is now.
27. experience it almost as a personal tragedy.
28. estimate the high cost to life and property.
29. read the paper for further details.
30. wonder what I would do if I were caught in such a situation.
31. discuss the need to work out a disaster plan for our own community.
32. watch with interest all the television coverage.

The eight items under each of the fifteen situations are responded to using a scale ranging
from 1 (never) to 5 (always) on a graphics scale. The user is directed to respond unless
"there is a situation in which you cannot possibly imagine yourself," in which case the item may
be skipped entirely. The Booklet states that number 1 means, "I would never do this," number
2, "I would do this only occasionally," number 3, "I would do this about half of the time,"
number 4, "I usually do this," and number 5, "I always do this." (Manual, p. 3-4)

Practical Evaluation

The SLIP materials are attractive, with rich, mellow beige and off-white pages and
covers. The print and logo are burgundy on the Answer Sheet, Booklet, and covers of the Manual
and Interpretive Guide. There are no illustrations, only written text. The quality of the pages
and cover material is excellent with a good, durable "feel." Different font sizes, bold print, and
section titles are used to advantage to clarify and separate materials. The manual has a two-
column layout with enough white space to keep the page looking airy and uncluttered despite the
large quantity of small print. The answer sheet is easy to understand and mark.

Administrating the instrument is easy and no special facilities or training are required.
The administrator is instructed to explain there are no right or wrong answers, the test is not a
measure of intelligence, there is no time limit, and the answers should reflect what individuals
would actually do (not what they think they should do) in the described situations. After
booklets and answer sheets are handed out, the administrator familiarizes the test takers with
the features of both. Although the printed directions are very clear, the administrator discusses
the scales and responses. Time is allowed for questions (Manual, p. 3).

There are two ways to score the SLIP. The first employs self-scoring response sheets
from the publisher. Responses are transferred to a grid on the answer sheet. A profile form
next to the grid interprets results. In the second method of scoring, prepaid interpretive response sheets are mailed to the publisher who returns a profile and interpretation of results.

The SLIP has face validity and looks good because of the high quality paper and covers. The answer scale and arrangement of situations also convey a feeling of relevance to the test taker. The situation ideas are believable; one can envision the settings.

Technical Evaluation

Norms, Scores

The current experimental edition of SLIP is the third version. The statistical information in the manual was derived from current and earlier versions. Data has been gathered for more than ten years. Development of norms and research on the instrument continues. The descriptions of modes, functions and scales are based on Jung's theory of psychological types from a cognitive perspective. The SLIP has 16 scales. From these scales come the eight cognitive modes or psychological types, four functions and two orientations (Loomis, 1982; Guide, p. 5; Manual, p. 18).

The SLIP converts raw scores to percent scores. The authors explain that mean or raw scores can be misleading because of marking inconsistency among users. Some individuals might mark items using 2's, 3's, and 4's while others might range from 0's to 1's or 2's (Apparently, 0's would derive from unmarked responses. However, the test materials do not say so.) Therefore, two sets of raw scores are not directly comparable (Gu., p. 5). Reliability

The first 1233 subjects were mostly white, over half had a graduate level education, and were about 40% male, 60% female. Although this population is not typical and represents a restricted range, the authors said reliability coefficients would likely be similar to that of a more balanced population. They did not explain why they concluded this (Manual, p. 12 & 16).

Coefficient alpha reliabilities were derived from data collected on the second version of SLIP. Reliability coefficients for the eight cognitive modes ranged from .56 to .71 with an average alpha coefficient of .64. The reliability coefficients for the four functions ranged from .73 to .80 with an average alpha coefficient of .77. Introversion had a reliability coefficient of .85, Extroversion .88, Judging .86, and Perceiving .85. These reliability figures are low
compared to the MBTI. Additional research is necessary to clarify reliability (Metzner, Burney, & Mahlberg, 1981; Loomis, 1982; Loomis & Singer, 1980).

**Validity**

Loomis (1982) stated that the most important step in establishing validity would be to derive factors from a factor analysis to substantiate the constructs. In her opinion, this substantiation has been missing from previous inventories that were initiated to measure Jung’s types. Therefore, these earlier instruments could not guarantee to be measuring what they claimed to be measuring. Also, creation of a solid empirical foundation necessary for research or clinical use would be impossible without a substantiating analysis.

In the original version of SLIP, the authors stated that factor analysis supported the validity of Jung’s constructs, but noted unexpected results in that not all eight of the potential types emerged. After additional research, the instrument was revised by using a correlation matrix to choose the most discriminant questions. Additional research and adaptation of the SLIP produced other experimental versions of the instrument (Manual, p. 13).

**Content Validity.** Responses to the first version of SLIP were examined by Jungian analysts and Jungian-oriented therapists. Modifications were made according to their suggestions. Also, situations that proved nondiscriminating were removed. (Manual, p. 13)

**Criterion Validity.** Criterion validity has been addressed by investigating different SLIP profiles in a study involving professional artists and psychotherapists. Mean factor scores were computed for 51 artists and 37 psychotherapists. Psychotherapists had significantly (t-test between factor scores significant at P< .001) higher scores than artists for extroverted thinking (.89 for psychotherapist, .42 for artists), introverted intuition (2.05 for psychotherapists, 1.46 for artists), and extroverted intuition (1.87 for psychotherapists, .82 for artists). The high scores in intuition for psychotherapists are appropriate considering that Jung said this quality was important for analysts. Both artist and psychotherapists gave feeling modes the highest scores and thinking modes the lowest, which at first glance might show evidence of bipolarity. However, approximately 20% of the artist and 27% of psychotherapists did not have a bipolar opposite for the least developed cognitive mode (Manual, p. 15).
Another study involving a comparison of cognitive styles and artistic styles was conducted. Extroverted artists met the expectation of producing representational art and introverted artists produced abstract art. Art arranged in conformance to rational expectations was usually created by artist with judging, organizing function cognitive types. Art produced by artists with predominantly perceptual functions created unusual and unpredictable art which upheld the SLIP's assessment of the four functions.

Predictive ability was examined in further studies. The studies supported the measures of introversion and extroversion and the assessment of judgmental and perceptual functions. Other researchers have also supported these findings but some have urged continued investigation regarding criterion validity (Metzner, Burney, & Mahlberg, 1981; Meier & Wozny, 1978; Manual, p. 15).

**Construct Validity.** Construct validity of the second version of SLIP was addressed by factor analysis. The Alberta General Factor Analysis Program was used to analyze the data by total and split halves to discover principal components. Two judging factors and two non-rational, perceptual factors emerged from the analysis. A third version of SLIP was prepared by examining total correlations and factor loading. If item-total correlations sank below .20 or factor loadings were low, items and categories were rearranged (Manual, p. 14 & 15).

**Summary Evaluation**

The description of the process of developing this new instrument was valuable and informative. The amount of work, time, and thought that has gone into the project is evident in the various SLIP materials. The adaptation and production of several versions indicates that developing an instrument is not a quick process, but one of trials and revisions.

The Manual and Guide were helpful in organizing and explaining the subject matter. The expanded discussions of the cognitive modes helped in understanding the instrument. The Glossary of terms included in the Guide assisted in clarifying the functions and types.

The authors of the SLIP conclude that there is a need to develop normative data. They suggested that response bias could be eliminated by having separate norms based on the mean of the individual's scale raw scores and also that norms using percent scores could be developed to allow the SLIP to measure other dimensions of individuals. They also suggested that compiling Z
scores for individuals would help address strengths and patterns of cognitive modes within populations (Manual, p. 18).

Loomis (1982) made important points about the problem of validity, that SLIP must indeed measure what it is supposed to measure to be valuable. Potential users of the SLIP should be reassured by the author’s attempts to ensure validity, but more studies must be performed. Also, since this is still an experimental inventory, users should be cautious about relying on the results.

Very little was said about gender differences in the results of testing sample groups. However, Jarrett (1979) commented that Jung considered some qualities to be masculine (thinking) and some feminine (feeling). He also believes Jung saw some bipolar qualities as being so opposite as to be incompatible, that one individual could not contain both. This idea seems to run counter to the conclusions about the relative development of cognitive modes in the SLIP. Therefore, I would have liked to see more about gender differences and more about the possible disagreements with Jung’s theory discussed as it applied to the SLIP.

When responding to the SLIP, it is easy to answer "occasionally" frequently. One could do almost anything occasionally. If several answers are marked "occasionally," it is then difficult to choose to answer "about half of the time" or "usually" for others. The "usually" response could also be overdone in a similar manner. However, raw scores are not compared, conversion to percentage figures should eliminate imbalances caused by different levels of responses.

All-in-all, the SLIP appears to be a useful tool for educators, counselors, and clinicians for helping to analyze clients. The method of evaluating the functions and orientations separately with percentage ratings instead of forcing choices into polar opposites appears to be effective in classifying individuals. It would be interesting to administer both the MBTI and the SLIP to a group of individuals in order to make a comparison of classification results. The authors of SLIP give several suggestions for using the inventory in research in the Manual (p. 18). The SLIP will likely be informative to those exploring personality or Jungian types.
References


Jarrett, J. L. (1979). The logic of psychological opposition—or how opposite is opposite? 


