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Organizing and Disseminating Information about Creativity: In Summary

Sharon A. Meyers
Buffalo State College

Organizing and Disseminating Information about Creativity: Creativity Research Journal 2001 In Summary

By

Sharon Ann Myers

A Project in
Creative Studies

Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Master of Science

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ABSTRACT

This study contains information about trends, not only in the creativity literature, but the trends of creativity research. It identifies the issues being addressed and methods used in previous studies. It also, provides researchers with ideas on the direction of creativity research.

Using adaptations and modifications of the Fiest and Runco schema (1993), the study identified and analyzed the current themes in the 2001 issues of the *Creativity Research Journal*. Data were collected across five domains: Structural Characteristics, Authorship Patterns, Methods, Populations, and Issues in Title and Foci.

The average number of references per article, published in the 2001*Creativity Research Journal,* was 54.74. Analyses of the research methods showed a slight difference between empirical studies at 19 and non-empirical studies at 16. Male authors made up 55% of the population with females making up 33% and undetermined gender made up the remaining percentage. The most frequently studied populations were university students. Of the forty-six articles, thirty-five were considered to be legitimate studies (not book reviews, comments or introductions).

Results from this and companion studies on journal trends are available on a database at the International Center for Studies in Creativity.

Buffalo State College
State University of New York
International Center for Studies in Creativity

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Date of Approval:

_____ _____

Dr. Mary Murdock
Professor of Creative Studies
Project Adviser

_____ _____

Sharon Ann Myers

This project is dedicated to

Annette Tuszynski - For her unending support.

My father Richard Myers – Because we didn't have enough time together.
My mother Marie Myers – I can't wait to spend more time with you.

All of my pets that have passed away during my educational pursuits:
Cassius, Murphy, Blitzen and Kelsey

Acknowledgements

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Lisa Noetzel and Diane Steele for letting me relax and enjoy friends. I'll miss our meetings at Papa Jakes.

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SECTION 1: THE PROJECT

History of the Project

An important point in creativity literature came with Guildford's 1950 presidential address to the American Psychological Association. In this famous speech, Guildford pointed out the scarcity of creativity references listed in the *Psychological Abstracts*. In 1993, Feist and Runco completed a study of trends in the creativity literature using the *Journal of Creative Behavior* from 1967 to 1989. Their study provided the foundation for future studies. In 1998, The International Center for Studies in Creativity launched a five-year initiative to study the current trends in creativity literature (Murdock, 1999). This study is just a small part of that initiative (Myers, 2002).

Rationale

The purpose of this project was to promote awareness of the content, themes, and trends appearing in creativity research journals by continuing to organize and disseminate the information in those journals using an established process model for synthesizing journal literature.

Questions that Guided the Project

- What are the similarities and differences in trends and themes in articles from *Creativity Research Journal* for the calendar year 2001?
- What contents and methods are apparent?
- What kinds of materials appear?
- What are the implications of this information for the development of the domain of creativity?

Project Significance

This project was part of an ongoing initiative being carried out at the International Center for Studies in Creativity in response to a growing concern that the creativity literature was being overlooked, often to the detriment of current work being produced in the field (Murdock, 1999; see also Isaksen & Murdock, 1993; Murdock, Isaksen, & Coleman, 1993; Raina, 1993; Stein, 1987; Stein, 1993). Stein (1987) noted, how frequently scholars published papers with seemingly little knowledge of what had already been accomplished in the field. In later work Stein speaks directly to the issue by advising, "There is vast and important literature available in the area of creativity. Consult it and use it" (1993, p. 489). This project directly addresses these issues by examining the journal literature and synthesizing the information.

This project belongs to a five-year initiative at the International Center for Studies in Creativity (Murdock, 1999). Prior journal syntheses have been completed by Bowman-Jones, (1999); Carroll, (2000); Donaldson, (1999); Ezrin, (1999); and Moynihan, (2001) .

They discussed the importance of synthesizing the creativity journal literature on a regular basis for the benefit of those contributing to the development of creativity so that they may enhance prior work and synthesized work from three different journals.

Method

This project involved reading, studying, and carefully examining each article published in the issues of *Creativity Research Journal* for the calendar year 2001 and developing a database that would be able to handle the data from other previous analyses. Of the 4 issues printed in 2001, issue #1 was a special issue on creativity and the schizophrenia spectrum, issue #2 consisted of independent articles and issue #3/4 was a special issue commemorating Guilford's 1950 Presidential Address. Qualitative analysis was used to examine themes and trends in the journal articles, and quantitative analysis was used to provide descriptive statistics as specified in the established schema supplied by Feist and Runco (1993). The project followed these five steps: (1) examining of the Feist and Runco (1993) process model for analyzing journal literature; (2) acquiring and reading the journal material published by *Creativity Research Journal* for the calendar year 2001; (3) developing a system for storing, retrieving and analyzing the material (4) analyzing the material according to the categories outlined in Feist and Runco (1993); and (5) making changes, additions, modifications, or adjustments to their schema as necessary or as required by the data. Specific information regarding coding criteria can be found in Appendix B.

According to the Feist and Runco schema, **Structural Characteristics** contained the number of articles per issue, pages for book reviews, comments/rejoinder and introductions, total references per article, total recent reference index, total classic reference index and authors per article. Recent references consisted of reference years within 5 years of the date of issue and classic references consisted of 25 years or older from the date of issue.

Authorship Patterns contained the total number of authors, total number of male authors, total number of male female authors, number of male-first authors, number of female-first authors, and the number of authors where gender could not be determined.

Research Methods consisted of two categories: empirical studies describing those that have explicit or implicit method sections, and non-empirical studies describing those that did not report original empirical data. Empirical studies were subdivided into eleven different methods: laboratory; questionnaires; tests; interviews; field studies; longitudinal; archival; multi-method; meta-analytic; quantitative analysis; or qualitative analysis. Non-empirical studies were subdivided into four methods: descriptive/review; prescriptive; technique; and theoretical. Articles could be coded with multiple methods.

The fourth category **Populations**, examined the nature of populations studied in the empirical articles only and consisted of: preschool children; elementary school children; junior high school students; high school students; university students; adults; artists; scientist/engineers; business people; and others as a separate category.

Finally, **identifying articles based on their explicit title or main focus determined Issues in Title and Foci**. Feist and Runco selected thirty-one topics for their

1993 study (i.e., education, creativity enhancement, divergent thinking). Twenty-three of the thirty-one categories were identified in this study along with two other topics. One topic being; technology, which was added in a previous study (Donaldson, 1999) at the Center and one new topic being trends in authorship. The following section describes what were currently being studied and the direction, which the trends illustrate, based on the Donaldson (1999) study of the 1998 issues and the Carroll (2000) study of the 1999 issues of the *Creativity Research Journal*. The current study captures the trends in both the literature and research within the creativity domain.

SECTION 2: THE RESULTS

Introduction

The data used in this study provided additional information for examining current themes creativity literature. The four 2001 issues of the *Creativity Research Journal*, contained a total of 46 articles, 4 of which were book reviews, 4 comments/rejoinders and 3 introductions leaving 35 articles as legitimate articles for this study. Articles averaged 54.74 references and 11 pages in length. Issues in title and foci showed that the five most often studied topics were creative behavior (12); synthetic / divergent (11); mental health (10); neurobiological (7) and problem solving (7). The fact that issue #1 was dedicated, solely, to creativity and the schizophrenia spectrum and issue #3/4 commemorating Guilford's 1950 presidential address makes an impressive find of twenty-four different topics being covered throughout the year. Recent references made up 11% and classic references made up 24% of the total references.

The most notable trends from the 1998 and 1999 issues of the *Creativity Research Journal* (Donaldson, 1999; Carroll, 2000) were (1) a constant increase in the average number of references per article from 35.86 in 1998, 41.84 in 1999 and 54.74 in 2001; (2) The fluctuation of empirical studies from 13 in 1998, 23 in 1999 and 19 in 2001; and (3) the stability of the percentage of male authors from 59% in 1998, 50% in 1999 and 55% in 2001.

Creativity References in PsycINFO

One of the most telltale signs of the growth in creativity research and literature is the number of references in different research databases, such as PsycINFO. Table 1 shows a constant increase in references from 1928 to 1999.

Table 1.

Number of Creativity References in Psychological Abstracts 1928 - 1999

Years	Creativity References
1928 - 1949	891
1950 - 1959	685
1960 - 1969	1957
1970 - 1979	3498
1980 - 1989	5282
1990 - 1999	7186

Note: These data were gathered by a computer search on PsyhINFO on 10/14/2002.

It is especially interesting to see that in the last decade, the number of creativity references have almost matched the previous two decades.

Structural Characteristics

Structural Characteristics in the *Creativity Research Journal* for 2001 showed an average of 11.7 articles per issue, up from eight in 1998. The average length in pages per article was 11.14, almost matching the analysis from 1998. There were 1,916 references,

well above the 789 references in 1998 and the mean reference of 54.74 is well above the mean of 35.86 in 1998 and up from 41.84 in 1999. Recent references had a mean of 6.17, down from 10.31 in 1998 and classic references had a mean of 13.31, well above the 5.90 in 1998. This number may be somewhat exaggerated due to the special issue commemorating Guilford's 1950 presidential address. Table 2 shows a mean of 13.31 for the classic reference index, however, the standard deviation is 10.80; signifying a large dispersion among the number of classic references in each article. The same is true for References as a whole. It is important to note that 24% of the *Creativity Research Journal* references in 2001 occurred prior to 1976.

Table 2.

Average Article in the Creativity Research Journal for 2001: Means and Standard Deviations:

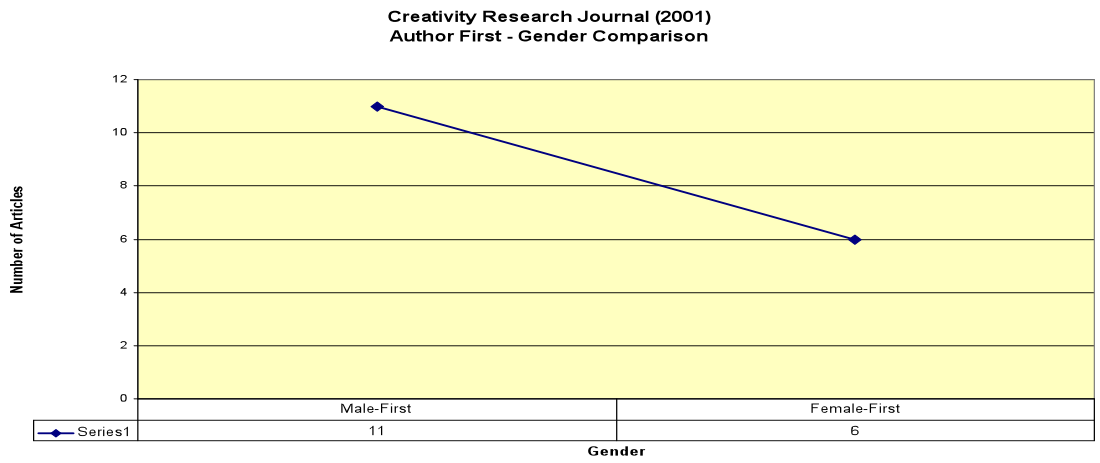
	M	SD
References	54.74	30.46
Pages	11.14	4.56
Recent Reference Index	6.17	7.12
Classic Reference Index	13.31	10.80
Authors	1.97	1.34
Male Authors	1.09	0.89
Female Authors	0.66	0.84

Authorship Patterns

Analysis of Authorship Patterns indicated that of the 69 authors, almost double the number of 37 in 1998 and well above the 48 in 1999, 38 were male, up from 22 in

1998 and 24 in 1999 and 23 were female, up from 14 in 1998 and almost even with 22 in 1999. There were eight authors where the gender was undetermined. Seventeen articles were single-authored and eighteen were multi-authored. As Chart 1 indicates; of the eighteen multi-authored articles, eleven were male-first authors and six were female-first authors. Table 2, above, shows that the Male authorship mean was 1.09 and female authorship mean was .66.

Chart 1



Methods

The number of empirical studies (19), up from 13 in 1998, yet down from 23 in 1999 and the number of non-empirical studies (16), up from 11 in 1998 and 1999. This number may be somewhat exaggerated due to the special issue commemorating Guilford's 1950 presidential address. Chart 2 shows that of the 19 empirical studies, all

utilized quantitative measures. The most common methods of empirical research were multi-method (9), laboratory (4), and questionnaires (3). Chart 3 shows that of the non-empirical studies, prescriptive at 11, was more than double the 5 in 1998; descriptive/review accounted for 9, matching 1998; and theoretical methods accounted for 7 and only one article was classified as describing a technique. Table 3A shows the means and standard deviations for methods being quite dependable as far as the dispersion of scores. The most interesting was the increase in prescriptive methods.

Chart 2

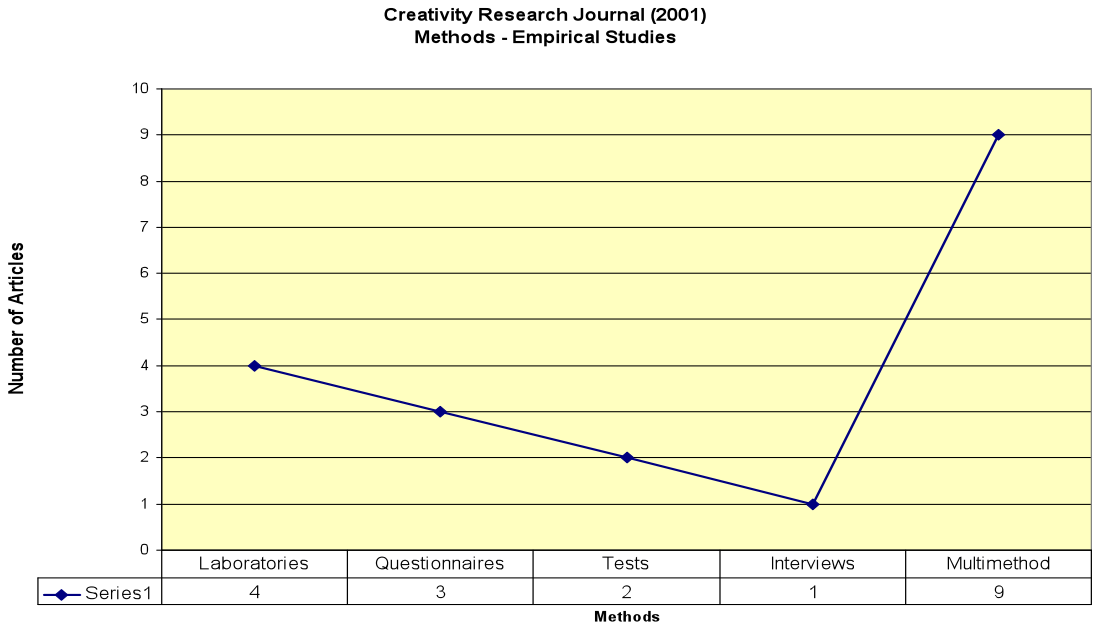


Chart 3

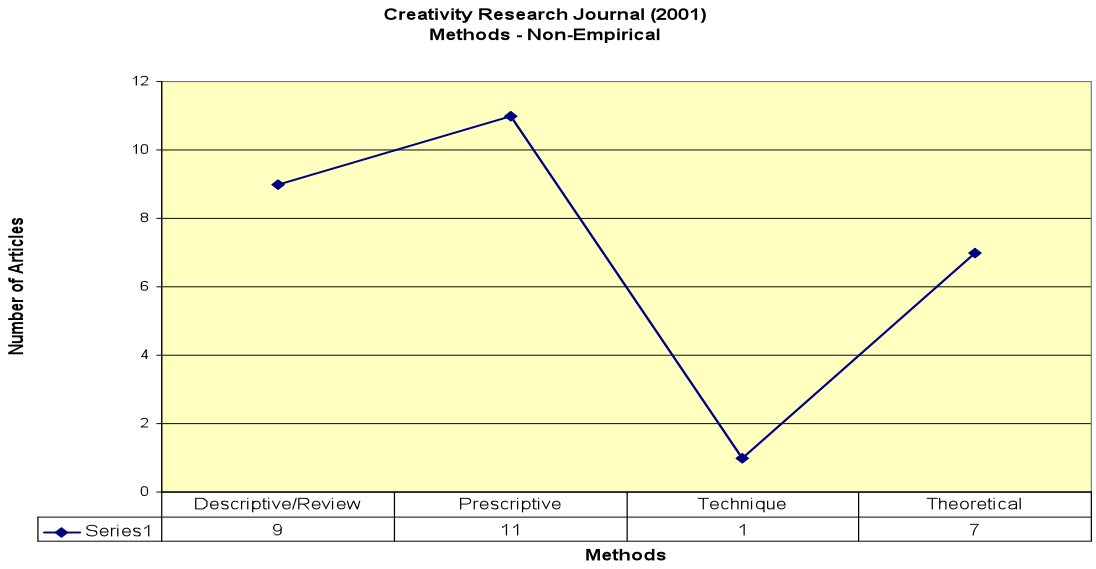


Table 3.

Mean Ranking

Methods	M	SD
Empirical Studies		
Multimethod Studies	0.47	0.50
Laboratories	0.21	0.41
Questionnaires	0.16	0.36
Tests	0.11	0.31
Interviews	0.05	0.22
Non-Empirical Studies		
Descriptive/Review	0.56	0.51
Prescriptive	0.69	0.48
Theoretical	0.44	0.51
Technique	0.06	0.25

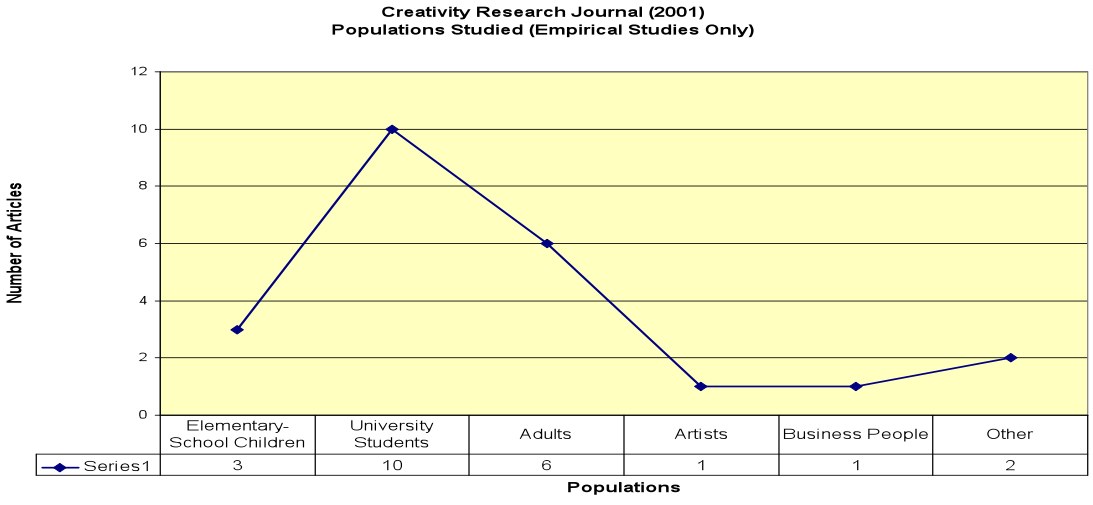
Populations Studied

Chart 4 shows University students (10), up from 7 in 1998, were the most commonly studied populations in empirical research, followed by adults (6). The least studied populations in 2001 were artists and business people, both at one each. Table 3B shows the standard deviations from the mean being very low, signifying low dispersion of scores. The most important finding in this section is the continued trend of university student populations.

Table 4.

Populations Studied	M	SD
University Students	0.29	0.46
Adults	0.17	0.38
Elementary-School Children	0.09	0.28
Other	0.06	0.24
Artists	0.03	0.17
Business People	0.03	0.17

Chart 4



Issues in Titles and Focus

To standardize coding in issues in title and focus and to more clearly reflect a possible new trend, I added a new category; trends in authorship (see Chart 5 on the following page). Each article was coded, based on the content of its title and/or the identification of its main focus; therefore, an article could have been rated twice. The top five issues were creative behavior at 12; synthetic/divergent thinking at 11; mental health at 10; and problem solving/incubation tied with neurobiological at 7. The five least common topics were personality at 5; potential and social/environmental influences of creativity both at 3; imagery/visualization/dreams, testing/measurement and business/management all at 2. There were 12 topics that were studied only once.

Special issues are always an influence on such genres as topics and foci and 2001 was no exception. It should be noted that Volume 13, Issue 1 focused solely on creativity and the schizophrenia spectrum (10) articles and Issue 3 & 4 was a commemorative issue to Guilford's 1950 presidential address (18) articles. Also important to mention is the wide variety of topics. Twenty-three different topics were studied in 35 articles. Table 4 indicates a low dispersion of scores based on the standard deviation of the most and least common topics. This diversity appears to be characteristic of the *Creativity Research Journal*.

Chart 5

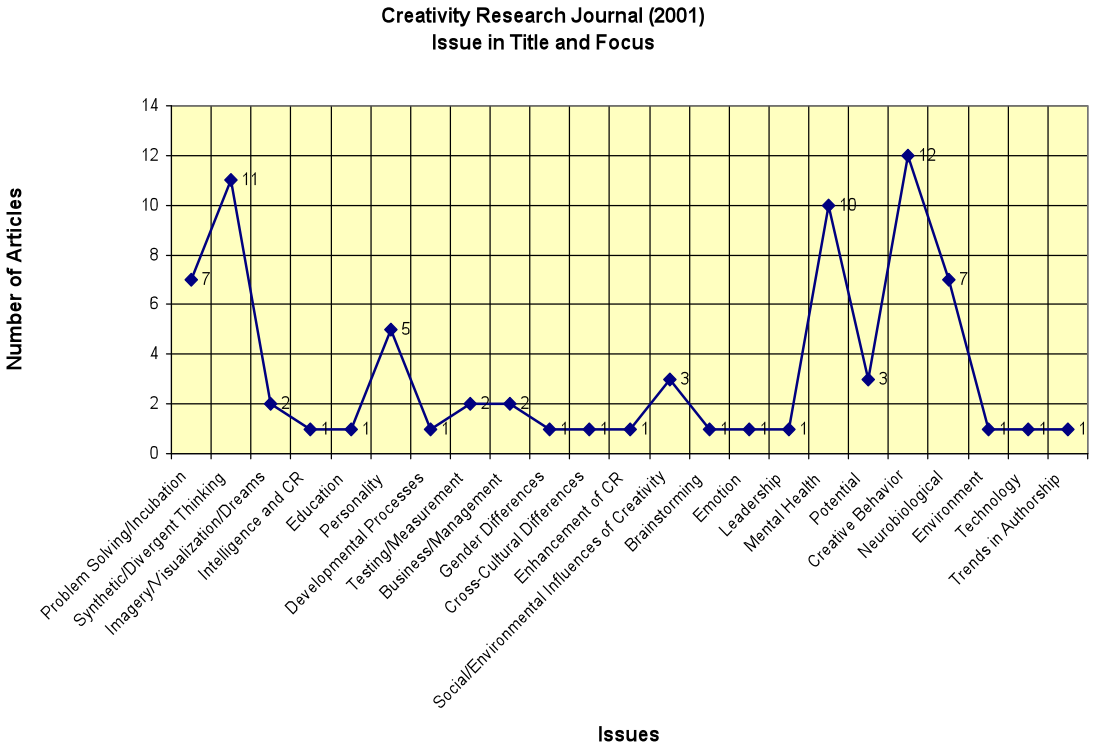


Table 5.

Five Most and Least Common Topics: Mean Ranking per Issue

Most Common Topics	*M*	*SD*
Creative Behavior:	0.34	0.48
Mental Health:	0.29	0.46
Neurobiological:	0.20	0.41
Problem Solving/Incubation:	0.20	0.41
Synthetic/Divergent Thinking:	0.31	0.47

Least Common Topics	*M*	*SD*
Business/Management:	0.06	0.24
Imagery/Visualization/Dreams:	0.06	0.24
Personality:	0.14	0.36
Potential:	0.09	0.28
Social/Environmental Influences of Creativity:	0.09	0.28
Testing/Measurement:	0.06	0.24

Summary

Table 1 showed the number of creativity references in PsycINFO, in some years, much higher than those quoted in Feist and Runco, 1993. It is not known why this discrepancy exists; only that there may have been a re-classification of articles.

In comparison to both the Donaldson study of the 1998 issues and the Carroll study of 1999 issues, the number of articles per issue is rising. However, this number may be somewhat exaggerated due to the special issue commemorating Guilford's 1950 presidential address. The average number of pages per article has also risen. The average number of references per articles appears to be the most significant trend by its growth from 35.86 in 1998, 41.84 in 1999 and 54.74 in this study. The classic references rose from 130 in 1998 to 466. This is most likely due to the commemorative issue.

Female authors appear to be gaining ground based on 14 in 1998, 22 in 1999 and 23 in this study. Male authorship appears to be holding steady at around 55%.

Empirical studies continue to be a very strong focus for the *Creativity Research Journal* and descriptive/review continues to be the most common method for non-empirical articles.

Researchers continue to use university students more frequently than any other population. There is concern that researchers may be missing a very fast growing population and enormous opportunity for studying our senior population.

Other than problem solving, there does not appear to be a trend, over time, in topics except for the continuance of technology as a category. This may be the beginning of a new trend.

The data in this study provide important information for the continued study of trends in creative research and literature. There are many benefits of this kind of analysis. First, it informs researchers of what has been accomplished in the past, and may help prevent researchers from duplicating efforts therefore speeding up the development of the domain. Second, it provides a view of the future direction of the field of creativity. Third, it shows how fast or slow aspects of research in the field are developing. Finally, it presents a step toward a better understanding of basic constructs in the discipline of creativity.

SECTION 3: DATABASE DESIGN AND STRUCTURE

Purpose

A second major part of this project is the development of a database to store, retrieve and analyze data collected in connection with the International Center for Studies in Creativity's five-year initiative, to study the trends in creativity literature. After careful review of previous studies, Donaldson (1999) and Carroll (2000), it became apparent that consistency and accuracy of data is of the utmost importance in producing accurate and meaningful analyses.

The main purpose of its design is to provide structure for contributions to this study. It is hoped that it will provide guidance in entering data so that more accurate and meaningful comparisons can be made from journal-to-journal and year-to-year.

This section will document the database and provide information about its design and structure for contributors.

The name of the database file is: JRNLPROJ.MDB and was created using Microsoft Access 2000. You can acquire a copy of this database by contacting the International Center for Studies in Creativity at Buffalo State College.

Step-by-Step Procedures

Steps:

1. Using the Tables or Forms tabs, begin by entering data into the Article Info table.
2. Next enter the Reference Years by article into the Reference Table, **remembering to run the Reference Query in between article input**. This will, automatically, add the journal abbreviation, volume and article number to the table.
3. Print out the Empirical and Non-Empirical Worksheets.
4. Identify articles by Empirical or Non-Empirical and complete the appropriate worksheet for the article.
5. After all worksheets have been completed, click on the Forms or Tables tab and begin to enter the data into the appropriate tables. The tables are identified by headings on the worksheet.
6. After all the data is entered, go to the Query tab and double click on the appropriate queries to update the Structural Characteristics Table and the Article Info Table.
7. Next run the queries that provide information to be entered into other tables.
8. To develop charts, you will need to have some knowledge of Microsoft Excel.
9. You can click on a Chart Query to highlight it. Once highlighted, click on the icon above to *Analyze it with MS Excel*.
10. Once Excel comes up, highlight the titles and figures in the rows and columns and then click on the Chart Icon. It is suggested that you get a step-by-step book if you're not familiar with Excel. You can then create your charts in Excel.
11. The Mean and Standard Deviation reports can be exported as a Rich Text Format and then inserted into your document.
12. In order to insert the Charts, you will need to choose Insert / Object / Create From File and then browse for you chart.
13. You will have to play with formatting to have your charts come out right.

Basic Terminology

Database: A collection of related data in tables, queries, reports and forms. A database contains information about a particular topic or purpose; it is not itself the programs that manage the data. The database is organized for easy user access. The Microsoft Access database is stored in a single, large file that contains all of the database objects for a particular application.

Database Objects:

Table: the basic structure that holds the data values for the database. It is called a table because its rows represent records and its columns are data.

Record: a group of related fields of information about one object or event in the database (for example, an issue of a particular journal). Records correspond to rows in tables.

Field: fields in a record contain a particular data item (for example, a reference year). Fields correspond to columns in tables.

Index: contains a table of record numbers, called pointers, arranged in some order (for example, alphabetical, numerical, or chronological) to permit the rapid location of a particular record.

Key: an identifier for each record. It can be a single field like an issue number or a combination of several fields such as journal abbreviation, issue number and article number.

Query: a set of conditions that provide for retrieval of certain records from a table. You can add more than one table to a query and related tables by matching common fields, such as journal abbreviation, issue number and article number.

Form: represents a customized manner of inputting data in a database or presenting data on the screen. A form usually presents a single record at a time, or a single record from one table together with records from another table that match it.

Report: provides the specifications for output of data in a tabular format. In Microsoft Access, you may display a report on the screen or send it to the printer. A report usually has multiple records, organized in a particular order.

Data Types:

Text Fields: represent attributes or short descriptions of objects. You would use text fields for such things as a name or a journal, issue number or title of an article.

Memo Fields: are used for long textual descriptions or comments.

Number Fields: are used to hold quantitative measurements about items in your database. The rule of thumb is to use a number field for an item when you might want to perform arithmetic operations on that field.

Date/Time Fields: contain date and time information about events. Dates can be shown in four different formats and time can be shown in three different formats.

Currency Fields: are used to store numeric money amounts. By default, these fields show a dollar sign in front of the value and show two decimal places, as in $99.95. Negative numbers are shown in parentheses. Numbers larger than $ 1,000 have a comma separator between hundreds and thousands place.

Counter Fields: are special numeric fields that increment by one in each successive record. They count up as you add new records, usually starting with 1. Counter fields are frequently used as a primary key for a table. Counter field values cannot be changed once entered.

Yes/No Fields: contain only the values yes (true) or no (false). They can be used to reflect a condition that is met or not met by the data item. An example may be to include the article in the study (yes) or not to include it (no).

Tables – Based on Feist and Runco Categories

Tables: Each of the tables was designed based on the categories established by Feist and Runco (1993).

Table: Article Info

This table stores all of the basic information about each article as you can see by the Column Names.

Columns

Name	Type	Size
ID	Double	8
Journal Abbr	Text	255
Volume	Text	255
Issue No	Text	255
Article No	Text	255
Article Title	Text	255
Article Start Page	Double	8
Article End Page	Double	8
Book Review	Yes/No	1
Comment/Rejoinder	Yes/No	1
Total Pages	Double	8
CountasArticle	Yes/No	1
Introduction	Yes/No	1

Table Indexes

Name	Number of Fields
PrimaryKey	1

Table: Authorship Patterns

This table stores all of the information with regard to the Authorship Patterns.

Columns

Name	Type	Size
ID	Double	8
Journal Abbr	Text	255
Volume	Text	255
Issue No	Text	255
Article No	Text	255
Total Number of Authors	Double	8
Total Number of Male Authors	Double	8
Total Number of Female Authors	Double	8
Number of Male-First Authors	Double	8
Number of Female-First Authors	Double	8
Undetermined Gender of Author	Double	8

Table Indexes

Name	Number of Fields
Number of Female-First Authors	1
Number of Male-First Authors	1
PrimaryKey	1

Table: Empirical Studies

This table was created using one blank record in order to print an Empirical Studies recording sheet for later data entry. You should not enter any data in this table.

Columns

Name	Type	Size
ID	Text	255
Journal Abbr	Text	255
Volume	Text	255
Issue No	Text	255
Article No	Text	255
Article Title	Text	255
Article Start Page	Text	255
Article End Page	Text	255
Total Number of Authors	Text	255
Total Number of Male Authors	Text	255
Total Number of Female Authors	Text	255
Number of Male-First Authors	Text	255
Number of Female-First Authors	Text	255
Undetermined Gender of Author	Text	255
Problem Solving/Incubation	Text	255
Synthetic/Divergent Thinking	Text	255
Imagery/Visualization/Dreams	Text	255
Intuition (thought)	Text	255
Intelligence and CR	Text	255
Education	Text	255
Giftedness	Text	255
Personality	Text	255
Developmental Processes	Text	255
Testing/Measurement	Text	255
Business/Management	Text	255
Gender Differences	Text	255
Cross-Cultural Differences	Text	255
Enhancement of CR	Text	255
Social/Environmental Influences of Creativity	Text	255
Motivation/Source/Origin	Text	255

Brainstorming	Text	255
Humor	Text	255
Intuition (nature)	Text	255
Science/Scientific	Text	255
Art/Artistic	Text	255
Emotion	Text	255
Leadership	Text	255
Therapy	Text	255
Mental Health	Text	255
Freewill/Will	Text	255
Potential	Text	255
Creative Product	Text	255
Creative Behavior	Text	255
Neurobiological	Text	255
Psychic/Futuristic	Text	255
Number of Empirical Studies Per Issue	Text	255
Number of Laboratories	Text	255
Number of Questionnaires	Text	255
Number of Tests	Text	255
Number of Interviews	Text	255
Number of Field Studies	Text	255
Number of Logitudinal Studies	Text	255
Number of Archival Studies	Text	255
Number of Multimethod Studies	Text	255
Number of Meta-Analytic Studies	Text	255
Number of Quantitative Analyses	Text	255
Number of Qualitative Analyses	Text	255
Preschool Children	Text	255
Elementary-School Children	Text	255
Junior High School Students	Text	255
High School Students	Text	255
University Students	Text	255
Adults	Text	255
Artists	Text	255
Scientists/Engineers	Text	255
Other	Text	255

Table Indexes

Name	Number of Fields
Number of Archival Studies	1
Number of Empirical Studies Per Issue	1
Number of Female-First Authors	1
Number of Field Studies	1
Number of Interviews	1
Number of Laboratories	1
Number of Logitudinal Studies	1
Number of Male-First Authors	1
Number of Meta-Analytic Studies	1
Number of Multimethod Studies	1
Number of Qualitative Analyses	1
Number of Quantitative Analyses	1
Number of Questionnaires	1
Number of Tests	1
PrimaryKey	1

Table: Issues in Title and Focus

This table stores all of the information with regard to the Issues in Title and Focus.

Columns

Name	Type	Size
ID	Double	8
Journal Abbr	Text	255
Volume	Text	255

Issue No	Text	255
Article No	Text	255
Problem Solving/Incubation	Long Integer	4
Synthetic/Divergent Thinking	Long Integer	4
Imagery/Visualization/Dreams	Long Integer	4
Intuition (thought)	Long Integer	4
Intelligence and CR	Long Integer	4
Education	Long Integer	4
Giftedness	Long Integer	4
Personality	Long Integer	4
Developmental Processes	Long Integer	4
Testing/Measurement	Long Integer	4
Business/Management	Long Integer	4
Gender Differences	Long Integer	4
Cross-Cultural Differences	Long Integer	4
Enhancement of CR	Long Integer	4
Social/Environmental Influences of Creativity	Long Integer	4
Motivation/Source/Origin	Long Integer	4
Brainstorming	Long Integer	4
Humor	Long Integer	4
Intuition (nature)	Long Integer	4
Science/Scientific	Long Integer	4
Art/Artistic	Long Integer	4
Emotion	Long Integer	4
Leadership	Long Integer	4
Therapy	Long Integer	4
Mental Health	Long Integer	4
Freewill/Will	Long Integer	4
Potential	Long Integer	4
Creative Product	Long Integer	4
Creative Behavior	Long Integer	4
Neurobiological	Long Integer	4
Psychic/Futuristic	Long Integer	4
Environment	Long Integer	4
Technology	Long Integer	4
Trends in Authorship	Long Integer	4

Table Indexes

Name	Number of Fields
PrimaryKey	1

Table: Issues Most and Least

This table stores all of the information with regard to the Most and Least Common Issues found in the study. This table is created manually once the Most and Least Common Issues are determined.

Columns

Name	Type	Size
ID	Double	8
Journal Abbr	Text	255
Volume	Text	255
MostLeast	Text	5
Problem Solving/Incubation	Long Integer	4
Synthetic/Divergent Thinking	Long Integer	4
Imagery/Visualization/Dreams	Long Integer	4
Personality	Long Integer	4
Testing/Measurement	Long Integer	4
Business/Management	Long Integer	4
Social/Environmental Influences of Creativity	Long Integer	4
Mental Health	Long Integer	4
Potential	Long Integer	4

	Creative Behavior	Long Integer	4
	Neurobiological	Long Integer	4

Table Indexes

Name	Number of Fields
PrimaryKey	1

Table: Journal Name

This table stores all of the information with regard to each of the Journals full name and abbreviation.

Columns

Name	Type	Size
ID	Double	8
Journal Abbr	Text	255
Journal Title	Text	255

Table Indexes

Name	Number of Fields
PrimaryKey	1

Table: Methods

This table stores all of the information with regard to the Methods of Empirical and Non-Empirical studies.

Columns

Name	Type	Size
ID	Double	8
Journal Abbr	Text	255
Volume	Text	255
Issue No	Text	255
Article No	Text	255
Number of Empirical Studies Per Issue	Long Integer	4
Number of Laboratories	Long Integer	4
Number of Questionnaires	Long Integer	4
Number of Tests	Long Integer	4
Number of Interviews	Long Integer	4
Number of Field Studies	Long Integer	4
Number of Logitudinal Studies	Long Integer	4
Number of Archival Studies	Long Integer	4
Number of Multimethod Studies	Long Integer	4
Number of Meta-Analytic Studies	Long Integer	4
Number of Quantitative Analyses	Long Integer	4
Number of Qualitative Analyses	Long Integer	4
Number of Nonempirical Studies Per Issue	Long Integer	4
Descriptive/Review	Long Integer	4
Prescriptive	Long Integer	4
Technique	Long Integer	4
Theoretical	Long Integer	4

Table Indexes

Name	Number of Fields
Number of Archival Studies	1
Number of Empirical Studies Per Issue	1
Number of Field Studies	1
Number of Interviews	1
Number of Laboratories	1
Number of Logitudinal Studies	1
Number of Meta-Analytic Studies	1
Number of Multimethod Studies	1
Number of Nonempirical Studies Per Issue	1

Number of Qualitative Analyses	1
Number of Quantitative Analyses	1
Number of Questionnaires	1
Number of Tests	1

Table: Non Empirical Studies

This table was created using one blank record in order to print an Non-Empirical Studies recording sheet for later data entry. You should not enter any data in this table.

Columns

Name	Type	Size
Field1	Text	255
Field2	Text	255
Field3	Text	255
Field4	Text	255
Field5	Text	255
Field6	Text	255
Field7	Text	255
Field8	Text	255
Field9	Text	255
Field10	Text	255
Field11	Text	255
Field12	Text	255
Field13	Text	255
Field14	Text	255
Field15	Text	255
Field16	Text	255
Field17	Text	255
Field18	Text	255
Field19	Text	255
Field20	Text	255
Field21	Text	255
Field22	Text	255
Field23	Text	255
Field24	Text	255
Field25	Text	255
Field26	Text	255
Field27	Text	255
Field28	Text	255
Field29	Text	255
Field30	Text	255
Field31	Text	255
Field32	Text	255
Field33	Text	255
Field34	Text	255
Field35	Text	255
Field36	Text	255
Field37	Text	255
Field38	Text	255
Field39	Text	255
Field40	Text	255
Field41	Text	255
Field42	Text	255
Field43	Text	255
Field44	Text	255
Field45	Text	255
Field46	Text	255
Field47	Text	255
Field48	Text	255
Field49	Text	255
Field50	Text	255

Table Indexes

Name	Number of Fields
PrimaryKey	1

Table: Populations Studied (Empirical Studies Only)
This table stores all of the information with regard to the Populations Studied (Empirical Studies Only).

Columns

Name	Type	Size
ID	Double	8
Journal Abbr	Text	255
Volume	Text	255
Issue No	Text	255
Article No	Text	255
Preschool Children	Long Integer	4
Elementary-School Children	Long Integer	4
Junior High School Students	Long Integer	4
High School Students	Long Integer	4
University Students	Long Integer	4
Adults	Long Integer	4
Artists	Long Integer	4
Scientists/Engineers	Long Integer	4
Business People	Long Integer	4
Other	Long Integer	4

Table Indexes

Name	Number of Fields
PrimaryKey	1

Table: PsychINFO Data
This table stores all of the information with regard to the PsychINFO Data gathered by the researcher.

Columns

Name	Type	Size
ID	Long Integer	4
Years	Text	11
#CreativityArticles	Long Integer	4

Table Indexes

Name	Number of Fields
PrimaryKey	1

Table: References
This table stores all of the information with regard to the References.

Columns

Name	Type	Size
ID	Double	8
Journal Abbr	Text	255
Volume	Text	255
Issue No	Text	255
Article No	Text	255
Ref Year	Double	8
Other Notes	Text	255
Classic	Long Integer	4
Recent	Long Integer	4
CountRef	Long Integer	4

Table Indexes

Name	Number of Fields
PrimaryKey	1

Table: Struc Char Totals

This table stores summary information to populate the Structural Characteristics table. The information is enter via an append query.

Columns

Name	Type	Size
Journal Abbr	Text	255
Volume	Text	255
Issue No	Text	255
Article No	Text	255
SumOfClassic	Double	8
SumOfRecent	Double	8
SumOfCountRef	Double	8
Total Number of Authors	Double	8
Book Review	Yes/No	1
Comment/Rejoinder	Yes/No	1
Total Pages	Double	8
Introduction	Yes/No	1

Table: Structural Characteristics

This table stores all of the information with regard to the Structural Characteristics.

Columns

Name	Type	Size
ID	Double	8
Journal Abbr	Text	255
Volume	Text	255
Year	Text	4
Issue No	Text	255
Article No	Text	255
Total Number of Articles/Issue	Double	8
Pages For Articles	Double	8
Pages For Book Reviews	Double	8
Total References Per Issue	Double	8
Total Recent Reference Index	Double	8
Total Classic Reference Index	Double	8
Authors Per Article	Double	8

Table Indexes

Name	Number of Fields
PrimaryKey	1

Queries

Query: Append Abbr,Vol,Issueno,Articleno

This query populates the Journal Abbreviation, Volume, Issue Number and Article Number in the Structural Characteristics Table. This query uses the References Table to populate the information. This was done because I found that I was able to get a headstart on the project by first entering all of the reference years for each article. (The Reference Table must be populated before running this query).

SQL

```
INSERT INTO [Structural Characteristics] ( [Journal Abbr], Volume, [Issue No], [Article No] )
SELECT DISTINCT References.[Journal Abbr], References.Volume, References.[Issue No], References.[Article No]
FROM [References];
```

Query: Articles Not Used in Study

This query is used to produce the Report of Articles Not Used in Study Report.

SQL

```
SELECT [Article Info].[ID], [Article Info].[Journal Abbr], [Article Info].[Volume], [Article Info].[Issue No], [Article Info].[Article No], [Article Info].[Article Title], [Article Info].[Article Start Page], [Article Info].[Article End Page], [Article Info].[Book Review], [Article Info].[Comment/Rejoinder], [Article Info].[Total Pages], [Article Info].[CountasArticle], [Article Info].[Introduction]
FROM [Article Info]
WHERE ((([Article Info].[CountasArticle])=False));
```

Query: Chart Authorship Query

This query is used to produce the Authorship Chart.

SQL

```
SELECT [Authorship Patterns].[Journal Abbr], [Authorship Patterns].Volume, Sum([Authorship Patterns].[Total Number of Male Authors]) AS [SumOfTotal Number of Male Authors], Sum([Authorship Patterns].[Total Number of Female Authors]) AS [SumOfTotal Number of Female Authors], Sum([Authorship Patterns].[Undetermined Gender of Author]) AS [SumOfUndetermined Gender of Author], Sum([Authorship Patterns].[Total Number of Male Authors]) AS [SumOfTotal Number of Male Authors1], Sum([Authorship Patterns].[Number of Male-First Authors]) AS [SumOfNumber of Male-First Authors], Sum([Authorship Patterns].[Number of Female-First Authors]) AS [SumOfNumber of Female-First Authors]
FROM [Article Info] INNER JOIN [Authorship Patterns] ON ([Article Info].[Journal Abbr] = [Authorship Patterns].[Journal Abbr]) AND ([Article Info].Volume = [Authorship Patterns].Volume) AND ([Article Info].[Issue No] = [Authorship Patterns].[Issue No]) AND ([Article Info].[Article No] = [Authorship Patterns].[Article No])
GROUP BY [Authorship Patterns].[Journal Abbr], [Authorship Patterns].Volume, [Article Info].CountasArticle
HAVING ((([Article Info].CountasArticle)=True));
```

Query: Chart Empirical Studies Methods

This query is used to produce the Empirical Studies Methods Chart.

SQL

```
SELECT Methods.[Journal Abbr], Methods.Volume, Sum(Methods.[Number of Laboratories]) AS [SumOfNumber of Laboratories], Sum(Methods.[Number of Questionnaires]) AS [SumOfNumber of Questionnaires], Sum(Methods.[Number of Tests]) AS [SumOfNumber of Tests], Sum(Methods.[Number of Interviews]) AS [SumOfNumber of Interviews], Sum(Methods.[Number of Field Studies]) AS [SumOfNumber of Field Studies], Sum(Methods.[Number of Logitudinal Studies]) AS [SumOfNumber of Logitudinal Studies],

Sum(Methods.[Number of Archival Studies]) AS [SumOfNumber of Archival Studies], Sum(Methods.[Number
```

```
of Multimethod Studies]) AS [SumOfNumber of Multimethod Studies], Sum(Methods.[Number of Meta-Analytic
Studies]) AS [SumOfNumber of Meta-Analytic Studies], Sum(Methods.[Number of Quantitative Analyses]) AS
[SumOfNumber of Quantitative Analyses], Sum(Methods.[Number of Qualitative Analyses]) AS [SumOfNumber
 of Qualitative Analyses]
FROM [Article Info] INNER JOIN Methods ON ([Article Info].[Journal Abbr] = Methods.[Journal Abbr]) AND
([Article Info].Volume = Methods.Volume) AND ([Article Info].[Issue No] = Methods.[Issue No]) AND ([Article
Info].[Article No] = Methods.[Article No])
GROUP BY Methods.[Journal Abbr], Methods.Volume, [Article Info].CountasArticle
HAVING ((([Article Info].CountasArticle)=True));
```

Query: Chart Issues in Title and Focus

This query is used to produce the Issues in Title and Focus Chart.

SQL

```
SELECT [Issues in Title and Focus].[Journal Abbr], [Issues in Title and Focus].Volume, Sum([Issues in Title and
 Focus].[Problem Solving/Incubation]) AS [SumOfProblem Solving/Incubation], Sum([Issues in Title and
Focus].[Synthetic/Divergent Thinking]) AS [SumOfSynthetic/Divergent Thinking], Sum([Issues in Title and
Focus].[Imagery/Visualization/Dreams]) AS [SumOfImagery/Visualization/Dreams], Sum([Issues in Title and
Focus].[Intuition (thought)]) AS [SumOfIntuition (thought)], Sum([Issues in Title and Focus].[Intelligence and
 CR]) AS [SumOfIntelligence and CR], Sum([Issues in Title and Focus].Education) AS SumOfEducation,
Sum([Issues in Title and Focus].Giftedness) AS SumOfGiftedness, Sum([Issues in Title and Focus].Personality)
AS SumOfPersonality, Sum([Issues in Title and Focus].[Developmental Processes]) AS [SumOfDevelopmental
Processes], Sum([Issues in Title and Focus].[Testing/Measurement]) AS [SumOfTesting/Measurement],
Sum([Issues in Title and Focus].[Business/Management]) AS [SumOfBusiness/Management], Sum([Issues in
Title and Focus].[Gender Differences]) AS [SumOfGender Differences], Sum([Issues in Title and
Focus].[Cross-Cultural Differences]) AS [SumOfCross-Cultural Differences], Sum([Issues in Title and
Focus].[Enhancement of CR]) AS [SumOfEnhancement of CR], Sum([Issues in Title and
Focus].[Social/Environmental Influences of Creativity]) AS [SumOfSocial/Environmental Influences of
Creativity], Sum([Issues in Title and Focus].[Motivation/Source/Origin]) AS [SumOfMotivation/Source/Origin],
 Sum([Issues in Title and Focus].Brainstorming) AS SumOfBrainstorming, Sum([Issues in Title and
Focus].Humor) AS SumOfHumor, Sum([Issues in Title and Focus].[Intuition (nature)]) AS [SumOfIntuition
(nature)], Sum([Issues in Title and Focus].[Science/Scientific]) AS [SumOfScience/Scientific], Sum([Issues in
Title and Focus].[Art/Artistic]) AS [SumOfArt/Artistic], Sum([Issues in Title and Focus].Emotion) AS
SumOfEmotion, Sum([Issues in Title and Focus].Leadership) AS SumOfLeadership, Sum([Issues in Title and
Focus].Therapy) AS SumOfTherapy, Sum([Issues in Title and Focus].[Mental Health]) AS [SumOfMental
Health], Sum([Issues in Title and Focus].[Freewill/Will]) AS [SumOfFreewill/Will], Sum([Issues in Title and
Focus].Potential) AS SumOfPotential, Sum([Issues in Title and Focus].[Creative Product]) AS [SumOfCreative
Product], Sum([Issues in Title and Focus].[Creative Behavior]) AS [SumOfCreative Behavior], Sum([Issues in
Title and Focus].Neurobiological) AS SumOfNeurobiological, Sum([Issues in Title and
Focus].[Psychic/Futuristic]) AS [SumOfPsychic/Futuristic], Sum([Issues in Title and Focus].Environment) AS
SumOfEnvironment, Sum([Issues in Title and Focus].Technology) AS SumOfTechnology, Sum([Issues in Title
and Focus].[Trends in Authorship]) AS [SumOfTrends in Authorship]
FROM [Article Info] INNER JOIN [Issues in Title and Focus] ON ([Article Info].[Article No] = [Issues in Title
and Focus].[Article No]) AND ([Article Info].[Issue No] = [Issues in Title and Focus].[Issue No]) AND ([Article
Info].Volume = [Issues in Title and Focus].Volume) AND ([Article Info].[Journal Abbr] = [Issues in Title and
Focus].[Journal Abbr])
GROUP BY [Issues in Title and Focus].[Journal Abbr], [Issues in Title and Focus].Volume, [Article
Info].CountasArticle
HAVING ((([Article Info].CountasArticle)=True));
```

Query: Chart Non-Empirical Studies Methods

This query is used to produce the Non-Empirical Studies Methods Chart.

SQL

```
SELECT Methods.[Journal Abbr], Methods.Volume, Sum(Methods.[Descriptive/Review]) AS
[SumOfDescriptive/Review], Sum(Methods.Prescriptive) AS SumOfPrescriptive, Sum(Methods.Technique) AS
SumOfTechnique, Sum(Methods.Theoretical) AS SumOfTheoretical
FROM [Article Info] INNER JOIN Methods ON ([Article Info].[Article No] = Methods.[Article No]) AND ([Article
 Info].[Issue No] = Methods.[Issue No]) AND ([Article Info].Volume = Methods.Volume) AND ([Article
```

```
Info].[Journal Abbr] = Methods.[Journal Abbr])
```

```
GROUP BY Methods.[Journal Abbr], Methods.Volume, [Article Info].CountasArticle
HAVING ((([Article Info].CountasArticle)=True));
```

Query: Chart Number of Authors

This query is used to produce the Number of Authors Chart.

SQL

```
SELECT [Authorship Patterns].[Total Number of Authors], Count([Authorship Patterns].[Article No]) AS
[CountOfArticle No]
FROM [Article Info] INNER JOIN [Authorship Patterns] ON ([Article Info].[Journal Abbr] = [Authorship
Patterns].[Journal Abbr]) AND ([Article Info].Volume = [Authorship Patterns].Volume) AND ([Article
Info].[Issue No] = [Authorship Patterns].[Issue No]) AND ([Article Info].[Article No] = [Authorship
Patterns].[Article No])
GROUP BY [Authorship Patterns].[Total Number of Authors], [Article Info].CountasArticle
HAVING ((([Article Info].CountasArticle)=True));
```

Query: Chart Populations Empirical Studies

This query is used to produce the Populations Empirical Studies Chart.

SQL

```
SELECT [Populations Studied (Empirical Studies Only)].[Journal Abbr], [Populations Studied (Empirical Studies
 Only)].Volume, Sum([Populations Studied (Empirical Studies Only)].[Preschool Children]) AS
[SumOfPreschool Children], Sum([Populations Studied (Empirical Studies Only)].[Elementary-School
Children]) AS [SumOfElementary-School Children], Sum([Populations Studied (Empirical Studies
Only)].[Junior High School Students]) AS [SumOfJunior High School Students], Sum([Populations Studied
(Empirical Studies Only)].[High School Students]) AS [SumOfHigh School Students], Sum([Populations
Studied (Empirical Studies Only)].[University Students]) AS [SumOfUniversity Students], Sum([Populations
Studied (Empirical Studies Only)].Adults) AS SumOfAdults, Sum([Populations Studied (Empirical Studies
Only)].Artists) AS SumOfArtists, Sum([Populations Studied (Empirical Studies Only)].[Scientists/Engineers]) AS
 [SumOfScientists/Engineers], Sum([Populations Studied (Empirical Studies Only)].[Business People]) AS
[SumOfBusiness People], Sum([Populations Studied (Empirical Studies Only)].Other) AS SumOfOther
FROM [Article Info] INNER JOIN ([Populations Studied (Empirical Studies Only)] INNER JOIN Methods ON
([Populations Studied (Empirical Studies Only)].[Journal Abbr] = Methods.[Journal Abbr]) AND ([Populations
Studied (Empirical Studies Only)].Volume = Methods.Volume) AND ([Populations Studied (Empirical Studies
Only)].[Issue No] = Methods.[Issue No]) AND ([Populations Studied (Empirical Studies Only)].[Article No] =
Methods.[Article No])) ON ([Article Info].[Journal Abbr] = [Populations Studied (Empirical Studies
Only)].[Journal Abbr]) AND ([Article Info].Volume = [Populations Studied (Empirical Studies Only)].Volume)
AND ([Article Info].[Issue No] = [Populations Studied (Empirical Studies Only)].[Issue No]) AND ([Article
Info].[Article No] = [Populations Studied (Empirical Studies Only)].[Article No])
WHERE (((Methods.[Number of Empirical Studies Per Issue])>0))
GROUP BY [Populations Studied (Empirical Studies Only)].[Journal Abbr], [Populations Studied (Empirical
Studies Only)].Volume, [Article Info].CountasArticle
HAVING ((([Article Info].CountasArticle)=True));
```

Query: Chart References

This query is used to produce the References Chart.

SQL

```
SELECT References.[Journal Abbr], References.Volume, Sum(References.CountRef) AS SumOfCountRef,
Sum(References.Recent) AS SumOfRecent, Sum(References.Classic) AS SumOfClassic
FROM [Article Info] INNER JOIN [References] ON ([Article Info].[Journal Abbr] = References.[Journal Abbr])
AND ([Article Info].Volume = References.Volume) AND ([Article Info].[Issue No] = References.[Issue No])
AND ([Article Info].[Article No] = References.[Article No])
WHERE ((([Article Info].CountasArticle)=True))
GROUP BY References.[Journal Abbr], References.Volume;
```

Query: Chart Studies

This query is used to produce the Empirical vs. Non-Empirical Studies Chart.

SQL

```
SELECT Methods.[Journal Abbr], Methods.Volume, Sum(Methods.[Number of Empirical Studies Per Issue]) AS [SumOfNumber of Empirical Studies Per Issue], Sum(Methods.[Number of Nonempirical Studies Per Issue]) AS [SumOfNumber of Nonempirical Studies Per Issue]
FROM [Article Info] INNER JOIN Methods ON ([Article Info].[Journal Abbr] = Methods.[Journal Abbr]) AND ([Article Info].Volume = Methods.Volume) AND ([Article Info].[Issue No] = Methods.[Issue No]) AND ([Article Info].[Article No] = Methods.[Article No])
GROUP BY Methods.[Journal Abbr], Methods.Volume, [Article Info].CountasArticle
HAVING ((([Article Info].CountasArticle)=True));
```

Query: Count of References

This query is used to provide the number of classic, recent and total references for each article.

SQL

```
SELECT [References].[Journal Abbr], [References].[Volume], [References].[Issue No], [References].[Article No], Sum([References].[CountRef]) AS SumOfCountRef, Sum([References].[Classic]) AS SumOfClassic, Sum([References].[Recent]) AS SumOfRecent, [Article Info].[CountasArticle]
FROM [Article Info] INNER JOIN [References] ON ([Article Info].[Journal Abbr]=[References].[Journal Abbr]) AND ([Article Info].[Volume]=[References].[Volume]) AND ([Article Info].[Issue No]=[References].[Issue No]) AND ([Article Info].[Article No]=[References].[Article No])
GROUP BY [References].[Journal Abbr], [References].[Volume], [References].[Issue No], [References].[Article No], [Article Info].[CountasArticle]
HAVING ((([Article Info].CountasArticle)=True));
```

Query: Create Struc Char Totals

This query summarizes data and appends it to the Struc Char Totals Table for later input into the Structural Characteristics Table.

SQL

```
SELECT [Structural Characteristics].[Journal Abbr], [Structural Characteristics].[Volume], [Structural Characteristics].[Issue No], [Structural Characteristics].[Article No], Sum([References].[Classic]) AS SumOfClassic, Sum([References].[Recent]) AS SumOfRecent, Sum([References].[CountRef]) AS SumOfCountRef, [Authorship Patterns].[Total Number of Authors], [Article Info].[Book Review], [Article Info].[Comment/Rejoinder], [Article Info].[Total Pages], [Article Info].[Introduction] INTO [Struc Char Totals]
FROM [Article Info] INNER JOIN (([Structural Characteristics] INNER JOIN [References] ON ([Structural Characteristics].[Journal Abbr]=[References].[Journal Abbr]) AND ([Structural Characteristics].[Volume]=[References].[Volume]) AND ([Structural Characteristics].[Issue No]=[References].[Issue No]) AND ([Structural Characteristics].[Article No]=[References].[Article No])) INNER JOIN [Authorship Patterns] ON ([References].[Journal Abbr]=[Authorship Patterns].[Journal Abbr]) AND ([References].[Volume]=[Authorship Patterns].[Volume]) AND ([References].[Issue No]=[Authorship Patterns].[Issue No]) AND ([References].[Article No]=[Authorship Patterns].[Article No])) ON ([Article Info].[Journal Abbr]=[Structural Characteristics].[Journal Abbr]) AND ([Article Info].[Volume]=[Structural Characteristics].[Volume]) AND ([Article Info].[Issue No]=[Structural Characteristics].[Issue No]) AND ([Article Info].[Article No]=[Structural Characteristics].[Article No])
GROUP BY [Structural Characteristics].[Journal Abbr], [Structural Characteristics].[Volume], [Structural Characteristics].[Issue No], [Structural Characteristics].[Article No], [Authorship Patterns].[Total Number of Authors], [Article Info].[Book Review], [Article Info].[Comment/Rejoinder], [Article Info].[Total Pages],
```

Query: Empirical

This query is used to produce the Empirical Report.

SQL

```
SELECT [Article Info].[Journal Abbr], [Article Info].Volume, [Article Info].[Issue No], [Article Info].[Article No], [Article Info].[Article Title], [Article Info].[Article Start Page], [Article Info].[Article End Page], [Article Info].[Book Review], [Article Info].[Comment/Rejoinder], [Issues in Title and Focus].[Problem Solving/Incubation], [Issues in Title and Focus].[Synthetic/Divergent Thinking], [Issues in Title and
```

Focus].[Imagery/Visualization/Dreams], [Issues in Title and Focus].[Intuition (thought)], [Issues in Title and Focus].[Intelligence and CR], [Issues in Title and Focus].Education, [Issues in Title and Focus].Giftedness, [Issues in Title and Focus].Personality, [Issues in Title and Focus].[Developmental Processes], [Issues in Title and Focus].[Testing/Measurement], [Issues in Title and Focus].[Business/Management], [Issues in Title and Focus].[Gender Differences], [Issues in Title and Focus].[Cross-Cultural Differences], [Issues in Title and Focus].[Enhancement of CR], [Issues in Title and Focus].[Social/Environmental Influences of Creativity], [Issues in Title and Focus].[Motivation/Source/Origin], [Issues in Title and Focus].Brainstorming, [Issues in Title and Focus].Humor, [Issues in Title and Focus].[Intuition (nature)], [Issues in Title and Focus].[Science/Scientific], [Issues in Title and Focus].[Art/Artistic], [Issues in Title and Focus].Emotion, [Issues in Title and Focus].Leadership, [Issues in Title and Focus].Therapy, [Issues in Title and Focus].[Mental Health], [Issues in Title and Focus].[Freewill/Will], [Issues in Title and Focus].Potential, [Issues in Title and Focus].[Creative Product], [Issues in Title and Focus].[Creative Behavior], [Issues in Title and Focus].Neurobiological, [Issues in Title and Focus].[Psychic/Futuristic], Methods.[Number of Empirical Studies Per Issue], Methods.[Number of Laboratories], Methods.[Number of Questionnaires], Methods.[Number of Tests], Methods.[Number of Interviews], Methods.[Number of Field Studies], Methods.[Number of Logitudinal Studies], Methods.[Number of Archival Studies], Methods.[Number of Multimethod Studies], Methods.[Number of Meta-Analytic Studies], Methods.[Number of Quantitative Analyses], Methods.[Number of Qualitative Analyses], [Populations Studied (Empirical Studies Only)].[Preschool Children], [Populations Studied (Empirical Studies Only)].[Elementary-School Children], [Populations Studied (Empirical Studies Only)].[Junior High School Students], [Populations Studied (Empirical Studies Only)].[High School Students], [Populations Studied (Empirical Studies Only)].[University Students], [Populations Studied (Empirical Studies Only)].Adults, [Populations Studied (Empirical Studies Only)].Artists, [Populations Studied (Empirical Studies Only)].[Scientists/Engineers], [Populations Studied (Empirical Studies Only)].[Business People], [Populations Studied (Empirical Studies Only)].Other, [Authorship Patterns].[Total Number of Authors], [Authorship Patterns].[Total Number of Male Authors], [Authorship Patterns].[Total Number of Female Authors], [Authorship Patterns].[Number of Male-First Authors], [Authorship Patterns].[Number of Female-First Authors], [Authorship Patterns].[Undetermined Gender of Author], [Journal Name].[Journal Title], [Issues in Title and Focus].Environment, [Issues in Title and Focus].Technology, [Issues in Title and Focus].[Trends in Authorship], [Article Info].[Total Pages], [Article Info].CountasArticle
FROM (((([Article Info] INNER JOIN [Issues in Title and Focus] ON ([Article Info].[Journal Abbr] = [Issues in Title and Focus].[Journal Abbr]) AND ([Article Info].Volume = [Issues in Title and Focus].Volume) AND ([Article Info].[Issue No] = [Issues in Title and Focus].[Issue No]) AND ([Article Info].[Article No] = [Issues in Title and Focus].[Article No])) INNER JOIN Methods ON ([Issues in Title and Focus].[Journal Abbr] = Methods.[Journal Abbr]) AND ([Issues in Title and Focus].Volume = Methods.Volume) AND ([Issues in Title and Focus].[Issue No] = Methods.[Issue No]) AND ([Issues in Title and Focus].[Article No] = Methods.[Article No])) INNER JOIN [Populations Studied (Empirical Studies Only)] ON (Methods.[Journal Abbr] = [Populations Studied (Empirical Studies Only)].[Journal Abbr]) AND (Methods.Volume = [Populations Studied (Empirical Studies Only)].Volume) AND (Methods.[Issue No] = [Populations Studied (Empirical Studies Only)].[Issue No]) AND (Methods.[Article No] = [Populations Studied (Empirical Studies Only)].[Article No])) INNER JOIN [Authorship Patterns] ON ([Populations Studied (Empirical Studies Only)].[Journal Abbr] = [Authorship Patterns].[Journal Abbr]) AND ([Populations Studied (Empirical Studies Only)].Volume = [Authorship Patterns].Volume) AND ([Populations Studied (Empirical Studies Only)].[Article No] = [Authorship Patterns].[Article No]) AND ([Populations Studied (Empirical Studies Only)].[Issue No] = [Authorship Patterns].[Issue No])) INNER JOIN [Journal Name] ON [Authorship Patterns].[Journal Abbr] = [Journal Name].[Journal Abbr]
WHERE (((Methods.[Number of Empirical Studies Per Issue])=True) AND (([Article Info].CountasArticle)=True));

Query: Issues Totals

This query is used to provide the number of articles by Issues in Title and Focus. This will identify the Most and Least Common Topics for entry into the Issues Most and Least table.

SQL

SELECT [Issues in Title and Focus].[Journal Abbr], [Issues in Title and Focus].[Volume], Sum([Issues in Title and Focus].[Problem Solving/Incubation]) AS [SumOfProblem Solving/Incubation], Sum([Issues in Title and Focus].[Synthetic/Divergent Thinking]) AS [SumOfSynthetic/Divergent Thinking], Sum([Issues in Title and Focus].[Imagery/Visualization/Dreams]) AS [SumOfImagery/Visualization/Dreams], Sum([Issues in Title and Focus].[Intuition (thought)]) AS [SumOfIntuition (thought)], Sum([Issues in Title and Focus].[Intelligence and CR]) AS [SumOfIntelligence and CR], Sum([Issues in Title and Focus].[Education]) AS SumOfEducation, Sum([Issues in Title and Focus].[Giftedness]) AS SumOfGiftedness, Sum([Issues in Title and Focus].[Personality]) AS SumOfPersonality, Sum([Issues in Title and Focus].[Developmental Processes]) AS

[SumOfDevelopmental Processes], Sum([Issues in Title and Focus].[Testing/Measurement]) AS [SumOfTesting/Measurement], Sum([Issues in Title and Focus].[Business/Management]) AS [SumOfBusiness/Management], Sum([Issues in Title and Focus].[Gender Differences]) AS [SumOfGender Differences], Sum([Issues in Title and Focus].[Cross-Cultural Differences]) AS [SumOfCross-Cultural Differences], Sum([Issues in Title and Focus].[Enhancement of CR]) AS [SumOfEnhancement of CR], Sum([Issues in Title and Focus].[Social/Environmental Influences of Creativity]) AS [SumOfSocial/Environmental Influences of Creativity], Sum([Issues in Title and Focus].[Motivation/Source/Origin]) AS [SumOfMotivation/Source/Origin], Sum([Issues in Title and Focus].[Brainstorming]) AS SumOfBrainstorming, Sum([Issues in Title and Focus].[Humor]) AS SumOfHumor, Sum([Issues in Title and Focus].[Intuition (nature)]) AS [SumOfIntuition (nature)], Sum([Issues in Title and Focus].[Science/Scientific]) AS [SumOfScience/Scientific], Sum([Issues in Title and Focus].[Art/Artistic]) AS [SumOfArt/Artistic], Sum([Issues in Title and Focus].[Emotion]) AS SumOfEmotion, Sum([Issues in Title and Focus].[Leadership]) AS SumOfLeadership, Sum([Issues in Title and Focus].[Therapy]) AS SumOfTherapy, Sum([Issues in Title and Focus].[Mental Health]) AS [SumOfMental Health], Sum([Issues in Title and Focus].[Freewill/Will]) AS [SumOfFreewill/Will], Sum([Issues in Title and Focus].[Potential]) AS SumOfPotential, Sum([Issues in Title and Focus].[Creative Product]) AS [SumOfCreative Product], Sum([Issues in Title and Focus].[Creative Behavior]) AS [SumOfCreative Behavior], Sum([Issues in Title and Focus].[Neurobiological]) AS SumOfNeurobiological, Sum([Issues in Title and Focus].[Psychic/Futuristic]) AS [SumOfPsychic/Futuristic], Sum([Issues in Title and Focus].[Environment]) AS SumOfEnvironment, Sum([Issues in Title and Focus].[Technology]) AS SumOfTechnology, Sum([Issues in Title and Focus].[Trends in Authorship]) AS [SumOfTrends in Authorship]
FROM [Article Info] INNER JOIN [Issues in Title and Focus] ON ([Article Info].[Journal Abbr]=[Issues in Title and Focus].[Journal Abbr]) AND ([Article Info].[Volume]=[Issues in Title and Focus].[Volume]) AND ([Article Info].[Issue No]=[Issues in Title and Focus].[Issue No]) AND ([Article Info].[Article No]=[Issues in Title and Focus].[Article No])
GROUP BY [Issues in Title and Focus].[Journal Abbr], [Issues in Title and Focus].[Volume], [Article Info].[CountasArticle]
HAVING ((([Article Info].CountasArticle)=True));

Query: Mean and Standard Deviation

This query is used to produce Table 2: Mean and Standard Deviation report.

SQL

SELECT [Means and Standard Deviations References].[AvgOfSumOfCountRef], [Means and Standard Deviations References].[StDevOfSumOfCountRef], [Means and Standard Deviations Pages/Authors].[AvgOfTotal Pages], [Means and Standard Deviations Pages/Authors].[StDevOfTotal Pages], [Means and Standard Deviations References].[AvgOfSumOfRecent], [Means and Standard Deviations References].[StDevOfSumOfRecent], [Means and Standard Deviations References].[AvgOfSumOfClassic], [Means and Standard Deviations References].[StDevOfSumOfClassic], [Means and Standard Deviations Pages/Authors].[AvgOfTotal Number of Authors], [Means and Standard Deviations Pages/Authors].[StDevOfTotal Number of Authors], [Means and Standard Deviations Pages/Authors].[AvgOfTotal Number of Male Authors], [Means and Standard Deviations Pages/Authors].[StDevOfTotal Number of Male Authors], [Means and Standard Deviations Pages/Authors].[AvgOfTotal Number of Female Authors], [Means and Standard Deviations Pages/Authors].[StDevOfTotal Number of Female Authors], [Means and Standard Deviations Pages/Authors].[Journal Abbr], [Means and Standard Deviations Pages/Authors].[Volume]
FROM [Means and Standard Deviations Pages/Authors] INNER JOIN [Means and Standard Deviations References] ON ([Means and Standard Deviations Pages/Authors].[Journal Abbr]=[Means and Standard Deviations References].[Journal Abbr]) AND ([Means and Standard Deviations Pages/Authors].[Volume]=[Means and Standard Deviations References].[Volume]);

Query: Mean and Standard Deviation Empirical Methods

This query is used to produce the Empirical Studies section of Table 3: Mean and Standard Deviation Methods report.

SQL

SELECT [Article Info].[Journal Abbr], [Article Info].[Volume], [Methods].[Number of Empirical Studies Per Issue], Avg([Methods].[Number of Laboratories]) AS [AvgOfNumber of Laboratories1], StDev([Methods].[Number of Laboratories]) AS [StDevOfNumber of Laboratories], Avg([Methods].[Number of Questionnaires]) AS [AvgOfNumber of Questionnaires1], StDev([Methods].[Number of Questionnaires]) AS

[StDevOfNumber of Questionnaires], Avg([Methods].[Number of Tests]) AS [AvgOfNumber of Tests], StDev([Methods].[Number of Tests]) AS [StDevOfNumber of Tests], Avg([Methods].[Number of Interviews]) AS [AvgOfNumber of Interviews], StDev([Methods].[Number of Interviews]) AS [StDevOfNumber of Interviews], Avg([Methods].[Number of Multimethod Studies]) AS [AvgOfNumber of Multimethod Studies], StDev([Methods].[Number of Multimethod Studies]) AS [StDevOfNumber of Multimethod Studies], [Mean and Standard Deviation Non-Empirical Methods].[AvgOfDescriptive/Review], [Mean and Standard Deviation Non-Empirical Methods].[StDevOfDescriptive/Review], [Mean and Standard Deviation Non-Empirical Methods].[AvgOfPrescriptive], [Mean and Standard Deviation Non-Empirical Methods].[StDevOfPrescriptive], [Mean and Standard Deviation Non-Empirical Methods].[AvgOfTechnique], [Mean and Standard Deviation Non-Empirical Methods].[StDevOfTechnique], [Mean and Standard Deviation Non-Empirical Methods].[AvgOfTheoretical], [Mean and Standard Deviation Non-Empirical Methods].[StDevOfTheoretical], [Mean and Standard Deviation Populations].[AvgOfElementary-School Children], [Mean and Standard Deviation Populations].[StDevOfElementary-School Children], [Mean and Standard Deviation Populations].[AvgOfUniversity Students], [Mean and Standard Deviation Populations].[StDevOfUniversity Students], [Mean and Standard Deviation Populations].[AvgOfAdults], [Mean and Standard Deviation Populations].[StDevOfAdults], [Mean and Standard Deviation Populations].[AvgOfArtists], [Mean and Standard Deviation Populations].[StDevOfArtists], [Mean and Standard Deviation Populations].[AvgOfBusiness People], [Mean and Standard Deviation Populations].[StDevOfBusiness People], [Mean and Standard Deviation Populations].[AvgOfOther], [Mean and Standard Deviation Populations].[StDevOfOther]
FROM (([Article Info] INNER JOIN Methods ON ([Article Info].[Journal Abbr]=[Methods].[Journal Abbr]) AND ([Article Info].[Volume]=[Methods].[Volume])) INNER JOIN [Mean and Standard Deviation Non-Empirical Methods] ON ([Methods].[Volume]=[Mean and Standard Deviation Non-Empirical Methods].[Volume]) AND ([Methods].[Journal Abbr]=[Mean and Standard Deviation Non-Empirical Methods].[Journal Abbr])) INNER JOIN [Mean and Standard Deviation Populations] ON ([Mean and Standard Deviation Non-Empirical Methods].[Journal Abbr]=[Mean and Standard Deviation Populations].[Journal Abbr]) AND ([Mean and Standard Deviation Non-Empirical Methods].[Volume]=[Mean and Standard Deviation Populations].[Volume])
WHERE ((([Article Info].[CountasArticle])=True))
GROUP BY [Article Info].[Journal Abbr], [Article Info].[Volume], [Methods].[Number of Empirical Studies Per Issue], [Mean and Standard Deviation Non-Empirical Methods].[AvgOfDescriptive/Review], [Mean and Standard Deviation Non-Empirical Methods].[StDevOfDescriptive/Review], [Mean and Standard Deviation Non-Empirical Methods].[AvgOfPrescriptive], [Mean and Standard Deviation Non-Empirical Methods].[StDevOfPrescriptive], [Mean and Standard Deviation Non-Empirical Methods].[AvgOfTechnique], [Mean and Standard Deviation Non-Empirical Methods].[StDevOfTechnique], [Mean and Standard Deviation Non-Empirical Methods].[AvgOfTheoretical], [Mean and Standard Deviation Non-Empirical Methods].[StDevOfTheoretical], [Mean and Standard Deviation Populations].[AvgOfElementary-School Children], [Mean and Standard Deviation Populations].[StDevOfElementary-School Children], [Mean and Standard Deviation Populations].[AvgOfUniversity Students], [Mean and Standard Deviation Populations].[StDevOfUniversity Students], [Mean and Standard Deviation Populations].[AvgOfAdults], [Mean and Standard Deviation Populations].[StDevOfAdults], [Mean and Standard Deviation Populations].[AvgOfArtists], [Mean and Standard Deviation Populations].[StDevOfArtists], [Mean and Standard Deviation Populations].[AvgOfBusiness People], [Mean and Standard Deviation Populations].[StDevOfBusiness People], [Mean and Standard Deviation Populations].[AvgOfOther], [Mean and Standard Deviation Populations].[StDevOfOther]

Query: Mean and Standard Deviation Least Common Topics

This query is used to produce the Least Common Topics section of Table 5: Mean and Standard Deviation Most/Least Common Topics report.

SQL

SELECT [Issues in Title and Focus].[Journal Abbr], [Issues in Title and Focus].[Volume], Avg([Issues in Title and Focus].[Imagery/Visualization/Dreams]) AS [AvgOfImagery/Visualization/Dreams], StDev([Issues in Title and Focus].[Imagery/Visualization/Dreams]) AS [StDevOfImagery/Visualization/Dreams], Avg([Issues in Title and Focus].[Personality]) AS AvgOfPersonality, StDev([Issues in Title and Focus].[Personality]) AS StDevOfPersonality, Avg([Issues in Title and Focus].[Testing/Measurement]) AS [AvgOfTesting/Measurement], StDev([Issues in Title and Focus].[Testing/Measurement]) AS [StDevOfTesting/Measurement], Avg([Issues in Title and Focus].[Business/Management]) AS [AvgOfBusiness/Management], StDev([Issues in Title and Focus].[Business/Management]) AS [StDevOfBusiness/Management], Avg([Issues in Title and Focus].[Social/Environmental Influences of Creativity]) AS [AvgOfSocial/Environmental Influences of Creativity], StDev([Issues in Title and Focus].[Social/Environmental Influences of Creativity]) AS [StDevOfSocial/Environmental Influences of Creativity], Avg([Issues in Title and Focus].[Potential]) AS AvgOfPotential, StDev([Issues in Title and Focus].[Potential]) AS StDevOfPotential
FROM [Article Info] INNER JOIN [Issues in Title and Focus] ON ([Article Info].[Journal Abbr]=[Issues in Title

```
and Focus].[Journal Abbr]) AND ([Article Info].[Volume]=[Issues in Title and Focus].[Volume]) AND ([Article Info].[Issue No]=[Issues in Title and Focus].[Issue No]) AND ([Article Info].[Article No]=[Issues in Title and Focus].[Article No])
GROUP BY [Issues in Title and Focus].[Journal Abbr], [Issues in Title and Focus].[Volume], [Article Info].[CountasArticle]
HAVING ((([Article Info].CountasArticle)=True));
```

Query: Mean and Standard Deviation Most Common Topics

This query is used to produce the Most Common Topics section of Table 5: Mean and Standard Deviation Most/Least Common Topics report.

SQL

```
SELECT [Issues in Title and Focus].[Journal Abbr], [Issues in Title and Focus].[Volume], Avg([Issues in Title and Focus].[Problem Solving/Incubation]) AS [AvgOfProblem Solving/Incubation], StDev([Issues in Title and Focus].[Problem Solving/Incubation]) AS [StDevOfProblem Solving/Incubation], Avg([Issues in Title and Focus].[Synthetic/Divergent Thinking]) AS [AvgOfSynthetic/Divergent Thinking], StDev([Issues in Title and Focus].[Synthetic/Divergent Thinking]) AS [StDevOfSynthetic/Divergent Thinking], Avg([Issues in Title and Focus].[Mental Health]) AS [AvgOfMental Health], StDev([Issues in Title and Focus].[Mental Health]) AS [StDevOfMental Health], Avg([Issues in Title and Focus].[Creative Behavior]) AS [AvgOfCreative Behavior], StDev([Issues in Title and Focus].[Creative Behavior]) AS [StDevOfCreative Behavior], Avg([Issues in Title and Focus].[Neurobiological]) AS AvgOfNeurobiological, StDev([Issues in Title and Focus].[Neurobiological]) AS StDevOfNeurobiological
FROM [Article Info] INNER JOIN [Issues in Title and Focus] ON ([Article Info].[Journal Abbr]=[Issues in Title and Focus].[Journal Abbr]) AND ([Article Info].[Volume]=[Issues in Title and Focus].[Volume]) AND ([Article Info].[Issue No]=[Issues in Title and Focus].[Issue No]) AND ([Article Info].[Article No]=[Issues in Title and Focus].[Article No])
GROUP BY [Issues in Title and Focus].[Journal Abbr], [Issues in Title and Focus].[Volume], [Article Info].[CountasArticle]
HAVING ((([Article Info].CountasArticle)=True));
```

Query: Mean and Standard Deviation Non-Empirical Methods

This query is used to produce the Non-Empirical Studies for Table 3: Mean and Standard Deviation Methods report.

SQL

```
SELECT [Article Info].[Journal Abbr], [Article Info].[Volume], [Methods].[Number of Nonempirical Studies Per Issue], Avg([Methods].[Descriptive/Review]) AS [AvgOfDescriptive/Review], StDev([Methods].[Descriptive/Review]) AS [StDevOfDescriptive/Review], Avg([Methods].[Prescriptive]) AS AvgOfPrescriptive, StDev([Methods].[Prescriptive]) AS StDevOfPrescriptive, Avg([Methods].[Technique]) AS AvgOfTechnique, StDev([Methods].[Technique]) AS StDevOfTechnique, Avg([Methods].[Theoretical]) AS AvgOfTheoretical, StDev([Methods].[Theoretical]) AS StDevOfTheoretical
FROM [Article Info] INNER JOIN Methods ON ([Article Info].[Article No]=[Methods].[Article No]) AND ([Article Info].[Issue No]=[Methods].[Issue No]) AND ([Article Info].[Volume]=[Methods].[Volume]) AND ([Article Info].[Journal Abbr]=[Methods].[Journal Abbr])
WHERE ((([Article Info].[CountasArticle])=True))
GROUP BY [Article Info].[Journal Abbr], [Article Info].[Volume], [Methods].[Number of Nonempirical Studies Per Issue]
HAVING (((Methods.[Number of Nonempirical Studies Per Issue])=1));
```

Query: Mean and Standard Deviation Populations

This query is used to produce the Populations Studied for Table 4: Mean and Standard Deviation Populations report.

SQL

```
SELECT [Populations Studied (Empirical Studies Only)].[Journal Abbr], [Populations Studied (Empirical Studies Only)].[Volume], Avg([Populations Studied (Empirical Studies Only)].[Elementary-School Children]) AS [AvgOfElementary-School Children], StDev([Populations Studied (Empirical Studies Only)].[Elementary-School Children]) AS [StDevOfElementary-School Children], Avg([Populations Studied (Empirical Studies Only)].[University Students]) AS [AvgOfUniversity Students], StDev([Populations Studied (Empirical Studies Only)].[University Students]) AS [StDevOfUniversity Students], Avg([Populations Studied
```

(Empirical Studies Only)].[Adults]) AS AvgOfAdults, StDev([Populations Studied (Empirical Studies Only)].[Adults]) AS StDevOfAdults, Avg([Populations Studied (Empirical Studies Only)].[Artists]) AS AvgOfArtists, StDev([Populations Studied (Empirical Studies Only)].[Artists]) AS StDevOfArtists, Avg([Populations Studied (Empirical Studies Only)].[Business People]) AS [AvgOfBusiness People], StDev([Populations Studied (Empirical Studies Only)].[Business People]) AS [StDevOfBusiness People], Avg([Populations Studied (Empirical Studies Only)].[Other]) AS AvgOfOther, StDev([Populations Studied (Empirical Studies Only)].[Other]) AS StDevOfOther
FROM [Article Info] INNER JOIN [Populations Studied (Empirical Studies Only)] ON ([Article Info].[Volume]=[Populations Studied (Empirical Studies Only)].[Volume]) AND ([Article Info].[Journal Abbr]=[Populations Studied (Empirical Studies Only)].[Journal Abbr]) AND ([Article Info].[Issue No]=[Populations Studied (Empirical Studies Only)].[Issue No]) AND ([Article Info].[Article No]=[Populations Studied (Empirical Studies Only)].[Article No])
WHERE ((([Article Info].[CountasArticle])=True))
GROUP BY [Populations Studied (Empirical Studies Only)].[Journal Abbr], [Populations Studied (Empirical Studies Only)].[Volume];

Query: Means and Standard Deviations Pages/Authors

This query is used to produce the Pages, Authors, Male Authors and Female Authors sections of Table 2: Mean and Standard Deviation report.

SQL

SELECT [Article Info].[Journal Abbr], [Article Info].[Volume], Avg([Authorship Patterns].[Total Number of Authors]) AS [AvgOfTotal Number of Authors], StDev([Authorship Patterns].[Total Number of Authors]) AS [StDevOfTotal Number of Authors], Avg([Authorship Patterns].[Total Number of Male Authors]) AS [AvgOfTotal Number of Male Authors], StDev([Authorship Patterns].[Total Number of Male Authors]) AS [StDevOfTotal Number of Male Authors], Avg([Authorship Patterns].[Total Number of Female Authors]) AS [AvgOfTotal Number of Female Authors], StDev([Authorship Patterns].[Total Number of Female Authors]) AS [StDevOfTotal Number of Female Authors], Avg([Article Info].[Total Pages]) AS [AvgOfTotal Pages], StDev([Article Info].[Total Pages]) AS [StDevOfTotal Pages]
FROM [Article Info] INNER JOIN [Authorship Patterns] ON ([Article Info].[Journal Abbr]=[Authorship Patterns].[Journal Abbr]) AND ([Article Info].[Volume]=[Authorship Patterns].[Volume]) AND ([Article Info].[Issue No]=[Authorship Patterns].[Issue No]) AND ([Article Info].[Article No]=[Authorship Patterns].[Article No])
WHERE ((([Article Info].[CountasArticle])=True))
GROUP BY [Article Info].[Journal Abbr], [Article Info].[Volume];

Query: Means and Standard Deviations References

This query is used to produce the References, Recent Reference Index and the Classic Reference Index sections of Table 2: Mean and Standard Deviation report.

SQL

SELECT [Count of References].[Journal Abbr], [Count of References].[Volume], Avg([Count of References].[SumOfCountRef]) AS AvgOfSumOfCountRef, StDev([Count of References].[SumOfCountRef]) AS StDevOfSumOfCountRef, Avg([Count of References].[SumOfClassic]) AS AvgOfSumOfClassic, StDev([Count of References].[SumOfClassic]) AS StDevOfSumOfClassic, Avg([Count of References].[SumOfRecent]) AS AvgOfSumOfRecent, StDev([Count of References].[SumOfRecent]) AS StDevOfSumOfRecent
FROM [Article Info] INNER JOIN [Count of References] ON ([Article Info].[Journal Abbr]=[Count of References].[Journal Abbr]) AND ([Article Info].[Volume]=[Count of References].[Volume]) AND ([Article Info].[Issue No]=[Count of References].[Issue No]) AND ([Article Info].[Article No]=[Count of References].[Article No])
GROUP BY [Count of References].[Journal Abbr], [Count of References].[Volume], [Article Info].[CountasArticle]

Query: Non-Empirical

This query is used to produce the Non-Empirical Studies report.

SQL

```
SELECT [Article Info].[Journal Abbr], [Article Info].Volume, [Article Info].[Issue No], [Article Info].[Article No], [Article Info].[Article Title], [Article Info].[Article Start Page], [Article Info].[Article End Page], [Article Info].[Book Review], [Article Info].[Comment/Rejoinder], [Issues in Title and Focus].[Problem Solving/Incubation], [Issues in Title and Focus].[Synthetic/Divergent Thinking], [Issues in Title and Focus].[Imagery/Visualization/Dreams], [Issues in Title and Focus].[Intuition (thought)], [Issues in Title and Focus].[Intelligence and CR], [Issues in Title and Focus].Education, [Issues in Title and Focus].Giftedness, [Issues in Title and Focus].Personality, [Issues in Title and Focus].[Developmental Processes], [Issues in Title and Focus].[Testing/Measurement], [Issues in Title and Focus].[Business/Management], [Issues in Title and Focus].[Gender Differences], [Issues in Title and Focus].[Cross-Cultural Differences], [Issues in Title and Focus].[Enhancement of CR], [Issues in Title and Focus].[Social/Environmental Influences of Creativity], [Issues in Title and Focus].[Motivation/Source/Origin], [Issues in Title and Focus].Brainstorming, [Issues in Title and Focus].Humor, [Issues in Title and Focus].[Intuition (nature)], [Issues in Title and Focus].[Science/Scientific], [Issues in Title and Focus].[Art/Artistic], [Issues in Title and Focus].Emotion, [Issues in Title and Focus].Leadership, [Issues in Title and Focus].Therapy, [Issues in Title and Focus].[Mental Health], [Issues in Title and Focus].[Freewill/Will], [Issues in Title and Focus].Potential, [Issues in Title and Focus].[Creative Product], [Issues in Title and Focus].[Creative Behavior], [Issues in Title and Focus].Neurobiological, [Issues in Title and Focus].[Psychic/Futuristic], Methods.[Number of Nonempirical Studies Per Issue], Methods.[Descriptive/Review], Methods.Prescriptive, Methods.Technique, Methods.Theoretical, [Authorship Patterns].[Total Number of Authors], [Authorship Patterns].[Total Number of Male Authors], [Authorship Patterns].[Total Number of Female Authors], [Authorship Patterns].[Number of Male-First Authors], [Authorship Patterns].[Number of Female-First Authors], [Authorship Patterns].[Undetermined Gender of Author], [Journal Name].[Journal Title], [Issues in Title and Focus].Environment, [Issues in Title and Focus].Technology, [Issues in Title and Focus].[Trends in Authorship], [Article Info].[Total Pages], [Article Info].CountasArticle
FROM ((([Article Info] INNER JOIN [Issues in Title and Focus] ON ([Article Info].[Journal Abbr] = [Issues in Title and Focus].[Journal Abbr]) AND ([Article Info].Volume = [Issues in Title and Focus].Volume) AND ([Article Info].[Issue No] = [Issues in Title and Focus].[Issue No]) AND ([Article Info].[Article No] = [Issues in Title and Focus].[Article No])) INNER JOIN Methods ON ([Issues in Title and Focus].[Journal Abbr] = Methods.[Journal Abbr]) AND ([Issues in Title and Focus].Volume = Methods.Volume) AND ([Issues in Title and Focus].[Issue No] = Methods.[Issue No]) AND ([Issues in Title and Focus].[Article No] = Methods.[Article No])) INNER JOIN [Authorship Patterns] ON (Methods.[Journal Abbr] = [Authorship Patterns].[Journal Abbr]) AND (Methods.Volume = [Authorship Patterns].Volume) AND (Methods.[Issue No] = [Authorship Patterns].[Issue No]) AND (Methods.[Article No] = [Authorship Patterns].[Article No])) INNER JOIN [Journal Name] ON [Authorship Patterns].[Journal Abbr] = [Journal Name].[Journal Abbr]
WHERE (((Methods.[Number of Nonempirical Studies Per Issue])=True) AND (([Article Info].CountasArticle)=True));
```

Query: References Counts

This query is used to provide the number of classic, recent and total references for each article.

SQL

```
SELECT [References].[Journal Abbr], [References].[Volume], [References].[Issue No], [References].[Article No], Sum([References].[CountRef]) AS SumOfCountRef, Sum([References].[Recent]) AS SumOfRecent, Sum([References].[Classic]) AS SumOfClassic
FROM [Article Info] INNER JOIN [References] ON ([Article Info].[Article No]=[References].[Article No]) AND ([Article Info].[Issue No]=[References].[Issue No]) AND ([Article Info].[Volume]=[References].[Volume]) AND ([Article Info].[Journal Abbr]=[References].[Journal Abbr])
WHERE ((([Article Info].[CountasArticle])=True))
GROUP BY [References].[Journal Abbr], [References].[Volume], [References].[Issue No], [References].[Article No];
```

Query: References Query

This query populates the Journal Abbreviation, Volume, Issue Number and Article Number in the References Table. This saves the researcher time in entering all of this data multiple times. It is run after all references years have been input, for a particular article, into the References Table. The user is prompted for the Journal Abbreviation, Volume, Issue Number and Article Number for the

reference years. It will only fill in null fields.

SQL

```
UPDATE [References] SET [References].[Journal Abbr] = "CRJ", [References].Volume = "13",
[References].[Issue No] = "3/4", [References].[Article No] = "20"
WHERE (((References.[Journal Abbr]) Is Null) AND ((References.[Ref Year]) Is Not Null));
```

Query: References Report

This query is used to produce the References report.

SQL

```
SELECT [Article Info].[CountasArticle], [References].[Journal Abbr], [References].[Volume],
[References].[Issue No], [References].[Article No], [References].[Ref Year], [References].[Other Notes],
[References].[Classic], [References].[Recent], [References].[CountRef]
FROM [References] INNER JOIN [Article Info] ON ([References].[Article No]=[Article Info].[Article No]) AND
([References].[Issue No]=[Article Info].[Issue No]) AND ([References].[Volume]=[Article Info].[Volume]) AND
([References].[Journal Abbr]=[Article Info].[Journal Abbr])
WHERE ((([Article Info].[CountasArticle])=True));
```

Query: References_Crosstab

This query provides the average year per article.

SQL

```
TRANSFORM Avg(References.[Ref Year]) AS [AvgOfRef Year]
SELECT References.[Journal Abbr], References.Volume, References.[Issue No], Avg(References.[Ref Year]) AS
[Total Of Ref Year]
FROM [Article Info] INNER JOIN [References] ON ([Article Info].[Article No] = References.[Article No]) AND
([Article Info].[Issue No] = References.[Issue No]) AND ([Article Info].Volume = References.Volume) AND
([Article Info].[Journal Abbr] = References.[Journal Abbr])
WHERE ((([Article Info].CountasArticle)=True))
GROUP BY References.[Journal Abbr], References.Volume, References.[Issue No]
PIVOT References.[Article No];
```

Query: Structural Characteristics Averages

This query provides the average number of pages, References, Recent References, Classic References and Authors per Volume.

SQL

```
SELECT [Article Info].[CountasArticle], [Structural Characteristics].[Journal Abbr], [Structural
Characteristics].[Volume], Avg([Structural Characteristics].[Pages For Articles]) AS [AvgOfPages For Articles],
Avg([Structural Characteristics].[Total References Per Issue]) AS [AvgOfTotal References Per Issue],
Avg([Structural Characteristics].[Total Recent Reference Index]) AS [AvgOfTotal Recent Reference Index],
Avg([Structural Characteristics].[Total Classic Reference Index]) AS [AvgOfTotal Classic Reference Index],
Avg([Structural Characteristics].[Authors Per Article]) AS [AvgOfAuthors Per Article]
FROM [Article Info] INNER JOIN [Structural Characteristics] ON ([Article Info].[Article No]=[Structural
Characteristics].[Article No]) AND ([Article Info].[Issue No]=[Structural Characteristics].[Issue No]) AND
([Article Info].[Volume]=[Structural Characteristics].[Volume]) AND ([Article Info].[Journal Abbr]=[Structural
Characteristics].[Journal Abbr])
GROUP BY [Article Info].[CountasArticle], [Structural Characteristics].[Journal Abbr], [Structural
Characteristics].[Volume]
HAVING ((([Article Info].CountasArticle)=True));
```

Query: Structural Characteristics Update # of Articles

This query updates the Number of Articles in the Structural Characteristics Table.

SQL

```
UPDATE [Structural Characteristics] SET [Structural Characteristics].[Total Number of Articles/Issue] = 1;
```

Query: Update as Classic References
This query updates the Reference as Classic in the References Table.

SQL

```
UPDATE [References] SET [References].Classic = 1
WHERE ((([References].[Ref Year])<1976));
```

Query: Update as Recent References
This query updates the Reference as Recent in the References Table.

SQL

```
UPDATE [References] SET [References].Recent = 1
WHERE (((References.[Ref Year])>1996));
```

Query: Update References-CountRef to 1
This query updates the Reference count as 1 in the References Table.

SQL

```
UPDATE [References] SET [References].CountRef = 1;
```

Query: Update Structural Characteristics Authors Per Article
This query updates the Number Authors per article, in the Structural Characteristics Table.

SQL

```
UPDATE [Struc Char Totals] INNER JOIN [Structural Characteristics] ON ([Struc Char Totals].[Journal Abbr] =
 [Structural Characteristics].[Journal Abbr]) AND ([Struc Char Totals].Volume = [Structural
Characteristics].Volume) AND ([Struc Char Totals].[Issue No] = [Structural Characteristics].[Issue No]) AND
([Struc Char Totals].[Article No] = [Structural Characteristics].[Article No]) SET [Structural
Characteristics].[Authors Per Article] = [Struc Char Totals].[Total Number of Authors]
WHERE ((([Struc Char Totals].[Book Review])=0) AND (([Struc Char Totals].[Comment/Rejoinder])=0) AND
(([Struc Char Totals].Introduction)=0));
```

Query: Update Structural Characteristics Classic References
This query updates the Number of Classic References per article, in the Structural Characteristics Table.

SQL

```
UPDATE [Struc Char Totals] INNER JOIN [Structural Characteristics] ON ([Struc Char Totals].[Journal Abbr] =
 [Structural Characteristics].[Journal Abbr]) AND ([Struc Char Totals].Volume = [Structural
Characteristics].Volume) AND ([Struc Char Totals].[Issue No] = [Structural Characteristics].[Issue No]) AND
([Struc Char Totals].[Article No] = [Structural Characteristics].[Article No]) SET [Structural
Characteristics].[Total Classic Reference Index] = [Struc Char Totals].[SumOfClassic]
WHERE ((([Struc Char Totals].[Book Review])=0) AND (([Struc Char Totals].[Comment/Rejoinder])=0) AND
(([Struc Char Totals].Introduction)=0));
```

Query: Update Structural Characteristics Pages for Articles
This query updates the Number of Pages per article, in the Structural Characteristics Table.

SQL

```
UPDATE [Struc Char Totals] INNER JOIN [Structural Characteristics] ON ([Struc Char Totals].[Journal
Abbr]=[Structural Characteristics].[Journal Abbr]) AND ([Struc Char Totals].[Volume]=[Structural
Characteristics].[Volume]) AND ([Struc Char Totals].[Issue No]=[Structural Characteristics].[Issue No]) AND
([Struc Char Totals].[Article No]=[Structural Characteristics].[Article No]) SET [Structural
Characteristics].[Pages For Articles] = [Struc Char Totals].[Total Pages]
```

WHERE ((([Struc Char Totals].[Book Review])=0) And (([Struc Char Totals].[Comment/Rejoinder])=0) And (([Struc Char Totals].[Introduction])=0));

Query: Update Structural Characteristics Pages for Book Reviews

This query updates the Number of Pages for Book Reviews per article, in the Structural Characteristics Table.

SQL

UPDATE [Struc Char Totals] INNER JOIN [Structural Characteristics] ON ([Struc Char Totals].[Article No]=[Structural Characteristics].[Article No]) AND ([Struc Char Totals].[Issue No]=[Structural Characteristics].[Issue No]) AND ([Struc Char Totals].[Volume]=[Structural Characteristics].[Volume]) AND ([Struc Char Totals].[Journal Abbr]=[Structural Characteristics].[Journal Abbr]) SET [Structural Characteristics].[Pages For Book Reviews] = [Struc Char Totals].[Total Pages]
WHERE ((([Struc Char Totals].[Book Review])=-1)) Or ((([Struc Char Totals].[Comment/Rejoinder])=-1)) Or ((([Struc Char Totals].[Introduction])=-1));

Query: Update Strucural Characteristics Recent References

This query updates the Number of Recent References per article, in the Structural Characteristics Table.

SQL

UPDATE [Struc Char Totals] INNER JOIN [Structural Characteristics] ON ([Struc Char Totals].[Journal Abbr] = [Structural Characteristics].[Journal Abbr]) AND ([Struc Char Totals].Volume = [Structural Characteristics].Volume) AND ([Struc Char Totals].[Issue No] = [Structural Characteristics].[Issue No]) AND ([Struc Char Totals].[Article No] = [Structural Characteristics].[Article No]) SET [Structural Characteristics].[Total Recent Reference Index] = [Struc Char Totals].[SumOfRecent]
WHERE ((([Struc Char Totals].[Book Review])=0) AND (([Struc Char Totals].[Comment/Rejoinder])=0) AND (([Struc Char Totals].Introduction)=0));

Query: Update Structural Characteristics Total References

This query updates the Total Number of References per article, in the Structural Characteristics Table.

SQL

UPDATE [Struc Char Totals] INNER JOIN [Structural Characteristics] ON ([Struc Char Totals].[Journal Abbr] = [Structural Characteristics].[Journal Abbr]) AND ([Struc Char Totals].Volume = [Structural Characteristics].Volume) AND ([Struc Char Totals].[Issue No] = [Structural Characteristics].[Issue No]) AND ([Struc Char Totals].[Article No] = [Structural Characteristics].[Article No]) SET [Structural Characteristics].[Total References Per Issue] = [Struc Char Totals].[SumOfCountRef]
WHERE ((([Struc Char Totals].[Book Review])=0) AND (([Struc Char Totals].[Comment/Rejoinder])=0) AND (([Struc Char Totals].Introduction)=0));

Query: Update Total Pages in Article Info

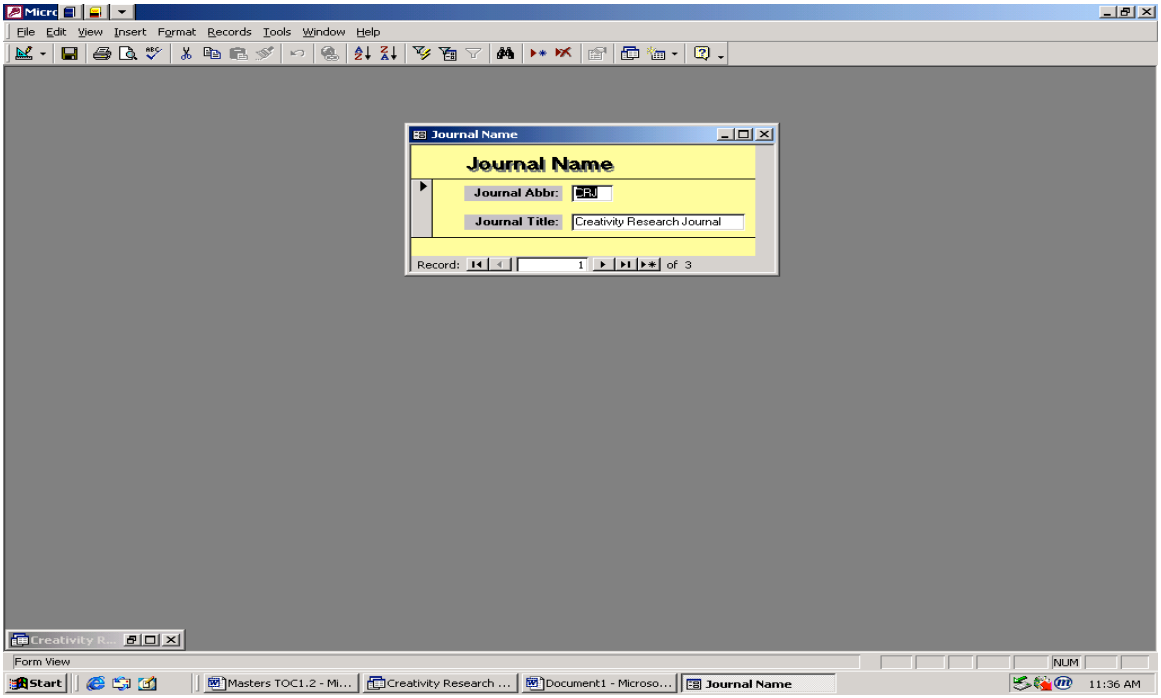
This query updates the Total Number of Pages for each article, in the Article Info Table.

SQL

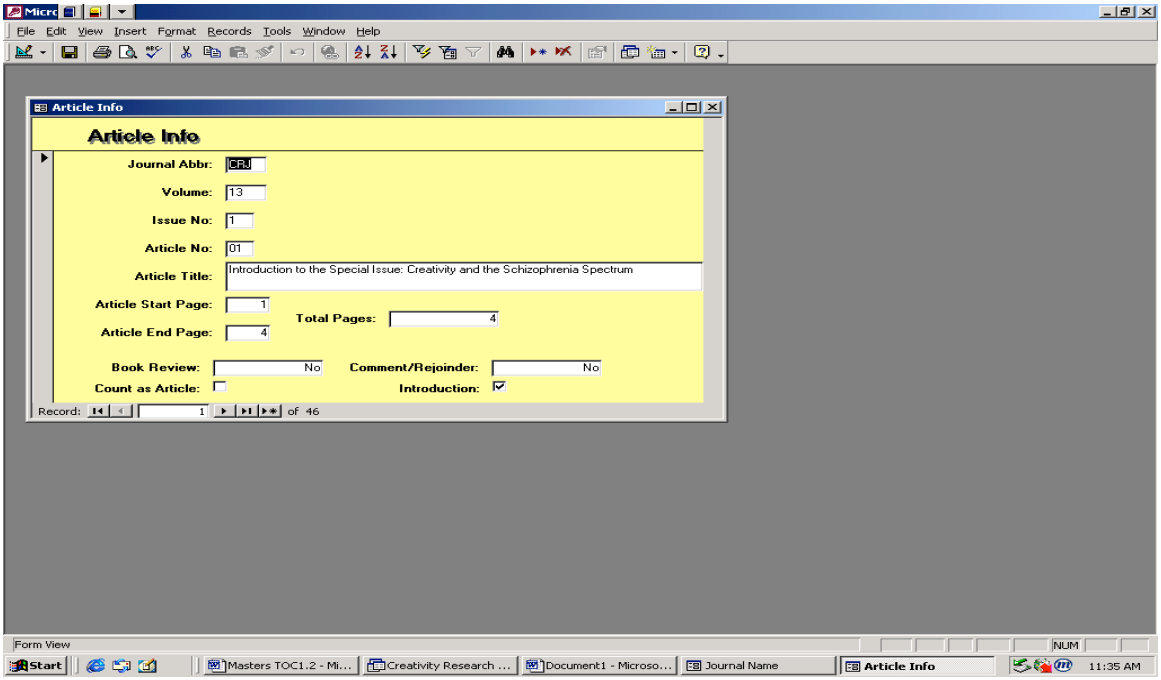
UPDATE [Article Info] SET [Article Info].[Total Pages] = ([Article End Page]-[Article Start Page]+1);

Forms

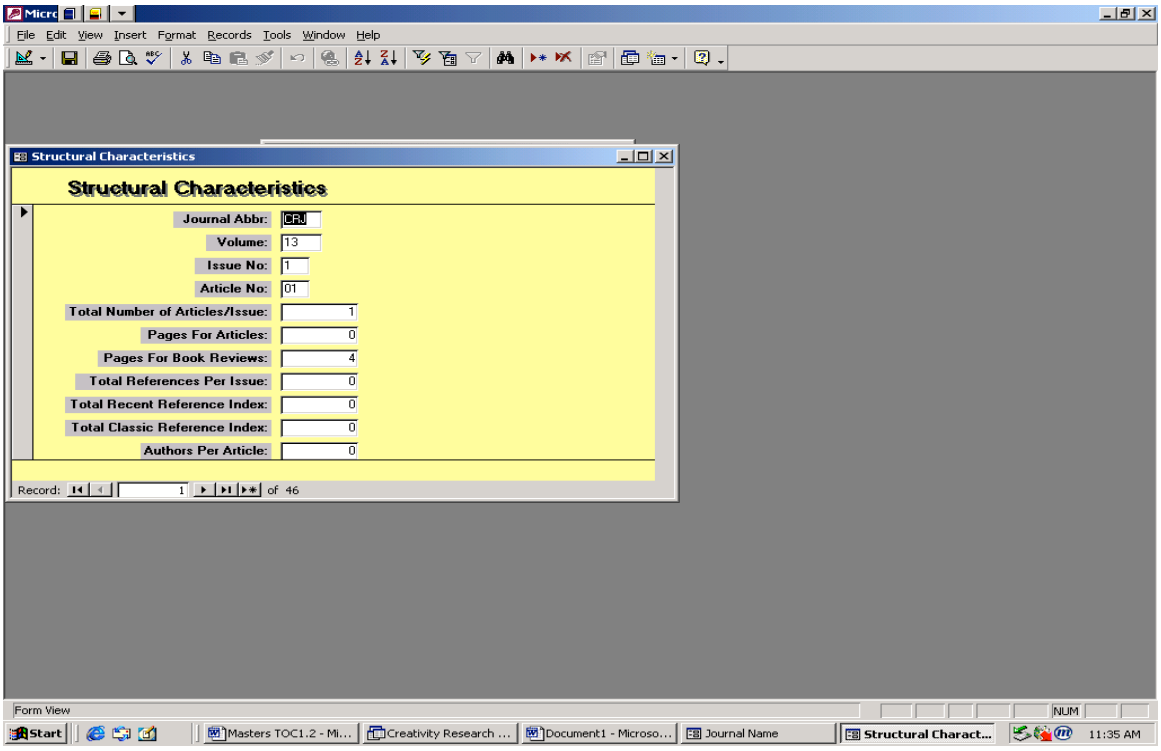
Journal Name Form:



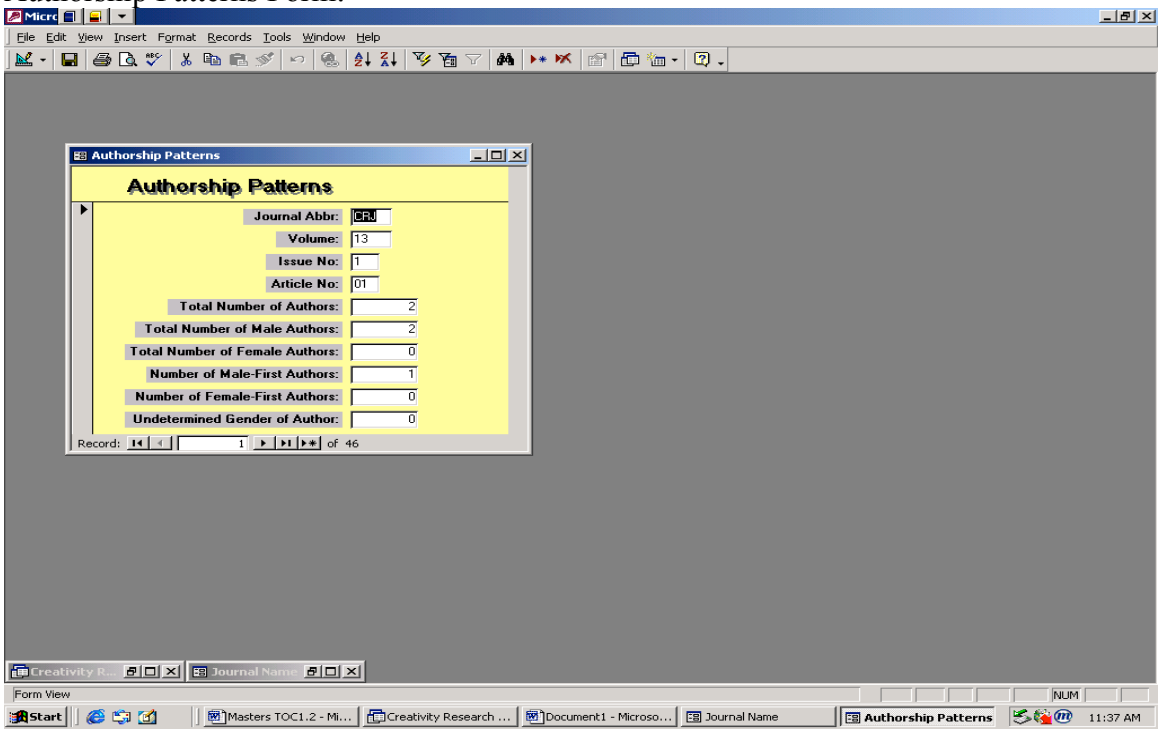
Article Information Form:



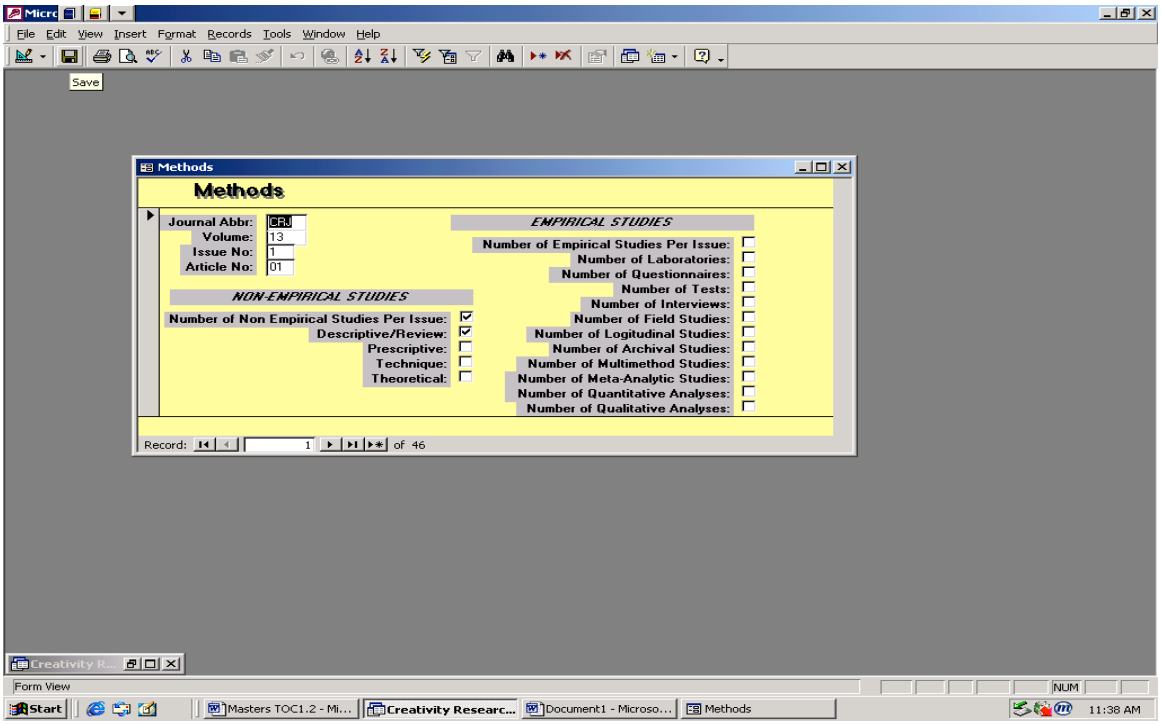
Structural Characteristics Form:



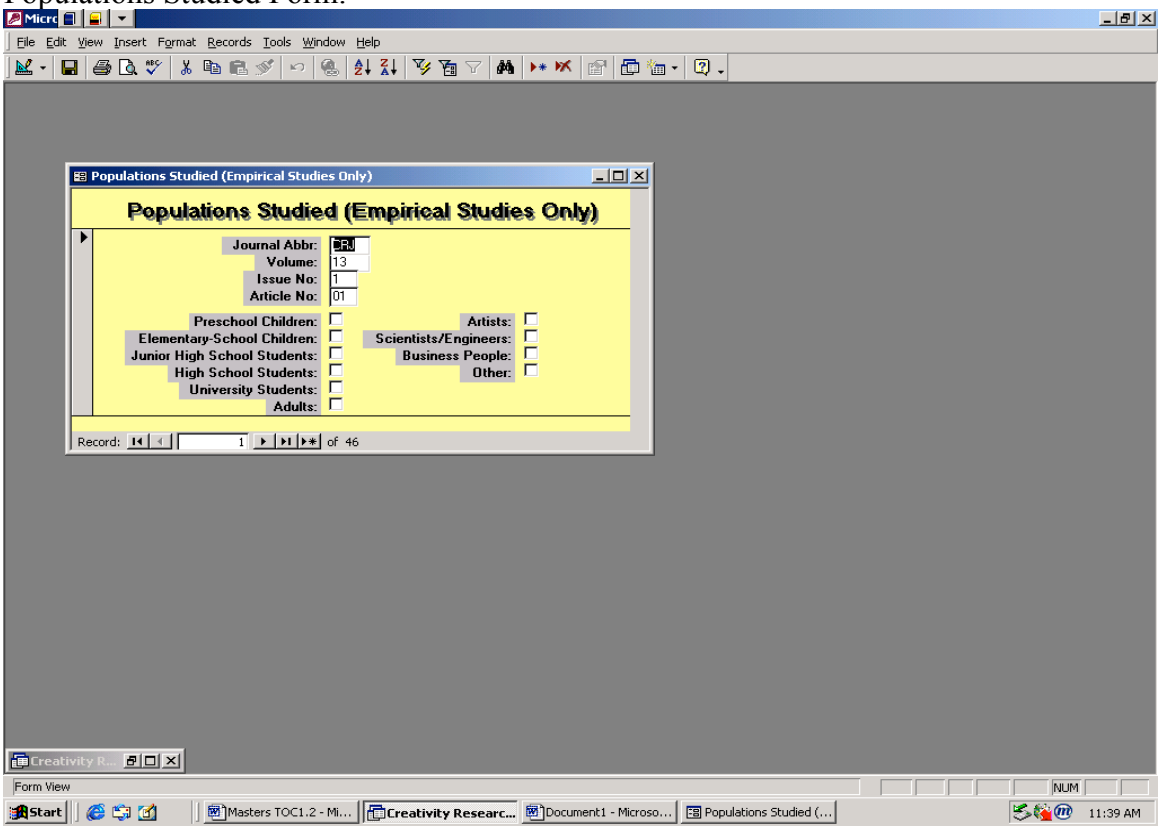
Authorship Patterns Form:



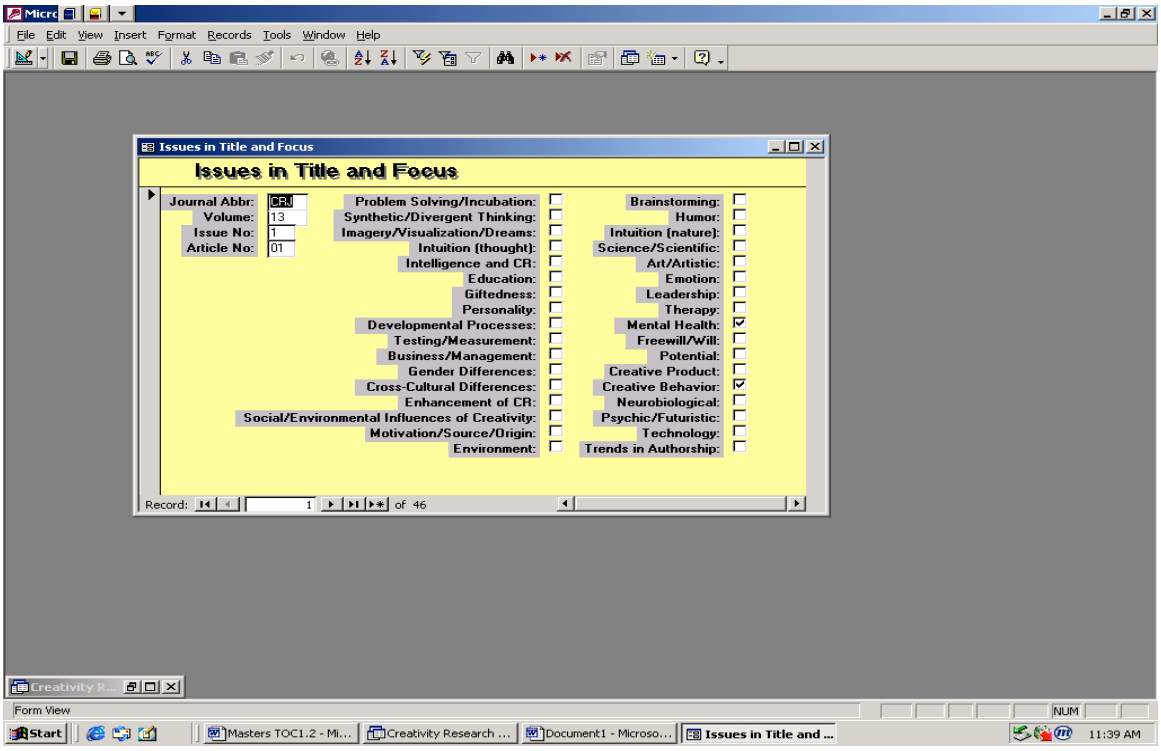
Methods Form:



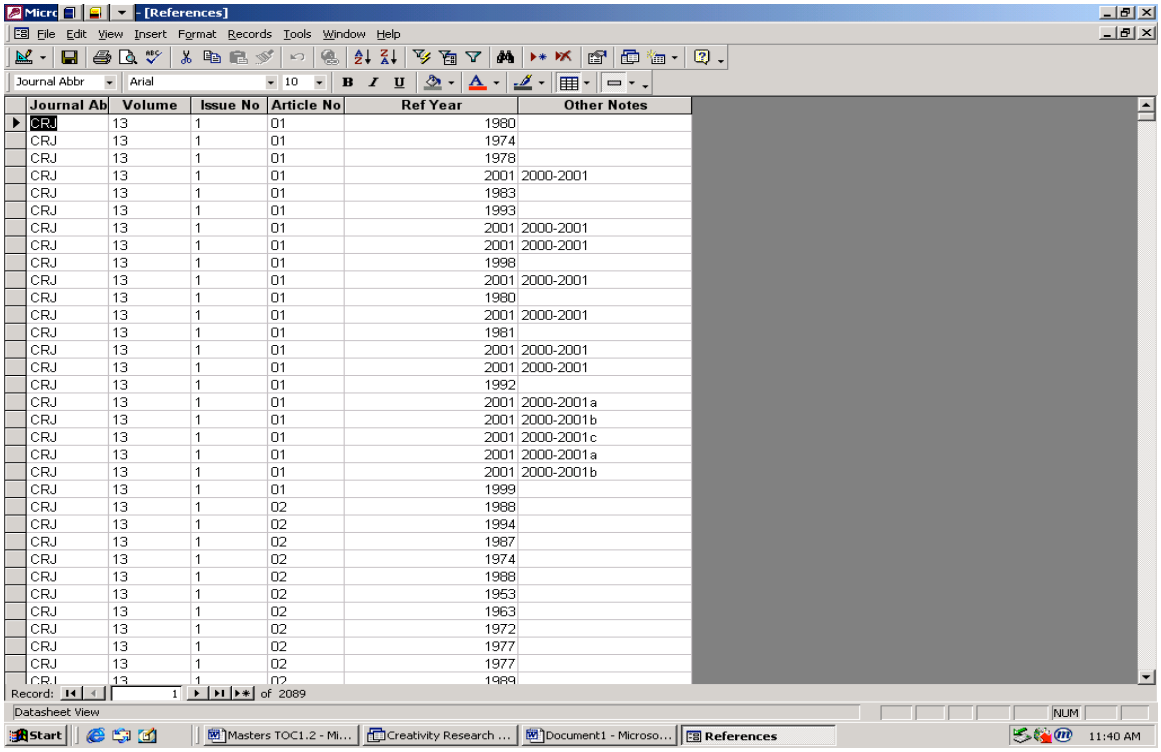
Populations Studied Form:



Issues in Title and Focus Form:



References Form:



SECTION 4: KEY LEARNINGS, LIMITATIONS AND RECOMMENDATIONS

Key Learnings

After studying creativity for the last two years, I was in search of tools to extend my learning and so decided to work on this particular project to explore the creativity literature. In carrying out this project, I found that there is a wealth of creativity research that has been literally ignored or forgotten. All too often, creativity scholars perform research studies without knowing what has previously been accomplished. In looking at the content of the 2001 issues, the lack of communication in the field becomes all too apparent.

I've come to realize the importance of researchers awareness of other peoples ideas, data, and beliefs in order to develop the creativity domain to its fullest. It is extremely important then, that creativity scholars have easy and timely access to other research data.

The field of medical research has the advantage of immediate release of information regarding breakthroughs. The creativity domain does not have this luxury and is therefore slower to progress.

The ability to develop successful research studies that take into account others work and build on them, rather than recreating them, is crucial to the development of the creativity domain. As the rate-of-change in the domain increases and as intrinsic and

extrinsic pressures increase for greater knowledge, researchers must enhance their ability to develop, introduce, and share new ideas and processes more quickly over time.

The Internet is on the verge of becoming a major resource for creativity research information. As more schools develop websites and as faculty provide research interests, it will facilitate the development of the domain more rapidly. The PsychINFO database on the Internet is a key example of the impact of the Internet.

We are living in a very exciting time, where information has become more accessible at an increasing rate.

Limitations

All studies have their limitations and this study is no exception. However, to lessen the effects of its limitations, I have tried to incorporate the Feist and Runco, Donaldson and Carroll studies to provide consistent and meaningful analyses for future studies. The inconsistencies of data analyses and documentation were the most notable limitations and deficiencies of this study. Also, Carroll's data from the 1999 issues of *Creativity Research Journal* appear to be inconsistent.

Recommendations

It is important to keep in mind that this study was intended to build upon data gathered for a five-year initiative by the International Center for Studies in Creativity and is therefore limited in its scope.

Adding other journals to the database would allow for a more comprehensive picture of scholars interested in trends in creativity literature. Redefining the methodology to include publications that have appeared outside of the three major creativity journals would add to our knowledge of how creativity scholars are influencing the study of creativity more broadly.

I've read about recent advances in bibliometrics and scientometrics and believe these could benefit follow-up studies, specifically the development and use of models for predicting and describing distributions of issues in title and focus. I believe this will go a long way in explaining the emerging image of growth in the field of creativity, as it is represented in patterns of issues in title and focus and authorship in the field's professional journals (Beghetto, Plucker & MaKinster, 2001).

The database developed in this project can facilitate the storing, retrieving and analysis of data in a more consistent manner. It can and should be updated as new information and new ideas for analyses are identified. I specifically developed it in Microsoft Access, for easy use and manipulation by novice users.

Pre-school children, high school students and scientists/engineer were not used in any of the studies in the 1998, 1999 and 2001 issues and should therefore be an issue of concern. As I mentioned earlier in this study, the growing population of seniors may also lead to opportunities for future studies. Intuition, humor, intuition in CR, therapy, free will/will, and psychic/futuristic and should also be looked at in more detail.

The study, however, should remain flexible enough to capture information regarding both new and dying trends.

References

Beghetto, R. A., Plucker, J. A. & MaKinster, J. G. (2001). Who studies creativity and how do we know? *Creativity Research Journal, 13(3&4*), 351-357.

Bowman-Jones, L. C. (1999). *Organizing and disseminating knowledge about creativity: themes in the 1998 creativity journal literature–Journal of Creative Behavior*. Unpublished master's project, State University College at Buffalo, NY.

Bowman, L. C., Donaldson, J. E. & Ezrin, S. T. (1999). *Themes in the 1998 creative journal: a report from the center for studies in creativity*, State University College at Buffalo, NY. In M. I. Stein (Ed.), *Creativity's global correspondents–1999.* New York: Winslow Press.

Carroll, H. S. (2000). *Creativity Research Journal, 1999 in summary.* Unpublished master's project, State University College at Buffalo, NY.

Carr, R. D. (in preparation). *Organizing and disseminating knowledge about creativity: Journal of Creative Behavior 2001 in summary.* Unpublished master's project, State University College at Buffalo, NY.

Donaldson, J. E. (1999). *Organizing and disseminating knowledge about creativity: themes in the 1998 issues of the Creativity Research Journal.* Unpublished master's project, State University College at Buffalo, NY.

Ezrin, S. T. (1999). *Organizing and disseminating knowledge about creativity: themes in the 1998 creativity journal literature-Creativity and Innovation Management.* Unpublished master's project, State University College at Buffalo, NY.

Feist, G. J. & Runco, M. A. (1993). Trends in the creativity literature. *Creativity Research Journal, 6*(3), 271-286.

Isaksen, S. G. & Murdock, M. C. (1993). The emergence of a discipline: Issues and approaches to the study of creativity. In S. G. Isaksen, M. C. Murdock, R. L. Firestien & D. J. Treffinger (Eds.), *Understanding and recognizing creativity: The emergence of a discipline* (pp. 13-47). Norwood, NJ: Ablex Publishing Corporation.

Moynihan, P. L. (2001). *Organizing and disseminating knowledge about creativity: themes in the 1998 creativity journal literature–Journal of Creative Behavior*. Unpublished master's project, State University College at Buffalo, NY.

Murdock, M. C. (1999). *CRS project/thesis menu topics*. Unpublished instructional handout for CRS 690/795. Buffalo, NY: International Center for Studies in Creativity.

Murdock, M. C., Isaksen, S. G., & Coleman, S. E. (1993). Moving to a desired future state in the field of creativity. In S. G. Isaksen, M. C. Murdock, R. L. Firestien, & D. J. Treffinger (Eds.), *Understanding and recognizing creativity: The emergence of a discipline* (pp. 499-528). Norwood, NJ: Ablex Publishing Corporation.

Tufte, E. R. (1983). *The visual display of quantitative information*. Cheshire, Connecticut: Graphics Press.

Theme:
Organizing and Disseminating Information About Creativity
Initiative:
Current Themes in the Creativity Journal Literature

Project Title: Organizing and Disseminating Information About Creativity: *Creativity Research Journal 2001* In Summary

Purpose and Questions: The purpose of this project is to promote awareness of the content, themes, and trends appearing in creativity research journals by continuing to organize and disseminate the information in those journals using an established process model for synthesizing journal literature. The questions guiding this project are:

- What are the similarities and differences in trends and themes in articles from *Creativity Research Journal* for the calendar year 2001?
- What contents and methods are apparent?
- What kinds of materials appear?
- What are the implications of this information for the development of the domain of creativity?

Rationale & Statement of Significance: This project is part of an ongoing initiative being carried out at the International Center for Studies in Creativity in response to a growing concern that the creativity literature is being overlooked, often to the detriment of current work being produced in the field (Murdock, 1999; see also Isaksen & Murdock, 1993; Murdock, Isaksen, & Coleman, 1993; Raina, 1993; Stein, 1987; Stein, 1993). Stein noted, "how frequently papers are published in which there seems to be little awareness of what has already been accomplished and published" (1987, p. 419). In later work Stein speaks directly to the issue by advising, "There is vast and important literature available in the area of creativity. Consult it and use it" (1993, p. 489). This project directly addresses these issues by examining the journal literature and synthesizing the information.

This project belongs to a five-year initiative at the International Center for Studies in Creativity (Murdock, 1999). These issues have been addressed by Bowman-Jones, 1999; Carroll, 2000; Donaldson, 1999; Ezrin, 1999; Moynihan, 2001 who discussed the importance of synthesizing the creativity journal literature on a regular basis for the benefit of those contributing to the development of creativity so that they may enhance prior work. By making journal literature easily attainable for the benefit of those contributing to the development of the discipline so that they may enhance prior work rather than being redundant of it. Thus, synthesizing the journal literature will play an important part in helping to, as Murdock, Isaksen and Coleman noted, "provide the field of creativity with what it needs in order to move forward to the desired future state of a discipline" (1993, p. 527).

Description of the Method or Process: The project will involve reading, studying, and carefully examining each article published in the issues of *Creativity Research Journal* for the calendar year 2001. Qualitative analysis will be used to examine themes and trends in the journal articles, and quantitative analysis will be used to examine certain statistics as specified in the established schema supplied by Feist and Runco (1993). The project will follow these seven steps: (1) study the Feist and Runco (1993) process model for analyzing journal literature; (2) acquire and read the journal material published by *Creativity Research Journal* for the calendar year 2001; (3) develop a system for storing, retrieving and analyzing the material (4) analyze the material according to the categories outlined in Feist and Runco (1993); (5) make changes, additions, modifications, or adjustments to their schema as necessary or as dictated by the data; (6) prepare the full project report that includes all findings and is organized in such a fashion as suitable for publication; and (7) prepare an Executive Summary of the project results that will be published electronically on the ICSC website.

Personal Learning Goals:

- Become very familiar with a major creativity journal;
- Recognize current creativity literature themes and trends;
- Develop skills for both qualitative and quantitative analysis;
- Challenge myself by developing a system for organizing, and disseminating information about creativity that can be used in later projects at the ICSC;
- Become familiar with the language and methods of study, themes and trends in creativity literature;
- Gain research experience;
- Attain an in depth understanding of contributions to the field of creativity; and
- Learn more about possibly publishing future articles of my own.

Outcomes:

- A concise and complete analysis of themes and trends from *Creativity Research Journal* for 2001;
- A concise and complete analysis of pertinent statistics as outlined in the schema used;
- A database system to storing, retrieving and analyzing journal information.
- 1 annotation of this project;
- 1 Executive Summary of this project;
- 10 CBIR Annotations; and
- Project Write-Up.

Timeline:

- **March 2002** **Become familiar with process model being used**
  Obtain journals
  Get organized
  Gain an understanding of data and analyses needs
  Develop MS Access system for gathering and analyzing data
  Begin reading
- **April 2002** **Identify key topics, trends and themes in the literature**
  Continue reading

Test MS Access system for recording and analysis of data
Maintain contact with advisor

- **May 2002** **Concept paper approved**
Implement MS Access system for recording and analysis of data
- September 2002 Begin writing
- November 2002 Submit project write-up for review
- December 2002 Submit final project write-up and all materials

Principal Investigators:

- Advisor, Mary C. Murdock, Ed. D.
- Sharon A. Myers

Related Literature:

Bowman-Jones, L. C. (1999). *Organizing and disseminating knowledge about creativity: themes in the 1998 creativity journal literature–Journal of Creative Behavior*. Unpublished master's project, State University College at Buffalo, NY.

Bowman, L. C., Donaldson, J. E. & Ezrin, S. T. (1999). Themes in the 1998 creative journal: a report from the center for studies in creativity, State University College at Buffalo, NY. In M. I. Stein (Ed.), *Creativity's global correspondents–1999.* New York: Winslow Press.

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Carr, R. D. (in preparation). *Organizing and disseminating knowledge about creativity: Journal of Creative Behavior 2001 in summary.* Unpublished master's project, State University College at Buffalo, NY.

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Ezrin, S. T. (1999). *Organizing and disseminating knowledge about creativity: themes in the 1998 creativity journal literature-Creativity and Innovation Management.* Unpublished master's project, State University College at Buffalo, NY.

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Murdock, M. C., Isaksen, S. G., & Coleman, S. E. (1993). Moving to a desired future state in the field of creativity. In S. G. Isaksen, M. C. Murdock, R. L. Firestien, & D. J. Treffinger (Eds.), *Understanding and recognizing creativity: The emergence of a discipline* (pp. 499-528). Norwood, NJ: Ablex Publishing Corporation.

Tufte, E. R. (1983). *The visual display of quantitative information*. Cheshire, Connecticut: Graphics Press.

Coding Criteria

Structural Characteristics

Total number of articles/issue = total number of creativity articles per issue. (An article is not a book review, an abstract, a bibliography, a comment or an Introduction.)

Pages for articles = last page minus first page. Plus 1.

Pages for book reviews = last page minus first page. Plus 1.

Total references per issue = total number of references divided by total number of articles.

Total recent reference index = number of references that are 5 years old or less from publication date (i.e., publication date minus 5).

Total classic reference index = number of references that are 25 years old or older. (i.e., publication date minus 25).

Authors per article = total number of single authored papers, double-authored papers, triple-authored articles, and so forth.

Total number of authors = total number of authors per issue.

Total number of male authors = total number of male authors per issue.

Total number of female authors = total number of female authors per issue.

Number of male-first authors = total number of male-first listed authors, for coauthored articles only.

Number of female-first authors = total number of female-first listed authors, for coauthored articles only.

Undetermined gender of author = total number of authors per issue whose gender cannot be determined.

Methods - Empirical

Number of empirical studies per issue = total number of articles that have either explicit or implicit methods section (i.e., subjects,. Instruments, procedures).

Number of laboratories = total number of empirical articles that use laboratory methods only.

Number of questionnaires = total number of empirical articles that use questionnaire method only.

Number of tests = total number of empirical articles that use test methods only.

Number of interviews = total number of empirical articles that use interview methods only.

Number of field studies = total number of empirical articles that use field study methods only.

Number of longitudinal studies = total number of empirical articles that use longitudinal data.

Number of archival studies = total number of empirical articles that use archival data.

Number of multimethod studies = total number of empirical articles that use more than one of the above methods.

Number of meta-analytic studies = number of empirical articles that report analyses of multiple articles and report statistics from each study on a particular topic.

Number of quantitative analyses = number of empirical articles that use quantitative statistics to analyze its data (numerical statistics).

Number of qualitative analyses = number of empirical articles that use qualitative analyses to describe its data (verbal summaries, quotes).

Methods – Non-Empirical

Number of nonempirical studies per issue = total number of articles that do not report original empirical data.

Descriptive/Review = total number of nonempirical articles that describe a phenomenon or that review the literature on a particular issue.

Prescriptive = total number of nonempirical articles that prescribe a technique, topic of study, or issue that should be studied.
Technique = total number of nonempirical articles that simply describe a new technique.

Theoretical = total number of nonempirical articles that put forth a theory explaining or interpreting a set of phenomena.

Populations Studied (Empirical Studies Only)

Preschool children = under 6 years old, not yet in first grade.

Elementary-school children = grades 1 through 5.

Junior high school students = grades 6 through 8.

High school students = grades 9 thought 12.

University students = students at the undergraduate or graduate level.

Adults = adults in the general population.

Artists = adults whose primary profession is art.

Scientists/Engineers = adults whose primary profession is in one of the science or technical fields.

Business people = adults whose primary profession is in business (white collar or management) or who are entrepreneurs.

Other = adults who do not fit in the above categories.

Issues in Title and Focus

(Each article is coded on its explicit title and its main focus; sometimes this will mean each article can be rated twice, or sometimes once.)

Problem solving/Incubation = deals with thought processes that are synthetic (bringing diverse elements together) or divergent thinking (a broad search to usually an open-ended question, in which there are a number of possible solutions [cf. Guilford, as quoted in Isaksen, 1987, p.47]).

Imagery/Visualization/Dreams = deals with any aspect or imagery, visualization, or dream processes.

Intuition = deals with thought processes that involve intuitive (not conscious, verbal, rational) elements.

Intelligence and Creativity = deals with the relationship between intelligence (or IQ) and Creativity.

Education = deals with any aspect of teaching, training students, or testing students.

Giftedness = deals with gifted (high IQ, high creativity) children or adults.

Personality = deals with personality (individual differences) characteristics of creative people.

Developmental processes = deals with development across time in either children or adults.

Testing/Measurement = deals with test construction, test taking, or measurement (methodological) issues of creativity research.

Business/Management = deals with creativity in business, management, or training of employees.

Gender differences = deals with differences between males and females.

Cross-cultural differences = deals with differences between different cultures (countries or ethnic groups).

Enhancement of Creativity = enhancement, training, or encouragement of creative thinking or behavior.

Social/Environmental influences of creativity = environmental, social (role models, mentors), or group influences on creative thinking or behavior.

Motivation/Source/Origin = deals with motivational (drive) components of creativity or the source or origin of creativity.

Brainstorming = deals with brainstorming techniques (must explicitly say "brainstorming").

Humor = deals with the relationship between humor, wit, joking, and Creativity.

Intuition = deals with the nature of intuition and its role in Creativity.

Science/Scientific = deals with scientific Creativity or the role of Creativity in science and scientific thinking and problem solving.

Art/Artistic = deals with artistic Creativity or the role of Creativity in art and artistic thinking or problem solving.

Emotion = deals with the role of emotion in Creativity.

Leadership = deals with the relationship between leadership or leadership qualities and Creativity.

Therapy = deals with the role of therapy or therapeutic techniques in Creativity.

Mental health = deals with the relationship between mental health (or mental illness) and Creativity. Mental health/illness includes topics such as emotional stability, psychological health, ego-strength, self-actualization, depression, suicide, alcoholism, manic-depression, and schizophrenia.

Freewill/Will = deals with the role of freewill (or personal control) in Creativity.

Potential = deals with creative potential.

Creative product = deals primarily with the creation of a creative product or its evaluation.

Neurobiological = deals with neurobiological elements such as hemisphericity, brain-lateralization, or any other aspect of physiology.

Psychic/Futuristic = deals with psychic phenomena (i.e., EST, clairvoyance, predictive dreams) or aspects of futuristic theory (what sort of society can we, usually with the aid of science, hope to create in the future).

Technology = deals with the use of technology in as a creativity tool.

Trends in authorship = deals with the identification and research on trends in authorship.