

In This Issue:

2002 Presentation

Abstracts for:

- Thorndike Award
- Snow Award
- Outstanding Dissertation Award

Pull-out Preview of
AERA Sessions



Random Thoughts on the (In)credibility of Educational- Psychological Intervention Research

Joel R. Levin

E. L. Thorndike Award 2002 Address
Extended Abstract

In this presentation I echo the concerns (expressed in my previous writings with Angela O'Donnell and Thomas Kratochwill, as well as in current federal-funding legislation) about the need for researchers to conduct more "scientifically credible" studies on proposed educational and psychological interventions. I begin with examples that serve to clarify two "random" research confusions, random sampling/random selection and random assignment/randomization. Whereas the former is important in certain inferential investigations, the latter is essential for the conduct of scientifically credible intervention research.

The Concept of Evidence

In this section I dissect the *incredible* operations and conclusions of research purporting to document the existence of the so-called "Mozart effect", which in this case was illustrated by the claimed positive influence of piano lessons and spatial-ability exercises on the development of children's intellectual and academic skills. I argue that scientifically credible research methodology can be reduced to four basic components, as captured by the **CARE**ful experimentation acronym presented in a first-year college course that colleague Sharon Derry and I designed to improve prospective teachers' scientific reasoning: **Comparison**, **Again** and **again**, **Relationship**, and **Eliminate**. Succinctly stated: If an appropriate **Comparison** reveals **Again** and **again** evidence of a direct **Relationship** between an intervention and a specified outcome, while **Eliminating** all other competing explanations for the outcome (typically through appropriate randomization operations), then the research yields scientifically convincing evidence of the treatment's effectiveness.

Contemporary Forms of Educational Intervention Research Inquiry

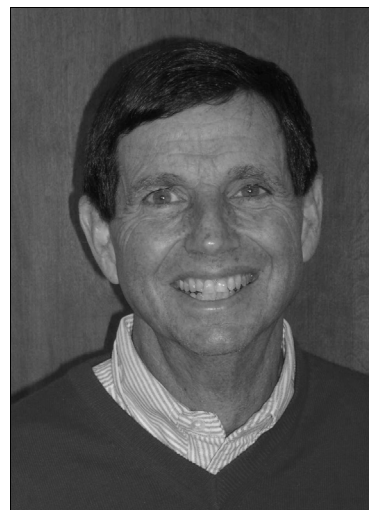
Two methods of empirical inquiry, along with their resulting forms of "evidence", that are thriving in educational research today - even in *educational-psychological* research today - are the demonstration study and the design experiment.

The demonstration study. Two manifestations of demonstration studies are ubiquitous in

AMERICAN PSYCHOLOGICAL ASSOCIATION
Newsletter for Educational Psychologists

Spring 2003

Volume 26 Number 1



educational contexts. One is when an instructional intervention is introduced within a particular classroom, with or without a non-intervention comparison classroom. A second is when an out-of-classroom special intervention "program" is

provided to a particular group of students. The critical issue in both cases is that with only one classroom receiving special instruction or only one group participating in a special program, it is not possible to separate the effects of the intervention or the program from the specific implementation of it. Interpretive concerns associated with the "evidence" derived from a demonstration study have been discussed by Mary Levin and me in the context of evaluating the outcomes of university academic retention programs. Typically, any documented positive program outcomes cannot be regarded as either scientifically credible or generalizable to other implementations of the program. In that sense, then, an evaluation of a particular program and its outcomes can indicate only what *happened* under a uniquely defined set of circumstances. It clearly cannot indicate what *to expect* if a similar program were to be implemented by others with college students elsewhere.

The design experiment. The so-called "design experiment" is a classroom-based form of research inquiry that was initially popularized by Alan Collins and the late Ann Brown. It was welcomed into the educational research community by Division 15 colleagues Gavriel Salomon and Robert Calfee, and shortly thereafter by various research-funding agencies. It is currently the focus of considerable research attention (as reflected, for example, in the January/February 2003 special issue of the *Educational Researcher*). The design experiment surely has its pros and cons. In contrast to the typical laboratory-based experiment, the design experiment is, by definition, classroom-based and classroom-targeted thereby scoring high

(Continued on page 10)

Newsletter for Educational Psychologists

NEP / 15

American Psychological Association

Division 15 Officers

Past-President: Paul Pintrich
University of Michigan
pintrich@umich.edu

President: Philip Winne
Simon Fraser University
winne@sfu.ca

President-Elect: James M. Royer
University of Massachusetts
Royer@psych.umass.edu

Secretary: Paul Schutz
University of Georgia
pschutz@coe.uga.edu

Treasurer: Allan Wigfield
University of Maryland College Park
aw44@umail.umd.edu

Representative to the APA Council:
Claire Ellen Weinstein
University of Texas
ce.weinstein@mail.utexas.edu

Members at large to the Executive Committee:
Judith Meece
University of North Carolina
Meece@email.unc.edu

Bonnie Meyer
Pennsylvania State University
bjm8@psu.edu

Sandra Graham
University of California Los Angeles
graham@gseis.ucla.edu

NEP/15 Editor: Christopher A. Wolters
University of Houston
cwolters@uh.edu

NEP/15 is the official newsletter of Division 15—Educational Psychology—and has a Spring, Summer, and Fall issue each year. It is mailed from the US Post Office in Washington, DC 20002-4242. Mailing addresses are those listed on the official APA roster. Corrections and changes of address should be sent directly to the APA Directory Office, 750 First St., NE, Washington, DC 20002-4242.

NEP/15 will publish minutes of official business meetings, committee reports, news items, and information on topics and issues of interest to the Division 15 membership. Items and articles for NEP/15 should be sent to Christopher Wolters, 491 Farish Hall, College of Education, University of Houston, Houston, TX 77204-5029 or to cwolters@uh.edu.

From the Editor

By way of looking back, this issue of NEP/15 includes columns based on all three of the Division 15 award addresses. The recipients of the E. L. Thorndike Award, R. Snow Early Contributions Award, and Outstanding Dissertation Award were asked to provide an abstract for their presentations from last August. These abstracts provide an extended summary of each award presentation but space constraints do not allow them to be comprehensive. For a more complete version of each address you may contact the authors individually, or refer to the citations provided within the abstracts.

Looking forward, the special AERA section is designed to make it easier for those headed to Chicago to find and attend sessions relevant to Division 15. This part of the newsletter is designed to be pulled out and easily tucked into a briefcase or purse. It has all of the information you need to find the listed sessions. Thus, you may be able to avoid toting around the thick program all day every day. Of course, space prohibits listing all the sessions that might be of interest to all members of the division.

Along with being editor of this newsletter, I currently serve in another role for Division 15—Cluster Representative. For the past two years, APA has organized all divisions into a set of about 12 “clusters” based on common interests and membership overlap. For the 2003 conference, Division 15 was grouped with Divisions 1 (General), 2 (Teaching), 3 (Experimental), 6 (Behavioral Neuroscience & Comparative) and 7 (Developmental). Representatives from these divisions (including myself) have planned six sessions for the convention this August in Toronto. In the convention program these sessions are referred to as Track programming. I encourage everyone who planning to be in Toronto to put these presentations on their “sessions to attend” list. The presentations this year will focus on different psychological perspectives on “The Rational Mind” and “The Emotional Mind”. The prominent researchers scheduled to participate includes Nobel award winner Daniel Kahneman. In the next issue, I will list the dates, times, and locations of these sessions, as well as all of the Division 15 sessions and events.

- caw

Self-Handicapping and Defensive Pessimism: Predictors and Consequences from a Self-Worth Motivation Perspective

Andrew J. Martin PhD

Outstanding Dissertation Award 2002 Address
Extended Abstract

The importance of protecting one's self-worth from failure has been emphasized over the past two decades. Self-worth motivation theory (Covington, 1992) holds that failure has implications for students' self-worth because failure is interpreted as being indicative of low ability and low ability is then equated with low self-worth. Thus, many students go to great lengths to avoid failure or to alter its meaning. Two strategies they can use to do this are self-handicapping and defensive pessimism. The present study examined self-handicapping and defensive pessimism from a self-worth motivation/protection perspective. Until this study, very little research had assessed self-handicapping and defensive pessimism jointly and no research had incorporated these two strategies into a longitudinal model examining their predictors and consequences. There was a need, then, for an integrative analysis of these strategies that provided direction for subsequent research and educational intervention. Although the two strategies appeared to be conceptually congruent from a self-worth protection perspective, the present study sought to empirically assess this through (a) exploring the process of defensive maneuvering as it relates to self-handicapping and defensive pessimism, (b) clarifying the factors giving rise to self-handicapping and defensive pessimism, and (c) better understanding the consequences that follow from self-handicapping and defensive pessimism.

The central constructs. Self-handicapping refers to the choice of impediments or obstacles to successful performance that enable the individual to deflect the cause of failure away from his or her competence and on to the acquired impediments. By these means, the individual is able to avoid disconfirmation of a desired self-conception and so protect his or her self-worth (Rhodewalt & Davison, 1986). Defensive pessimism involves setting unrealistically low expectations and thinking through a variety of possible outcomes prior to events in which one's performance is to be evaluated (Norem & Cantor, 1986). Defensive pessimism, then, is a protective strategy in the sense that it cushions the blow of potential failure and sets lower and safer standards against which to be judged.

Hypotheses. Based on the theoretical development of a longitudinal model of the predictors and consequences of self-handicapping and defensive pessimism, the following hypotheses were advanced: (a) performance orientation, uncertain personal control, and an external attributional orientation positively predict self-handicapping and defensive pessimism, (b) task-orientation negatively predicts self-handicapping and defensive pessimism, and (c) self-handicapping and defensive pessimism negatively predict a variety of academic outcomes. Self-esteem was also incorporated in the model but given a



lack of clarity in previous research findings no hypotheses were proposed. **Method.** The study centered on longitudinal data derived from a self-complete questionnaire to Australian undergraduate students at three institutions in their first ($n=584$) and their second ($n=489$) years at university. Quantitative analyses, involving hierarchical confirmatory factor analysis and structural equation modeling,

tested the hypothesized model. Additional analyses, involving multidimensional scaling, were carried out to further explore the central constructs in the context of need achievement theory.

Results. Hierarchical confirmatory factor analysis and structural equation modeling showed that an external attributional orientation and performance orientation positively predicted self-handicapping and defensive pessimism, uncertain personal control positively predicted defensive pessimism, and task-orientation was found to negatively predict self-handicapping and defensive pessimism. In turn, self-handicapping negatively predicted persistence, self-regulation, and later academic grades while defensive pessimism negatively predicted self-regulation. The full set of findings from these structural equation models is presented in Martin, Marsh, and Debus (2001b; in press).

The dimensions underpinning self-handicapping and defensive pessimism were explored in further analyses using multidimensional scaling. The conceptual rationale for these analyses involved integrating self-worth motivation theory and need achievement theory (Atkinson, 1957; Covington, 1992; McClelland, 1965) to test a quadripartite model representing the motives to avoid failure and approach success (Covington & Omelich, 1991). Results showed that defensive pessimism was underpinned by a motive to avoid failure while self-handicapping actually bordered on failure acceptance (see Martin & Marsh, in press; Martin et al., 2001a, for full set of findings and implications).

To add depth to these quantitative findings, interviews with students were conducted at Times 1 ($n=24$) and 2 ($n=16$). Time 1 interview data identified (a) personal perspectives on the nature of self-handicapping and defensive pessimism, (b) the perceived reasons why students engage these strategies, (c) the perceived advantages that follow from them, and (d) the circumstances and situations giving rise to them. Time 2 qualitative analyses shed light on upward and downward shifts in self-handicapping and defensive pessimism across students' first and second years at university. Time 2 qualitative data also provided insights into the concomitant shifts in the affective and motivational factors underpinning these strategies and the perceived academic and personal difficulties that students believed accounted for the identified shifts in self-handicapping and defensive pessimism (see Martin, Marsh,

Williamson, & Debus, in press, for details of qualitative findings).

Implications for education. A number of educational implications follow from these studies. Although self-handicapping and defensive pessimism may have some protective attributes, they are not adaptive from an educational performance and motivation perspective. The quantitative and qualitative data showed that a surprisingly large number of university students employ these strategies and that these strategies do not operate in a vacuum. Rather, they tend to be a response to factors operating in students' academic lives and underscore the need for educators to recognize the presence of these factors and develop ways to address them.

The finding that an external attributional orientation is the strongest predictor of self-handicapping suggests a need to encourage students to attribute outcomes to internal and controllable factors such as effort and strategy. Indeed, the finding that self-handicapping borders on failure acceptance suggests that effort-oriented attribution retraining that has been successful with failure accepters (e.g., students who are learned helpless - see Dweck, 1975; Schunk, 1981) may also be successful for self-handicappers.

The role of uncertain personal control in predicting defensive pessimism is also significant. In the educational context, a prime contributor to uncertain personal control is non-contingent or inconsistent feedback (Perry & Tunna, 1988). Administering reinforcement and feedback in a way that is commensurate with students' performance is one means of enhancing their perceived control over educational outcomes (Thompson, 1994).

A performance orientation also predicted the tendency to self-handicap and engage in defensive pessimism. The data showed that underpinning a performance orientation were concerns about ability, the need to demonstrate one's competence, and concerns with how one's performance was perceived by and compared with others. In the educational domain, competition perpetuates these concerns (Nicholls, 1989). Cooperative learning and mastery-oriented environments, on the other hand, are task-oriented and focus more on mastery through collaboration with one's peers (Qin, Johnson, & Johnson, 1995). Importantly, however, this is not to reject the possible benefits to be gained through a performance approach (see Harackiewicz, Barron, & Elliot, 1998; Martin & Debus, 1998). Thus, balancing competitive interests with mastery and cooperation may reduce the extent to which students are motivated to maneuver defensively while also optimizing performance and motivation.

Yields of the study. The yields of the study are multi-fold. First, the study provided timely confirmatory measurement work on self-handicapping and defensive pessimism and clarified the factors giving rise to them and the academic outcomes that follow from them. Second, these issues were assessed using a longitudinal process model that captured both predictors and consequences of self-handicapping and defensive pessimism, thus extending previous research that typically examined predictors and consequences separately. Third, the study extended the self-worth motivation research, not only by directly locating it, theoretically and empirically, in the areas of self-handicapping and defensive pessimism, but

also by identifying a variety of factors argued to be indicants of a self-worth motivation. Fourth, the study is among the first to explicitly draw together self-handicapping and defensive pessimism under a common conceptual framework and to assess their respective effects in an hypothesized model of the academic process as is relevant to self-worth protection. Fifth, the study extended current understanding about defensive pessimism and self-handicapping by drawing them together in a multidimensional need achievement model of academic motivation and identifying their respective positions on failure-avoidance and success-orientation axes. Finally, the quantitative findings were enriched through qualitative analyses that not only illuminated the relationships derived in the quantitative models, but also provided important insights into shifts on key dimensions that occurred across students' first and second years at university.

Conclusion. In sum, both quantitative and qualitative data hold implications not only for current understanding and existing theory regarding self-handicapping and defensive pessimism, but also for educational practice and research dealing with these phenomena. On a more general level, data derived from the study provide new perspectives on defensive maneuvering and the lengths to which students will go to protect their self-worth, the many reasons they pursue their studies in such a fashion, and the diversity and complexity of consequences that follow from such behavior.

*Andrew Martin would like to thank Professor Herb Marsh and Dr Ray Debus for their outstanding supervision. Andrew Martin is now Postdoctoral Research Fellow at the SELF Research Centre, University of Western Sydney, Penrith South DC, NSW 1797, AUSTRALIA.
E-Mail: amartin@uws.edu.au.*

Selected References

- Martin, A.J., & Debus, R.L. (1998). Self-reports of mathematics self-concept and educational outcomes: The roles of ego-dimensions and self-consciousness. *British Journal of Educational Psychology*, 68, 517-535.
- Martin, A.J. & Marsh, H.W. (in press). Fear of failure: Friend or foe? *Australian Psychologist*.
- Martin, A.J. Marsh, H.W., & Debus, R.L. (in press). Self-handicapping and defensive pessimism: A model of self-protection from a longitudinal perspective. *Contemporary Educational Psychology*.
- Martin, A.J. Marsh, H.W., & Debus, R.L. (2001a). A quadri-polar need achievement representation of self-handicapping and defensive pessimism. *American Educational Research Journal*, 38, 583-610.
- Martin, A.J., Marsh, H.W., & Debus, R.L. (2001b). Self-handicapping and defensive pessimism: Exploring a model of predictors and outcomes from a self-protection perspective. *Journal of Educational Psychology*, 93, 87-102.
- Martin, A.J., Marsh, H.W., Williamson, A., & Debus, R.L. (in press). Self-handicapping, defensive pessimism, and goal orientation: Personal perspectives of university students. *Journal of Educational Psychology*.

AERA PREVIEW

PULL-OUT SECTION

MONDAY APRIL 21

17.23: MULTIPLE GOALS AND MULTIPLE CONTEXTS: NEW DIRECTIONS FOR RESEARCH ON THE DEVELOPMENT OF ACHIEVEMENT GOALS

12:00 --2:00: Hyatt, Regency C, West Tower - Gold Level
The Role of Multiple Goals and Interest in the College Classroom: Motivational Dynamics Over Time - J. Harackiewicz, A. Durik, Wisconsin
The Dilemma of Performance Goals: The Use of Multiple Goal Contexts to Promote Students' Motivation and Learning in Cooperative Groups - Elizabeth Linnenbrink, Univ. of Toledo
 Understanding the Contexts of Students' Achievement Goals and Behaviors from Elementary to Middle School Mathematics Classrooms - J. Turner, Notre Dame; H. Patrick, Purdue; D. Meyer, Elmhurst College
Theories of Intelligence, Perceived Classroom Goal Structures, and Perceived Parental and Peer Goals Relations to Elementary and Middle School Students' Achievement Goals - Mimi Bong, Univ. of South Carolina
Parent-child Concordance in Fear of Failure: Implications for Achievement Goals - Andrew Elliot, Univ. of Rochester
 Chair: Paul Pintrich, Univ. of Michigan; Discussant: Martin Covington, Univ. of California, Berkeley

17.86: STUDIES ON LEARNING (Posters)

17.88: THINKING ABOUT CLASSROOM PRACTICES (Posters)

17.94: MOTIVATION (Posters)

12:00 --1:30: Hyatt, Riverside Center, Exhibition Hall

19.15: ISSUES IN LEARNING AND COGNITION (Roundtables)

1:00 --1:40: Hyatt, Grand Ballroom E, East Tower - Gold Level
Thinking Styles in Computing and Information Technology Among Hong Kong Univ. Students -- Li-fang Zhang, Univ. of Hong Kong
Write Together to Learn to Write Better -- Pietro Boscolo, Carlo Dalmonego, Univ. of Padova
Towards a Unified Theory of Cognition: A Kantian Analysis -- Paul Eggen, Univ. of North Florida
Configurative Visions of the Space of Learning -- Ference Marton, Ulla Runesson, Univ. of Gothenburg; y Tsui, Univ. of Hong Kong; Derek Holton Univ. of Otago; Gaye Williams, Univ. of Melbourne
Web-based Instruction—Tool or Topic in the Study of Learner Characteristics -- Lisa Bendixen; E. Michael Nussbaum, UNLV; Douglas Kauffman, Oklahoma Univ.; Steve Lehman, Utah State
The Effect of Seductive Details on Interest, Recall, and Comprehension -- Rosemarie Ataya, Connecticut
Student Affect and Conceptual Change in Learning Chemistry -- Martina Nieswandt, OISE/Univ. of Toronto
 Chair: *Configurative Visions of the Space of Learning* -- David Clarke, Univ. of Melbourne
Web-based Instruction —Tool or Topic in the Study of Learner Characteristics -- Kendall Hartley, UNLV
 Discussant: *Configurative Visions of the Space of Learning* -- Stephen Lerman, South Bank Univ.

20.20: BELIEFS ABOUT KNOWLEDGE AND KNOWING: ARE THEY DOMAIN GENERAL, DOMAIN SPECIFIC, OR CONTEXT SPECIFIC?

2:15 --3:45: Hyatt, Columbus Hall C/D, East Tower - Gold Level
Mapping the trajectory of epistemological understanding: The interaction of domain-general and discipline-specific beliefs -- Barbara Hofer, Middlebury College
Students' mathematics-related belief systems: Where do epistemological beliefs fit in? -- Erik DeCorte, Peter Op 't Eynde Univ. of Leuven
General and domain-specific epistemological thinking: Relationships with educational level and curriculum -- L. Mason, G. Zurlo Univ. of Padova
Teachers' epistemological worldviews and teaching practices -- Gregory Schraw, Lori Olafson, Jeanne Klockow UNLV
Testing the waters: Examining the relationship between domain-specific epistemological beliefs and motivation -- M. Buehl, P. Alexander Maryland
 Chair: Margarita Limon Autonoma Univ. of Madrid

20.67: UNRAVELING THE ROLE OF SELF-EFFICACY BELIEFS IN ACADEMIC SELF-REGULATION

2:15 --3:45: Sheraton, Ontario, Level 2
The Influence of Self-Protective Perceptions on the Prediction of Test Scores -- Myron Dembo, Univ. of Southern California; Terrance Jakubowski, Los Angeles Unified School District
Accuracy of Middle School Math Students' Self-Efficacy Beliefs and its Effects on Academic Self-Regulation -- Peggy Chen, Hunter College; Barry Zimmerman, CUNY
Impact of Students' Self-Efficacy for Learning Beliefs on their Self-Regulated Learning Processes -- A. Kitsantas, George Mason; B. Zimmerman, CUNY
Developmental Changes in Students' Self-Efficacy Beliefs Regarding Use of Self-Regulated Learning Strategies -- Giovanni Valiante, Rollins College; Frank Pajares, Emory
 Chair: Barry Zimmerman, CUNY; Discussant: Dale Schunk, Univ. of North Carolina at Greensboro

20.68: CULTURAL ISSUES IN MOTIVATION AND LEARNING

(Roundtables)
 2:15 --2:55: Hyatt, Grand Ballroom B, East Tower - Gold Level
Exploring Teacher Bias: Issues of Racial Awareness, Identification, and Compensation -- Carol Mullen, Jose Farinas, Univ. of South Florida
Bringing Ourselves into the Classroom through Multicultural Literature -- Jessica Trubek, LIU-Brooklyn
Community Responsibility and Activism with Preschool Children -- Judith Singer, LIU-Brooklyn
An Africana Feminist Begins a Scholarly Agenda in Inclusive Education -- Joya Carter, Univ. of Georgia
A Researcher's Role as an African-American Woman -- K. Scott, Hofstra
Personal Disclosure in Counseling and in the Classroom -- R. McLean, Hofstra
A Political Activist in the High School Classroom -- Alan Singer, Hofstra
A Cross-Cultural Examination of Dweck's Model -- Albert Ziegler, Heidrun Stoeger, Markus Dresel, Univ. of Ulm
Dialogical Critical Thinking: A Multi-National Study of Dialogue in 10 12-Year-Old Children -- Marie-France Daniel, Univ. of Montreal; Laurance Splitter, Montclair State Univ.
Promoting Resilience to Improve School Performance of Academically At-Risk Latina Adolescents -- Christianna Alger, San Diego State Univ.
The Growth of Philosophically Precocious Intellectuals -- Wenyu Bai, College of William and Mary
Cultural Psychology and the Learning of History: The Problem of Ecological Validity -- Thomas Cockbill, New York Univ.
 Chair: Alan Singer, Hofstra

20.87: MOTIVATION AND LEARNING (Poster Session)

2:15 --3:45: Hyatt, Riverside Center, Exhibition Hall

22.23: DIV. C: NEW MEMBER POSTER SESSION (Poster Session)

22.77: NEW VOICES IN MOTIVATION RESEARCH (Poster Session)
 4:05 --5:35: Hyatt, Riverside Center, Exhibition Hall

22.25: THINKING ABOUT THINKING

4:05 --5:35: Sheraton, Michigan A, Level 2
Using Assessments to Think About Thinking -- Linda Sadusky, Sarah Brem, Arizona State
Uncovering the Mental Models of Students with Reading Disabilities -- Debby Zambo, Sarah Brem, Arizona State
Metacognition and Critical Thinking -- D. Dean, D. Kuhn, Teachers College
Epistemology and Intellectual Values as Core Metacognitive Constructs -- Deanna Kuhn, Sharon Daniels, Anita Krishman, Teachers College.
 Discussant: David Garcia, Arizona Dept. of Education

22.62: CONTEXTUAL INFLUENCES ON MOTIVATION & LEARNING

4:05 --5:35: Sheraton, Parlor E, Level 3
Professor Caring and Social Acceptance as Predictors of College Freshmen's Sense of Univ. Belonging -- T. Freeman, L. Anderman, J. Jensen, Kentucky
Perceived Emphasis on Mastery and Performance Goals of Teacher Behavior: Culture, Context and Individual Differences -- Avi Kaplan, Aviva Gadasi, Ben Gurion Univ.
Parental and Motivational Influences on Text Comprehension -- Judy Wang, Claudia Gentile, Venus Mifsud, Educational Testing Service

Instructional Influences on Children's Reading Motivation -- Stephen Tonks, Allan Wigfield, John Guthrie, Kathleen Perencevich, Maryland
Chair: Heather Davis, Univ. of Florida; Discussant: Judith Meece, UNC-CH

TUESDAY APRIL 22

26.22: INTERNATIONALIZING THE STUDY OF EPISTEMOLOGY, GOAL ORIENTATIONS, AND SELF-EFFICACY

8:15 --10:15: Hyatt, Stetson Suite F, West Tower - Purple Level
At the Crossroads: Exploring the Intersection of Epistemological Beliefs, Motivation, and Culture -- Michelle Buehl, Maryland
The French Connections: Explaining the Links between Epistemological Beliefs, Goal Orientations and Self-Efficacy -- Laurence Filisetti, Univ. of Grenoble; Helen Rose Fives, Maryland
Beliefs, Motivation and Achievement as Reflections of Culture and Education in Italy -- Michelle Riconscente, Liliana Maggioni, Maryland
Epistemological Beliefs and Motivation of College Students in Taiwan -- Shu-hui Chiu Chaoyang, Jenner Tsay Chaoyang, Univ. of Technology
America as a cultural context in the study of domain-specific epistemological beliefs, academic goal orientations, and self-efficacy for novel and traditional tasks -- Bradford Woods, Emily Fox, Michelle Buehl, Maryland
Chair: Helen Rose Fives, Maryland; Discussant: S. Volet, Murdoch Univ.

26.92: MOTIVATION AND LEARNING II (Poster Session)

8:15 --9:45: Hyatt, Riverside Center, Exhibition Hall

29.25: EDUCATIONAL ISSUES IN SELF-EFFICACY

10:35 --12:05: Sheraton, Ohio, Level 2
Teacher Self-Efficacy is Not Enough!! The Problem of Interpreting Measures of Teacher Self-Efficacy Apart from other Measures of Teacher Performance -- J. Kyle Roberts, Univ. of North Texas; Nancy Moreno, Baylor College of Medicine
What is Teacher Efficacy and How does it Relate to Teachers' Knowledge? A Theoretical Review -- Helen Rose Fives, Maryland
Influencing Student Mathematics Self-Efficacy Through Teacher Training -- Del Siegle, Connecticut
Intrinsic Motivation or Perceived Competence: Which should Autonomy Supportive Teachers First Pay Attention to? -- Mafumi Omura, Johnmarshall Reeve, Iowa
Chair: Einar Skaalvik, Norwegian Univ. of Science and Technology

29.36: SYNTHESIZING COGNITIVE AND SOCIAL PERSPECTIVES IN EDUCATIONAL RESEARCH: PROGRESS AND POSSIBILITIES (Panel Discussion)

10:35 --12:05: Sheraton, Sheraton Ballroom 5, Ballroom Level
R. Anderson, Univ. of Illinois; D. Kuhn, Columbia; J. Greeno Stanford; A. O'Donnell, Rutgers; M. Scardamalia, OISE/Univ. of Toronto
Chair: Michael Nussbaum, Lisa Bendixen, UNLV

29.37: UNDERSTANDING MOTIVATION IN COOPERATIVE LEARNING: WHERE HAVE WE COME FROM AND WHERE SHOULD WE BE GOING?

10:35 --12:05: Hyatt, Comiskey, West Tower - Bronze Level
Motivation in Cooperative Learning: Where Have We Come From? -- R. Nelson, Oklahoma
Comparing the Quality of College Students' Experiences During Cooperative Learning and Large-group Instruction -- Sarah Peterson, Jeffrey Miller, Duquesne Univ.
Emergent Leadership in Children's Collaborative Learning Groups: Likely Effects and Possible Causes -- R. Yamaguchi, M. Maehr, Michigan
The Role of Social Goals During Small Group Work -- Teresa DeBacker, R. Nelson, Univ. of Oklahoma
Engaging Students in Cooperative Learning Tasks: Individual and Group-level Factors -- T. Kempler, L. Hrudá, M. Maehr, Univ. of Michigan
Chair: Deborah Kalkman, Northern Illinois Univ.; Discussant: Myron Dembo, Univ. of Southern California

31.27: COGNITIVE LOAD AND DEEPER PROCESSING

12:25 --1:55: Sheraton, Superior A, Level 2
Cognitive Load and Text Learning -- Matthew McCrudden, Gregg Schraw, Kendall Hartley, UNLV; Kenneth Kiewra, Univ. of Nebraska-Lincoln
Do instructor-provided on-line notes really facilitate student learning? -- Jerrold Barnett, Northwest Missouri State Univ.
Boundaries of the Delay Hypothesis with Adjunct Displays -- Daniel Robin-

son, Stephan Bera, Univ. of Texas

Promoting Deeper Processing in an Online, Copy and Paste, Note-taking Task: A mixed methods study -- Brent Igo, Nebraska; Matt McCrudden, UNLV; Jeff Lang; Roger Bruning, Nebraska
Chair: C. McCormick, New Mexico; Discussant: Ernest Goetz, Texas A&M

33.10: FROM MNEMONICS TO SELF-EVALUATION: ROAMING THE LEARNING STRATEGIES RANGE (Roundtables)

1:15 --1:55: Hyatt, Grand Ballroom B, East Tower - Gold Level
The Role of Local and Global Coherence in the Processing and Recall of History and Science Texts -- Michelle Everson, Univ. of Minnesota
Musical Mnemonics: A Systematic Technique for Retaining Your Composers -- Russell Carney, Carrie Robertson, Cassandra Mascorro, Frank Ragozzine, Southwest Missouri State Univ.; Joel Levin, Univ. of Arizona
The Relationship of Student Attitudes, Skill Level and Self-Regulated Learning Strategies to Performance in an Undergraduate Computer Literacy Course -- Mary Niemczyk, Kathryn Fischer, Arizona State Univ.
ABC's of Self-Regulated Learning Models -- Dawn Young, Bossier Parish Community College; Kathryn Ley, Univ. of Houston, Clear Lake
The influence of practice and achievement level on calibration accuracy -- Linda Bol, Old Dominion
Self-Selected Study Activities of Ethnically Diverse College Students -- Cheri Araki, San Francisco State Univ.; Mark Wilson, UC-Berkeley

34.25: EPISTEMOLOGY AND DISPOSITIONS

2:15 --3:45: Sheraton, Superior A, Level 2
Varied views of a familiar landscape?: Examining the goal orientations and epistemological belief profiles of inner-city adolescents from a cluster analytic perspective -- Michelle Buehl, Maryland; P. Karen Murphy, Pennsylvania, State Univ.; Shinichi Monoi, Ohio State
How Epistemology and Personality Affect Students' Dispositions to Argue -- E. Michael Nussbaum, Lisa Bendixen, UNLV
Relationship Among Teacher Candidates' Epistemological Beliefs, Dispositions, and Views on Teaching as Persuasion -- Gale Sinatra, CarolAnne Kardash, UNLV
Do need for cognition, need for closure, and learning beliefs predict beliefs about the simplicity and certainty of knowledge? Specifying intra-individual factors associated with epistemic change -- H. Michael Crowson, Oklahoma
Chair: E. Gardner, Arkansas; Discussant: L. Hammann, Univ. of Akron

34.97: STUDIES ON THE LEARNER (Roundtables)

2:15 --2:55: Sheraton, Chicago Ballroom 6, Ballroom Level
Instructional and Motivational Influences on Deep Learning: Contrasting Theoretical Models in Higher Education -- Benoit Galand, Université, Etienne Bourgeois, Mariane Frenay, Université Catholique de Louvain
Effects of Gifted and Talented Strategies on ESL Learners -- Elizabeth Gibson, Univ. of Texas-Arlington
Learner Intent and Online Learning -- Randall Davies, Indiana; Russell Osguthorpe, Brigham Young
Predicting Self-Regulated Learning Abilities in College Students -- Amy Dombach Connelly, Rutgers
The Role of Motivation in Meta-Cognitive Development -- Barbara Garii Lesley, Univ.; Izi Loveluck, Snohomish (WA) School District
What Do You Mean My Grade Is Not an A?: Academic Entitlement and its Relationship to Self-Regulation and Achievement in College Students -- Michelle Achacoso, Diane Schallert, Univ. of Texas
The Forgotten Students in Traumatic Exposure Incidences -- Rosalind Duplechain, State Univ. of West Georgia

WEDNESDAY, APRIL 23

41.28: SOCIOCULTURAL ASPECTS OF INTEREST DEVELOPMENT AND THEIR IMPLICATIONS FOR EDUCATION

8:15 --9:45: Sheraton, Ontario, Level 2
The Role of the Social in Teachers' Interest Development and Learning with an Online Community -- K. Renninger, Swarthmore; W. Shumar, Drexel
Canalisation of interest development in a classroom learning community: from social origins to self identification or resistance? -- Kimberley Presnick-Kilborn, Richard Walker, Univ. of Sydney
The Role of Choice in Promoting Interest -- Gregory Schraw, UNLV; Terri Flowerday, Univ. of New Mexico
The role of literate communities in the development of children's interest in reading and writing -- Susan Nolen, Univ. of Washington

Chair: K. Renninger, Swarthmore College; Susan Nolen, Univ. of Washington; Discussant: Leslie Rupert-Herrenkohl, Univ. of Washington

43.19: ISSUES IN INDIVIDUAL DIFFERENCES

10:35 --12:05: Sheraton, Mayfair, Level 2

Literacy and Cognition in L2 Children at Risk for Reading Disabilities -- H. Lee Swanson, Univ. of California; L. Saez, Univ. of California-Riverside; M. Gerber, J. Leftstedt, Univ. of California-Santa Barbara
Reframing Sex Differences in Spatial Ability: Could Gender Role be a part of the Picture? -- L. Massa, R. Mayer, Univ. of California Santa Barbara
Perceptions of Science: The Influence of Gender and Level of Science Achievement -- Michael Pyryt, Judy Lupart, M. Elizabeth Cannon, Univ. of Calgary
Accounting for Individual Differences in Learning: New insight into measuring learning preferences -- Joanne Bentley, Utah State
Chair: Lilia Ruban, Univ. of Houston; Discussant: S. Benton, Kansas State

45.50: ACHIEVEMENT GOALS FROM MULTIPLE PERSPECTIVES

12:25 --1:55: Sheraton, Parlor E, Level 3

Using Goal Structures and Goal Orientations to Predict Adolescents' Cognitive Engagement and Achievement -- C. Wolters, Univ. of Houston
Goal-Orientations in Mathematics and Verbal Arts: Domain Specificity and Relations with Achievement and Academic Self-perception -- Einar Skaalvik, Sidsel Skaalvik, Norwegian Univ. of Science and Technology; Richard Rankin, Univ. of Oregon
Examining the Invariance of the Achievement Goal Questionnaire Across Gender -- Sara Finney, Susan Davis, James Madison
Achievement Goal Pursuit: Are Different Goals Activated and More Beneficial in Different Types of Academic Situations? -- Kenneth Barron, Sara Finney, Susan Davis, Kara Owens, James Madison
Chair: Carolyn Jagacinski, Purdue; Discussant: David Bergin, Missouri

THURSDAY APRIL 24

55.48: EFFECTS OF TIME PERSPECTIVE ON STUDENT MOTIVATION: CURRENT THEORY, INTERNATIONAL RESEARCH AND APPLICATION

8:15 --10:15: Sheraton, Chicago Ballroom 8, Ballroom Level

A Model of Future-Oriented Motivation and Self-Regulation -- R. Miller, Oklahoma; S. Brickman, Southwestern Oklahoma State Univ.
Academic Delay of Gratification, Future Goals, and Self-Regulated Learning -- Hefer Bembenutty, CUNY; Stuart Karabenick, Eastern Michigan Univ.
Gender Differences in Representations of the Future: Links to Motivation -- Barbara Greene, Teresa DeBacker, Univ. of Oklahoma
The Future Motivates: Experimentally Manipulated Utility Influences Performance Through Motivated Behavior -- Willy Lens, Joke Simons, Siegfried Dewitte, Maarten Vansteenkiste, Univ. of Leuven-Belgium
How Future Goals Enhance Motivation and Learning in Multicultural Classrooms -- Karen Phalet, Utrecht Univ.; Willy Lens, Univ. of Leuven-Belgium
Chair: Douglas Kauffman, Univ. of Oklahoma; Jenefer Husman, Arizona State; Discussant: Dennis McInerney, Western Sydney Univ.

55.52: INQUIRY ON TRANSACTIONS AMONG MOTIVATIONS AND EMOTIONS IN EDUCATION

8:15 --10:15: Swissotel, Grand Ballroom 2, Ballroom Level

Investigating Transactions Among Approach/Avoidance Motives, Emotions and Emotional Regulation During Testing -- Paul Schutz, Jessica DeCuir, Rebecca I. Garcia, Lori Aultman, Univ. of Georgia
Motivation, Affect, and Cognitive Processing: What Role Does Affect Play? -- Elizabeth Linnenbrink, Univ. of Toledo; Paul Pintrich, Univ. of Michigan
Exploring Students' and Teachers' Emotions and Motivation using Experience Sampling with Classroom Observations -- Debra Myer, Elmhurst College; Amy Schweinle, Julianne Turner, Notre Dame
Positive and Negative Affect Experienced in the Classroom in Relation to Goal Frustration and Goal Facilitation -- M. Boekaerts, Leiden Univ.
Control-Value Theory of Academic Emotions: Implications for the Motivational Determinants of Students' Emotions in the Domain of Mathematics and Statistics -- Reinhard Pekrun, Andrea Barrera, Thomas Goetz, Markus Maier, Univ. of Munich; Raymond Perry, Univ. of Manitoba
Chairs: J. Turner, Southwest Education Development Laboratory; Paul Schutz, Georgia; Discussant: Martin Covington, Univ. of California at Berkeley

57.19: ISSUES IN MOTIVATIONAL TRAINING AND PRACTICE

10:35 --12:05: Sheraton, Superior A, Level 2

Teacher Attributional Responses to Students With Attention-Deficit Disorder Who Fail -- J. Wood, Pittsburg State Univ.; S. Benton, Kansas State
Expectancies and Values in HIV/STD/Pregnancy Prevention Education -- Eric Anderman, Pamela Cupp, Baishakhi Banerjee, Univ. of Kentucky
Effect of Choice, Context, and Personalization on Activity Level, Motivation, and Learning in Children with Attention Deficit Hyperactivity Disorder -- Jennifer Bergeron, Patricia Ashton, Univ. of Florida
Relation of Motivational Beliefs and Self-Regulatory Processes to Homework Completion and Academic Achievement -- Hefer Bembenutty, Barry Zimmerman, CUNY
Chair: Robert Bangert-Drowns, Univ. at Albany/SUNY; Discussant: Avi Kaplan Ben Gurion, Univ. of the Negev

57.21: THE DYNAMIC INTERPLAY OF STUDENTS' EMOTIONS, MOTIVATION, AND SELF-REGULATION WITHIN CLASSROOM CONTEXTS

10:35 --12:05: Sheraton, Ontario, Level 2

An Ideographic Investigation of Students' Learning Processes throughout a Semester, from an Emergent, Dynamical Systems Perspective -- J. Turner, Southwest Educ. Development Laboratory; R. Waugh, Univ. of Texas
Students' emotions in the mathematics classroom: a situated and process oriented analysis. -- Peter Op 't Eynde, Erik De Corte, Univ. of Leuven
Emotions and Classroom Talk: Toward a model of the role of emotions in students' experiences of classroom discussions. -- S. Lee Do, D. Schallert, Texas
Interest and emotions. -- Suzanne Hidi, Univ. of Toronto
Students' academic emotions and their flow experiences, interest, motivation to learn, and engagement in academic tasks. -- Reinhard Pekrun, Thomas Goetz, A. Zirngibl, Univ. of Munich; Raymond Perry, Univ. of Manitoba
Chair: P. Schutz, Georgia; J. Turner, Southwest Educ. Devel. Laboratory

60.16: DEVELOPMENTAL PERSPECTIVES ON TEACHING

12:25 --1:55: Swissotel, Alpine 2, Ballroom Level

Developmental Changes in Teachers' Use of Higher-Order Thinking and Content Knowledge -- Bruce Torff, Hofstra
How Exemplary and Typical Early-Primary Teachers Start the Year -- Catherine Bohn, Alysia Roehrig, Michael Pressley, Notre Dame
Views of Algebra Development Among Pre-Service Teachers with Advanced and Basic Mathematics Knowledge: Evidence for Expert Blind Spot -- Mitchell Nathan, Univ. of Colorado; Anthony Petrosino, Univ. of Texas
Assessing the Effects of Mentoring on Beginning Early-Primary Teacher Effectiveness, Student Engagement, and Literacy Achievement -- Alysia Roehrig, Catherine Bohn, Notre Dame
Chair: Bradford Woods, Maryland; Discussant: Barbara McCombs, Univ. of Denver Research Institute

60.18: THE RELATIONSHIP BETWEEN STUDENTS' EPISTEMOLOGICAL BELIEFS, COGNITION, AND LEARNING

12:25 --1:55: Hyatt, Water Tower, West Tower - Bronze Level

Epistemological Beliefs Expressed in the Classroom Discussion -- Judy Radigan, Univ. of Houston
The Relationship Between Epistemological Beliefs and Learning Styles -- James Schreiber, Southern Illinois Univ.; David Shinn, John Wood Community College; Gail Weems, The Univ. of Memphis
Epistemological Beliefs as Predictors of Mathematical Problem Solving Beliefs -- M. Schommer-Aikins, Orpha Duell, Rosetta Hutter, Wichita State
Students' Mathematics-Related Belief Systems: Design and Analysis of a Questionnaire -- Peter Op't Eynde, Erik De Corte, Center for Instructional Psychology and Technology
When Girls Value Mathematics as Highly as Boys: An Analysis of Junior-High Students' Mathematics-Related Beliefs -- Erick DeCorte, Peter Op't Eynde, Center for Instructional Psychology and Technology
Chair: B. Hofer Middlebury College; Discussant: L. Bendixen UNLV

65.18: DOES EDUCATIONAL PSYCHOLOGY STILL HAVE A ROLE TO PLAY IN TEACHER EDUCATION?

4:05 --5:35: Sheraton, Ontario, Level 2

Does Educational Psychology Still Have a Role to Play in Teacher Education? Lord, I hope so. -- Peter Winograd, Univ. of New Mexico
The Role of Educational Psychology in Advancing Literacy Instruction -- Michael Pressley, Michigan State

The Role of Educational Psychology in Teacher Education: Understanding and Using Technology -- Valentina McInerney, Univ. of Western Sydney
The Role of Educational Psychology in Teacher Education: Students with Disabilities -- Joan Erickson-Rankin, Nebraska
The Role of Educational Psychology in Teacher Preparation: What Pre-Service Teachers Tell Us -- Terri Flowerday, Univ. of New Mexico
Educational Psychology's Future: Do We Really Believe that There's Nothing So Practical as a Good Theory? -- Roger Bruning, Univ. of Nebraska

FRIDAY APRIL 25

68.25: MOTIVATIONAL ISSUES IN ADOLESCENCE

8:15 --9:45: Sheraton, Sheraton Ballroom 3, Ballroom Level
Using goal structures and goal orientations to predict adolescents' motivation and procrastination in mathematics -- C. Wolters, Univ. of Houston
The Longitudinal Contribution of Motivational Beliefs and Goals to Academic Achievement in Urban Minority Students Transitioning to High School -- S. Monoi, Joyce Long, Ohio State; P. Karen Murphy, Pennsylvania State
Quantity of motivation & qualities of classrooms: A person-centered comparative analysis of cheating in high school -- J. Stephens, R. Roeser Stanford
On identity and achievement goals in early adolescence: Patterns, dynamics, and relation to educational outcomes -- Robert Roeser, Aisha Lowe, Rita Sattler, Hunter Gehlbach, Karen Strobel, Stanford
 Chair: David Bergin, Missouri; Discussant: Judith Meece, UNC-CH

68.26: WHAT ARE STUDENTS SELF-REGULATED ABOUT? TASK FEATURES, CONTEXTS AND UNDERSTANDING AS CONDITIONS FOR SELF-REGULATED LEARNING

8:15 --9:45: Sheraton, Michigan A, Level 2
Tasks as Contexts Designed to Support Self-Regulated Learning -- Dianne Jamieson-Noel Simon, Fraser Univ.
Examining Features of Tasks and Their Potential to Promote Self-Regulated Learning -- N. Perry, L. Phillips, J. Dowler Univ. of British Columbia
Classroom Cultures for SRL: Promoting Learner-Centered Classrooms Through Student-Focused Teaching Strategies & Reflective Practice -- Mary Anne Doucette, Concordia Univ.
Task Understanding and SRL: Exploring Sources and Dimensions of Graduate Students' Understandings About a Complex Writing Task -- Vivek Venkatesh, Allyson Hadwin, Lori Wozney, Concordia Univ.
Exploring the Dynamic Interplay Between Students' Emerging Task Understanding and Instructional Scaffolds -- Allyson Hadwin, Vivek Venkatesh, Lori Wozney, Concordia Univ.
 Discussant: Philip Winne, Simon Fraser Univ.

69.19: CONCEPTUAL CHANGE AND BELIEFS

10:35 --12:05: Hyatt, Stetson Suite F, West Tower - Purple Level
Knowledge and Beliefs: Empirical Investigation of Conceptual Difference -- Gale Sinatra, Ralph Reynolds, Tina Jacobson, UNLV
Conceptual Change is Persuasion: A Theory and an Empirical Study -- Joanna Garner, Peggy Van Meter Penn State Univ.
Redefining the Muse: Self-Regulatory Aspects of Creative Behavior -- Pamela Way, Univ. of Texas
Notions of the Mind and their Effect on Learning Styles: A Factor Analytic Study -- Gopakumar Venugopalan, Asghar Iran-Nejad, Univ. of Alabama
 Chair: D. Rudmann Univ. of Illinois; Discussant: Robert Stahl, Arizona State

69.21: ENHANCING HIGHER ORDER THINKING AND LEARNING IN AP PSYCHOLOGY AND STATISTICS

10:35 --12:05: Sheraton, Michigan A, Level 2
The Context, Theory, and Scientific and Educational Importance of the Presented Research -- Robert Sternberg, Yale
Design and Method of the Presented Research -- Elena Grigorenko, Yale
Results and Discussion: Psychology -- Linda Jarvin, Yale
Results and Discussion: Statistics -- Steven Stemler, Yale
 Chair: Robert Sternberg, Yale; Discussant: Thanos Patelis, College Board

69.23: FROM THE COGNITIVE TO THE SOCIAL

10:35 --12:05: Swissotel, Grand Ballroom 1, Ballroom Level
The Evolution of Group Dynamics and Learning in Peer-Directed Groups -- Noreen Webb, Nicole Kersting, Marsha Ing, Kariane Nemer, UCLA
Writing Arguments and Counterarguments: Do Goals and Need for Cognition Overcome the My-Side Bias? -- Michael Nussbaum, CarolAnne Kardash, Gregg Schraw, UNLV

Patterns of Participation in Fluency-Building Experiences in a High-Tech Community: Implications for Bridging Divides by Design -- Brigid Barron, Caitlin Martin, Emma Mercier, Kristen Pilner, and Mathias, Stanford
Learning from Self-Directed Versus Other-Directed Explaining -- Rod Roscoe, Univ. of Pittsburgh
 Chair: E. Schaeffer, Stanford; Discussant: N. Miyake, Chukyo Univ.

70.19: MENTAL MODELS AND STRUCTURES

12:25 --1:55: Hyatt, Stetson Suite F, West Tower - Purple Level
The Influence of Prior Content Knowledge & Graphical Literacy Skills on Data Interpretation -- P. Shah, E. Freedman, P. Watkins, Michigan
Using Causal Influence Diagrams to Assess Progress of Learning in Complex Domains: An Exploratory Study in Instructional Design -- Deniz Eseryel, Syracuse
A Case Study of Developing Mental Models Through Design -- Lisa Tsuei, Alyse Hachey, John Black Teacher College
Transfer of Runnability from Analogies to Explanatory Models in Science -- John Clement, Univ. of Massachusetts
 Chair: M. Nathan, Univ. of Colorado; Discussant: R. Azevedo, Maryland

72.13: CURIOSITY, CREATIVITY AND COMPLEX LEARNING

2:15 --3:45: Swissotel, Alpine 1, Ballroom Level
Creativity Training: Evidence for Domain Specificity -- Gayle Dow, Indiana Univ.; Richard Mayer, Univ. of California, Santa Barbara
Goal Setting, Cues, and Self-Evaluative Feedback during Acquisition of a Procedural Skill: Empowering Students' Learning during Independent Practice -- Anastasia Kitsantas, George Mason; Robert Reiser, Jessica Doster, Florida State Univ.
The Role of Co-Regulated Learning During Students' Understanding of Complex Systems with Hypermedia -- Roger Azevedo, Jennifer Cromley, Diane Seibert, Myriam Tron, Maryland
Defining and measuring the love of learning -- Terry McFarlane, Univ. of Colorado at Denver
 Chair: M. Pyryt, Univ. of Calgary; Discussant: W. Bart, Univ. of Minnesota

72.17: REVISITING SELF-FULFILLING PROPHECIES IN A HIGH STANDARDS/HIGH STAKES ENVIRONMENT

2:15 --3:45: Sheraton, Ontario, Level 2
An Expectation Perspective on Current Federal Initiatives -- Jere Brophy, Michigan State
Societal Expectations for erican Youth: Numerous but Contradictory -- Sharon Nichols, Thomas Good, Univ. of Arizona
Underestimating the Potential of Children: Contradictions Between Policy and Need -- Rhona Weinstein, Univ. of California, Berkeley
The Co-Construction of Low Achievement -- Joan Cone, West Contra Costa County School District
 Chair: Rhona Weinstein, Univ. of California, Berkeley; Discussant: Denise Alston, National Education Association

72.39: IS AUTONOMY IMPORTANT FOR NON-WESTERN STUDENTS? EXAMINING AUTONOMY AS A UNIVERSAL HUMAN PROPENSITY

2:15 --3:45: Sheraton, Sheraton Ballroom 3, Ballroom Level
Autonomy and Psychological Well Being: Are They Universally Related Across Different Cultures? -- Valery Chirkov Univ. of Saskatchewan, Saskatoon; Richard Ryan, Univ. of Rochester
The Values of Autonomy and Relatedness Among High-School Students: A Study in 19 Cultures -- Ariel Knafo, Ben Gurion Univ.; Shalom Schwartz, Hebrew Univ. of Jerusalem
Cross-Cultural Investigations of Intrinsic and Extrinsic Aspirations -- Tim Kasser, Knox College
Toward a Differentiated Cross-Cultural Conceptualization of Autonomy: Active Goal/Ideal Formation, Temperament/Interest Realization, and Choice in Learning -- Idit Katz, Yaniv Kanat-Maymon, Avi Assor, Ben Gurion Univ.
 Discussant: Avi Assor, Ben Gurion Univ.

Fear of Failure: Consequences and Development

Andrew Elliot

R. Snow Early Career Contributions Award
2002 Address Extended Abstract

In general, my research focuses on approach and avoidance motivation. In my talk, I will be focusing primarily on one form of avoidance motivation - fear of failure. I will discuss the consequences of fear of failure, and then I will discuss how fear of failure develops. But first, it is important to begin by establishing some definitions and drawing some distinctions between different types of motivational constructs.

Fear of failure may be defined as the dispositional tendency to orient toward the possibility of failure in achievement situations. There are three things to note about this definition: First, fear of failure is an achievement motive, meaning it is relevant to situations in which competence is evaluated. Fear of failure is the avoidance achievement motive; need for achievement is the approach achievement motive that involves orienting toward the possibility of success. Second, fear of failure is a general disposition, meaning a person high in fear of failure tends to orient toward the possibility of failure in all types of achievement situations. Third, fear of failure is affectively grounded, meaning a person high in fear of failure orients toward the possibility of failure because failure evokes shame.

It is important to distinguish motive dispositions, like fear of failure, from goals. Goals differ from motives in two ways: First, goals are concrete and focus on a specific task. Second, goals are cognitively-based rather than affectively-based; they are cognitive representations of possible outcomes. There are four primary types of achievement goals, three of which I will focus on today: Mastery-approach goals which focus on developing competence and task mastery, performance-approach goals which focus on attaining competence relative to others, and performance-avoidance goals which focus on avoiding incompetence relative to others.

Most motivational theorists have assumed that fear of failure is a direct predictor of negative outcomes, but little evidence is available to support this assumption. In our work on the hierarchical model of achievement motivation, we have posited that fear of failure predicts achievement outcomes, but that it has an indirect influence on these outcomes through its affect on achievement goal adoption. Specifically, in several studies now we have found that fear of failure is a positive predictor of performance-avoidance goals, and that these goals, in turn, are direct negative predictors of outcomes such as exam performance and intrinsic motivation.

These data clearly indicate that fear of failure is a vulnerability in achievement situations and, as such, it is important to uncover its origins. One place to begin in this quest is to examine whether fear of failure really is linked to shame, as has been posited for many years but never empirically documented, and, if so, how failure and shame get associated for those high in fear of failure.



A graduate student, Holly McGregor, and myself have recently conducted two studies designed to document the failure-shame association for those high in fear of failure. In Study 1, we assessed fear of failure in college students, had them take an exam, gave them accurate feedback, had them evaluate their performance, and then had them rate their shame and several other negative emotions. Our results indicated that subjects high in fear of failure who thought

that they had done poorly reported more shame than any other group of subjects; furthermore, an extensive series of analyses clearly indicated that shame was the unique affective response to failure for those high in fear of failure. In Study 2, we replicated these findings in a laboratory context, and additionally demonstrated that high fear of failure subjects who failed experienced more global self-derogation and felt less worthy of love than any other group of subjects.

Another graduate student, Todd Thrash, and myself have explored how shame gets linked to failure in the fear of failure motive. We had college students complete measures of fear of failure and their perceptions of the degree to which their parents withdrew love from them when they failed during their elementary school years; subjects' parents also completed the fear of failure measure. We found evidence of the intergenerational transmission of fear of failure: high fear of failure mothers had high fear of failure children, and high fear of failure fathers had high fear of failure children (there were no differences in these relationships as a function of child gender). Furthermore, love withdrawal partially mediated the intergenerational transmission effect for mothers, but not for fathers. That is, mother fear of failure was a positive predictor of love withdrawal, love withdrawal was a positive predictor of child fear of failure, and these mediational paths accounted for a significant amount of the direct mother-child fear of failure relationship. Love withdrawal did not mediate the father-child fear of failure relationship; it appears that fathers pass their fear of failure to their children through some other means such as global negative comments or physical punishment upon failure. As a side note, in this research we also found that mother and father fear of failure positively predicted their child's adoption of performance-avoidance goals for their schoolwork; this relationship was fully mediated by the passing of fear of failure from parent to child.

The final study that I will present is a cross-sequential study of the intergenerational transmission of fear of failure with elementary school kids. The sample comprised 360 1st, 3rd, and 5th grade students in a school district close to Rochester, New York. We had parents and children complete measures of fear of failure, along with measures of general perceived competence. The results showed that mother-child con-

(Continued on page 10)

(Continued from page 9)

cordance in fear of failure is present at 5th grade, at 3rd grade, and even at 1st grade, whereas father-child fear of failure concordance was not present even at 5th grade and, therefore, must emerge during the middle or high school years. These findings held when general perceived competence (of both parents and children) was controlled. In the longitudinal piece of this research, we are following the 1st graders through the 5th grade, and looking at love withdrawal and several other possible mediators of the mother-child fear of failure concordance.

So, in sum, fear of failure is a negative disposition that affects achievement behavior by influencing the goals that people pursue in achievement situations. Fear of failure is grounded in shame, which means that for those high in fear of failure, their affiliation and achievement worlds are inextricably intertwined. Both mothers and fathers pass their fear of failure along to their children. Mother-child concordance emerges early, in part through love withdrawal processes. The processes through which fathers pass on their fear of failure are unclear at present.

Fear of failure, and avoidance motivation more generally, warrant more attention in educational environments, because it has a pervasive negative impact on the achievement outcomes of children. There are many things that teachers and administrators can do in this regard, and importantly, from our research it looks as though one of the most important foci for intervention will need to be the home front. But alas, that is a topic for another talk.

Don't Forget to Mark Your Calendar

**APA's Annual Conference
Toronto, Canada
August 7 to 10, 2003**

For more information visit:
www.apa.org/convention/

(Continued from page 1)

on external-validity criteria. On the internal-validity side of the ledger, however, the design experiment can be taken to task on methodological grounds, among others. In my view, design experiments can play an informative role in preliminary stages of instructional development research just so long as when reporting and speculating about a given study's findings the design experimenter remembers that the research was *designed* to be *preliminary*.

All the Research World's a Stage

With this backdrop, Angela O'Donnell and I ask: "What to do about educational research's credibility gaps?" Our vision of how to close one gigantic credibility gap, while at the same time better informing instructional practice, is presented in a "stage" model of educational intervention research. Stages 1 and 2 of the model are very familiar to educational-psychological researchers, as studies in those traditions comprise the vast majority of educational research as we know it. Stage 1 includes preliminary ideas, observations, hypotheses, and "pilot" research. Stage 2 components of the model are encompassed by controlled laboratory experiments, on the one hand, and classroom-based demonstrations and design experiments, on the other. Stage 2 research also includes observational studies of master teachers deploying their "craft knowledge" in the longer-term teacher-researcher collaborative investigations recently called for by James Hiebert, Ronald Gallimore, and James Stigler. Stage 1 and Stage 2 studies are crucial to developing an understanding of the phenomena that inform classroom practice but that then must be rigorously, complexly, and intelligently evaluated in Stage 3. The accumulation of classroom-based scientifically credible evidence is precisely the function of what we call the "randomized classroom trials" stage of the model. As in medical research, this stage consists of an examination of the proposed treatment or intervention under realistic, yet carefully controlled, conditions. Foremost among these conditions is the inclusion of multiple classrooms that are randomly assigned to receive either the designated instructional intervention or an acceptable alternative, something that is imperative for combating "evidence in-credibility" concerns arising from both methodological and statistical features of the research.

In educational intervention research, one of the biggest impediments to securing scientifically credible evidence relates to the manner in which classroom-based studies are typically conducted and analyzed. The critical issue here concerns the need for what in the medical and prevention research literature is called "cluster" randomization and analysis when the associated research conclusions and inferences are applied to *group*-implemented interventions. A similar major scientific credibility problem pertains to researchers ignoring teacher and classroom effects, something that has consequences akin to those articulated by counseling psychology methodologist, Bruce Wampold, in his discussion of *therapist* effects - as persuasive alternative explainers of *therapy* effects - when accounting for psychotherapy outcomes.

(Continued on page 11)

Conducting randomized classroom trials studies is not an easy task. Nonetheless, such studies are not impossible (or even implausible) to conduct; and the commonly offered objections to them are not difficult to counter - as Thomas Cook and Monique Payne have effectively demonstrated recently with nine such contentions. Consequently, educational researchers must begin adding randomized classroom trials studies to their investigative repertoires to enhance the scientific credibility of their research and research-based conclusions. Conducting randomized classroom trials studies is not for all of the people all of the time - only when an instructional intervention is approaching a validating, prescribing, or adopting phase. My sentiments exactly are reflected in a 2002 book, *Evidence matters: Randomized trials in education research*, edited by Frederick Mosteller and Robert Boruch. In education-related contexts, dozens of exemplary randomized classroom-, school-, and community-trials intervention research can be found: the Tennessee class-size study, the Hutchinson smoking-prevention project, the *Fast Track* conduct problems prevention study, and certain of the *Success for All* evaluations, to name just a few.

The “Evidence-Based” Movement: Three Cheers for Credible Educational Intervention Research!

The spirit of scientifically credible research is part and parcel of what has come to be known as the “empirically supported” or “evidence-based” movement in many research disciplines. The movement is well represented in the evidence-based guidelines for effective interventions that have been formulated by numerous task forces, councils, foundations, and collaborations, as well as in the considerations of various summer institutes, international conferences, and federal funding agencies. Evidence-based interventions are likely to bear directly on a related problem as well: how to change the lay public's perceptions of, and confidence in, educational research. Angela O'Donnell has commented on the public's prevailing perceptions of “everyday commonsense” expertise and knowledge in the field of education, in contrast to their perceptions in more technical and scientific fields. Creating a different mindset about authoritative knowledge in education, through the accumulation of theoretically derived principles that in turn are credibly researched and validated, would go a long way toward turning instructional authorities and their prescriptions that are *suspected* into those that are *respected*.

Four Slices of Professional Advice

I conclude with some thoughts directed toward the next generation of educational-psychological researchers, our current graduate students:

- Serendipity do: Be on your toes to recognize and capitalize on serendipitous research moments!
- Opt for passion over fashion: Do the research that you're most passionate about, even if it's not “cool” at the moment or on today's federal-funding bandwagon!
- Perseverance pays: Don't abandon what you believe to be a promising line of investigation because of initially disappointing or inconclusive experimental outcomes!
- A little humility wouldn't hurt: Be generous in ex-

tending appropriate credit to the colleagues, students, and other players who have been integral to your professional attainments!

Note. Substantial portions of the talk upon which this abstract is based appear in the following:

Levin, J. R., & O'Donnell, A. M. (1999). What to do about educational research's credibility gaps? *Issues in Education: Contributions from Educational Psychology*, 5, 177-229.

Levin, J. R., O'Donnell, A. M., & Kratochwill, T. R. (2003). Educational/psychological intervention research. In I. B. Weiner (Series Ed.) & W. M. Reynolds & G. E. Miller (Eds.). *Handbook of psychology: Vol. 7. Educational psychology* (pp. 557-581). New York: Wiley.

Division 15: Educational Psychology Outstanding Dissertation Award

Division 15 (Educational Psychology) of the American Psychological Association is seeking nominations for the year 2003 Outstanding Dissertation Award. Dissertations eligible for the 2003 award are ones that were successfully defended during calendar years 2001 and 2002 (from 1/1/01 through 12/31/02). Nominations must be received by Wednesday, June 25, 2003 to be eligible for consideration. Nominations are accepted on a continuing basis and those not meeting the June 25, 2003 deadline will be eligible for consideration in 2004, provided the dissertation was successfully defended in calendar years 2002 or 2003. (Note that this deadline is earlier as compared with the last two years.)

The recipient of the annual Dissertation Award receives a plaque of recognition, automatic acceptance to present the dissertation at the next APA annual meeting (August 2004 for the 2003 award), and a \$500 cash stipend. Nominees must be a member, student member, or affiliate of Division 15. Applicants who are not members or affiliates may apply for membership when submitting materials for the award.

Nominations must include a letter of recommendation and 8 copies of a 1500 word summary. In addition to the summary, two (2) additional pages of figures or tables may be included. A narrative autobiography of 250 words or less is also required.

The guidelines for submission, evaluation criteria, and a form for the cover page can be requested from the chair of the Award committee. Inquiries and nominations are to be submitted to:

Maria Pennock-Roman, Chair, Dissertation Award Committee
MPR Psychometric & Statistical Research & Consulting
539 Matilda Ave.
PO Box 1142
Lemont, PA 16851-1142
(814) 861-3904, mariyin@aol.com

NEP/15

NEWSLETTER OF EDUCATIONAL PSYCHOLOGY
DIVISION 15 / AMERICAN PSYCHOLOGICAL ASSOCIATION
750 FIRST STREET N.E., WASHINGTON, D.C. 20002-4242

**Application for 1-Year Membership in APA
Division 15: Educational Psychology**

Name: _____

Institution: _____

Mailing address: _____

E-mail address: _____

Phone number () _____

- ☐ APA Dues-Paid Member \$9.00
(APA ID# _____)
- ☐ Non-APA Member \$25.00
(affiliate of the Division only)
- ☐ Student Member \$10.00
(include proof of student status)

Send completed application and membership fee to
(Make checks payable to *DIVISION 15-APA*):

Mr. Keith Cooke
American Psychological Association
Division of Member Services
750 First Street, NE
Washington, DC 20002-4242

FIRST CLASS MAIL
US POSTAGE
PAID
WASHINGTON, DC
PERMIT #6348