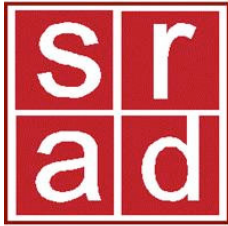


**ADULT DEVELOPMENT**  
**OF**  
**THE SOCIETY FOR RESEARCH IN ADULT DEVELOPMENT**

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The international membership of the Society for Research in Adult Development (SRAD) includes people from all disciplines who are interested in positive adult development. Positive adult development concerns itself with development starting in late adolescence and continuing throughout life. The focus is on the changes and expanded capabilities that improve the quality of life of individuals as they adapt to the challenges of adulthood's ages and stages.

For practitioners, the Society offers an opportunity to discover the latest ideas in the field and to explore the application of those ideas to everyday problems and challenges. For academic researchers and theoreticians, the Society offers the opportunity to share ideas, often in a deeper way, with other researchers and theoreticians through discussion and the exchange of papers. Researchers and theoreticians are able to explore the application of their ideas to the problems and opportunities of daily life by working on them with practitioners from many fields.

The Society supports diversity within its membership. Such diversity includes differences in professional status, academic discipline, occupation, race, culture, gender, and sexual orientation. We extend an invitation to all those interested in this field to join us, whether their context is adult development in the individual or whether it is development within the framework of families, work, school, or communities.

For more information, including the Society's history, visit its website, <http://adultdevelopment.org>.

**CONTENTS**

NEXT ISSUE	1
NEW BOOKS? NEW ACCOMPLISHMENTS?	2
SRAD BUSINESS MEETING	1
SRAD'S APPROACH TO FACILITATING AND REPORTING DISCUSSIONS	1
SRAD SYMPOSIUM PROGRAM	2
SRAD'S LISTSERVE	2
2010 SYMPOSIUM	2
2011 SYMPOSIUM	12
PICTURES SRAD 2011	19

**NEXT ISSUE**

The next issue of Adult Developments is planned for November and will include articles, book notices, and other news. Submissions are welcome. Instructions for submission are below.

**2011 SRAD MEMBERSHIP BUSINESS MEETING**

The annual SRAD Business Meeting took place on

March 29, 2011, from 5-6pm. Michael Commons, Dorothy Danaher White, Michel Ferrari, Alice Cicero, and Carol Yoder employing their academic department resources to help SRAD. Also, Dorothy White and Carol Yoder volunteered to edit this Bulletin. Matters discussed included Michel Ferrari and Carol Yoder noting SRAD business meetings provide an opportunity for all Symposium participants to exercise their membership in the Society, build the organization, and develop a sense of the field's community. These are not stodgy meetings!

**SRAD'S APPROACH TO FACILITATING AND REPORTING DISCUSSIONS**

The form of the SRAD meeting has evolved over many years. The goal has been to stage meetings metasystematically. Meetings are conducted in a conference table format, placing everyone on equal footing. Sessions have three components:

1. Participants have five minutes to introduce their presentations to the group at the beginning of each session. This lets people know with which posters they might like to spend more time, and gives an initial overview of the session to the audience.

2. Posters. Posters are set up with handouts on the periphery of the meeting room. Participants and presenters have time for discussion and questions.

3. The final part of each session is facilitated group discussion, allowing for the integrative discussion of the commonalities and differences among the papers in the session. Facilitated group discussions replace discussants and allow for integrative, metacognitive discussion of the commonalities and differences among the papers in the session.

### SRAD MEMBERSHIP, REGISTRATION, AND DUES NEWS

Among the benefits of membership in SRAD are:

- **you** become part of a network of people interested in and working in the field of positive adult development.
- **you** receive the newsletter of the Society, *Adult Development*.
- **you** receive the Call for Papers for SRAD's annual symposia and other communiqués.
- **you** are eligible to submit your work for publication in the *Adult Development*.

SRAD's membership year is from the beginning of one annual symposium to the beginning of the one the following year. The symposium registration fee includes SRAD membership so that symposium attendees are automatically members for the year following the symposium they attend.

Find the combined form for both SRAD membership and for membership plus symposium registration at [http://adultdevelopment.org/Mail\\_in%20registration%20form.txt](http://adultdevelopment.org/Mail_in%20registration%20form.txt) Sometimes SRAD people lose track of whether their membership is current—whether they have paid their dues for the current year. To check your dues status, please contact [admin@adultdevelopment.org](mailto:admin@adultdevelopment.org).

### SRAD'S LIST SERVE

SRAD has an open list serve, and you are invited to join. Visit <http://groups.yahoo.com> and subscribe to the list [adultlevel@yahoogroups.com](mailto:adultlevel@yahoogroups.com)

### NEW BOOKS? NEW ACCOMPLISHMENTS?

SRAD Members are invited to submit information about their forthcoming books and other accomplishments for future issues of *Adult Development*. Send them to Carol Yoder at [cyoder@trinity.com](mailto:cyoder@trinity.com).

*The 25th Adult Development Symposium  
Society for Research in Adult Development  
(Preconference meeting of the Society for  
Research on Adolescence)*

*Sofitel Hotel  
Philadelphia, PA  
March 9-10, 2010*

### *Session 1: Student Learning and Development*

#### **Carol Y. Yoder (Trinity University) Comprehension and reasoning about belief-consistent and belief-inconsistent political commentary in a traditional college-aged sample**

How well do college students reason and learn information inconsistent with their beliefs? In this series of four studies students determined which issues would be most effective for a hypothetical Senate candidate to include in a successful campaign. After assessing attitudes toward several topical issues (e.g., health care reform, immigration reform, stem cell funding) left- and right-slanted persuasive statements were presented in a random order, and comprehension of particular facts and perspectives related to these issues were assessed. We found that participants were better at reasoning when confronted with information contrary to their beliefs and that they learned belief-inconsistent information better than when learning information more consistent with their beliefs. However, this relationship was influenced by individual differences and age even in a traditional college-aged sample. The implications for dual process development theory, prefrontal cortical development, and real-world applications will be discussed.

#### **Darlene E. Crone-Todd (Salem State College) The Effect of mastery-based contingencies on undergraduate progress in a research methods & statistics**

Typically, undergraduate students demonstrate high rates of anxiety or fear when taking courses involving statistics. Completion of work and mastery of the subject matter is hampered by low engagement on the part of students. In this 3-year study, students in three different sections were exposed to either a) no contingencies, or b) contingencies for completing work in an online mastery-based program. The results clearly suggest that when contingencies are in place which demand work be completed prior to test-taking, that students complete all of the work in the course, and learn more of the material. The implications of mastery-based learning for future research will be discussed.

**Darlene E. Crone-Todd (Salem State College) and  
Joanna Gonsalves (Salem State College)  
The use of the Model of Hierarchical Complexity in  
scoring senior-level undergraduate writing samples**  
Use of Bloom's taxonomy has been ubiquitously used in education at all levels. Recent developments in the assessment of higher-order thinking skills on the part of college students has spurred interest in using it at higher educational levels. Recent research indicates that parts of

the taxonomy produce high inter-rater reliability, but that it suffers in other areas, perhaps due to no empirical basis for a hierarchy in the taxonomy. In the current study, assessment of students' writing in senior-level Psychology courses is assessed using the Model of Hierarchical Complexity. Inter-rater reliability, as well as level at which students write at this level will be presented, and contrasted with previous research on the taxonomy.

**Maria Sucupira Lins**

**(Universidade Federal Rio de Janeiro)**

**Adults' motivation and teachers' training curriculum  
This study focuses on adults' motivation concerning  
Psychology of Development as a subject in  
teachers' training course curriculum.**

Theoretical foundation is Anatrella's hypothesis states adults are people over 30 years because adolescence extends from 12 to 30 years. Thirty-two students had class during a semester where they read the same texts and had the same orientation. For the purpose of this study they were analyzed in two groups. 12 students in Group A: 30 to 49 years old students. 20 students in Group B: 18 to 29 years old students. It was observed that they preferred working in small groups inside their age groups. Group A showed greater interest and stronger motivation than Group B for all activities.

At the end of the course, scaled data (0-10) showed that the average score for group A was 7 and 5 for group B. The purpose of this work is to situate within a context the singular nature of the educational universe in the penitentiary system, revealing a brief overview of the Brazilian case, and in particular that of the state of Rio de Janeiro. For this purpose there is another problem: how do inmate students and teachers perceive the educational system in a prison-school? To discuss this, within the State School Mario Quintana, we must answer a question: what is the school community's view on adult education? The theoretical discussion was based on Paulo Freire, Moacir Gadotti and Jose Romão. These thinkers provided the basic foundation for the drafting two qualitative questions. In concluding, it is suggested that reality, participation and affectivity are three words inserted in the education of adults as carried out in the public schools located in penitentiaries.

**Rebecca Givens Rolland (Harvard Graduate School  
of Education)**

**Finding the through-line: Exploring the impact of an  
arts organization on adult development.**

Although research has suggested that adult arts education can assist participants in fulfilling a range of personal and professional goals, little is known about the nature of organizations that provide such education most effectively. What instructional practices and institutional cultures affect students' ability to develop in new directions and deepen their commitment to the creative process? This portrait study evaluates the supports provided by a non-profit creative writing organization,

utilizing instructor and student interviews and participant observation to create a more complex picture of the institution as a whole. A particular focus is placed on goals and challenges of community-building, professional development, and financial management. In my evaluation, I conclude that non-hierarchical relationships between teachers and students and a consistently "supportive but rigorous" atmosphere allow students the opportunity to take creative risks while maintaining respect for their own and others' differing experience levels and range of stylistic approaches.

**Eduardo R. Santos (University of Coimbra)**

**Life after High School: Socio-cognitive,  
affective, and demographic predictors of  
Portuguese high school seniors' expectations  
to enter college or work**

The purpose of the present study was to investigate the influence of socio-cognitive (career decision self-efficacy, vocational identity), affective (dispositional optimism), and demographic variables (age, gender, socio-economic status), in outcome expectations of transition pathways after high school: college; work; college and work. The sample includes 622 Portuguese high school seniors, 376 females and 246 males, ranging from 16 to 23 years old. Results of the logistic regression revealed that high scores in social-cognitive factors (career decision self-efficacy and vocational identity) are negatively associated to the expectation to enter the world of work, and positively associated to the success in making a transition to college. Socioeconomic status and vocational/technological training in high school are the major predictors of school-to work transition. Age and dispositional optimism are the major predictors for students who anticipate to both study and work after finishing high school. Implications of the results for career counseling interventions will be addressed.

**Garrett J. McAuliffe (Old Dominion University),  
Rebecca E. Michel (Old Dominion University),  
Margaret J. Jensen (Old Dominion University), Tim  
Grothaus (Old Dominion University)**

**Ethnocentrism challenged: A Study of cultural de-  
centering using subject-object and moral  
development theory.**

It is common for individuals to be ethnocentric; in fact it is universal in a pure sense. However, cognitive development theory poses the possibility of individuals being relatively culturally decentered. Personal epistemology might predict the nature of one's relationship to culture. In this session, the presenters will share results of a qualitative study in which individuals who were largely conventional thinkers were compared with those who were largely post-conventional. The comparison involved differences in the outcome of an intentional cultural de-centering exercise and subsequent course. Kegan's subject-object theory was the

basis for providing the "culture of contradiction" to individuals' cultural assumptions about gender, sexual orientation, religion, race, and social class. The researchers discovered differences between the two groups.

Session 2: Development of Moral Reasoning, Wisdom, and Higher Order Thought

**Dorothy Danaher White (Psychsource, Inc.)**

**Lessons from history: A Historical example of high level reasoning from a medieval knight lessons for modern leadership**

Although it is tempting to romanticize the past and to assume that knights were involved in simplistic exercises such as defending their own castles or laying siege develop systems of both military strategy/equipment as well as legal systems in order to succeed. The leaders and their knights who did not modernize, the Lancastrians, lost to those who did, the Yorkists. Overall, the pace of change in the Middle Ages and later the Renaissance might seem quite slow compared to our recent history, but the basic principles of leadership are the same.

**Michael Lamport Commons  
(Harvard Medical School)**

**Criteria for scoring paradigmatic order and stage 13**

Scoring of performance has always been a great problem, especially at the highest stages. This is because to do so requires reflection upon the stage being scored. As Arlin points out, this requires a next stage action. Therefore, a lot of support is needed to do scoring at the highest stages. One way to increase accuracy in scoring in this instance is to make sure that the Model of Hierarchical Complexity conditions for an action to constitute the next higher order are met. One needs to have the transition steps mapped out as well. This process will be illustrated with respect to scoring of the Paradigmatic Order. The Paradigmatic Order and Stage 13 integrates or discriminates how to fit metasystems together to form new paradigms:  $\Omega_1 \circ \Omega_2 = \Psi_a$ . There are a number of steps. The first step is to determine whether there are at least two metasystems that are being referred to. Second, one should score each metasystem for transition steps. This will make clear how fully explicated each metasystem is. Third, one has to find what paradigmatic action coordinates the two metasystems.

**James M Day (Universite catholique de Louvain),**

**Michael Lambert Commons (Harvard Medical School) and Andrew Richardson (DARE Institute)**

**New evidence for postformal stages in moral judgment and religious judgment Using the Model of Hierarchical Complexity: Stage, structure, and religious belonging**

This poster/paper presents data from recent research using standard measures of moral and religious reasoning, and questionnaires and analyses, including

Rasch analyses, associated with the Model of Hierarchical Complexity, to demonstrate that it is possible to confirm the existence of postformal stages in moral and religious reasoning. Drawing on research with hundreds of subjects in Belgium, England, and the United States, we show how postformal reasoning can be measured in these domains, and explore correlations between patterns of moral and reasoning judgment levels and belonging to religious groups. The research is associated with the Louvain-Harvard Research Project in Cognitive Complexity, Moral Reasoning, and Religious Cognition.

**Ulas Kaplan (James Madison University)**

**Moral development and moral sense: A Possible integration from a motivational perspective**

This study explores one of the possible ways of integrating developmental and evolutionary perspectives in moral motivation. In this process Kohlberg's stages of moral development have been reconceptualized as structures of motivation, rather than explicit reasoning. Considered this way, stages of moral development are closer to evolutionary formulations of moral sense than traditionally presented. These two perspectives have usually been considered in moral motivation. In this process Kohlberg's stages of moral development have been reconceptualized as structures of motivation, rather than explicit reasoning. Considered this way, stages of moral development are closer to evolutionary formulations of moral sense than traditionally presented. Although these two perspectives have usually been considered in opposition, relating them on the basis of motivational structures could provide insights into the complexity of moral judgment. Recent empirical evidence from a Self-Determination Theory perspective is discussed as revealing the operation of multiple stages of moral motivation in a way that is compatible with evolutionary formulations.

**Suzie Benack (Union College) and  
Thomas Swan (Siera College)**

**What can an understanding of adult moral development contribute to moral philosophy? The example of Gert**

When Kohlberg wrote 'From Is to Ought' he was addressing the common assumption among moral philosophers that facts about how people make moral judgments could not be relevant to the rightness of the judgments. In the last two decades, however, moral philosophers have increasingly turned to empirical study of people.

**Caroline Bassett (The Wisdom Institute)**

**Practical wisdom: A Challenge to conventional wisdom**

Wisdom, according to conventional wisdom, is abstract, elusive, and powerful. It is big. It is important. Only exceptionally developed people achieve wisdom.

However, wisdom is available to many of us much of the time if we know how to look for it and use it. That is because, contrary to conventional wisdom, wisdom is quite accessible – and also useful in our daily lives. It is eminently practical. It is how we can get out of or through difficult interpersonal situations in ways that usually work. In this poster session We will present my model of practical wisdom and its development with examples. We will show some ways that we all can become more adept at accessing and using our wisdom. Wisdom may be developmental, complex, and not learned in ten easy steps. At the same time, small daily wisdom is around us all the time. We can – and should - take more advantage of it. Wisdom is for everyone.

**Michael Lamport Commons (Harvard Medical School), Sara Nora Ross (Antioch University, Midwest), Jonas Gensaku Miller (University of California at Davis)**

**Why postformal stages of development are not formal, but postformal**

Kallio (1994), Marchand (2001, 2008) and Meyerhoff (2005) say postformal stage actions could still just be formal stage actions. Formal stage actions are characterized by empirical evidence and univariate linear logic (Commons, Trudeau, Stein, Richards, & Krause, 1998). A formal stage action contains only one relation. Using the Model of Hierarchical Complexity, it is only necessary to show that the systematic order actions cannot be reduced to formal.

Systematic order actions are sets of formal order actions:  $A = \{a, b\}$  where A is the higher order set of actions, and a and b are lower order actions that are elements of that set A. This creates the hierarchy because  $A \neq \{A, \dots\}$  --. Sets cannot be equal to their members. For example, consider the empty set  $\emptyset$ . Note that  $\emptyset = \{\}$  has no members. No members means there is nothing in it, and therefore,  $\emptyset = \text{nothing}$  How can  $\emptyset = \text{nothing}$  when  $\emptyset$  is a set, and therefore it is "some thing" Something cannot equal nothing. Therefore, the empty set, does not equal any of its members. Likewise, a higher order action cannot equal any lower order action from which it is are made.

Session 3: Wellbeing in Middle and Older Adulthood

**Theresa Mary Donovan Odell  
Reverend Celebrate Don**

**What is the possible connection between the angry, vengeful God and the current level of anxiety within our society?**

This paper will focus on the image of an angry, vengeful God within the Baby Boomer population and where it came from, how it may have impacted lives impairing function rather than supporting healing and how it might be transformed leading to a fuller, more peaceful life. The possible relationship between the image of an angry, vengeful God and anxiety as well as self abuse will be

explored and the use of Ritual and Symbol will be illustrated and analyzed as a means to break a stress response resulting from guilt and fear. Spiritual Needs for Wholeness: Belonging, Meaning and Purpose, Love, Creativity, Hope, and Forgiveness will be examined offering possibilities for a more complete integration of Body, Mind and Spirit along the Life Span. Case studies of clients from the acute care setting inclusive of their Personally Designed Spiritual Care Practices offering healing and hope will be shared and evaluated as well as interviews obtained in the development of this paper.

**MaryAnn Sutton, Grace I. L. Caskie  
(Lehigh University)**

**Mexican American older adults' self-rated health as a predictor of concurrent and later psychological and physical outcomes**

Lower self-rated health is associated with decreased cognitive ability, greater depressive symptoms, and increased mortality rates. However, few studies have examined the relationship of self-rated health to psychological and physical outcomes for Mexican American older adults. Using Hispanic EPESE data ( $N = 1,009$ ), we examined differences in depression, cognition, doctor visits, and number of co-morbid health conditions based on self-rated health (excellent, good, fair, poor) at baseline. One-way MANOVAs indicated significant differences between self-rated health groups for both baseline ( $p < .001$ ) and 11-year outcomes ( $p < .001$ ). Individuals self-reporting poor health at baseline had lower MMSE scores, higher depression, greater co-morbid health conditions, and more doctors' visits at baseline and, with the exception of MMSE, also at the 11 year follow-up (all  $p$ 's  $< .01$ ); self-reported excellent or good health resulted in better outcomes at baseline than self-reports of fair health. Self-rated health may be an important predictor of both concurrent and long-term mental and physical health.

**Karen VanderVen (University of Pittsburgh)  
Life cycle, life span, life course; ages, stages, phases:  
Reconceptualizing Erikson for the 21<sup>st</sup> century**

Erikson proposed his still widely used "8 Stages of Man" theory in 1950. Gender roles have changed and people live longer to name just a few. This poster session will present a reconceptualization of Eriksonian life course theory that recognizes these transformational changes. The presenter's new theory, based on an extensive literature review, interviews with life span experts and people of different ages, and an examination of Erikson's papers, will be outlined. In this new model, there are now 14 identifiable phases of the life course that have emerged through the presenter's research, most particularly in the adult years where greater differentiation of developmental phases is needed. Each phase is named in an Eriksonian tradition, e.g. "trust vs. mistrust" and Eriksonian concepts are applied to describe and interpret it. The model includes retention of still

viable Eriksonian phases, modification and redefinition of some Eriksonian phases, and description of some completely new ones that best seem to reflect the contemporary human life course.

**Tommy M. Phillips (Mississippi State University) and  
Joe D. Wilmoth (Mississippi State University)**  
**Keys to longevity: A Study of enduring African  
American marriages**

Most studies of African Americans focus on what's wrong rather than what's right, emphasizing problems rather than strengths. Research on African American marriages has followed this deficit perspective. Indeed, most studies of African American marriages leave one feeling fairly pessimistic regarding the prognoses of marriage. This is a study of enduring African American marriages. The focus of this research on African Americans examined marriages that last rather than those that fail. Participants include African American couples who have been married for at least 15 years. Although the study is still in the data collection phase, early qualitative results show promise for providing insights into "secrets" of marital longevity among participants.

**Jamila Bookwala (Lafayette College) and  
Brett Strouse (Lafayette College)**  
**Links between different types of social  
exchanges and late life wellbeing**

This study compared the role of exchanges with one's spouse and with other sources (non-spouse family and friends) in married older adults' wellbeing. Data were used from 1423 individuals aged 57+ years who participated in the National Social Life, Health, and Aging Project. Links were examined between positive and negative social exchanges with each source (measured using parallel measures) and three measures of wellbeing (life satisfaction, loneliness, and depressive symptoms). Regression models using socio-demographic variables and self-rated health as controls and in which spouse exchanges were introduced after controlling for the other kinds of social exchanges showed that spouse exchanges explained a larger proportion of unique variance in all three models of wellbeing. This pattern was confirmed with alternate models in which social exchanges with non-spouse family and friends were introduced after spouse exchanges. Results indicate that different forms of social exchanges are differentially associated with late life wellbeing.

**Joaquim A. Ferreira (University of Coimbra)**  
**Psychological well-being of Portuguese older  
adults: The Role of personality and  
demographic variables**

The purpose of the present study was to analyze the relationships between psychological wellbeing with extraversion, self-esteem, dispositional optimism, and demographic variables (e.g., sex, age, marriage and

retirement status). The sample consisted of 320 participants, 200 females and 120 males, ranging from 60 to 96 years old (mean of 70.46). 181 were married, 93 widowed, 21 single, 15 divorced. 275 participants (86%) were retired, 31 (10%) were still working. Instruments: Demographic questionnaire, Ryff's Psychological Well-Being Scales, Rosenberg's Self-Esteem Scale, Extraversion Scale of the NEO-PI-R, and the Optimism Scale (LOT-R). Results indicate that 141 (44.1%) participants were very satisfied and 117 (36.6%) satisfied with their lives. Significant positive correlations were found between the six dimensions of psychological wellbeing with self-esteem, extraversion, optimism, and satisfaction with life. The best predictors for the psychological well-being dimensions were, in the following order, self-esteem, optimism, an extraversion. Implications for counseling and social policy will be addressed.

**Barbara-Ann Kaidy (Alliant International)**  
**Higher education: Do completing a degree and  
including online courses influence locus of  
control in returning adults?**

The study will examine the relationships amongst completion of a degree in adult higher education, Rotter's locus of control and the use of technology tools and online classes in degree completion. Questions pertaining to unsuccessful completion of degrees by adults in college have led to answers, like finances, family, work, etc. But are these only symptoms of an overarching need for personal control over these external pressures in their lives? Is the real reason adults return to school because they need to learn new ways to gain that control back, and could technology tools and online classes be part of the answer? Approximately 250 adult college students will complete educational background surveys and scales related to education, technology usage and locus of control. *T*-tests, Confidence intervals and Pearson's correlation will be used to test the two hypotheses. Gender and age data will be included in the study.

*Session 4: Measuring and Modeling Adult Development*

**Albert Erdynast (Antioch University Los Angeles)**  
**Structures and types: A Four domain model of  
intellectual, moral, and aesthetic development**

The empirical study of the types of structural-developmental stages central to research such as that of Piaget, Commons, Kohlberg and Erdynast addresses five factors in problem, dilemma and questionnaire design and in the organization of rating and scoring manuals for reliable data assessment. These factors are: 1. Distinctions between domains and types of problems posed by the dilemmas or questionnaires. 2. Levels of complexity of tasks and problems presented to subjects. 3. Types of probe questions addressed within questionnaires. 4. Meta-ethical categories of judgments

incorporated into the assessment of structures of moral and ethical thought.<sup>5</sup> Normative principles resolve domain-specific problems. A four domain developmental model that studies invariant sequences of progressive constructivist, transformational levels of: 1) factual reality, 2) judgments of value (conceptions of the good), 3) a. judgments of requirements of justice (obligations and duties) and 3) b. supererogatory judgments, and 4) judgments of the beautiful will be presented.

**Michael Lampion Commons  
(Harvard Medical School)**

#### **Computing item and person stage of performance**

To report results based on the Model of Hierarchical Complexity, one would like to have both a person and item scores that represent stage of performance. But there is no direct way of obtaining those scores from a Rasch analysis. The dilemma is that the orders of hierarchical complexity are an ordinal-scale analytic measure, and the corresponding Rasch-scaled measure of item and person performance scores are on the real line (interval scale). The Rasch map displays the person performance scaled values on the left side of a linear vertical scale and the items scores on the right side of that same scale. Thus, Rasch scores are not in the stage metric. The orders of hierarchical complexity of items is ordinal so they cannot be averaged, summed, or even subtracted. But the Rasch scores can. We have developed a method that allows for an interpolation between adjacent orders of hierarchical complexity of items on the Rasch scale for which interpolation is fine. There are no assumptions about the size and nature of a possible gap.

**Hudson F. Golino (Universidade Federal de Minas Gerais BR) and Christiano Mauro Gomes (Universidade Federal de Minas Gerais, BR)**  
**Psychometric properties of three developmental instruments: Analyzing a Brazilian sample.**

This exploratory study investigates some psychometric properties of three instruments for developmental stage evaluation, in a Brazilian convenience sample composed of 144 people (88 female, 56 male) ranging from 7 to 58 years ( $M = 19.10$ ,  $SD = 10.65$ ). The Balance Beam Task Series (Commons, Goodheart & Richards, 1995) and the short version of the Laundry Problem (Commons, Goodheart, Dawson, Draney & Wilson, 1996) were translated and adapted to Brazilian language and culture. The third instrument (TDRI - Inductive Reasoning Developmental Test) was developed by Gomes and Golino (2009), to access developmental stages of inductive reasoning. The result of Rasch analysis shows excellent reliability for items (from .97 to .98) and subjects (from .94 to .96) in all three instruments. The correlations vary from  $r = .571$  to  $.686$  ( $p = 0.01$  level, 2-tailed). Factor analysis (PCA) of the Rasch scale generated for each instrument shows unidimensionality,

explaining 76% of the variance. Further results will be presented and discussed.

**Lucas Alexander Hayleigh Commons-Miller (Dare Institute), Nicholas Hewlett Keen Commons-Miller (Tufts University), Jonas Gensaku Miller (University of California, Davis), Michael Lampion Commons (Harvard Medical School)**

#### **Development of atheism, religiosity, superstition and beliefs**

Is there a difference between thinking and arguments pertaining to religion versus atheism? Fowler studied stages of development in religious reasoning. Previous work of this research group showed that the stages he named also apply to atheistic thought. We have collected empirical data in an attempt to determine whether reasoning on all supernatural matters (everything from belief/non-belief in monsters, to belief/non-belief in god) forms a single domain, and does development in this domain follow the orders of complexity predicted by the Model of Hierarchical Complexity? The data suggest that people who believe in things like monsters make less Hierarchically Complex arguments about monsters (probably because this is the type of belief people have when they are young) than they do about belief in god. Thus arguments about atheism should be the most hierarchically complex.

**Samuel C. Albertson (Harvard Graduate School of Education)**

#### **Growth and construction: The Subject-object dialogue**

This investigation, under the guidance of renowned theorist of adult development Robert Kegan, reviews the birth of subject-object theory out of Piagetian genetic epistemology. The goal of the paper is to rekindle the dialogical elements of Piagetian theory, which has been overshadowed within American psychology by the focus on Piaget's stage analysis. The inquiry is thus based on Piaget's central concept of the dialogically-enhancing organizational activity of the person, and reviews Piaget's core principles assimilation/accommodation, equilibrium, organization), how neo-Piagetian and constructive-developmental successors have responded, common Piagetian criticism, and what this all means for subject-object relations. The overall discussion is couched in subject-object inquiry, with an explanation of how dialogue between subject and object enhance mental operations or organization.

**Michael Lampion Commons  
(Harvard Medical School)**

#### **How content and language affects stage of performance: Is there synchrony in performance?**

This study analyzed items from the following instruments to help determine the relationship

between hierarchical complexity, content, and language where the instrument was given: a) Arabic Laundry; b) United States Laundry; c) Short Laundry; d) Combustion; e) Atheism and Belief. A Rasch analysis produced stage scores for each of the items from each of the instruments. These item Rasch scores were regressed against the order of hierarchical complexity of each of the items,  $r = .95$  (Arabic Laundry);  $r = .963$  (United States Laundry);  $r = .940$  (Short Laundry);  $r = .797$  (Combustion);  $r = .787$  (Atheism and Belief). The analysis showed that Hierarchical Complexity was the greatest predictor of variance ( $r = .898$ ,  $r^2 = .806$   $p < .01$ ) when compared against both content and language, together and individually.

**Sara Nora Ross (Antioch University, McGregor)**  
**Examples of paradigmatic stage 13 and scoring their Hierarchical Complexity**

In the Model of Hierarchical Complexity (MHC), the Paradigmatic Order and Stage 13 accounts for and measures tasks/actions that coordinate tasks/actions of the previous order, Metasystematic 12. The MHC's definition of Order/Stage 13 was corrected in a SRAD presentation in 2008 (Ross, 2008). To "coordinate tasks/actions of the previous order" is to reflect on, compare, contrast, transform, define and/or synthesize the outcomes or the properties/behaviors of those tasks/actions. The few examples of Paradigmatic performances discussed previously (Commons & Bresette, 2006) were confined to historical rather than contemporary persons. Here, recent paradigmatic performances are presented for discussion of their hierarchical complexity scoring. These examples take the form of theories, proposals, analyses, and process designs. The multidisciplinary breadth includes higher education, international relations and monetary policy, and developmentally-designed interventions. Implications for scoring paradigmatic performances "in the spiritual domain" are considered in light of these examples.

*Session 5: Contexts of Emerging Adulthood*

**Chrysalis L. Wright and Mary J. Levitt**  
**(Florida International University)**

**Predicting courtship behaviors of emerging adults from immigrant and nonimmigrant families**

Acculturation, gender, and religiosity were examined as predictors of courtship behavior, using regression analyses, in a study of 495 emerging adult college students of Hispanic origin. The interaction of gender and acculturation were also examined by performing separate analyses by gender because a strong relationship between the interaction of gender and acculturation for courtship behaviors was determined. Religiosity was found to be related to the age at which parents allowed dating, age at first date, number of dating partners, and age at first sexual encounter. Gender, age, and

immigration status were also found to be good predictors for these outcomes. Gender specific analyses indicated that age and frequency of religious meeting attendance was related to age when parents allowed dating and age at first date for females but not males. There were also gender differences in the age at first sexual encounter and number of dating partners.

**Danielle Kristen Nadorff and Julie Hicks Patrick**  
**(West Virginia University)**

**Anticipated parenting efficacy among emerging adults: A Replication and extension study**

Little is known regarding the ways emerging adults envision their future parenting skills. Based on existing literature, a model of anticipated parenting efficacy was developed. Study 1 included data from 481 adults (mean age = 19.9 yrs) who completed measures of knowledge of childhood development, contact with children, affinity for children, and androgyny. Results of a hierarchical linear regression showed that by itself, biological sex was a unique predictor of anticipated parenting efficacy ( $F(1, 478) = 4.01$ ,  $p < .05$ ; ( $r^2 = .01$ ),  $\hat{\beta} = -.52$ ). However, when knowledge, contact, affinity, femininity and masculinity were entered in subsequent steps, the effects of biological sex were significantly reduced  $F(3, 473) = 12.30$ ,  $p < .001$ , ( $\hat{\beta}$  sex =  $-.25$ ,  $p > .05$ ). Study 2 extended Study 1 by adding improved measures of knowledge. Data from 44912 adults were used to test a mixed model of anticipated parenting efficacy. The summary statistics suggest a good fit of the data to the initial model [ $X^2$  ( $df = 30$ ,  $N = 449$ ) = 201.07,  $p < .001$ ;  $GFI = .878$ ;  $RMSEA = .080$ ]. Study 1 results were replicated. The improved measure of knowledge failed to emerge as a significant predictor. Results are discussed in terms of emerging adults' readiness to assume the parenting role.

**Dawn E. Schrader (Cornell University)**

**Friend or foe? Ubiquitous technology, privacy, and adolescent development**

Research on brain development indicates that adolescents have not fully developed their reasoning capacities; yet make important decisions about self and morality with increasing frequency. Ubiquitous technology encourages adolescents to make decisions about their lives that involve the public sharing of private information. This information is used by others--both friends and corporations--and has implications for identity development, and moral development and action. Adolescent understanding of what counts as private, the voluntary-ness of sharing private information, and the stealth collection and use of private information have potential risk for exploitation about which adolescents may not be aware (nor care about at this moment), but have far-reaching implications for their future. This paper explores ideas of how self and morality can be prosocially developed or adversely threatened by the sharing of private information, and

presents implications for increasing awareness of how ubiquitous technology encourages unreflective disclosure, which threatens individual autonomy.

**Erik Turkman (University of Maryland)**

**Asynchronous human dispersal: The Role of circadian rhythm shift in the home leaving process**

In many ways, home is defined by our sleep patterns: where we sleep, when we sleep, and with whom we sleep. It makes sense that when leaving home during early adulthood, sleep patterns should also change. It has been noted that sleep cycles do in fact change during emerging adulthood, but this phenomenon has not been examined in conjunction with the home leaving process. In my presentation, I will explore the possible connections between emerging adult shifts in circadian rhythm and home leaving. I will present an overview of my theory of Asynchronous Human Dispersal, the basic premise of which is that leaving home involves behavioral changes in two dimensions: temporal and spatial. I propose that shifts in daily sleep patterns are associated with preparing to leave one's family, making home leaving a complex developmental process rather than a single event. After presenting my theory, I will welcome active discussion.

**Chana Etengoff (CUNY Graduate Center)**

**God and I: A Gendered experience?**

This mixed-methods study explores gender differences in the religious orientation and experiences of 429 Jewish emerging adults (Secular, Traditional, and Modern-Orthodox). Findings reveal that while gender differences in religious experience exist, these differences are best assessed via an analysis of individual items rather than the summary score of the Arnett Religiosity Questionnaire, as gender differences are significant in only some aspects of religious experience. In addition, although Arnett (2002) found that Christian women are more likely than men to rate religious service attendance as important, similar percentages of Modern-Orthodox and Traditional Jewish men and women rated service attendance as being quite important. Arnett's finding was only significantly ( $p < .01$ ) replicated with the Secular participants. This and similar findings suggest that the future of religious developmental research lies in the gradations of difference model and that efforts must be made to explore within group as well as between group differences.

**Theresa Mary Donovan Odell (Reverend)**

**From Chrysalis To Butterfly**

This presentation will focus on ways in which the educator creates a cocoon for optimum spiritual development in an affirming, gently confrontational, highly accountable and challenging environment guiding students toward decision making from a more grounded

perspective. The spiritual needs for wholeness of both the high school and undergraduate populations will be explored as they pertain to healthy, holistic development assisting students build self-esteem and move forward into the world with strength and courage. Obstacles to the creation of such an environment will be discussed such as but not limited to: (1) prevalent confusion around and misrepresentation of both Religion and Spirituality, (2) possible objections from family and/or staff, (3) role of confidentiality within the classroom context and the (4) need for teacher support and supervision while undertaking such a project and persona. Both the roles of teacher and student in such an experience will be illustrated through resources, ideas and concrete activities.

**SESSION NOTES FROM THE 2010 SRAD SYMPOSIUM**

Volunteer session reporters took notes of the session discussions and prepared brief reports that summarize key points, conclusions, and directions for research that were mentioned in the discussion. In keeping with the eclectic, interdisciplinary style of SRAD, no format or length requirements were imposed. No notes were available from sessions 1, 2 and 4.

**Session 1: Student learning and development**

**Session 2: Development of moral reasoning, wisdom, and higher-order thought.**

**Session 3: Well-being in middle and older adulthood.**

Convener: Caroline Bassett Note Taker: Carol Yoder

Caroline commenced the discussion by asking people to discuss with others what did they personally find more relevant/interesting or important from this session and from today? Dorothy led off by commenting that she was interested in late life well-being, personality, spousal support as well as revisionist ideas concerning Erikson's conceptualization of adulthood. She also noted how evolution and adaptation continue throughout the lifespan. Rebecca was struck by the Portuguese data pointing to the strong relationship between well-being and the personality characteristics, extraversion and openness to experience. Bernardo pondered whether or not openness to experience could be taught and how training might look. Clearly, being interested, being in a safe environment and having basic needs well-meet provides a foundation to build openness and exploration. Darlene likened the safety element to a particular science fiction class that provided a safe haven for students to explore without fear of reprisal or ridicule. Bernardo then talked about openness and shame and how many adults became repressed and introverted because initial interest and excitement was suppressed in early childhood. It is important to encourage people to develop interests and that is only likely to happen in a safe context. Experiencing new things can be

frightening. Consequently, it is necessary to provide help with coping. Alexandre said that openness to experience was their primary focus, when extracting items from the NEO PI-R. Was it possible to increase participants' awareness, to impact and improve openness (motivation; goals). The importance of marriage was suppressed before widowhood. People need to get past the fear of making mistakes and looking foolish. No authority is needed to facilitate change; it simply comes down to how people internalize the message. In short, social expectations play a big role. In teaching people to be open to experience, we are allowing people the safety to do what they want. This facilitates well-being by enhancing agency. When we teach people to be open to experience, we are allowing them the freedom and a choice to do what they want.

Karen shared her team's model of adult complexity, which provided a framework for how we process new information in a social context. Along with Drs. Ferreira, Samtose and Munoz, Karen described a model with three levels of analysis where information would be initially processed at level 1 depending on the social context, individual characteristics of openness, and availability to consider new information. This might evoke a more analytic and combinatorial approach with level 2 processing. Any concept at a higher level involved the summation of two concepts below it. Under some circumstances, additional processing might occur at level 3, which involves a more transformational integration of concepts. Additionally, there was a dynamic, recursive relationship among concepts at the same and at successive levels.

James commented that he saw two key themes in this session—vulnerability and opportunity that cut across much of the presented work. He said having the right kind of skills and wisdom to mobilize into effective actions helped individuals and groups convert change or loss into developmental opportunities. Certainly, being in a strong marriage and having close friendships help people adapt. Caroline then mentioned how openness to experience may enable people to see the big picture and not be caught up to the same degree with personal biases. Without these typical limitations, productive actions are far more likely.

Barbara-Ann brought the session and afternoon to a beautifully opulent close when she sang a too brief segment from the *Mi Mi* aria from *La Boheme*.

**Session 4: Measuring and modeling adult development.**

**Session 5: Contexts of emerging adulthood.**

Convener: James Day Note Taker: Sam Albertson

James: the posters were well-presented, and everyone found them very engaging. Are there themes that were particularly striking? Other reactions?

Michael: Both about emerging adulthood! And decidedly so. Definite commonality: parenting and religion are closely tied. Judaism and bringing people up religiously is a dominant part of Jewish life.

Chana: Limited to no correlation between how children were raised and what their current religious status might be. It seems to be an emerging adulthood phenomenon.

Michael: But often the studies are just not done well enough. For example, in politics this is confirmed. Cultural expectations are rarely measured. A cultural phenomenon: people are leaving; for Judaism, this is strangely common.

Chana: People are joining in either direction, though.

Michael: For an emerging adult perspective, the traffic needs to be observed.

James: A fairly recent phenomenon -- at least in America -- that people do not adopt their parents' religion. Lately, there are far more religious and ethnic/racial integration in marriage (took place earlier in Europe), gave greater latitude for viewing religion as a choice. If religion is chosen on the grounds of an "added good," there are more options for what is chosen. It becomes then apart of the young adult identity.

Chana: In the qualitative component, I want to look at the choices that are made as to why people are staying. Is it faith-based? Is it culturally-based? Is it because their peers are staying?

Michael: I want to have a faith scale. There are really only two major religions: Judaism and then Egyptian. And then everything splits (Muslim, Hinduism, etc. and then splitting). The Chinese are animists and philosophers. They pray in Buddhism, but Buddha was against prayer. The Shintoists pray, but I don't understand that at all. When I go to China, there is lots of prayer but no faith -- it's a folk religion. Dimensions of religion are very sociological. I grew up next to priests, but you have to ask about literalness. For animists -- if you are Egyptian, cats are the gods, if you are some version of Plains Indian, it might be a bear. You go from animism to a physical male or female god to something that is more abstract. That never seems to get asked in these areas. I am obsessed with this question; aren't you, James?

James: When I'm around you, it feels like an obsession. But I am keenly interested.

Theresa: But it seems that you want to correlate that with dimensions of moving from formal into abstract, levels of literalness -- but wouldn't that be a confound?

Michael: Yes, it is a confound!

James: But literalness need not be religious. Atheists and agnostics test lower in literalness (agnostics higher, since atheists can be more literal).

Michael: There weren't literalists at the concrete stage. When I ask Assemblies of God and Pentecostals, they describe feeling close to Jesus, the support they feel -- they discuss what they feel. Not the case for Catholics! People are looking for experiential, phenomenological religious experience. They don't discuss what they believe, their belief systems. You can have experience without understanding the belief system.

Chana: To me, this means operationalizing what you mean when you say you are religious. For participatory research, taking people's personal perspectives, it gets fuzzy.

Michael: This is true of asking whether people are homosexual, so we have to look at homosexual behavior. All an attitude is is the tendency to think things are causal. If something turns out bad, how often would you say it is due to God? It's about causal statements that I want to know -- what kind of Christian am I if I say I like what Jesus says but don't see him as God.

Chana: But defining orthodoxy and liberalism in beliefs is always shifting.

James: You have to ask what the religion defines as the boundaries of its own group.

Chana: Yes, you have to look at the heritage of the faith. In Judaism, if you are born into the group, you are always in the group. But for my Sunni Muslim friend, it is solely activity-based.

Michael: The hard part to measure is what the faith is all about, not the activity. We can't collapse faith down into one dimension. How much experience? For Pentecostal it is all experience. It isn't about stage, it is low stage, all about experience. I'm just trying to get it to make sense. Think of me as a Martian and you are trying to explain this to me as a Martian who doesn't care about what they say they believe; the Martian wants to know objectively what is believed.

James: We need to make sure there are other voices contributing here. We need to also be aware of time. I have a dual role of managing both those things. Now, if I may ask bluntly, we've focused on the fact that both posters are about emerging adulthood, and more attention on Chana's poster. Are there more reactions about both or either? And what is the relationship of this session to the whole of the conference?

Theresa: Future research question -- Sara commented to me about the idea to assess how much in the past these young adults have thought about having children. Such a high number said they had thought about it, and I wonder how much they thought about it.

Sara: But it has nothing to do with thinking about efficacy. I thought it would be useful.

Chana: I have a question: why did you choose to include androgyny in your study?

Theresa: In the pilot study, we found that there was a single measure of each (contact) but in the replication study we added a few others (knowledge, etc); we found that gender alone was a significant predictor, but when we added the other factors we were trying to get at gender. Even though women scored higher, it isn't that women are better parents. So we were trying to get at why. It helped explain the role of gender.

Chana: But your whole sample was female...?

Theresa: No, 220 were female.

Michael: But you had a mixed model. Efficacy is dependent on a lot of things. That is what is missing in this field. Integrative models are needed. Wasn't that your point, Sam?

Sam: Yes! We need dialogue.

Carol: But it is so important. There is piecemeal literature on parental involvement.

Theresa: Even when we were talking about how we all change, we say how parents allowed us to change.

Carol: They are finding that a lot of achievement measures have to do with parental attitudes and familial values .

Michael: One of the things about culture... we know that when Chinese come to America, they are vastly better students. It has to do with roles and identity, you are expected to be a good student. The measure of respect, a value in that culture, is tied to knowledge.

James: There are studies on parental involvement with children and their educational outcomes.

Michael: We don't study value, it is a cultural variable and sets up the external reinforcement.

James: And parental style is related to moral judgment, development, emotional regulation, school efficacy... a

very, very, very strong correlation. And other parenting styles can contribute to damage

Carol: But it depends on the cultural setting!

James: Yes, it does.

Michael: In terms of damage, there has to be parent intervention. Training parents on parenting has high payoff. The interventions are so simple. You talk with your child! Read to them, listen to them, in infancy. Be responsive parents! So the question I've always had with adults is why is this so hard to learn? That's a cultural issue. You have to understand culture... The Finnish let their children cry because it allows them to toughen up!

Chana: That was reflected in the original attachment studies with German parents.

James: Yes, they let their kids get into conflict to allow them to settle it on their own. But some evidence shows that they learn conflict resolution earlier on. In some samples, the fact that they don't intervene does not mean they don't care!

James: Okay, we need to stop and think about how we move to the end of the conference.

Sara: Proportionately, this session has been given its due, it is okay to move into closure. We do have the evaluations filled out.

Michael: I want this last session to be put more in the middle in the future, it needs more of a prominent role.

[Closing Remarks]

James: I appreciated the fact that everyone jumped in to help take on the roles. In terms of looking ahead, this bodes well.

Michael: Did anyone read the bulletin online?

Theresa: It came up with an error

Michael: We need to fix that. I will solve this problem. ... I have one thing to say. Emerging adulthood, we need to build up looking at identity much more in this organization. We had no papers on attachment, and we usually do. We are not reaching out, it is a lot of work, that's why I want help with marketing.

Sara: If you want young adults, there is an Arnett-group list serve.

Michael: Shared values in development! They are there, but we haven't been able to affect the world with them.

The different societies agree on the goals, but how we achieve them are diverse.

Sara: Any more comments?

Michael: NIA is very interested in lots of aspects of what goes on here. This is the first time we've had a program director. The thing about junior people is they need to learn how to get funding. We're all journal editors and we help get things published.

Sara: I would like to revisit the topic of location. We are very US-centric society, and this is not always helpful. Why travel outside the US when we are largely based in the US.

Michael: Can we go?

***International Society for Research in Adult  
Development  
2011 Program, March 29-30  
Montreal, CA***

*Session One: Development in Relation to Others*

**Dorothy Danaher (Be Ready Bear, Inc.)  
Planning for Florida hurricanes: Effective  
leadership and the  
Model of Hierarchical Complexity**

This paper will focus on effective planning for Florida hurricanes using the Model of Hierarchical Complexity. The state of Florida is very vulnerable to hurricanes, tropical storms, tornados with the resulting wind damage, power outages, and flooding. Thorough planning prior to such events can help mitigate the consequences and speed up the recovery process. The Model of Hierarchical Complexity, applied in advance of such disasters before leaders and the general population are stressed by the disastrous events can be a highly effective coping tool for Floridians and our treasured visitors. Disaster preparedness needs to be undertaken by every member of our society who is able to function at the abstract stage of the MHC and above.

**Megan M. Seaman (University of North Carolina at  
Greensboro)  
Converging developmental issues of caregiving: Adult  
children to aging parents with dementia**

Parental caregiving by adult children is an important issue facing individuals whose parents are getting older and beginning to experience the critical symptoms of aging. Oftentimes, the familial expectation is that adult children will take care of the needs of their aging parents in the final stages of life. However, often, they feel disconcertingly obligated to the responsibilities and changes that come with caregiving. Further complicating the issue are the emotional and practical adjustments to

be made when caring for parents with dementia. Therefore, the goal of the program is to present information related to the converging developmental issues that impact adult siblings' experiences when collaborating to care for their aging parents with dementia. Attendees will gain insight about the challenges, the approaches, and the gaps in addressing the concerns of caregivers. Moreover, the presenter will demonstrate the need to implement information related to this topic in practice and research.

**Michael Lamport Commons  
(Harvard Medical School)**

**MLC Different methods of investigating transition from one stage to another**

Piaget outlined what happens during stage transition in his dialectical theory of stage change. This symposium will discuss four different accounts of stage transition, each delineating how to obtain data on stage transition for each method. It will also discuss how the methods might be interrelated. Having a better understanding of what the transition steps are, as well as how to study them, should help educators and others to better facilitate development at all stages and in between them. The first section elaborates the original Piagetian model by systematizing the transition substeps using choice theory and signal detection. An examination of stage transition includes scoring interviews or other participant responses for statements that reflect each of these steps. The second section examines micro-developmental approaches. These approaches identify what may be potential subtask and sub-subtask actions that may occur during transition to the next stage. The third section describes and illustrates the use of Rasch analysis to quantify the extent to which a participant's performance on an instrument is transitional. This approach may numerically pinpoint where in the transition an individual is but it does not measure the difficulty of the specific task subtask actions (strategies). The fourth section presents a methodology for creating tasks and methods of support that directly measure transition.

*Session Two: Clinical/Developmental*

**Jose Ferreira-Alves (University of Minho); Michael Lamport Commons (Harvard Medical School); Andrew Michael Richardson (Dare Institute), Raquel Silva (University of Minho)**

**After all, depression can be reduced to just being down?**

The purpose of the current paper is to: a) Explore the possibility of whether classic depressive symptoms are associated with other mood disorders; b) Contribute toward a more multimodal model of depression.

Methods: In this study items were collected from several different questionnaires. There were 128 participants: 52 (41.3%) males; 74 (57.4%) female; Age:  $M = 50.3$ ;  $SD =$

15.7. Using factor analysis, there were 10 items loading .75 to .85 on the first factor, out of the initial 144. The first component explained 28.3% of the variance of all the items. There were no clear 2nd and 3rd factors. The 10 items that loaded .75 or more on the first component when factored on their own accounted for 68.6% of the variance. Discussion: A Rasch Analysis showed that there was a small variance for the items and large variances for the participants. The significance of these findings will be discussed and follow up research will be proposed based on these findings.

**Alice LoCicero (Simmons College, Boston)  
Developmental alternative to the DSM**

Working as a clinician within the medical/disease model has reminded me of its shortcomings. The complex tug of war among insurance companies, medical entities, clinical guilds, and individual clinicians has led to an escalation of use of severe diagnoses when less severe ones would do, overuse of medication, lower payments by insurance companies, shorter sessions, less time for consultation or reflection. Clients pay the largest price for this, including medication complications, stigma, and unnecessary investment of time and energy. A possible alternative approach for most clients would be construction of a developmental profile where the specific areas in need of development could be delineated and corrective psycho-educational and relational experiences could be created or found.

**Lori Ellison, Carol Smith (Marshall University)  
Developing creatively: Using Art to build trauma resilience**

The speakers share the specifics of a creative assignment used in a Graduate Trauma Therapy Counseling course. The purpose is to demonstrate how an academic assignment can facilitate personal development in adult students, and others, such as clients or consultees. The assignment allowed students to experience the power of creative expressions, especially symbolism, in the healing process. Students submitted a creative expression representing the healing process from a traumatic event, using any artistic medium. Example media included poetry, sculpture, music, drawings, film, PowerPoint presentation, dance, etc. Emphasis was on the dynamic developmental process of healing and resilience, not the trauma itself. Results of student's processing and learning, along with sample submissions will be shared, including how the assignment helped students to "get beyond their own in their work with clients. Presentation will present opportunities for application beyond student academic assignments. Participants will be asked to share their own relevant experiences and suggestions. They will also experience creating an example of healing using simple materials.

**Michael Lamport Commons (Harvard Medical School), Robin Gane-McCalla (Dare**

**Institute), Cory David Barker (Antioch University Midwest (AUM))**

**A Reworked smaller set of axioms for the Model of Hierarchical Complexity (MHC)**

The Model of Hierarchical Complexity (MHC) is a mathematical model based on the "Theory of Measurement" that has gone through a number of iterations as a measurement system (Commons, Goodheart, Pekker, et al., 2005; Commons & Pekker, 2008; Commons & Richards, 1984a, 1984b; Commons, Trudeau, Stein, et al., 1998). It sets forth the measurement system by which actions are put into a hierarchical order and each order is assigned an ordinal number. In this paper, the components of the Model will be described: Actions and tasks, measurement and operations, and the axioms, followed by an articulation of emerging properties from axioms, and then a description of orders of hierarchical complexity of tasks. These are a reworked smaller set of axioms that are more measurement-theoretical in nature. They also parallel the informal conditions underlying the kind of complexity that the MHC entails.

*Session Three: Positive Development and Well-Being*

**Rachel K. Baker, Susan A. Korol  
(Cape Breton University)**

**Occupational predictors of longevity: Lessons from traditional farming**

The goals of this presentation are to examine factors that promote adults' health and to determine how the modern western workplace should be modified as a result. We review research examining lifestyle, psychological, social, and occupational predictors of good health and longevity. Given that a significant portion of many adults' days is devoted to an occupation and the broader impact of work on our lives, we argue that the workplace is an important target to improve the health and well-being of the population. We identify one occupation, traditional farming, which exemplifies a number of longevity promoting factors. It is not possible for everyone to be a traditional farmer. We argue, however, that the longevity promoting factors found in traditional farming can be incorporated into other occupations. We use traditional farming as a template for our recommendations to employers regarding workplace modifications to enhance the health and longevity of employees.

**Monica K. Erbacher and Karen M. Schmidt  
(University of Virginia), Cindy S. Bergeman,  
(University of Notre Dame)**

**How are you today? Inter-individual differences in the structure of affect in a sample of older adults across 56 days**

Accurately describing affect structure across the lifespan is crucial for investigating connections among emotion regulation, health, and well-being. Empirical support

exists for several competing theories on affect structure; however, support mainly comes from cross-sectional investigations, examining affect levels, ignoring relationships among changes in positive (PA) and negative (NA) affect. Position, velocity, and acceleration of PA and NA across 4-day windows spanning 56 days were examined to detect complex PA-NA relationships. Relationships among PA and NA derivatives were calculated for each participant to examine inter-individual differences. Adults ( $N = 288$ ; 53-91 years,  $M = 68$ ) completed the PANAS plus additional items once daily for 56 consecutive days. Participants mainly reported high PA and low NA. Cluster analysis revealed two groups. PA and NA were uncorrelated for one group and strongly negatively correlated for the other. Graphical analysis indicated individual differences in affect structure were continuous. Age, life events, and arousal were unrelated to these.

**Michel Ferrari, Nic Weststrate  
(OISE, University of Toronto)**

**Developing wisdom among Canadian adults**

What is the personal experience of wisdom for younger and older Canadians? In this study, 80 Canadians from in and around Toronto answered open-ended questions about their own wisdom and wisdom in people they knew personally or had heard of historically. Participants also answered questionnaires designed to assess wisdom and satisfaction with life, including the 3D Wisdom Scale developed by Ardel and the Self-Transcendence scale developed by Levenson. Men and women had very different stories about wisdom to tell, as did those who are young adults (age 21-30) as compared to elders (65-85). We also found that those who scored higher on the 3D Wisdom Scale showed more in depth autobiographical reasoning, greater self-transcendence, and greater life satisfaction.

*Tuesday, 4:20-4:50 Feedback and Suggestions Meeting*

*Tuesday, 6-9:30 PM, Workshop on HCT*

**Society for Research in Adult Development  
Workshop Title: The model of hierarchical complexity: scoring for stage of development, creating new problems and dilemmas, and analyzing social problems**

This free three-and a half hour workshop introduces core concepts and practice in two kinds of scoring. Attendees will learn the Hierarchical Complexity Scoring System. That is, they will learn to recognize the orders of hierarchical complexity, they will apply their learning to the creation of new instruments or problems in an area of interest to them, and they will learn the relevance of the model for analyzing social problems. The Model of Hierarchical Complexity provides a framework for scoring performance in any domain (problem solving, moral, social) as well as in any cultural setting. Unlike

other models of development, such as Piaget's, this model posits that the observed sequence of development results from the fact that tasks in all domains form an order from simpler to more complex. We call the performance that is observed on these tasks, the "stage of development." The workshop will concentrate on stages of development from early school age into and including adulthood. The MHC is a general theory describing the hierarchically ordered behaviors in any subject domain or cross-cultural setting. Developmental stages are based on how information is organized, rather than on content matter. MHC can be used to score any narrative or task or construct instruments (instruments do not need to be normed because the stages are absolute). Narrative scoring is useful for such data as interviews and written texts. Instruments are ideal for initial assessments in any domain and pre and post measures to test for increases in performance. No answers are incorrect; each represents a different stage of performance. Workshop learning formats include the application of precision teaching to the learning of the model. Studies of this workshop show that almost everyone learns up to criteria. Planned learning outcomes are: a) describe what this general theory applies to; b) name and recognize the orders of hierarchical complexity of tasks and the corresponding stages of performance that may be exhibited by adults; c) score and justify the score; d) describe how vignette instruments are constructed.

Note: No session notes were submitted for Session Three

#### *Session Four, Spiritual, Moral and Personal*

**Lisa Miller, American Public University System;  
Carol Carpenter (Capella University)**

#### **A Multicultural studies approach to the development of religion in athletics**

The multicultural studies approach to teaching religion encourages knowledge beyond the basics of various religions by also infusing political, social, and cultural intersections through multiple viewpoints (Moore, 2007). Multicultural education in the nation's schools takes advantage of the diversity of students in the classroom or on the playing field. Topics of multiculturalism that are likely to be addressed in athletics are gender, race, ethnicity, and disability. Religion is another important dimension of multiculturalism to be discussed. To include a multicultural approach within athletics follows the guidelines of multicultural and social reconstructionist methods by extending the study of cultural pluralism and structural equality within other dimensions of a school community (Moore, 2007). The goal would be to promote equality and cultural pluralism through athletics to prepare student-athletes for promoting democratic ideals, moral agency, and pursuit of happiness within and beyond their current school community.

**Janne J. Korhonen (Aalto University)**

#### **A cross-scale model of systems co-development**

An individual's personality development transpires through distinct stages of increasingly higher orders of abstraction in a dialectical motion between differentiation and integration (Kegan, 1982). These punctuated dynamic equilibria are reflected in the stratified structure of organizations (Jaques, 1989) and "temporal segregation" (Maybury-Lewis & Almagor, 1989) of individualism vs. communalism in culture and social practices. However, few conjectures have been put forth to examine the co-causal underpinnings of cultural, organizational and personal development. This study embraces the ecological concept of panarchy (Gunderson & Holling, 2002) in constructing a cross-scale model that accounts for the structural-temporal co-development of systems at all levels of abstraction.

**Pninit Russo-Netzer, Ofra Mayseless,  
(University of Haifa, Israel)**

#### **Spiritual development in adulthood: A Phenomenological exploration**

Previous studies underscored the distinctiveness of spirituality (vis-a-vis religiousness), its becoming more central and important later in life, and its positive effects as reflected in higher well-being in adulthood (Wink & Dillon, 2002; 2003). Yet we know little about how adults incorporate spirituality in their lives, in particular following spiritual change. A phenomenological analysis of in depth interviews conducted with 20 adults, 8 men and 12 women (mean age: 45 years) who had experienced a spiritual change revealed that the developmental process could best be conceived as establishing a new identity.

The process included intensive inward examination and openness to experiences and explorations, aiming towards authenticity and meaning. These led to new insights and changes in self-perception and life priorities as part of constructing a new and multifaceted identity, and integrating it in the participants' daily lives. These findings broaden our understanding of spirituality contributing to positive personal change in adulthood.

**Thomas Swan (Siena College),  
Suzie Benack (Union College)**

#### **Widening of the moral stage: Modern difficulties in moral self-evaluation**

Several features of the post-modern world create an environment in which evolved mechanisms of human moral functioning become problematic; ultimately, these problems can lead to moral anomie and to an inability to evaluate the self as morally good. Specifically, a) social group membership has become largely an abstraction; b) information about others' welfare is mostly received indirectly; c) group norms change very quickly; and d) distance between groups has drastically diminished. These changes in the morally relevant environment produce two challenges to the modern individual trying

to do right and feel like a good person: moral intuition is super-satiated by constant exposure to more morally relevant information than one could reasonably respond to, and living in close proximity with “others” who do not share one’s group membership and norms leads to the development of more complex forms of moral reasoning, which eventually become meta-reflective, leading to explicit consideration of metaethical questions and moral relativism. Both contribute to the modern individual’s difficulty in achieving a relatively consistent sense of moral self-worth.

**Carol Y. Yoder (Trinity University)**

**Developmental change in reasoning among college students**

Given the documented changes in young adult brain development, does this translate into the possibility of more effective reasoning and less confirmation bias? In this study, 102 first-years and upper-class traditional-aged college students read and responded to political perspectives. Results indicated upper-class traditional aged students learned information contrary to their perspective better than consistent information whereas first-year students demonstrated more confirmation bias.

**Michael Lamport Commons  
(Harvard Medical School)**

**Using raw scores to determine stage of a person performance**

Scoring stage of items using the Model of Hierarchical Complexity along with Rasch analysis is reasonably straightforward. Rasch analysis also produces Rasch “person scores” for each person. The problem with these scores is that they are given in terms of the Rasch scale and do not have an obvious representation as “Person Stage” scores. Obtaining such a person stage score requires a large sample of participants with both item and person performance. This is because one needs to interpolate between adjacent orders of hierarchical complexity to find where the each person’s Rasch score falls. This becomes clearer from the discussion in this presentation in which the calculation of Person Performance Scores will be illustrated for two different instrument types. For the decision instrument, such as a laundry-type problem, one takes the number of corrects at each order of hierarchical complexity. One changes the number of corrects into proportion correct for each order. One multiplies that proportion correct for an order by the order number of hierarchical complexity for that group of items. That essentially gives the product a weighting by order value. Then one sums those products across all the orders. This gives you the total weighted raw score. Using regression, the total weighted raw scores are used to predict the obtained the stage of performance for that person using the way one scores for stage using Rasch and interpolation. This yields an approximate stage from the raw scores. The resulting regression will yield two constants, one for slope, b

which will multiply the raw score and one for offset, a, which will correct the offset so that the obtained number matches the obtained stage score. For the vignettes, the process is almost the same. But one just multiplies the ratings time the order of hierarchical complexity of the item and then sums those results across order of hierarchical complexity. The rest is the same. But the  $y = a + bx$  will yield different a's and b's.

**SESSION NOTES FROM THE 2011 SRAD SYMPOSIUM**

Volunteer session reporters took notes of the session discussions and prepared brief reports that summarize key points, conclusions, and directions for research that were mentioned in the discussion. In keeping with the eclectic, interdisciplinary style of SRAD, no format or length requirements were imposed. No notes were available for sessions 2 and 4.

**Session I: Development in Relation to Others**

Convener: Michael Commons Note taker: Unknown

Common factors affect relationships but fear can lead to regression. When we think we know everything (re: elders), our approach is limited. It is important to realize we have a lot to learn—one method that is helpful is to start the difficult conversations early.

Future orientation: We think we know everything--then we learn we didn't. Dorothy's poster described the rural helping urban after the storm and demonstrated that it is better to prepare early. What happens to stage of performance in light of other emotions?

Seldom do people remember before age five. In US we like to know who's responsible. Do not consider fate.

Reference to Lawrence Kohlberg: Rights and responsibilities not coordinated till meta-systematic. Individuals have a tight to be helped, and they have a duty to help. Stages do not apply to consciousness. Consciousness reflects status, not stage.

Holland scales. Different stages not necessary. Age--40% of those over 85 have dementia. Can be reduced by exercise, not smoking, working in a challenging field and not retiring (altogether). These are all related to maintaining better blood flow.

Note: No notes available for Session 2

**Session 3: Positive Development and Well-being.**

Convener: Dorothy White Note Taker: Carol Yoder

Following up on the Baker & Korol paper, what factors promote health and well-being? People keep repeating behaviors and cognitions that are problematic, so it is important to look at change and how to get ‘unstuck’ in quantitative and qualitative ways. Part of the problem is language, where people put ideas into words, which may

reify concepts. Therapists may be able to encourage people to correct their words/modify their behaviors to effect change. Lori and Carol's paper on trauma resilience (session 2) was alluded to in this stream-of-consciousness type discussion. It was also noted that states are important; for example, the sleep deprived get stuck. In today's world, people do not have habits that allow reflection even though they may record what needs to be done. Looking to Rachel's approach with occupational analyses (Baker & Korol) may provide another way to approach healthier lifestyles and habits. Megan brought up issues around gender differences in priorities and life style choices. While males may be more task oriented and females more relational, gender differences in cognition are minimal; however, interests and values may differ. Michael noted that gender differences are more pronounced at lower levels of complexity but that culture and gender do not discriminate performances on the MHC. Discussion segued into differences between male and female brains and Michael noted that Ladies Who Launch, a group supporting female entrepreneurship, indicates that women want more scaffolding of information and more explication of how to do things. Megan commented about differential gender responses and Jennifer commented about some myths of mentoring. Alice mentioned her idea of a developmental DSM, suggesting that DSM should be reconceptualized with more focus on social relations and community as a measure of health coupled with mutual responsibility and connection, especially given the importance of social reinforcement. On-line communications lose so many cues. How often do people misinterpret what was really intended? The nature of relationships change, but people get so caught up in words, that their physical bodies may be ignored. Lower MHC stages are about moving the body, this is followed by stages of reflection. Studies of positive adult development are more about adaptive, innovative and more intrinsically motivated individuals and group comparisons. There are many areas of research inquiry, but it is necessary to prioritize and then make judgments if we want the field to advance. Healthier people have richer cognitive lives, which have more complexity. Nevertheless, positive and negative affect are uncorrelated according to much research including some of Monica's (Erbacher et al.) data, but perhaps the relationship is more complicated. While positive affect seems to be relatively stable, when looking at depression, context must be considered. With well-being, is higher cognitive development really associated with better well-being and higher contentment? Is the rate of behavior proportional to reinforcement? When you lower reinforcement does unhappiness result? Ultimately, people adapt by resetting expectations. With more education, there is an expectation of a better future for one's children. If you have high rates of reinforcement, you adjust, but you also benefit from better longevity and more problem-centered

coping. What underlies avoidant coping styles? OCD, dependency and high anxiety were suggested. People enjoy solving problems if they have possible solutions, but anxiety, trauma, or mental illness can interfere. In Haiti poor organization, poor cooperation and trauma contribute to slowed recovery. Indeed the best coping mechanism for the most gifted Haitians may be to leave. In 1870 Michael reminded that King Leopold II in the Congo tortured half of the people and that kind of trauma transcends generations. Traumatized societies need wisdom and need to let go of memories that haunt and maladaptive habits that undermine progress. While positive affect works around equilibrium, negative affect is rather on or off and potentially quite dangerous and damaging. Monica's project shows that one variable can kick the negative affect switch on, which makes a developmental approach appropriate. People develop when they have sufficient challenge but not an overwhelming amount. Getting reinforcements increases positive mood, however it is domain specific. Wisdom needs to be more incorporated and Michel was encouraged to continue his work.

#### **Session 4: Spiritual, Moral and Personal**

#### **Session 5: Young Adult/Adult Education**

Convener: Michael Commons Note Taker: Megan Seaman

*Side note*, Completing symposium evaluation: Research in general does not focus on adult development; so there is importance of this SRAC meeting – and importance of learning how people are experiencing the workshop (Michael Lamport Commons).

No solutions to problems in the social domain that are consistent; in physical domain there are (Michael Lamport Commons).

Christian's poster is an instrument: changing the task into an instrument (Michael Lamport Commons).

The first meeting of SRAD was in 1981. Three years SRAD was not organized to meet; However, it has been consistently meeting for several years, making this year's meeting the 27<sup>th</sup> meeting of the SRAD Symposium – check history of SRAD:

<http://www.adultdevelopment.org/index.php>

This organization gets better and better. (Michael Lamport Commons).

Evaluations: Broad range of ideas; and new ideas are never shot down; SRAD covers everything, all topics; everybody gets equal time, equal attention; poster formation allow people to construct reality, rather than looking at one presentation at time (Michel Ferrari, Monica Erbacher, and Michael Lamport Commons).

Curious about epistemology of developmental assumptions; Lower level - belief at certain levels that there is always a right answer (Dorothy Danaher) – barrier to democracy in Afghanistan (Michael Lamport Commons).

*Teach Like Your Hair's on Fire*, book by Rafe Esquith—introduction to Kohlberg; how this might parallel epistemology assumptions (Alice LoCicero).

Put epistemology assumptions chapter in an accounting textbooks as a model of teaching accounting; at first Professors were confused at how it would work in the classroom. Found that it helps as a teaching tool; also useful as a framework for course design; (Susan Wolcott).

Materials are free at <http://wolcottlynch.com/> (Susan Wolcott).

Possibly, the expectations and limitations based on assumptions that students come in with influence their levels in RJM (Alice LoCicero).

Area specific phenomena; complaining about learning protocol; dependent on type of subject learning; computer students' problem-solving vs. psychology students' problem-solving (Monica Erbacher)  
Textbook author; pressure from publishers to include everything in your book; not to prioritize; (Susan Wolcott)

To Daniel's poster – looking at young adults adversely affected by peers, separate from family contribution; wondering how does that adverse experience impact cognitive developmental trajectory. What causes regression developmentally (Alice LoCicero)?

Aspect of self-criticism, need for achievement and fear of failure and rejection; in that sense there is a delay that they stunt their growth of achievement and risk-taking (Daniel Kopala-Sibley).

See it in depressed people and out of work; individuals cannot imagine not getting a job; or getting fired again; a self-handicapping thing (Daniel Kopala-Sibley).

Students may have external locus of control; helpless; powerless; beyond their control (Daniel Kopala-Sibley). Kids can contribute to making self target: expectancy; do not defend themselves; which confirms beliefs of self (Daniel Kopala-Sibley).

Idea of security for individuals who experience self-criticism; if I don't try I can't fail; in a sense it is out of control – perceived – peers bullying is outside the self (Carol Smith).

*Predators*, (Salter, Anna C)

<http://www.amazon.com/Predators-Pedophiles-Offenders-Ourselves-Children/dp/0465071724> written from child perspective predator and how they pick out their victim; what makes kids targets (Carol Smith).

Lisa Kuhmerker (Gielen, U., Hayes, R.L., Kuhmerker, L. (1991). *The Kohlberg Legacy for the Helping Profession*. Birmingham, AL: Religious Education Press.

(<http://www.amenetwork.org/kuhmerker.html>)

Promoting the value of friendship (norm of friendship); Moral atmosphere in classroom; perspective of just community in elementary to steer kids away from bullying (Dorothy Danaher).

Giant social hierarchy in K-12 schools; like animals trying to navigate an unpredictable world (Daniel Kopala-Sibley).

Robert Sutton's book *The No Asshole Rule* – bullying in corporate settings is costly as is abusive supervision; overall costs outweighs productivity (Carol Yoder). Absolute power of the boss; but until get to systematic stage of MHC no business does well (Michael Lamport Commons).

How do you handle difficult customers; coordination of departments; depending on them, projects fail; disagreement between department heads; and hierarchy of power influence (Michael Lamport Commons)?

Corporate leaders are politicians; train for respect whether they like you or not; can pull company's together to see companies succeed (Michael Lamport Commons).

Bullying: consultation to private school; a lot of progress, but at the board of directors, turned out bigger bullies were children of bigger donors. Donors didn't like this program; "boys will be boys" – building "men"; then it is a no-issue; tradition of the school (Alice LoCicero).

University of Virginia Press

(<http://www.upress.virginia.edu/>), published

*Disciplinary* series; for those researchers and academics that do not fit into status quo of research - Cathy Brettschneider, Editor – discusses stuff that doesn't fit into traditional spheres of knowledge (Carol Smith).

### What's Common Among The Posters?

Helping students learn and develop while helping faculty get overall picture (Michel Ferrari and Susan Wolcott). Curious to extend development theory (MHC) into other realms – like teaching, education, wisdom (Michel Ferrari).

Transcending knowledge – so integrating into any subject area: science, English (Michel Ferrari). Identify deep patterns that govern the universe. It is multifaceted; more than just truth; human truth vs. ultimate truth (Michel Ferrari).

Wise teachers more attuned to student overall growth and not just content (Michel Ferrari).

Yes, seem more centered on students themselves and transformative content (not the concrete subject; Michel Ferrari).

**Pictures from SRAD Conference  
in Montreal, March 29-30, 2011**



**Dr. Michael Lamport Commons, Harvard Medical School, in foreground**



**Michele Ferrari, OISE, in foreground**



**Dorothy & Chris White in foreground**



**Layout of Conference, showing posters**



**1 Dr. Michael Lamport Commons, Harvard Medical School, in foreground**



**View from Left**



**View from Center**



**Lft to Rt: Michel Ferrari, Kristian Lund,**



**Dr.White and Be Ready Bears, in foreground**



**Another view from Right**

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