

UNIVERSITATEA DIN BUCUREȘTI
DIANE F. HALPERN

Doctor Honoris Causas

DIANE F. HALPERN DOCTOR HONORIS CAUSA





Most theories of intelligence do not directly address the question of whether people with high intelligence can successfully solve real world problems. A high IO is correlated with many important outcomes (e.g., academic prominence, reduced crime), but it does not protect against cognitive biases, partisan thinking, reactance, or confirmation bias, among others. There are several newer theories that directly address the question about solving real-world problems. Prominent among them is Sternberg's adaptive intelligence with "adaptation to the environment" as the central premise, a construct that does not exist on standardized 10 tests. Similarly, some scholars argue that standardized tests of intelligence are not measures of rational thought—the sort of skill/ability that would be needed to address complex real-world problems. Other investigators advocate for critical thinking as a model of intelligence specifically designed for addressing real-world problems. Yes, intelligence (i.e., critical thinking) can be enhanced and used for solving a real-world problem such as COVID-19, which we use as an example of contemporary problems that need a new approach.

> Review Critical Thinking: A Model of Intelligence for Solving Real-World Problems Diane F. HALPERN and Dana S. DUNN



Laudatio | Diane F. Halpern

Stimate Domnule Rector, Stimate Domnule Presedinte al Senatului, Stimată Doamnă Profesor Diane F. Halpern, Stimate colege și stimați colegi,

Diane F. Halpern este o cercetătoare și profesoară remarcabilă, apreciată și renumită la nivel international pentru activitatea sa în domeniile psihologiei, pedagogiei si gândirii critice. Cariera sa a fost marcată de succese atât în cercetare, cât si în predare, după cum o dovedesc numeroasele premii si functiile prestigioase obtinute de-a lungul anilor.

Si-a obtinut licenta în psihologie în 1969, la Universitatea din Pennsylvania, si a primit premiul Consiliului de Educatie din Philadelphia, o bursă de scolarizare integrală pentru rezultate academice deosebite; a fost pe Lista Decanului, a obținut Distincția Academică și a absolvit Cum Laude.

Doamna profesor Diane Halpern deține două masterate în psihologie, unul de la Temple University (1973), și cel de-al doilea de la University of Cincinnati (1977). Diane Halpern și-a obținut doctoratul în psihologie la Universitatea din Cincinnati, iar teza de doctorat a fost premiată cu cea mai înaltă distincție.

Diane F. Halpern este Decan Emerit al Facultății de Științe Sociale la Minerva Schools at Keck Graduate Institute și Profesor de Psihologie, Emerit la Claremont McKenna College. A câștigat numeroase premii pentru predarea și cercetarea sa, inclusiv *Premiul pentru întreaga carieră*, în 2019, pentru realizări remarcabile în predare, cercetare si implicare profesională, din partea Western Psychological Association. A obținut un premiu onorific din partea Federation of Behavioral and Brain Sciences (FABBS) pentru oamenii de stiintă care au adus contribuții importante și de durată la științele minții, creierului și comportamentului, premiul James McKeen Catell 2013 acordat de Asociatia pentru Stiinte Psihologice, premiul Fundatiei Americane de Psihologie pentru predare remarcabilă, premiul pentru carieră remarcabilă pentru contributii la educație acordat de Asociația Americană de Psihologie și premiul pentru profesor remarcabil acordat de Universitatea de Stat din California.

Doamna profesor Halpern a primit din partea Asociației Americane de Psihologie Premiul pentru predare remarcabilă (2013) și Premiul pentru carieră remarcabilă pentru contribuții în domeniul educației.

Statul Universității de Stat din California i-a acordat premiul Wide Outstanding Professor Award.

Doamna profesor Halpern este fostă președintă a Asociației Americane de Psihologie (2004), una dintre cele mai cunoscute, influente si respectate asociații din lume, fostă președintă a Societății pentru Predarea Psihologiei (1997–1998) și fostă președintă a Asociației Psihologice de Vest (1999–2000).

În 2021, Diane Halpern a fost recunoscută de evaluarea Universitătii Stanford ca fiind printre primii 2% dintre oamenii de stiintă din întreaga lume (într-un clasament de top care a inclus 176 de domenii si subdomenii stiintifice).

Diane F. Halpern a avut o contribuție fundamentală la dezvoltarea domeniului gândirii critice și a formelor superioare de raționament și este, de asemenea, autoarea unuia dintre cele mai utilizate și cunoscute teste de măsurare a gândirii critice, Halpern Critical Thinking Assessment.

Doamna profesor Halpern este autoarea a numeroase studii și cărți care au influențat peisajul academic al cercetării gândirii critice din punct de vedere psihologic si pedagogic. Lucrarea ei, Thought and Knowledge: An Introduction to Critical Thinking, Psychology Press, o publicatie a Taylor and Francis, ajunge în 2023 la cea de-a șasea ediție, scrisă împreună cu Dana S. Dunn. Thought and Knowledge aplică teoria și cercetarea din domeniul științelor învățării pentru a-i învăța pe elevi abilitățile de gândire de care au nevoie pentru a reusi în lumea de astăzi. O fundamentare academică riguroasă bazată pe psihologia cognitivă este prezentată într-un stil de scriere clar si plin de umor si sustinută de numeroase exemple si anecdote din lumea reală, relevante din punct de vedere cultural.

Lucrarea Dianei Halpern despre gândirea critică este importantă atât din perspectiva psihologiei, cât și a educației, după cum o implică cele patru părti ale sale:

- Predarea / învățarea explicită a gândirii critice
- Dezvoltarea unei atitudini și a unei dispoziții față de gândirea critică (ceea ce Aristotel ar numi "spiritul critic")
- Formarea deprinderilor de transfer al abilităților de gândire critică în alte contexte diferite de cele în care au fost practicate initial aceste abilităti

• Urmărirea eficacității gândirii critice (implică metacogniția și automonitorizarea). Lucrarea a fost distinsă cu numeroase premii și a fost tradusă în mai multe limbi. Richard E. Nisbett, profesor emerit de psihologie la Universitatea din Michigan, a declarat: "Gândirea și cunoașterea sunt o introducere superbă în logică, în erorile de raționament și în analiza dovezilor. Autorul este unul dintre cei mai distinși oameni care studiază modul în care gândim și cum putem gândi mai eficient."

Lucrarea sa este utilizată în predarea gândirii critice sub forma unor cursuri individuale, precum și pentru dezvoltarea unor cursuri în care gândirea critică este integrată.

Munca ei este semnificativă atât pentru psihologie, cât și pentru filosofie, adăugând noul domeniu al științelor cognitive la suma beneficiarilor activității științifice remarcabile a doamnei profesor Diane Halpern.

Diane Halpern a susținut mai multe mărturii în Congres:

În 2001, a depus o mărturie privind aplicațiile principiilor psihologiei cognitive în educație în fața *Comisiei pentru știință* din cadrul *Camerei Reprezentanților a Statelor Unite*, mărturie publicată în registrul *Congresului Statelor Unite* la 10 mai 2001: *Sălile de clasă ca laboratoare: The Science of Learning Meets the Practice of Teaching*.

În 2005, a oferit o mărturie despre femeile din domeniul științei în fața *Proiectului Știință și Congres* și a *Grupului pentru Știință și Tehnologie al Senatului*, la 6 iunie 2005.

În 2009, la 20 mai 2009, a prezentat o mărturie pe tema *Sprijinirea unui loc de muncă mai sănătos: Workplace Flexibility and Wellness*, sponsorizată de către Rep. Grace F. Napolitano (D-CA) și Rep. Tim Murphy (R-PA), copreședinți ai *Grupului pentru sănătate mintală* din Congres.

Doamna profesor Halpern va primi o altă recunoaștere a meritelor sale, *Premiul pentru întreaga carieră* din partea *Societății pentru Științe Experimentale și Cognitive* (Divizia 3 a *Asociației Americane de Psihologie*). Acest premiu este destinat "unei persoane care a adus contribuții teoretice și / sau empirice de lungă durată și deosebite la cercetarea de bază în psihologia experimentală și / sau știința cognitivă". Acesta va fi prezentat în august 2023.

Doamna profesor Halpern a scris, de asemenea, despre diferențele de sex, oferind o sinteză cuprinzătoare în *Sex Differences in Cognitive Abilities*, ediția a 4-a (2012). Diane Halpern trece în revistă știința relevantă pentru a determina dacă există diferențe de sex în ceea ce privește abilitățile cognitive și, în caz afirmativ, care sunt cauzele acestora. "Ea prezintă aceste informații într-o proză convingătoare și accesibilă. Studenții la psihologie vor aprecia acest text excelent, la fel ca oricine este interesat de ceea ce are de spus știința despre abilitățile cognitive ale femeilor și bărbaților.", spune Alice H. Eagly, de la Northwestern University, SUA.

Femeile ocupă un loc special în activitatea Dianei Halpern, care a oferit cărti lămuritoare despre echilibrul dintre viața profesională și cea de familie, dar și despre rolul femeilor în societate. În cartea Women at the Top: Powerful Leaders Tell Us How to Combine Work and Family (2008), profesoara Diane Halpern și colega sa Fanny M. Cheung pornesc de la faptul că foarte puține femei ajung în topul profesiei lor, iar dintre cele care reusesc, aproape jumătate nu au copii sau alte responsabilități de îngrijire a cuiva. Mesajul pentru femeile care lucrează a fost clar - pentru a ajunge în vârf trebuie să alegi sau una sau alta – familia sau cariera. În această carte revoluționară, doi experți prezintă o nouă perspectivă asupra modului în care femeile își pot crea o viată cu dublu succes. Femeile de pretutindeni si-ar dori un răspuns la întrebarea universală: cum să reușească în profesia lor atunci când sunt și sotii sau mame? Folosind cele mai bune cercetări de psihologie si interviuri personale cu 60 de femei cu familii si cu functii de conducere importante în SUA, China si Hong Kong, cartea analizează cea mai presantă întrebare a timpului nostru – pot femeile să le aibă pe toate?

Diane Halpern este foarte legată emoțional de România, datorită faptului că familia ei este originară din țara noastră. Sperăm ca în viitor să se dezvolte o colaborare între psihologii români și doamna profesor Halpern.

Având în vedere toate aceste motive, precum și realizările remarcabile ale profesoarei Diane F. Halpern, Senatul Universității din București a votat în unanimitate acordarea celui mai înalt titlu onorific de *Doctor Honoris Causa*.

Dear Rector,
Dear President of the Senate,
Dear Professor Diane F. Halpern,
Dear colleagues,

Diane F. Halpern is an outstanding scholar and professor, internationally esteemed and celebrated for her work in the field of Psychology, teaching, and critical thinking. Her career was marked by success both in research and in teaching, as proved by her numerous awards and prestigious positions held over the years.

She completed her BA in Psychology in 1969 at the University of Pennsylvania and she received the Award of the Philadelphia Board of Education full tuition scholarship for outstanding academic achievement; she was on *Dean's list* and *Academic Distinction*, and she graduated *Cum Laude*.

Professor Halpern holds two MA degrees in Psychology, one from Temple University (1973) and the second one from the University of Cincinnati (1977). Diane Halpern received her PhD in Psychology from the University of Cincinnati, and her dissertation was awarded the highest honors.

Diane F. Halpern is *Dean Emerita* of Social Sciences at Minerva Schools at Keck Graduate Institute and Professor of Psychology, Emerita at Claremont McKenna College. She has won many awards for her teaching and research, including the 2019 *Lifetime Achievement Award* for Outstanding Achievement in teaching, research, and professional involvement from the Western Psychological Association, an *Honorary Award* from the Federation of Behavioral and Brain Sciences (FABBS) for *scientists who have made important and lasting contributions to the sciences of mind, brain, and behavior*, the 2013 James McKeen Catell award from the Association for Psychological Science, the American Psychological Foundation Award for Distinguished Teaching, the Distinguished Career Award for Contributions to Education given by the American Psychological Association, and the California State University's State-Wide Outstanding Professor Award.

Professor Halpern received the *Award for Distinguished Teaching* (2013) and the *Distinguished Career Award* for Contributions to Education from the American Psychological Association.

California State University's State awarded her the Wide Outstanding Professor Award.

Professor Halpern is past president of the American Psychological Association (2004), one of the most well-known, influential, and respected associations in the world, past president of the Society for the Teaching of Psychology (1997–1998) and past president of the Western Psychological Association (1999-2000).

In 2021, Professor Halpern was recognized by Stanford University's assessment as among the top 2% of scientists worldwide (in a top ranking that included 176 scientific fields and subfields).

Diane F. Halpern has made a seminal contribution to the devolution of the field of critical thinking and higher forms of reasoning and is also the author of one of the most widely used and well-known tests for measuring critical thinking, the Halpern Critical Thinking Assessment.

Professor Halpern is the author of numerous studies and books that have influenced the academic landscape of critical thinking research from a psychological and pedagogical perspective. Her work, Thought and Knowledge: An Introduction to Critical Thinking, Psychology Press, a publication of Taylor and Francis, reaches its sixth edition in 2023, written together with Dana S. Dunn. Thought and Knowledge apply theory and research from the learning sciences to teach students the thinking skills that they need to succeed in today's world. A rigorous academic grounding based on cognitive psychology is presented in a clear, humorous writing style and supported by numerous real-world, culturally relevant examples and anecdotes.

Professor Halpern's work on critical thinking is important from the perspective of both psychology and education, as its four parts imply:

- Explicit teaching/learning of critical thinking
- Developing an attitude and disposition towards critical thinking (what Aristotle would call the "critical spirit")
- Training the skills of transferring critical thinking skills to other contexts different from those in which the skills were originally practiced
- Tracking the effectiveness of critical thinking (it involves metacognition

and self-monitoring). The work has been awarded numerous prizes and was translated into several languages. Richard E. Nisbett, Professor of Psychology Emeritus, University of Michigan said: "Thought and Knowledge is a superb introduction to logic, reasoning errors and analysis of evidence. The author is one of the world's most distinguished people studying how we think and how we can think more effectively."

Her work is used in teaching critical thinking in the form of individual courses as well as for the development of courses in which critical thinking is integrated.

Her work is significant for both psychology and philosophy, adding the new field of cognitive science to the sum of the beneficiaries of Professor Diane Halpern's outstanding scientific work.

Professor Halpern held several Congressional Testimonies:

In 2001, she provided testimony on the Applications of Principles from Cognitive Psychology to Education before the United States House of Representatives, Committee on Science. The testimony was published in the United States Congressional Record for May 10, 2001. "Classrooms as Laboratories: The Science of Learning Meets the Practice of Teaching".

In 2005, she provided testimony on Women in Science before the Science & Congress Project and the Senate Science and Technology Caucus on June 6, 2005.

In 2009, she presented testimony on May 20, 2009, on "Supporting a Healthier Workplace: Workplace Flexibility and Wellness", sponsored by Rep. Grace F. Napolitano (D-CA) and Rep. Tim Murphy (R-PA), Co-Chairs, Congressional Mental Health Caucus.

Professor Halpern will receive another recognition of her merits, the *Lifetime* Achievement Award from The Society for Experimental and Cognitive Science (Division 3 of the American Psychological Association). This award is for "an individual who has made long-lasting and distinguished theoretical and / or empirical contributions to basic research in experimental psychology and / or cognitive science." It will be presented in August 2023.

Professor Halpern has also written about sex differences, providing a comprehensive synthesis in Sex Differences in Cognitive Abilities, 4th Edition (2012). Professor Halpern reviews the relevant science to determine whether sex differences in cognitive abilities exist, and, if they do, what causes them. "She presents this information in cogent, accessible prose. Psychology students will appreciate this excellent text as would anyone interested in what science has to say about the cognitive abilities of women and men." says Alice H. Eagly, from Northwestern University, USA.

Women have a special place in Diane's work and she has provided enlightening books about work and family life balance and the role of women in society. In the book Women at the Top: Powerful Leaders Tell Us How to Combine Work and Family (2008), Professor Halpern and her colleague Fanny M. Cheung start from the fact that very few women make it to the top of their profession and among those that do, almost half have no children or other caregiving responsibilities. The message for working women everywhere has been clear—to make it to the top you have to pick one—your family or your career. In this groundbreaking book, two experts present a new look at how women can create dually-successful lives. Women everywhere would like an answer to the universal question of how to succeed in their profession when they are also wives, mothers, and family caregivers. Using the best psychological research and personal interviews with 60 women with families and prominent leadership positions in the U. S., China, and Hong Kong, the book examines the most pressing question of our time – can women have it all?

Diane is emotionally connected to Romania due to the fact that her family was originally from our country. We hope that in the future a collaboration between Romanian psychologists and Professor Halpern will develop.

Having in view all these reasons, and the outstanding achievements of prof. Diane F. Halpern, the Senate of the University of Bucharest has unanimously voted to bestow upon her the Highest Honorary Degree of *Doctor Honoris* Causa.



Curriculum vitae | Diane F. Halpern

Dean of Social Sciences, Emerita, Minerva Schools at the Keck Graduate Institute McElwee Family Professor of Psychology, Emerita, Claremont McKenna College Past-president, American Psychological Association

CONTACT INFORMATION

E-mail: Diane.Halpern@cmc.edu

Phone: 626.798.0456

http://www.DianeHalpern.com Address: 3345 Rubio Crest Drive

Altadena, CA 91001 USA

EDUCATION

1979 University of Cincinnati

Ph.D., Psychology

Scholastic Distinction: Major Qualifying Examinations passed with highest honors; Dissertation awarded highest honors Dissertation Chairs: Joel S. Warm and William N. Dember Dissertation Title: The Multiple Determinants of Subjective

Contour Perception

1977 University of Cincinnati

M.A., Psychology

1973 Temple University

M.A., Psychology

1969 <u>University of Pennsylvania</u>

B.A., Psychology

Scholastic Distinction: Awarded the Philadelphia Board of Education full tuition scholarship for outstanding academic achievement; Dean's list and Academic Distinction:

graduated Cum Laude

AWARDS

2023 Lifetime Achievement Award from The Society for Experimental

and Cognitive Science (Division 3 of the American Psychological Association). Award is for "an individual who has made long-lasting and distinguished theoretical and/or empirical contributions to basic research in experimental psychology and/or cognitive

science." To be presented in August 2023.

2021 Recognized by Stanford University as one of the top 2% of all

scientists (176 subfields) in the world. https://data.mendeley.com/

datasets/btchxktzyw/2

- 2019 Western Psychological Association Lifetime Achievement Award—for outstanding achievement in teaching, research, and professional involvement 2016 Federation of Associations in Behavioral & Brain Sciences (FABBS) Honored Scientist (IHO) "Who made important and lasting contributions to the science of mind, brain, and behavior." http:// www.fabbs.org/fabbs-foundation/honoring-our-scientists/honordiane-f-ha/ 2013 Association for Psychological Science James McKeen Cattell Fellow Award – for a lifetime of outstanding contributions to applied psychological research. It is the highest award given by the Association for Psychological Science. 2013 American Psychological Foundation Arthur W. Staats Lecture on Unifying Psychology. Lecture to be Presented at the 2013 Annual Convention of the American Psychological Association, Honolulu, HI. 2013 American Psychological Association Raymond D. Fowler Award for Outstanding Contributions to APA. Presented at the 2013 Annual Convention of the American Psychological Association, Honolulu, HI. 2013 The University of New Brunswick (UNB), Fredericton & St. John W. C. Desmond Pacey Memorial Lecture Award. Presented at UNB. March 2013. 2011 Western Psychological Association Award for Outstanding Service to Psychology 2010 Roy P. Crocker Award for Merit Awarded by Faculty at Claremont McKenna College 2009 George A. Miller Award, 2009, for "the outstanding journal article in psychology" Awarded by the Society for General Psychology, Division 1, American Psychological Association 2009 Association for Psychological Science
- 2008 William James Distinguished Lecture Award, Awarded by: American Psychological Society Two psychologists are selected each year to present lectures at regiona psychological association meetings

Caucus

Named "2009 Champion of Psychology" by APS Graduate Student

Society for the Teaching of Psychology 2007

Presidential Citation

In recognition of significant career contributions to the Teaching of Psychology

2007 Certificate of Special Congressional Recognition

> Presented "In recognition of outstanding service to the community" by Congressman Joe Baca, 43rd Congressional District

2006 Ida Beam Distinguished Visiting Professor Award

University of Iowa

Psi Chi Distinguished MemberOne of 25 that have been awarded in 2005 the 76 years of Psi Chi

2004 Honorary Doctorate, Doctor of Humane Letters (Ph.D.)

Mount St. Mary's College, Los Angeles, CA

"Mount St. Mary's College Upon the recommendation of the board of Trustees Confers on Diane F. Halpern for her esteemed leadership as president of the American Psychological Association, and as director of the Berger Institute for Work, Family, and Children at Claremont McKenna College; for her exemplary dedication to American higher education; for her extraordinary achievements as a professor of psychology, and as a researcher, scholar, and community leader; for he accomplished work as an author of books and articles; and for her compassion as a human being, which has improved the lives of so many, the degree of Doctor of Humane Letters, honoris causa with all the Rights, Privileges and Honors."

2003 Distinguished Alumni Award

McMicken College of Arts & Sciences, University of Cincinnati

Western Psychological Association Outstanding Teaching Award 2002

1999-2000 Wang Family Excellence Award

Cash award for professional excellence. Selected from among 10,000 eligible faculty members in the California State University system (all faculty in the Social Sciences on all campuses).

1998–1999 American Psychological Foundation Award for Distinguished Teaching

> Presented at the Annual Convention of the American Psychological Association.

1998 Eminent Women in Psychology

One of three female psychologists selected annually for this recognition. Presentation at Annual Convention of the American Psychological Association.

James Madison University, Distinguished Visiting Scholar Award

1996–1997 Distinguished Career Contributions to Education and Training

American Psychological Association Award to recognize significant life-long contributions to teaching and learning. First woman to receive this award.

Arthur Moorefield Memorial Award 1997

For "Exemplary Personal Faculty Development."

Rockefeller Foundation Scholar-In-Residence 1995

Awarded for collaboration with co-author in Russia to work at Rockefeller International Center at Bellagio, Italy.

1994 Fulbright Scholar Award

Recipient of a Fulbright Scholar Award to Moscow State University in Moscow, Russia.

Birkett Williams Memorial Lecture Award 1992

Invited address and award given by Ouachita Baptist University, Arkadelphia, Arkansas, for exceptional achievement in any academic area.

1991 G. Stanley Hall Lecture

Invited lecture for the American Psychological Association. Awarded to five psychologists annually (selected from among approximately 109,000 members)

Professional Growth Award, CSUSB 1990

University award for exceptional scholarship Meritorious Performance and Professional Promise Cash award given by California State University.

1989 Fellow, American Psychological Association / Divisions 1 (Society for General Psychology), 2 (Society for the Teaching of Psychology), 3 (Experimental Psychology), 15 (Educational Psychology), 35 (Society for the Psychology of Women), 48 (Society for the Study of Peace, Conflict, and Violence: Peace Psychology, 52 (Society for *International Psychology*)]. Awarded in recognition of outstanding and unusual contributions to psychology.

1988 Outstanding Alumni Award

University of Cincinnati. Awarded for outstanding achievement

by alumni in their chosen field.

1987 **Educational Equity Award**

> Association of Black Faculty and Staff (for efforts on behalf of underrepresented minorities).

Silver Medal Winner 1986

> Council for the Advancement and Support of Education (CASE). A national association for higher education. Award was given for recognition of outstanding teaching and research.

Meritorious Performance and Professional Promise Cash award given by California State University.

Professor of the Year Award

Given by the Chamber of Commerce

Outstanding Professor Award

California State University (System wide-selected from 19 campuses; approximately 80,000 professors in 1986)

1985 Outstanding Professor Award

California State University, San Bernardino

Outstanding Research Award

ACADEMIC EMPLOYMENT EXPERIENCE

- 2014-2015 Dean of Social Sciences, Minerva Schools at the Keck Graduate Institute
- 2009–2014 Named McElwee Family Professor of Psychology and George Roberts Fellow Claremont McKenna College
- 2001–2014 Professor of Psychology, Claremont McKenna College Faculty in Psychology, Claremont Graduate University
- 2001–2008 Director, Berger Institute for Work, Family, and Children and <u>Professor of Psychology, Claremont McKenna College</u>
- 2009-2011 & Department Chair
- **2005–2006** Courses taught at Claremont McKenna College:
 - Cognitive Psychology
 - Critical Thinking

- Introductory Psychology
- Psychology of Work, Family, and Children
- Sex Differences in Cognitive Abilities

Course taught at Claremont Graduate University

• Sex Differences in Cognitive Abilities

1981–2001 Department of Psychology, California State University, San Bernardino, California

1986-2001 Professor

1996-1999 Chair, Department of Psychology

1984–1986 Associate Professor

1981–1984 Assistant Professor

Courses taught at California State University:

- Advanced Cognitive Psychology (graduate)
- Advanced Topics in Cognitive Psychology (graduate)
- Advanced Psychological Statistics (graduate)
- Critical Thinking
- Cognitive Psychology
- Experimental Methods in Cognition & Perception
- Health Psychology (graduate)
- Introductory Psychology
- Perception
- Psychological Statistics
- Psychology of Women
- University Studies

1979–1981 Lecturer, Department of Psychology, University of California, Riverside, CA

Courses taught at University of California:

- Cognitive Influences on Perception (graduate)
- Foundations of Learning and Memory
- Introductory Psychology
- Perceptual Development
- Psychology of Women
- Topics in Psychology of Women (graduate)

1978–1979 Consultant, Behavioral Sciences Laboratory, University of Cincinnati, Cincinnati, Ohio

This job entailed consulting on experimental and survey design, data collection, and data analysis for research conducted in the University, Medical Center and private

industry.

1977–1978 <u>Teaching Assistantship, University of Cincinnati, Cincinnati, Ohio</u>

Courses taught at University of Cincinnati:

- Experimental Psychology Laboratory
- Statistical Package for the Social Sciences
- · Psychology of Perception
- Psychology of Women (Teaching Assistant)

ACADEMIC AFFILIATIONS

2016 (Summer) Visiting Professor, Summer Session, Chinese University (Hong Kong)

$\textbf{2016 (March)} \quad \text{Faculty, The } 6^{\text{th}} \, \text{Latin American School for Education,}$

Cognitive and Neural Sciences funded by the James S. McDonnell Foundation. Buenos Aires, Argentina

2011 (Summer) Visiting Professor at University of Minho, Braga, Portugal

2007 (Fall) <u>Visiting Professor in Psychology</u> (Fall semester) Chinese

University, Hong Kong

1999 <u>Visiting Professor in Psychology</u> (Fall semester) Bogazici

University, Istanbul, Turkey

Courses taught at Bogazici (Bosphorous) University:

- Psychology of Sex and Gender
- Advanced Cognitive Psychology

Conducted collaborative research with Dr. Uner Tan at Black Sea Technical Institute School of Medicine in Trabzon, Turkey where we examined the relationship between serum hormone levels and performance on selected cognitive tasks.

Conducted collaborative research with Dr. Hasan Yazaci at Cerrapasa Medical Center in Istanbul, Turkey where we assessed the cognitive decline found in patients with Behcet's Disease.

1997–2001 <u>Faculty Affiliate, "The Psychology Place"</u>

An extensive internet site designed to enhance teaching and learning. I was responsible for material on critical thinking and methodology.

On-line, interactive learning activities that I wrote:

- Critical thinking: I know it's a good thing, but what is it?
- Exploring arguments: Deciding what to believe
- $\bullet \ Exploring \ confirmation \ bias$
- Investigating graphology: Is the writing on the wall?

- · Making sound decisions
- Product claims: Too good to be true?
- Understanding mental models

Adjunct Graduate Faculty, Loma Linda University and Medical 1996-2001 Center

1996 (Summer) American Association for Higher Education (AAHE)

Summer Institute, Breckenridge, Colorado

Taught intensive course for college faculty and administrators on ways to restructure universities so that they support learning and facilitate the transfer of learning to real-world settings

1995 (Summer) International Center for Critical Thinking Instruction, Boston, MA Taught an intensive course for college and high school faculty on teaching for thinking

1994 Fulbright Scholar Award, Visiting Professor, Moscow State University, Department of Psychology, Moscow, Russia Courses taught at Moscow State University:

- Critical Thinking
- Psychology of Sex Differences and Similarities First American psychologist to have my own courses at Moscow State University

1992 (Summer) <u>Visiting Professor in Psychology, Instituto Technologico y de</u> Estudios Superiores de Monterrey, Monterrey, N.L. Mexico Course taught at the Instituto Technologico:

• Intellectual Development (graduate course)

1987-1988 Visiting Professor in Psychology, Department of Psychology,

University of British Columbia, Vancouver, B.C., Canada Worked with Stanley Coren on several research projects investigating laterality effects on cognition.

Course taught at University of British Columbia:

• Introductory Psychology

1988 (Spring) Visiting Scholar, Department of Psychology, Stanford

University, Stanford, California Sponsored by Gordon Bower

ACADEMIC - ADMINISTRATION

2014-2015 Dean of Social Sciences, Minerva Schools at the Keck Graduate Institute

Inaugural Dean for a new and innovative university. Among the

many innovations, students live in six different countries, with classes offered via the internet.

Chair, Department of Psychology, Claremont McKenna 2009-2011 College

2005-2006 Department in liberal arts college that is preparing highachieving students for leadership positions and graduate and professional school.

2001-2008 Director, Berger Institute for Work, Family, and Children As the founding director of this institute I established an agenda for research and education on family-work issues, including conflicts and benefits from these two interacting major forces on contemporary life and effects on child development and parenting and workplace roles. One goal of the institute is to assemble an empirically-validated body of knowledge that can inform public policy on work-family issues.

1996-Aug 1999 Chair, Department of Psychology, California State University, San Bernardino

Department with 31 tenure track faculty, 50–60 part-time and adjunct faculty, laboratory technicians, clerical staff, approximately 1000 undergraduate majors, separate master's programs in Industrial/Organizational Psychology, General Psychology, Life Span Development, and Clinical Psychology with an MOU for doctoral education and training with Loma Linda University. We offer a separate degree program in Human Development and maintain an off-campus site at College of the Desert in Palm Desert, CA.

Associate Chair, Department of Psychology 1995-1996 Scheduled classes, hired all part-time faculty, had oversight responsibility for budgets and a variety of department functions

Interim Dean, Undergraduate Studies, California State

University, San Bernardino Position of Interim Dean involved administration and line responsibility for all equity programs (Educational Opportunity Program, STEP to College, Student Assistance in Learning), the Learning Center, Advising Center, Counseling Center, Intensive Learning Experience, all transition and retention services, and academic probation. Accomplishments included award of several federal, state, and system-wide

1986-1987

grants to assist low income, handicapped, and minority students succeed in the University, administrative oversight for a major revision in the General Education Program, and implementation of an Educational Equity Program designed to increase the enrollment and retention rates for Black, Hispanic, and Native American students.

Two associate deans, six program directors, approximately twenty-five staff and two faculty positions reported to the Interim Dean. Total budget was in excess of \$1,000,000.

1984-1986 Associate Dean, Undergraduate Studies, California State University, San Bernardino

Position of Associate Dean involved administration and coordination of undergraduate programs and responsibility for all academic advising, curricular review, special baccalaureates, and undeclared majors (the largest major on campus). Specific accomplishments included planning and implementation of an undergraduate academic advisement center, writing academic program improvement grants, and formulating policies for student retention and prohibition of sexual harassment. Wrote FYI, a faculty handbook on university rules and regulations and Undergraduate Survival Manual, a student guide to the University. Initiated and coordinated an external review of General Education curriculum.

1984-1985 Coordinator, Master of Arts Program, Psychology

In this capacity, completely revised the Master of Arts program in psychology into three separate tracks (General-Experimental, Industrial Organization, and Developmental), made all admissions decisions, and administered the program.

SELECTED ACADEMIC COMMITTEES AND OTHER ADMINISTRATIVE DUTIES

Hiring/Selection/Evaluation Committees

- Claremont McKenna College Presidential Search Committee
- · Chancellor's Search Committee
- Psychology Department Hiring Committee
- Academic Vice President Selection Committee
- Department Chair Evaluation Committee
- Dean of Undergraduate Studies Hiring Committee
- Faculty Evaluation Committees

- School of Social and Behavioral Sciences Hiring Committee (hired faculty in Women's Studies and Ethnic Studies)
- Program Evaluator for Intensive Learning Experience, a state funded program to improve retention rates and academic success for lowest quartile students in the CSU

Policy Committees

- Faculty Affairs/Policies Committee, Chair
- Student Retention Committee
- Civic Service Internships (drafted policy to encourage civic/community service for all CSU students)
- Curriculum Committees
- General Education Revision Task Force
- · University Curriculum Committee, Chair
- · General Education Committee
- Cooperative Education Committee

American Psychological Association Committees

- Committee on Precollege and Undergraduate Education
- · Committee on Ethnic Diversity
- Task Force on Intelligence
- Awards Committee for Board of Educational Affairs

OTHER PROFESSIONAL EXPERIENCE

Editorial Boards (sampler):

- Scholarship of Teaching and Learning in Psychology 2015–2018
- Oxford On-line Bibliography 2012–2015
- Educational Psychologist, 2005-2010
- Educational Psychology Review 2008–2011
- Journal of Applied Psychology, 2002–2008
- Journal of Experimental Psychology: Applied, 2001–2007
- Brain and Cognition, 1999–2002
- College Teaching, 2000–2003
- Inquiry: The Journal of Critical Thinking, 2000-2003
- Journal of Educational Psychology, 1991–1996
- Journal of Experimental Psychology: General, 1989–1996
- Psychology, Learning, and Teaching, Special Issue on Globalization, 2011–2012

Congressional Testimony (2009)

Presented testimony May 20, 2009 on "Supporting a Healthier Workplace: Workplace Flexibility and Wellness" Sponsored by Rep. Grace F. Napolitano (D-CA) and Rep. Tim Murphy (R-PA), Co-Chairs, Congressional Mental Health Caucus.

Congressional Testimony (2005)

Provided testimony on Women in Science before the Science & Congress Project and the Senate Science & Technology Caucus on June 6, 2005.

Congressional Testimony (2001)

Provided testimony on the Applications of Principles from cognitivePsychology to Education before the United States House of Representatives, Committee on Science, Testimony published in the United States Congressional Record for May 10, 2001. Available on line at http://www.house.gov/science/research/ reshearings.htm "Classrooms as Laboratories: The Science of Learning Meets the Practice of Teaching"

Provided briefing for United States White House Staff

Office of Science and Technology on the Science of Learning and Assessment. May 9, 2001

American Psychological Association: President of Divisions

Division 1: General Psychology, Executive Committee, 1991–1998,

1996-President

Division 2: Society for the Teaching of Psychology,

Executive Committee, 1996-1999

American Psychological Association - President, 2004

1991-1994	Board of Educational Affairs
1992-1994	Chair, Panel on Public Policy and Innovations in Education
2003-2005	Council of Representatives
1998-2001	Committee on International Relations in Psychology (CIRP)
2001-2002	Committee on Learning Outcomes
2007-2010	Teachers of Psychology in Secondary Schools (TOPSS), Board
	Member

American Psychological Society

1999-2002 Co-Chair (with Sheldon Zedeck at UC, Berkeley and later

Milton Hakel, Bowling Green State University), Work group

on Education; Initial Fellow of APS

Federation of Associations in Behavioral and Brain Sciences (FABBS)

2012–2015 Executive Committee, Member-at Large

FABBS is a coalition of scientific societies that share an interest in advancing the sciences of mind, brain, and behavior.

Advisory Board Member for Admissions for Austrian Medical and Dental Schools

2013–present Working with Austria's Medical Universities to devise fair

and valid admissions practices.

Western Psychological Association

1999–2000 President

2005–2010 Western Psychological Foundation, Board member

California Psychological Association

2000–2006 Full Member

The Academy for Academic Leadership

1998–2000 Consultant on educational assessment and cognitive

psychology

<u>Association of American Colleges</u>

1989–1991 Committee on Study in Depth

<u>Defining Scholarship in Psychology</u>

1996–2000 Chair, Task Force; project funded by private donors and

FIPSE, administered from Syracuse University

Educational Testing Service

1990–1992 College Level Examination Program (CLEP) in psychology,

member, oversight committee

1996–2002 Graduate Record Examination, Technical Advisory

Committee, (separate contracts on equity and testing);

1998–1999 Committee on Mathematical Reasoning

Western Association of Schools and Colleges (WASC)

2016–2018 Chair, Accreditation Team

2001–2005 Commissioner

1990; 1992-1993;

1996-1997; 2000 Accreditation team member

Reviewed Journal Articles and Texts (sampler)

American Education Research Journal

American Journal of Psychology

American Psychologist

Brain and Behavioral Sciences

Brain and Cognition Child Development

Developmental Neuropsychology

Developmental Psychology Educational Psychology Review

Journal of Educational Psychology

Journal of Experimental Psychology: General Review of General Psychology

Learning and Individual Differences

Memory and Cognition Merrill Palmer Quarterly

Neuropsychology

Perception

Perception & Psychophysics Perceptual and Motor Skills Psychology of Aging

Psychological Bulletin Psychological Review Psychological Science

Psychology of Women Quarterly Educational Psychologist

Bulletin and Review

Psychonomic

Sex Roles

Social Psychology Quarterly Teaching of Psychology

Confidential peer reviews

For tenure and promotion decisions conducted for several universities annually.

Consulting and Grant Activities:

American Association for Higher Education (AAHE)

Educational Testing Service (ETS)

Hemet School District, CA

Pennsylvania Department of Education

Placer County Schools, CA

Riverside County Schools, CA

San Bernardino School District, CA

Consulting activities included advising on the design and use of critical thinking tests, programs, and instructional materials and conducting numerous in-service workshops on critical thinking instruction for faculty and administrators. Consultation for ETS involved the development of a taxonomy of thinking skills.

review of graduate psychology exam questions, review of exam items for possible bias, review of psychology credential exam, and Technical Advisory Committee for the CAT versions of the Graduate Record Exams (several separate contracts).

Sultanate of Oman Research Council (2014)

Consultant to the Program Specialist at the Research Council of Oman on "Skills for 21st

Century Training in Higher Education Institutions in Oman."

Singapore Armed Forces (2014)

Consultant on Critical Thinking Programme for armed forces.

External Evaluator for Chinese University of Hong Kong (2011–2012)

Consultant, ICF Train II

External Consultant on Army Research Institute Contracts with ICF: (a) Cognitive Skills; (b) Knowledge Management (2012–2013)

Enhancing Soldier, Leader, and Staff Decision-Making Processes

Consultant, Office of the Director of National Intelligence (2012)

Measuring Critical Analytic Thinking Skills for Intelligence Analysts

Consultant on Assessment of Teaching and Learning Outcomes:

California State University, Sacramento Minnesota State Universities (system wide) San Francisco State University (College of Ethnic Studies)

External evaluator for the Psychology Department

California State University, Fullerton; California State University, Long Beach; State University of New York, Geneseo; Furman University (2013)

U.S. Department of Education, Washington, D.C.

Consultant (writer and reviewer) for the higher education goal portion of Project 2000 – Presidential plan for education (1991–1993)

American Assembly of Collegiate Schools of Business, St, Louis, MO

 $Task\ Force\ on\ Effective\ Learning\ Environments$

Proctor & Gamble Co., Cincinnati, OH

Research consultant on project involving consumers' cognitive models.

Kaiser Permanente, Inc., Pasadena, CA

 $Research \ consultant \ on \ member \ perceptions \ of \ health \ risks.$

National Institute of Occupational Safety and Health, Cincinnati, OH

Research consultant on project designed to assess cognitive demands and stresses related to key board tasks.

Fund for the Improvement of Postsecondary Education (FIPSE).

Reviewed grant applications and made funding recommendations

Advisor to California Postsecondary Education Commission (CPEC)

Regarding Assembly Bill No. 2016 "Higher Education Talent Development." AB 2016 directed CPEC to develop recommendations for performance based incentive funding for all public postsecondary institutions in California.

California Commission on Teacher Credentialing

Consultant for the Multiple Subjects Assessment Test, a test administered to approximately 5000 prospective teachers. Consulted on psychometric aspects of the test, notably pass rates for various ethnic groups and issues pertaining to validity and compliance with California Law.

University of Texas, El Paso

Consultant on NSF-funded project to enhance student learning.

North Carolina Technical and Agricultural State University (2010-2011)

Reviewed materials relevant to plan to make critical thinking a university-wide outcome

National Institutes of Health, Bethesda, MD

Review panels for major centers grant applications (1998).

Orange County Adoption Services, Bridge Builders Project

Made data-based recommendations for post-adoption services (1998–1999; on-going consultancy).

<u>Seedlings Project (Orange County Adoption Services)</u>

Consultant on project to provide services to children (ages 0 to 5 years) with special needs who are making a transition into an adoptive home (2000–2002).

SPECIAL PROJECTS

American Civil Liberties Union (ACLU)

2012–2013 Expert Witness in Doe v. Wood County, West Virginia School District

2008–2011 Expert Witness in A.N. A. et al. v. United States Department of Education (Breckinridge County, KY Middle School)

Civil Action No. 3:08-cv-00004-CRS

2009–2011 Expert Testimony in Jane Doe et al. v. Vermilion Parish School Board

American Council for Co-Educational Schooling (ACCES)

2010–2016 Membership Chair, for Academic Council that is operated and financed through the generous support of the School of Social and Family Dynamics, Arizona State University

United States Department of Education

2006–2007 Chair of Working Group charged with the task of producing a "Best Practice

Guide for Encouraging Girls and Women in Math, Science, and Engineering."

<u>Association for Psychological Science</u>

2006-2007 Chair, Life-Long Learning at Work and at Home

Committee is charged with developing materials that highlight advances in learning technologies and methods that produce durable learning in applied settings.

American Psychological Association

 2006–2008 Chair, Planning Committee for International Conference on Psychology Education
 Conference on redesigning undergraduate education was held in June 2008.

People's Republic of China, Hong Kong

2000–2001 Prepared "expert testimony" for the Hong Kong Department of Education for use in a lawsuit concerning discriminatory use of test scores and grades for placement in secondary schools. Testimony was provided to Hong Kong court. Made recommendations for school change—presentations to numerous groups in Hong Kong, including the Legislative Council, Department of Education, parents, and school administrators. Outcome affects approximately 1 million children every year.

GRANTS—FUNDED PROJECTS

2007–2013 U. S. Department of Education, Institute for Educational Sciences

Co-PIs: Keith Millis, Ph.D., Northern Illinois University and Art Graesser, Ph. D., University of Memphis

Title: Acquiring Research Investigative and Evaluative Skills (ARIES) for Scientific Inquiry No.: R305B070349 Amount: \$1,986,743

Grant is for the development of computer-based instruction (CBI) that gives didactic lessons on scientific critical thinking and example cases that illustrate multiple critical thinking skills. A second component of ARIES consists of a series of cases that presents a problem, has 2 to 10 expected units of verbal information in an ideal answer, and 2–10 potential verbal misconceptions. After the problem is presented, a mixed initiative dialogue will commence with a guide "tutor" providing hints, prompts, assertions, answers to questions and other speech acts to facilitate smooth conversation and learning. A third component of ARIES will present tests and collect data from participants on tests designed to assess transfer of the skills. http://www.Operation-ARIES.com

2007-2009 National Science Foundation Grant DUE-618573 Howard Thorsheim Ph.D., and Robert Gephart Ph.D. co-PIs I served as a research design and statistical consultant Title: Investigative Psychophysiology Activities for **Community Colleges**

Grant was designed to develop active learning strategies to support community college faculty teaching psychology as a science in order to transform America's scientific and technology infrastructure.

2007-2010 Chinese Research Graduate Council Grant: "Critical Thinking Package for Senior Secondary Students in Hong Kong"

Principal Investigators: Kit-Tai Hau, Irene Ho, and Diane Halpern In the new Hong Kong senior secondary school curriculum to be launched in 2009–2010, the teaching of critical thinking will be an essential feature of the subject "Liberal Studies," which is compulsory for all students. The project will build upon earlier local studies on critical thinking assessment and will produce a teaching and learning package that can be easily reproduced in the classroom.

2007-2009 Chinese Research Graduate Council Grant: "Development of Critical Thinking Modules"

Principal Investigators: Kit-Tai Hau, Irene Ho, and Diane Halpern Development of web-based materials for critical thinking instruction. Modules are being used in every high school in Hong Kong.

2004–2006 Jacobs Foundation: "Web-Based Program to Enhance Critical Thinking Skills in Economically Disadvantaged Adolescents" Principal Investigator: Diane Halpern

Project to develop and implement a web-based program to enhance critical thinking skills in economically disadvantaged adolescents. This web-based program is intended as an intervention to help prepare adolescent for the technological demands of advanced education and the 21st century work force by developing their critical thinking skills.

2004–2007 Chinese Research Graduate Council Grant: "Critical Thinking among Chinese Students: Characteristics, Assessment, and Relationship with Dispositional Factors"

Principal Investigators: Kit-Tai Hau, Irene Ho, and Diane Halpern Project to examine the critical thinking skills of Chinese students and to develop appropriate assessment tools for use. This research provides the necessary foundation for the large scale launching of critical thinking skills training and assessment for high school and tertiary students in Hong Kong.

2004–2006 The California Wellness Foundation: "How Paid Family Leave Affects Home Care and Health Outcomes" Principal Investigator: Diane Halpern

Project to investigate the impact of the California Paid Family Leave Insurance Program. This project will determine whether work demands present a major barrier to providing family care; whether paid family leave will help to alleviate some of these demands by making it less costly to take family leave; and the effects of paid family leave on the health outcomes of low income participants with high needs for home care and out-patient hospital care. In addition, the Berger Institute will disseminate information about the availability of paid family leave and provide data about health outcomes to inform the debate about paid family leave.

- 2000–2003 The Spencer Foundation: "Practicing What We Preach: Using the Principles of Cognitive Psychology to Enhance Learning" Principal Investigator: Diane Halpern
- 2000–2003 Marshall-Reynolds Trust: "Science Based Teaching"
 PI and Project/Conference Coordinator: Diane Halpern
 Project to translate the science of learning into an action plan for
 the redesign of higher education. Project is conducted under the

auspices of the American Psychological Society and includes an invited working retreat of 35 prominent psychologists was held in March, 2001, a volume of proceedings, and Congressional briefings.

2001–2002 U.S. Army Research Institute.

Learning and Adult Development Project.

Principal Investigator: Diane Halpern

Research and educational project designed to increase the critical thinking abilities in the U.S. military. Presentation and planning at Ft. Leavenworth. December 2000.

1994 Rockefeller Foundation, New York.

Principal Investigator: Diane Halpern

Awarded Scholar-in-Residence grant, which funded collaborative research project with Dr. Alexander Voiskounsky at Moscow State University. Portion of collaboration occurred at Rockefeller Foundation in Bellagio, Italy.

OTHER GRANTS RECEIVED

As Dean of Undergraduate Studies (Associate Dean, Interim and Acting Dean were titles used in different years), the Office of the Undergraduate Dean received several state and federal grants (several million dollars in total) for "lowest quartile students," "first generation students," and "students from families with low incomes." The University and Office of the Undergraduate Dean were the recipients of the grants; I was responsible for obtaining them for the university.

PRIMARY AUTHOR

United States Department of Education National Education Goals Panel-Goal 5.5, the goal that promotes critical thinking in higher education. As the primary author, I wrote the standards for critical thinking and defined assessment techniques for determining the extent to which the goals have been obtained. (1992-1993)

CONFERENCE CHAIR

National Conference on Undergraduate Education in Psychology: Week-long conference held at University of Puget Sound, Tacoma. Washington. Eighty educators were selected to attend to "draft a blueprint for the future of education in psychology." Funded by multiple sources including, the National Science Foundation, American Psychological Association, Psi Chi, and ten other

societies and groups. Outcome was approximately 30 conference presentations and an edited book to be published by the American Psychological Association.

For conference entitled, "Student Outcomes Assessment: A Tool for Improving Teaching and Learning." In this capacity, handled all of the arrangements and made all program decisions for a three day conference which included a legislative panel, exemplary programs from four states (Tennessee, Missouri, New Jersey, Florida), the executive director for the Master Plan for Higher Education, the director of the Institute for Higher Education, as well as speakers from the National Center for Higher Education Management Systems, and other recognized authorities in this area.

CO-CHAIRPERSON

For conference entitled, "Eliminating the Anglo-Minority Achievement Gap." Coordinated all conference plans including selection of internationally known speakers and respondents, which included the Chancellor of the California Community Colleges (head of 106 campuses), the Director of the Postsecondary Education Commission, the Executive Director of the College Board, the Director of the National Alliance of Business, and representatives from model programs in Boston, Baltimore, and Oakland.

CO-CHAIRPERSON

Conference entitled "Assessing Learning Outcomes in the Psychology Major" (with Mary Allen at CSU, Bakersfield). Conference held in February, 1999 with representatives from all CSU campuses.

United States National Committee for the International Union for Psychological Science

"The United States is a member of the International Union of Psychological Science through the National Academy of Sciences." Board member and representative to the International Union 2005-2009.



Publications | DIANE F. HALPERN

- Halpern, D. F., & Dunn, D. (2023). Thought and Knowledge: An Introduction to Critical Thinking (6th Edition). New York, NY: Routledge (an imprint of Taylor & Francis). Hb: 978-1-138-65516-4; Pb: 978-1-138-65517-1
 - Companion website with instructor and student resources; www.routledge.com/ cw/halpern
- Sternberg, R.J., & Halpern, D. F. (Eds.). (2020) Critical Thinking in Psychology (2nd ed.) Cambridge, MA: Cambridge University Press.
- Cheung, F. M., & Halpern, D. F. (Eds.) (2020). Cambridge International Handbook on Psychology of Women. Cambridge, MA: Cambridge University Press.
- Gazzaniga, M. S., Heatherton, T. F., & Halpern, D. F. (2016). Psychological Science (6th ed.). NY: W. W. Norton. Also published in German. (2017).
- Halpern, D. F. (2014). Thought and Knowledge: An Introduction to Critical Thinking (5th Edition). NY: Routledge Publishers.
 - Halpern, D. F., Riggio, H. R., & Butler, H. (2014). Companion Website for Thought and Knowledge: An Introduction to Critical Thinking (5th Edition) http://www. routledge.com/cw/halpern-9781848726291/
- Gazzaniga, M. S., Heatherton, T. F., & Halpern, D. F. (2012). Psychological Science (4th ed.). NY: W. W. Norton.
- Halpern, D. F. (2012). Sex Differences in Cognitive Abilities (4th ed.). NY: Psychology Press. Gazzaniga, M. S., Heatherton, T. F., & Halpern, D. F. (2010). Psychological Science (3rd ed.). NY: W. W. Norton.
- Halpern, D. F. (Ed.). (2009). Undergraduate Education in Psychology: A Blueprint for the Future of the Discipline. Washington, DC: American Psychological Association Books.
- Halpern, D. F., & Cheung, F. M. (2008). Women at the Top: How Powerful Leaders Combine Work and Family. NY: Wiley-Blackwell Publishers.
 - Also published in Arabic, Portuguese, and Chinese (Cantonese and Mandarin).
- Marcus-Newhall, A., Halpern, D. F., & Tan, S. (Eds.). (2008). The Changing Realities of Work and Family: An Interdisciplinary Approach, NY: Wiley-Blackwell Publishers.
- Sternberg, R., Roediger, R., & Halpern, D. F. (Eds.). (2007). Critical Thinking in Psychology. Cambridge, MA: Cambridge University Press.
- Halpern, D. F. & Murphy, S. E. (Eds.). (2005). From Work-Family Balance to Work-Family Interaction: Changing the Metaphor. Mahwah, NJ: Lawrence Erlbaum Associates, Inc. Publishers.
- Halpern, D. F. (2003). Thought and Knowledge: An Introduction to Critical Thinking (4th Edition). Mahwah, NJ: Lawrence Erlbaum Associates, Inc. Publishers. Also published in Russian (2003).
- Halpern, D. F. & Riggio, H. (2003). Thinking Critically About Critical Thinking (4th ed.) Mahwah, NJ: Lawrence Erlbaum Associates, Inc. Publishers. (with separate instructors' manual)
- Halpern, D. F., & Hakel, M. D. (Eds.), (2002). Applying the Science of Learning to the University and Beyond. New Directions for Teaching and Learning. San Francisco: Jossey-Bass.

- Halpern, D. F. (2000). Sex Differences in Cognitive Abilities (3rd Edition). Mahwah, NJ: Lawrence Erlbaum, Associates, Inc. Publishers.
- Halpern, D. F. (1997). Critical Thinking Across the Curriculum: A Brief Edition of Thought and Knowledge. Mahwah, NJ: Lawrence Erlbaum Associates, Inc. Also published in Spanish (2000).
- Halpern, D. F. & Voiskounsky, A. (Eds.). (1997). States of Mind: American and Post-Soviet Perspectives on Contemporary Issues in Psychology. NY: Oxford University Press.
- Halpern, D. F. (1996). Thought and Knowledge: An Introduction to Critical Thinking (3rd Edition). Mahwah, NJ: Lawrence Erlbaum Associates, Inc. Publishers. Also published in Russian (1999).
- Halpern, D. F. (1996). Thinking Critically About Critical Thinking: An Exercise Book to Accompany Thought and Knowledge; An Introduction to Critical Thinking (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates, Inc. Publishers. (Package also includes an Instructor's Manual.)
- Halpern, D. F. (Ed.). (1994). Changing College Classrooms: New Teaching and Learning Strategies for an Increasingly Complex World. San Francisco: Jossey-Bass.
- Halpern, D. F. (1992). Sex Differences in Cognitive Abilities (2nd Edition). Hillsdale, NJ: Lawrence Erlbaum, Associates, Inc. Publishers.
- Halpern, D. F. (Ed.). (1992). Enhancing Thinking Skills in the Sciences and Mathematics. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc. Publishers.
- Halpern, D. F. (1991). Decision Making and Problem Solving. Moscow, USSR: Progress Press. (Published as a monograph in Russian).
- Halpern, D. F. (1989). Thought and Knowledge: An Introduction to Critical Thinking (2nd Edition). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc. Publishers.
- Halpern, D. F. (Ed.). (1987). Student Outcomes Assessment: What Institutions Stand to Gain. San Francisco: Jossey-Bass.
- Halpern, D. F. (1986). Sex Differences in Cognitive Abilities. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc. Publishers.
- Halpern, D. F. (1984). Thought and Knowledge: An Introduction to Critical Thinking. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc. Publishers (with accompanying Instructor's Manual).

BOOK CHAPTERS (AND PUBLISHED PROCEEDINGS)

- Halpern, D. F., & Wai, J. (2020). Sex differences in intelligence. In R. J. Sternberg (Ed.), The Cambridge Handbook of Intelligence (pp. 317-345). Cambridge, U.K.: Cambridge University Press.
- Halpern, D. F., & Butler, H. A. (2020). Is critical thinking a better model of intelligence? In Sternberg, R. J. (Ed.). The nature of intelligence pp. 183-196. Cambridge, UK. Cambridge University Press.
- Halpern, D.F. & Sternberg, R. J. (2020). An introduction to critical thinking: Maybe it will save your life. In R. J. Sternberg & D. F. Halpern (Eds.) Critical Thinking in Psychology (2nd. Ed.). (pp. 1-9). Cambridge, UK: Cambridge University Press.

- Sternberg, RJ., & Halpern, D.F. (2020). Conclusion: How to think critically about politics and anything else! In R. J. Sternberg & D. F. Halpern (Eds.) *Critical Thinking in Psychology* (2nd. Ed.). (pp. 354-372) Cambridge, UK: Cambridge University Press.
- Halpern, D.F., & Kanaya, T. (2020). Group differences in intelligence: Complexities and controversies. In Sternberg. R. J. (Ed.). *Human intelligence: An introduction*. Cambridge, UK. Cambridge University Press.
- Butler, H. A., & Halpern, D.F. (2020). Critical thinking impacts our everyday live. In R. J. Sternberg & D. F. Halpern (Eds.) *Critical Thinking in Psychology* (2nd. Ed.). (pp. 152-172). Cambridge, UK: Cambridge University Press.
- Halpern, D.F., Flores-Mendoza, C., & Rindermann, H. (2020) Sex, gender, and intelligence" Does XX=XY for intelligence? In F. M. Cheung and D. F. Halpern (eds.) Cambridge International Handbook on Psychology of Women. Cambridge, UK: Cambridge University Press.
- Cheung, F. M., & Halpern, D.F. (2020). International and intersectional perspectives on the psychology of Women. In F. M. Cheung and D. F. Halpern (eds.) Cambridge International Handbook on Psychology of Women. Cambridge, UK: Cambridge University Press.
- Halpern, D.F. & Cheung, F.M. (2020). Parting thoughts. In F. M. Cheung and D. F. Halpern (eds.) Cambridge International Handbook on Psychology of Women. Cambridge, UK: Cambridge University Press.
- Halpern, D. F., & Butler, H. A. (2019). Teaching critical thinking as if our future depends on it, because it does. In Dunlosky, J., & Rawson, K. (Eds.). Cambridge University Handbook on Cognition and Education. (pp. 51-66). Cambridge, UK. Cambridge University Press.
- Halpern, D. F. (2015). Academic Leadership in a Time of Rapid Change. In Sternberg,
 R. J., Davis, E., Mason, A. C., Smith, R. V., Vitter, J. S., & Wheatly, M. (Eds.).
 Academic leadership in higher education: From the top down and the bottom up.
 (pp. 175-179). Lanham, MD: Rowman & Littlefield.
- Butler, H. A., & Halpern, D. F. (in press). Critical Thinking. In Marc H. Bornstein (Ed.). *The SAGE Encyclopedia of Lifespan Human Development*. Sage Publishers, Thousand Oaks, CA.
- Stephenson, C. L., & Halpern, D. F. (2015). Pedagogical issues in teaching the next generation of applied perception researchers. In R. R. Hoffman, P. A. Hancock, M. Scerbo, R. Parasuraman, and J. L. Szalma (Eds.), (pp. 1099-1114). The Handbook of Applied Perception Research. Cambridge, UK: Cambridge University Press. Chapter doi: http://dx.doi.org/10.1017/CB09780511973017.064
- Halpern, D. F. (2015). The Ethical Use of Published Scales. In R. J. Sternberg and S. T. Fiske (Eds.). Ethical Challenges in the Behavioral and Brain Sciences: Case Studies and Commentaries. (pp 41-43). New York, NY: Cambridge University Press.
- Millis, K., Graesser, A., & Halpern, D. F. (2014). Operation ARA: A serious game that combines intelligent tutoring and learning principles to teach science. In V. A. Benassi, C. E. Overson, & C. M. Hakala (Eds.). *Applying the science of learning in*

- education: Infusing psychological science into the curriculum. Retrieved from the Society for the Teaching of Psychology web site: http://teachpsych.org/ebooks/asle2014/index.php
- Halpern, D. F., & Butler, H. A. (2015). How to create a better future by using the principles for undergraduate education. In D.S. Dunn (Ed.), The Oxford handbook of psychology education. (pp. 853-861)/ New York, NY: Oxford University Press. DOI: 10.1093/oxfordhb/9780199933815.013.068
- Franco, A. H. R., Butler, H. A., & Halpern, D. F. (2015). Teaching critical thinking to promote learning. In D. S. Dunn (Ed.), The Oxford handbook of psychology education (pp. 65-74). New York, NY: Oxford University Press. DOI: 0.1093/ oxfordhb/9780199933815.013.007
- Forsyth, C. M., Graesser, A. C., Walker, B., Millis K. Pavlik, P., & Halpern, D. F. (2013). Didactic galactic: Acquiring knowledge learned in a serious game. In H. C. Lane, K. Yacef, J. Mostow, & P. Pavlik (Eds.). Proceedings of the International Conference on Artificial Intelligence in Education: 16th International Conference (AIED 2013) (pp. 832-835). Berlin Heidelberg: Springer Verlag.
- Halpern, D. F. & Butler, H. A. (2013). Assessment in higher education: Admission and outcomes. In K.F. Geisinger, B. Bracken, J. F. Carlson, Hansen, J.I., Kuncel, N., Reise, S., & Rodriguez, M. C. Handbook of testing and assessment in psychology (Vol. 3; 319-336). Washington, DC: APA Books.
- Butler, H. A., & Halpern, D. F. (2013). Developing and assessing skills of psychological literacy and critical thinking in our students. In D. S. Dunn, S. C. Baker, C. M. Mehrotra, R. E. Landrum, & M. A. McCarthy (Eds). Assessing teaching and learning in psychology (pp. 82-93). New York, NY: Cengage.
- Forsyth, C. M., Pavlik, P., Graesser, A. C. Cai, Z., Germany, M., Millis, K., Butler, H., Halpern, D. F., & Dolan, R. (2012). Learning gains for core concepts in a serious game on scientific reasoning. In K.Yacef ,O. Zaïane, H. Hershkovitz, M. Yudelson, and J. Stamper (Eds.) Proceedings of the 5th International Conference on Educational Data Mining (pp 172-175). Chania, Greece: International Educational Data Mining Society.
- Millis, K., Forsyth, C., Butler, H., Wallace, P., Graesser, A. & Halpern, D. F. (2011). Operation ARIES!: A serious game for teaching scientific inquiry. In M. Ma. A. Oikonomou and L. Jain. (Eds.), *Serious games and Edutainment Applications* (pp. 167-194). UK: Springer-Verlag.
- Halpern, D. F. (2012). A statistically significant difference in understanding the scientific process. In J. Brockman (Ed.), *This will make you smarter*. (pp. 378-380). New York, NY: Harper Perennial.
- Weiten, W., Halpern, D. F., & Bernstein, D. (2012). A textbook case of textbook ethics. In McCarty, M., & Landrum, E. (Eds.), *Teaching Ethically: Challenges and Opportunities* (pp. 43-54). Washington, DC: American Psychological Association, Press.
- Halpern, D. F., Beninger, A. S., & Straight, C. A. (2011). Sex differences in intelligence. In R. J. Sternberg & S. B. Kaufman (Eds.). Cambridge Handbook of Intelligence (pp. 253-272). New York, NY: Cambridge University Press.

- Halpern, D. F., & Butler, H. A. (2011). Critical thinking and the education of psychologically literate citizens. In J. Cranney & D. Dunn (Eds.). Educating the Psychologically Literate Citizen: Global Perspectives (pp. 27-40). New York, NY: Oxford University Press.
- Halpern, D. F., & Stephenson, C. L. (2011). Applying the science of learning to the art of teaching. In D. Mashek & E. Y, Hammer (Eds.). *Empirical Research in Teaching and Learning*. (pp. 114-129). Malden, MA: Wiley-Blackwell.
- Butler, H. A., & Halpern, D. F. (2011). Educating psychological literate students: The importance of critical thinking. In S. McCarthy, V. Karandashev, & L. Dickson (Eds.). *Teaching Psychology around the World Vol 3*. Cambridge, U.K.: Cambridge Scholars Publishing.
- Butler, H. A., Forsyth, C., Halpern, D. F., Graesser, A.C.,& Millis, K (2010). Secret agents, alien spies, and a quest to save the world: Operation ARIES! Engages students in scientific reasoning and critical thinking. In R. L. Miller, R. F. Rycek, E. Amsel, B. Kowalski, B. Beins, K. Keith, & B. Peden (Eds.)., Promoting Student Engagement. Volume 1: Programs, Techniques and Opportunities. Syracuse, NY: Society for the Teaching of Psychology. Available from the STP web site: http://teachpsych.org/ebooks/pse2011/vol1/index.php
- Forsyth, C., Butler, H. A., Graesser, A. C., Halpern, D. F., Millis, K., Cai, Z., Wood, J. (2010). Higher contributions correlate with higher learning aims. In R. S. J. D. Baker, A. Merceron, P. I. Pavlik (Eds.). *Proceedings of the3rd International Conference on Educational Data Mining* (pp 287-288). Pittsburgh, PA: WordPress.
- Graesser, A.C., Britt, A., Millis, K., Wallace, P., Halpern, D., Cai, Z., Kopp, K. & Forsyth, C. (2010). Critiquing media reports with flawed scientific findings: Operation ARIES!, a game with animated agents and natural language trialogues. In J. Aleven, J. Kay, & J. Mostow (Eds.). *Lecture Notes in Computer Science*, 6095 (pp.327-329). London: Springer.
- Halpern, D. F. (2010). Creativity in College Classrooms. In R. Beghetto & J. Kaufman (Eds.). Nurturing Creativity in the Classroom (pp. 380-393). NY: Cambridge University Press.
- Hawkins, S. A., Tan, S. J., & Halpern, D. F. (2010). New Parents Taking Time Off: A Look at California Paid Family Leave. In: Emily M. Douglas (Ed.), *Innovations in Child and Family Policy: Multidisciplinary Perspectives on Strengthening Children and Their Families* (pp. 211-226). Lanham, MD: Lexington Books.
- Halpern, D. F., Anton, B., Beins, B., Bernstein, D., Blair-Broeker, C., Brewer, C., Buskist, B., Casad, B., Dixon, W., Harper, Y. Y., Hailstorks, R., Kite, M., Puccio, P.& Rocheleau, C. (2010). Principles for quality undergraduate education in psychology. In D. F. Halpern (Ed.), Undergraduate Education in Psychology: A Blueprint for the Future of the Discipline (pp. 161-174). Washington, DC: American Psychological Association.
- Marin-Burkhart, L., Tan, S. J., & Halpern, D. F. (2009). Critical Thinking. In R. A. Shweder, T. R. Bidell, A. C. Dailey, S. D. Dixon, P. J. Miller, & J. Modell, (Eds). *The Child: An Encyclopedic Companion* (pp. 225-227). Chicago: The University of Chicago Press.

- Halpern, D. F. (2009). Establishing cognitive sex differences. In J. Brockman (Ed.), What Have I Changed My Mind About? NY: HarperCollins. (US and UK editions).
- Halpern, D. F. (2009). Full, Half, Step, Foster, Adoptive, and Other: The Complex Nature of Sibling Relationships. In D. N. Silverstein & S. L. Smith (Eds.). Siblings in Adoption and Foster Care (pp. 1-12). Westport, CT: Praeger.
- Halpern, D. F., Stephenson, C. L., & Williams, P. B. (2009). Critical Thinking. In E. M. Anderman & L. H. Anderman. (Eds.). Psychology of Classroom Learning: An Encyclopedia (pp. 284-287). Detroit: Macmillan Reference.
- Halpern, D. F., & Williams, P. B. (2008). Critical Thinking. In S. Davis & W. Buskist (Eds.). Psychology in the 21st Century (pp. 478-484). Thousand Oaks, CA: Sage Publishers.
- Halpern, D. F., & Tan, S. J. (2009). Combining work and family: From conflict to compatible. In J. Bray & M. Stanton (Eds.). Handbook of Family Psychology (pp. 564-575). West Sussex: Wiley-Blackwell.
- Halpern, D. F., Tan, S. J., & Carsten, M. (2008). California Paid Leave: Is it Working for Caregivers? In A. Marcus-Newhall, D. F. Halpern, & S. J. Tan (Eds). The Changing Realities of Work and Family (pp. 159-174). West Sussex, UK: Wiley/Blackwell.
- Halpern, D. F. (2007). How technology is saving the world. In J. Brockman (Ed.). What are you optimistic about? (pp. 98-102). NY: Harper.
- Halpern, D. F., Brooks, A., & Stephenson, C. L. (2007). How Science by Media Creates False Certainties and Resistance to Conceptual Change. In J. Kitaeff, (Ed.). Malingering, Lies, and Junk Science in the Courtroom (pp. 15-34). Youngstown, NY: Cambria Press.
- Hawkins, S. A., Halpern, D. F., & Tan, S. (2007). Beyond University Walls: Conducting and Communicating Science Outside of the Academy. In M. K. Welch-Ross & L. G. Fasig (Eds.). Handbook on Communicating and Disseminating Behavioral Science. Thousand Oaks, CA: Sage Publishers.
- Johnson, N. G., Denmark, F., Cantor, D., Halpern, D. F., & Keita, G. (2007). Leadership Through Policy Development: Collaboration, Equity, Empowerment and Multiculturalism. In J. L. Chin, B. Lott, J. k. Rice, & J. Sanchez-Hucles (Eds.). Women and leadership: Transforming Visions and Diverse Voices (pp.140-156). NY: Blackwell.
- Halpern, D. F. (2007). Science, sex, and good sense: Why women are underrepresented in some areas of science and math. (pp. 121-130) In Ceci, S. J. & Williams, W. M. (Eds.). Why aren't more women in science? Eminent researchers debate the evidence on a key controversy of our time. Washington, D.C.: American Psychological Association.
- Halpern, D. F. (2007). Is Intelligence Critical Thinking? Why We Need a New Definition for Intelligence. In P. Kyllonen, I. Stankov, & R. D. Roberts (Eds.), Extending intelligence: enhancement and new constructs (pp. 349-370). Mahwah, NJ: Erlbaum Associates, Inc.
- Halpern, D. F. (2007). Choosing the sex of one's child. In J. Brockman (Ed.). What is your dangerous idea? (pp. 97-100). NY: HarperCollins.
- Johnson, N. G., Denmark, F., Cantor, D., Halpern, D. F., & Keita, G. (2007). Leadership

- Through Policy Development: Collaboration, Equity, Empowerment and Multiculturalism. In J. L. Chin, B. Lott, J. k. Rice, & J. Sanchez-Hucles (Eds.). Women and leadership: Transforming Visions and Diverse Voices (pp.140-156). NY: Blackwell.
- Halpern, D. F., & Tan, S. (2007). Learning in context: Education and research at the Berger Institute for Work, Family, and Children (pp. 9-13). In S. Sweet & M. Pitt-Catsouphes (Eds.). Teaching Work and Family: Strategies, activities, and syllabi. NY: American Sociological Association.
- Halpern, D. F. (2006). Biopsychosocial contributions to cognitive performance. In: Biological, Social, and Organizational Components of Success for Women in Academic Science and Engineering. Washington, DC: National Academies Press.
- Halpern, D. F. (2006). Assessing Gender Gaps in Learning and Academic Achievement. In P. A. Alexander & P. H. Winne (Eds.), Handbook of educational psychology (2nd ed.) (pp. 635-653). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Halpern, D. F. (2006). The nature and nurture of critical thinking. In R. Sternberg, R. Roediger, & D. F. Halpern (Eds.). Critical Thinking in Psychology (pp. 1-14). Cambridge, MA: Cambridge University Press.
- Halpern, D. F. (2006). The Enhancement of Critical Thinking: With Decades of Converging Evidence, Meta-Analyses With Large Effect Sizes, and Societal Need, Would You Allow Your Child to Be Assigned to a "Control" Group? In R. Subotink & H. Walberg (Eds.), The scientific basis of educational productivity (pp.85-102). Greenwich, CT: Information Age Publishing, Inc.
- Halpern, D. F. (2006). States of Mind: Political Systems as Implicit Theories of Psychology. In O. C. Jing, Y. E. Liu, & Y. H. Sun (Eds.), Proceeding of the XXVIII international congress of Psychology (pp. 405-415). London, UK: Psychology Press.
- Tan, S. J. & Halpern, D. F. (2006). Applying the Science of Psychology to a Public that Distrusts Science. In S. I. Donaldson, D. E. Berger, & K. Pezdek (Eds.), Applied psychology: New frontiers and rewarding careers (pp.153-167). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Halpern, D. F. (2006). Girls and academic success: Changing patterns of academic achievement. In J. Worell & C. Goodheart (Eds.), Handbook of girls and women's psychological health (pp. 272-282). New York, NY: Oxford University Press, Inc.
- Riggio, H. R. & Halpern, D. F. (2006). Understanding Human Thought: Educating Students as Critical Thinkers. In W. Buskist & S. F. Davis (Eds.), Handbook of the Teaching of Psychology (pp.78-84). Malden, MA: Blackwell Publishing.
- Halpern, D. F. (2006, January) Choosing the sex of one's child. Retrieved November 11, 2006 from http://www.edge.com. (Response to question about dangerous ideas. Readership for 2006 for all responses: 4,652,357. Total projected individual sessions in 2006: 5,177,160. Reviewed in over 100 media outlets.
- Hakel, M., & Halpern, D. F. (2005). How Far Can Transfer Go? Making Transfer Happen Across Physical, Temporal, and Conceptual Space. In J. Mestre (Ed.), Transfer of Learning From a Modern Multidisciplinary Perspective (pp.357-370). Greenwich, CT: Information Age Publishing.

- Halpern, D. F. (2005). That aha moment when understanding happens that is why I teach. In T. Benson, C. Burke, A. Amstadler, R. Siney, B. Beins, V. Hevern, & W. Buskist (Eds.), Teaching of psychology in autobiography: Perspectives from psychology's best teachers (pp. 135-140). Society for Teaching of Psychology. Available from the Society for Teaching of Psychology website http://teachpsych.lemoyne.edu/teachpsych/eit/index.html
- Halpern, D. F., & Collaer, M. L. (2005). Sex differences in visuospatial abilities: More than meets the eye. In P. Shah & A. Miyake (Eds.), *The Cambridge handbook of* visuospatial thinking (pp. 170-212). Cambridge, MA: Cambridge University Press.
- Halpern, D. F., Wai, J., & Saw, A. (2005). A psychobiosocial model: Why females are sometimes > and sometimes < males in math achievement. In J. Kaufman & A. Gallagher (Eds.), Gender differences in mathematics: An integrative psychological approach (pp. 48-72). Cambridge, MA: Cambridge University Press.
- Halpern, D. F. & Murphy, S. E. (2005). From balance to interaction: Why the metaphor is important. In D. F. Halpern & S. E. Murphy (Eds.), From work-family balance to work-family interaction: Changing the metaphor (pp 3-10). Mahwah, NJ: Lawrence Erlbaum Associates, Inc. Publishers.
- Murphy, S. E. & Halpern, D. F. (2005). Visions for the Future of Work and Family Interaction. In D. F. Halpern & S. E. Murphy (Eds.), *From work-family balance to work-family interaction: Changing the metaphor* (pp. 251-264). Mahwah, NJ: Lawrence Erlbaum Associates, Inc. Publishers.
- Halpern, D. F. (2005) Dissing Science: Selling Scientifically Based Educational Practices to a Nation that Distrusts Science. In G. Phye, D. Roberson, & J. Levin (Eds.), *Empirical methods for evaluating educational interventions* (pp. 53-65). NY: Academic Press.
- Halpern, D. F. (2004) Outcomes Assessment 101. In D. Dunn, C. Mehrotra, & J. Halonen (Eds.), Measuring up: Educational assessment challenges and practices for psychology (pp. 11-26). Washington, DC: American Psychological Association.
- Halpern, D. F. (2004). The development of adult cognition: Understanding constancy and change in adult learning. In D.V. Day, S. J. Zaccaro, & S. M. Halpin (Eds.), Leadership development for transforming organizations: Growing leaders for tomorrow (pp. 125-152). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Halpern, D. F. (2004). Creating cooperative learning environments. In B. Perlman, L. I. McCann, & S. H. McFadden (Eds.), Lessons learned (Vol. 2): Practical advice for the teaching of psychology (pp. 165-173). Cambridge, MA: Cambridge University Press.
- Halpern, D. F. (2003). Thinking skills. In Nadel, L. (Ed.), *Encyclopedia of cognitive science* (Vol. 4, pp. 383 388). London: Nature Publishing Group.
- Halpern, D. F. (2003). The "how" and "why" of critical thinking assessment. In D. Fasko, Jr. (Ed.), *Critical thinking and reasoning: Current research, theory, and practice* (pp. 355-366). Cresskill, NJ: Hampton Press, Inc.
- Halpern, D. F. (2003). Thinking critically about creative thinking. In M. A. Runco (Ed.), Critical creative processes: Perspectives on creativity research (pp. 189-207).Cresskill, NJ, US: Hampton Press, Inc.

- Halpern, D. F., & Donaghey, B. (2003). Learning theories: Historical overview. In J. W. Guthrie (Ed.), Encyclopedia of Education, Second Edition. New York: Macmillan Reference.
- Halpern, D. F. (2002). Race and IQ as Pseudoscience. In M. Shermer (Ed.). The skeptic encyclopedia of pseudoscience, Volume II (pp. 694-704). Santa Barbara: ABC Clio Publishers.
- Halpern, D. F. (2002). Sex, lies, and audiotapes: A cognitive analysis of the Clinton-Lewinsky scandal. In R. Sternberg (Ed.), *Why smart people do dumb things* (pp. 106-123). New Haven: Yale University Press.
- Halpern, D. F. (2002). Teaching for critical thinking: A four-part model to enhance thinking skills. In S. Davis & W. Buskist (Eds.), *The teaching of psychology: Essays in honor of Wilbert J. McKeachie and Charles L. Brewer* (pp. 91-105). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Halpern, D. F., & Hakel, M. D. (2002). Learning that lasts a lifetime: Teaching for long-term retention and transfer. In D.F. Halpern and M. D. Hakel (Eds.), *Applying the science of learning to the university and beyond, new directions for teaching and learning* (pp. 3-7). San Francisco: Jossey-Bass.
- Halpern, D. F., & Ikier, S. (2002). Causes, correlates, and caveats: Understanding the development of cognitive sex differences. In A.V. McGillicuddy-De Lisi and R. De Lisi (Eds.), Advances in applied developmental psychology series. Biology, society, and behavior: The development of sex differences in cognition (pp. 3-19). New York: Plenum.
- Halpern, D. F. (2001). Learning that lasts a lifetime: Teaching for long-term retention and transfer. In B. Massey (Ed.), *Learner-centered universities for the new millennium* (pp. 109-118). Baltimore, MD: University of Maryland.
- Halpern, D.F. (2001). Sex difference research: Cognitive abilities. In J. Worrell (Ed.), Encyclopedia of women and gender (pp. 963-971). San Diego, CA: Academic Press.
- Halpern, D. F. (2001). Critical thinking applications. In W. Weiten (Ed.), *Psychology: Themes and variations*. Belmont, CA: Brooks/Cole.
- Halpern, D. F. (2001). Making choices without a control group. In A. N. O'Connell (Ed.), *Models of achievement: Reflections of eminent women in psychology, Volume 3.* (pp. 293-306). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Halpern, D. F. (2000). Choice points and courage. In P. R. Freeman & J. Z. Schmidt (Eds.), *Wise women: Reflections of teachers at mid-life* (pp. 117-124). London: Routledge.
- Halpern, D. F. et al. (2000). Scholarship in psychology: A paradigm for the 21st century. In R.M. Diamond & B. E. Adam (Eds.), *The disciplines speak II: More statements on rewarding the scholarly, professional, and creative work of faculty* (pp. 13-25). Washington, DC: American Association for Higher Education.
- Halpern, D. F. (1999). Teaching for critical thinking: Helping college students develop the skills and dispositions of a critical thinker. In M. D. Svinicki (Ed.), *Teaching and learning on the edge of the millennium: Building on what we have learned* (pp. 69-74). New Directions for Teaching and Learning. San Francisco: Jossey-Bass.
- Halpern, D. F. (1998). A Russian perspective on optimism-pessimism and the future

- of the Russian economy. In R. Hoffman (Ed.), Viewing psychology as a whole: The integrative science of William N. Dember (pp. 363-373). Washington, DC: American Psychological Association.
- Halpern, D. F. (1998). Professional opinions. In W. M. Williams & S. J. Ceci (Eds.), Escaping the advice trap. Kansas City: Andrews McMeel Publishers.
- Halpern, D. F. (1998). Monitoring, controlling, and knowing: The metacognition of critical thinking. In M. Flachman (Ed.), Teaching excellence (pp. 65-76). Long Beach, CA: The CSU Institute Press.
- Halpern, D. F., & Crothers, M. (1997). Sex, sexual orientation and cognition. In L. Ellis & L. Ebertz (Eds.), Sexual orientation: Toward a biological understanding (pp. 181-197). Westport, CT: Praeger.
- Halpern, D. F. (1996). California's master scam. In B. Goldstein (Ed.), California's master plan for higher education in the 21st century (pp. 43-46). Washington, DC: American Association for the Advancement of Science.
- Halpern, D. F. (1995). Cognitive gender differences: Why diversity is a critical research issue. In H. Landrine (Ed.), Bringing cultural diversity to feminist psychology: Theory, research, practice (pp. 77-92). Washington, DC: American Psychological Association.
- Reprinted in Anselmi, D. L. & Law, A. L. (Eds.), (1998). Questions of gender: Perspectives & paradoxes (pp. 436-445). New York: McGraw-Hill.
- Halpern, D. F. (1994). Gender differences in intellectual abilities. In R. J. Sternberg, S. J. Ceci, J. Horn, E. Hunt, J. D. Matarazzo, & S. Scarr (Eds.), Encyclopedia of intelligence (pp. 463-467). NY: Macmillan.
- Halpern, D. F. (1994). A national assessment of critical thinking skills in adults: Taking steps toward the goal. In A. Greenwood (Ed.), The national assessment of college student learning: Identification of the skills to be taught, learned, and assessed (pp. 24-64). Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Halpern, D. F. (1994). Cognition. In McGraw-Hill yearbook of science & technology (pp. 88-89). New York: McGraw-Hill.
- Halpern, D. F. (1994). Rethinking college instruction for a changing world. In D. F. Halpern (Ed.), Changing college classrooms: New teaching and learning strategies for an increasingly complex world (pp. 1-10). San Francisco: Jossev-Bass.
- Halpern, D. F. (1994). Closing thoughts: Creating a new scholarship of college teaching. In D. F. Halpern (Ed.), Changing college classrooms: New teaching and learning strategies for an increasingly complex world (pp. 349-351). San Francisco: Jossey-Bass.
- Halpern, D. F. (1993). Targeting outcomes: Covering your assessment concerns and needs. In T. V. McGovern (Ed.), Handbook for enhancing undergraduate education in psychology (pp. 23-46). Washington, DC: American Psychological Association.
- Halpern, D. F., Waites, D. C., Fisher, D., & Guerra, E. (1992). Voter decisions about bond propositions: The effect of information format. In V. Petrov (Ed.), Management in Crisis Situations. Moscow, USSR: Progress Press. (Text published in English and Russian).

- Halpern, D. F. (1992). A cognitive approach to improving thinking skills in the sciences and mathematics. In D. F. Halpern (Ed.), *Enhancing Thinking Skills in the Sciences and Mathematics* (pp. 1-14). Hillsdale, NJ: Erlbaum.
- Halpern, D. F. (1991). Reasoning. In M. W. Eysenck, A. Ellis, E. Hunt, & P. N. Johnson-Laird (Eds.), *The Blackwell dictionary of cognitive psychology* (pp.304-308). London: Basil Blackwell, Ltd.
- McGovern, T. V., Furumoto, L., Halpern, D. F., Kimble, G., & McKeachie, W. J. (1991). Psychology. In American Association of Colleges (Ed.), *Liberal learning and the arts and sciences major. Volume 2: Reports from the fields* (pp. 151-168). Washington, DC: Association of American Colleges.
- Halpern, D. F., & Coren, S. (1990). Laterality and Longevity: Is Left-handedness associated with a younger age at death? In S. Coren (Ed.), *Left-Handedness: Behavioral implications and anomalies* (pp. 509-545). Amsterdam: Elsiever, Publishers.
- Halpern, D. F. (1987). Student outcomes assessment: Introduction and overview. InD. F. Halpern (Ed.), Student outcomes assessment: What institutions stand to gain.San Francisco: Jossey-Bass.
- Halpern, D. F. (1987). Recommendations and caveats. In D. F. Halpern (Ed.), Student outcomes assessment: What institutions stand to gain. San Francisco: Jossey-Bass.
- Halpern, D. F. (1987). Analogies as a critical thinking skill. In D. Berger, K. Pezdek, &
 W. Banks (Eds.), Applications of cognitive psychology: Computing and education.
 Hillsdale, NJ: Lawrence Erlbaum Associates, Inc. Publishers.
- Reprinted in Honeck, R. P., Case, T. J. S., & Firment, M. J. (1991). *Introductory readings* for cognitive psychology (pp. 305-313). Guilford, CT: Dushkin Publishing.
- Halpern, D. F. (1987). The functional equivalence of objective and illusory brightness enhancement. In G. Meyer & S. Petry (Eds.), *The perception of illusory contours*. New York: Springer-Verlag Publishers.
- Halpern, D. F. (1987). Thinking across the disciplines: Methods and strategies to promote higher-order thinking in every classroom. In M. Heiman & J. Slomianko (Eds.), *Thinking skills: Concepts and techniques*. Washington, DC: National Education Association.

JOURNAL ISSUES EDITED

- Sternberg, R. J., Conway, A., & Halpern, D. F. (2022) (Eds.). How Intelligence Can be a Solution to Consequential World Problems. Special Issue. Journal of Intelligence, ISBN 978-3-0365-3649-1(Hbk)
- Buskist, W., and others including Halpern, D. F. (2012). Special Issue on Globalization. Psychology Learning and Teaching, vol. 11. www.wwwords.co.ul/PLAT.
- Riggio, H. R., & Halpern, D. F. (Eds.), (2006). Changes at the Intersection of Work and Family: Family Perspectives, Volume 2. *American Behavioral Scientist*, 49(10).
- Halpern, D. F. & Riggio, H. R. (Eds.), (2006). Changes at the Intersection of Work and Family: Organizational and Worker Perspectives, Volume I. American Behavioral Scientist, 49(9).

- Halpern, D. F. (Guest Ed.). (1996). Psychological and psychobiological perspectives on sex differences in cognition: II. Commentaries and Controversies [Special Issue]. Learning and Individual Differences, 8.
- Halpern, D. F. (Guest Ed.). (1995). Psychological and psychobiological perspectives on sex differences in cognition: I. Theory and Research [Special Issue]. Learning and Individual Differences, 7.
- Halpern, D. F. & Nummedal, S. G. (Guest Eds.). (1995). Psychologists teach critical thinking. [Special Issue]. Teaching of Psychology, 22.

PROFESSIONAL PODCASTS

- Halpern, D. F. (2020). Critical Thinking. Intangibles. https://www.intangiblespodcast. com/season-five
- Halpern, D. F. (2014). What is your dangerous idea? Wisconsin Public Radio International. http://www.ttbook.org/book/dangerous-idea-choosing-gender-child
- Halpern, D.F. (2012). The Psychological Science Behind Partisanship and Bipartisanship: Seven Things We Can Do to Fix our Broken Government. TEDCC Talk. http://www.youtube.com/watch?v=b2mQNc7lfjI
- Halpern, D. F. (2011). Podcast interview on Pseudoscience of Single-Sex Education. http://www.sciencemag.org/content/333/6050/1706/suppl/DC1
- Halpern, D.F. (2005, December 5). Gender differences and cognitive abilities. Science Fridays, National Public Radio. http://www.npr.org/templates/story/story. php?storvId=5036084

JOURNAL ARTICLES AND OTHER PROFESSIONAL PUBLICATIONS

- Krauss, D. A., & Halpern, D. F. (2022). Conflicting myths about evidence in the legal system and suggestions for reform. Journal of Applied Research in Memory and Cognition.
- Halpern, D. F., & Dunn, Dana. (2021). Critical Thinking: A Model of Intelligence for Solving Real-World Problems, Journal of Intelligence, 9, 22. https://www.mdpi. com/2079-3200/9/2/22/pdf
- Reprinted in (Sternberg, R. J., Conway, A. R. A., & Halpern, D. F. (2022). How intelligence can be a solution to consequential world problems (pp. 19-25). MDPI: Basel, Switzerland, ISBN: 978-3-0365-3649-1.
- Appleby, D. Appleby, K.M., Bouchard, L.M., Cook, R., Erickson, L.V., Halpern, D.F., Kelly, S.M., & Wickline, V. (2019). A syllabus-based strategy to help psychology students prepare for and enter the workforce. Scholarship of Teaching and Learning, doi: http://dx.doi.org/10.1037/st10000161
- Wai, J., & Halpern, D. F. (2018). The impact of changing norms on creativity in psychological science. Perspectives on Psychological Science, 13, 466-472. doi: 10.1177/1745691618773326
- Halpern, D. F., & Butler, H. A. (2017, September 1). Teachers understand critical thinking? That's fake news. *Times Education Supplement*, (pp. 36-39).

- Halpern, D. F. (2017). Whither psychology. *Perspectives on Psychological Science*, 12, 665-668.
- Halpern, D. F. (2014). It's complicated—In fact, it's complex: Explaining the gender gap in academic achievement in science and mathematics. *Psychological Science in the Public Interest*, doi: 10.1177/1529100614548844
- Toma, M., Halpern, D. F., & Berger, D. (2014). Cognitive abilities of elite nationally-ranked SCRABBLE and Crossword experts. *Applied Cognitive Psychology*. doi: 10.1002/acp.3059
- Pentoney, C. S., Halpern, D. F., & Butler, H. A. (in press). How advanced learning technologies are reinventing higher education. In *Emerging Trends in the Social and Behavioral Sciences* (eds.) Robert Scorr and Stephen Kosslyn, Hoboken, NJ: John Wiley and Sons.
- Miller, D. I., & Halpern, D. F. (2014). The New Science of Cognitive Sex Differences. *Trends in Cognitive Sciences, 18,* 37-45. doi: 10.1016/j.tics.2013.10.011
- Halpern, D. F. (2014). It gets crowded with an elephant and an ape in the room: Teaching about female and male cognitive differences and similarities. *Teaching of Psychology, 41*,88-93. doi: 10.1177/0098628313514187.
- Forsyth, C. M., Graesser, A., Cai, Z., Butler, H., Halpern, D. F., Wallace, P., & Millis, K. (in press). Interrogating aliens: Learning in a game-like environment. In Special Issue on Question Generation in Dialogue and Discourse.
- Stephenson, C. L., & Halpern, D. F. (2013). Improved matrix reasoning is limited to training on tasks with a visuospatial component. *Intelligence, 41,* 341-357.
- Halpern, D. F. (2013). A is for assessment: The other scarlet letter. *Teaching of Psychology*, 40.334-338. doi:10.1177/0098628313501050.
- Forsyth, C. M., Graesser, A. C., Pavlik, P., Cai, Z., Butler, H., Halpern, D. F., & Millis, K. (2013). Operation ARIES! Methods, mystery, and mixed models: Discourse features predict affect and motivation in a serious game. *Journal of Educational Data Mining*, 5, pp 147-189.
- Miller, D. I., & Halpern, D. F. (2013). Can spatial training improve long-term outcomes for gifted STEM undergraduates? *Learning and Individual Differences, 26*, 141-152. doi.org/10.1016/j.lindif.2012.03.012
- Halpern, D. F., Millis, K., Graesser. A., Butler, H., Forsyth, C. & Cai, Z. (2012). Operation ARA: A computerized learning game that teaches critical thinking and scientific reasoning. *Thinking Skills and Creativity*, 7, 93-100.
- Halpern, D. F. (2012, June). An Olympian effort. The Psychologist, 25, 418-419.
- Nisbett, R. E., Aronson, J., Blair, C., Dickens, W., Flynn, J., Halpern, D. F. & Turkheimer, E. (2012). Group and national differences in IQ are best understood in environmental terms. *American Psychologist*, *67*, 503-504. doi:10.1037/a0029772
- Halpern, D. F.,Benbow,C. P., Geary,D. C., Gur,R. C., Hyde, J. S., & Gernsbacher, M. A. (2012, Summer). Sex, Math and Scientific Achievement: Why do men dominate the fields of science, engineering and mathematics? Scientific American Mind: Special Collector's Edition, 21, 26-33. (updated version of 2007 article with the same title). Reprinted in Scientific American, The Science of Education. (2012). New York, NY: Scientific American.

- Halpern, D. F., Eliot, L., Bigler, R. S., Fabes, R. A., Hanish, L. D., Hyde, J. S., Liben, L., & Martin, C. L. (2012, January 13). Response to Letters to the Editor in Science, 335, 165-167.
- Nisbett, R. E., Aronson, J., Blair, C., Dickens, W., Flynn, J., Halpern, D. F. & Turkheimer, E. (2012). Intelligence: New findings and theoretical developments. *American Psychologist*, 67, 130-159. doi: 10.1037/a0026699
- Halpern, D. F., Eliot, L., Bigler, R. S., Fabes, R. A., Hanish, L. D., Hyde, J. S., Liben, L., & Martin, C. L. (2011, September 23). The pseudoscience of single-sex schooling. *Science*, 333, 1706-1707. DOI: 10.1126/science.1205031
- Butler, H. A., & Halpern, D. F. (2011). Critical Thinking. Oxford Bibliographies Online. New York, N.Y.: Oxford University Press. Available from OBO website: http://aboutobo.com/
 - American Psychological Association. (2011). Principles for quality undergraduate education in psychology. *American Psychologist*, *66*, 850-856. doi: 10.1037/a0025181 (Although the official author was American Psychological Association, I was the primary author.)
- Cai, Z., Graesser, A.C., Forsyth, C., Burkett, C., Millis, K., Wallace, P., Halpern, D. & Butler, H. (2011). Trialog in ARIES: User Input Assessment in an Intelligent Tutoring System. In W. Chen & S. Li (Eds.), Proceedings of the 3rd IEEE International Conference on Intelligent Computing and Intelligent Systems(pp. 429-433). Guangzhou: IEEE Press.
- Miller, D. I., & Halpern, D. F. (2011). Spatial thinking in physics: Longitudinal impacts of 3-D spatial training. In L. Carlson, C. Hoelscher, & T. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society* (pp. 3465-3470). Austin, TX: Cognitive Science Society.
- Halpern, D. F. (2011). A statistically significant difference in understanding the scientific process. The Edge Question 2011. What scientific concept would improve everybody's cognitive toolkit. Retrieved from http://www.edge.org/ q2011/q11_index.html#halpern
- Butler, H. A., Forsyth, C., Halpern, D. F., Graesser, A., & Millis, K. (2011). Secret agents, alien spies, and a quest to save the world: Engaging students in scientific reasoning and critical thinking through Operation ARIES! Retrieved from http://teachpsych.org/resources/e-books/pse2011/vol1/56.%20Aries.pdf
- Halpern, D. F., Straight, C., & Stephenson, C. (2011). Beliefs about Cognitive Gender Differences: Accurate for Direction, Underestimated for Size. Sex Roles, 64, 336-347. Doi: 10.1007/s11199-010-9891-2
- Marin, L., & Halpern, D. F. (2011). Pedagogy for developing critical thinking in adolescents: Explicit instruction produces greatest gains. *Thinking Skills and Creativity*, 6, 1-13. Doi: 10.1016/j.tsc.2010.08.002
- Halpern, D. F. (2010). How neuromythologies support sex role stereotypes. Science, 330, 1320-1321.
- Cheung, F. M., & Halpern, D. F. (2010). Women at the Top: Powerful Leaders Define Success as Work + Family in a Culture of Gender. *American Psychologist*, 65, 182-193 doi: 10.1037/a0017309.

- Reprinted in Buskist, W. (2012-2013). *Annual Edition Psychology (pp. 120-130)*. New York, NY: McGraw-Hill.
- Turkheimer, E., & Halpern, D. F. (2009). Sex differences in variability for cognitive measures: Do the ends justify the genes? *Perspectives on Psychological Science*, 4, 612-614.
- Beninger, A., & Halpern, D. F. (2009). UK Women in Academia: The Quest for Work/ Life Balance. International Psychology Bulletin, 13, 15. (Abstract)
- Millis, K., Cai, Z., Graesser, A., Halpern, D. F. & Wallace, P. (2009). Learning Scientific Inquiry by Asking Questions in an Educational Game. In T. Bastiaens et al. (Eds.), Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2009 (pp. 2951-2956). Chesapeake, VA: AACE.
- Halpern, D. F. (2008). How Much Can Evolutionary Psychology Inform the Educational Sciences? *Educational Psychologist*, 43, 203-205.
- Halpern, D. F. (2008). National Conference on Undergraduate Education in Psychology: Drawing a Blueprint for the Future of the *Discipline*. Educator, 7, 5-7.
- Halpern, D. F. (2008). Psychologists are redefining retirement as a new phase of life. *The General Psychologist*, 42, 22-29.
- Halpern, D. F. (2008). From a Simple Truth to "It All Depends." Edge World Question Center, Retrieved January 11, 2008 from http://www.edge.org/2008/q08_7. html#halpern.
- Halpern, D. F. (2008). Nurturing careers in psychology: Combining work and family. *Educational Psychology Review, 20,* 57-64.
- Halpern, D. F. (2008). The National Conference on Undergraduate Education in Psychology: A Blueprint for the Future of the Discipline. *Educator*, *6*, 1-2.
- Halpern, D. F., Aronson, J., Reimer, N., Simpkins, S., Star, J. R., Wentzel, K. (2007, July). Encouraging girls in math and science. Institute for Educational Sciences, Washington, DC: United States Department of Education.
- Halpern, D. F. (2007). Redesigning undergraduate education in psychology: Imagine the possibilities, *Psychology Teacher Network*, 17, 1-3.
- Halpern, D. F., Benbow, C., Geary, D., Gur, D., Hyde, J. & Gernsbacher, M.A., (2007).
 The science of sex-differences in science and mathematics. *Psychological Science in the Public Interest*, 8, 1-52.
- Halpern, D. F., & Wai, J. (2007). The World of Competitive Scrabble[®]: Novice and Expert Differences in Visuospatial and Verbal Abilities. *Journal of Experimental Psychology: Applied, 13,* 79-94.
- Halpern, D. F., Benbow, C. P., Geary, D. C., Gur, R. C., Hyde, J. S., & Gernsbacher, M. A. (2007, December). Sex, Math and Scientific Achievement: Why do men dominate the fields of science, engineering and mathematics? *Scientific American Mind*. (pp. 44-52).
- Graesser, A., Hakel, M., & Halpern, D. F. (2007). Life long learning at work and at home. *APS Observer*, 20, 17-21.
- Kappenberg, E.S., & Halpern, D.F. (2006). Kinship Center Attachment Questionnaire: Development of a Caregiver-Completed Attachment Measure for Children Under

- Six Years of Age. Educational and Psychological Measurement, 66, 852-873.
- Halpern, D. F. (2006). How Organizations can Alleviate the Traffic Jam at the Intersection of Work and Family. American Behavioral Scientist, 49(9), 1147-1151.
- Halpern, D. F. (2006). Biopsychosocial contributions to cognitive performance. In: Biological, Social, and Organizational Components of Success for Women in Academic Science and Engineering. Washington DC: National Academies Press.
- Halonen, J.S., Appleby, D.C., Brewer, C.L., Buskist, W., Gillen, A.R., Halpern, D.F., Hill, G.W., Llioyd, M.A., Rudmann, J.L., & Whitlow, V.M. (2006, February). Guidelines for the Undergraduate Psychology Major. American Psychological Association.
- Halpern, D.F. (2005). President's Report. American Psychologist, 60, 384-387.
- Halpern, D. F. (2005). Psychology at the intersection of work and family: Recommendations for employers, working families, and policy makers. American Psychologist, 60, 367-409.
- Desrochers, S., Halpern, D. F., Tan, S. J., & Riggio, H. R. (2005). The end of clinical psychology as we know it? A response to Snyder and Elliott's four levels matrix model. Journal of Social and Clinical Psychology, 61(9), 1175-1178.
- Halpern, D. F. (2005). How time-flexible work policies can reduce stress, improve health, and save money. Stress and Health, 21, 157-168.
- Halpern, D. F. & Desrochers, S. (2005). Social Psychology in the Classroom: Applying what we teach as we teach it. Journal of Social and Clinical Psychology, 24, 51-61.
- McCarthy, M. A., (2005). The Role of Psychology in a Liberal Arts Education: An Interview With Diane F. Halpern. Teaching of Psychology, 32(2), 132-135.
- Halpern, D.F. (2005). Re: The science of gender and science. The Edge of Reality Club. Retrieved from http://www.edge.org/discourse/science-gender.html.
- Halpern, D. F. (2005, March 23). An Anniversary Celebration for Multiple Intelligences [Review of the book Frames of Mind: The Theory of Multiple Intelligences]. PsycCRITIQUES—Contemporary Psychology: APA Review of Books, 50 (No. 12), Article 9.
- Halpern, D. F. (2005). Foreword on Thinking. In Moseley, D., et al., Frameworks for Thinking (pp. xv - xvi). Cambridge, MA: Cambridge University Press.
- Halpern, D. F. (2004). A cognitive-process taxonomy for sex differences in cognitive abilities. Current Directions in Psychological Science, 13 (4), 135-139.
- Halpern, D. F. (2004, April). Should you buy this book on decision making? [Review of the book Making decisions that matter: How people face important life choices]. PsycCRITIQUES—Contemporary Psychology: APA Review of Books, 49 (No. 2).
- Halpern, D. F. (2003, October). The tabloids and "B" movies finally got it right: Alien abductions and man-eating tomatoes are old news [Review of the book Little green men, meowing nuns, and head-hunting panics: A study of mass psychogenic illness and social delusion]. PsycCRITIQUES-Contemporary Psychology: APA Review of Books, 48 (No. 5).
- Halpern, D. F., & Hakel, M. D. (2003). Applying the Science of Learning to the University and Beyond: Teaching for Long-Term Retention and Transfer. Change, July/August, 2-13.

- Halpern, D. F. (2002). The Scholarship of Teaching: The Best of Both Worlds. On-line referred publication. [PSYTEACH] E-xcellence in Teaching, November 2002, Vol. 4: [http://PSYCHTEACHER@list.kennesaw.edu].
- Halpern, D. F. (2002, June). A wise guy interprets the literature on learning for the general public. [Review of the book *Wise up: The challenge of lifelong learning*] PsycCRITIQUES—Contemporary Psychology: APA Review of Books, 47 (No. 3).
- O'Boyle, M. W. (2002, April). Sex-related Ability Differences: Changing Perspectives, Changing Minds. [Review of book Sex Differences in Cognitive Abilities (3rd ed.)] PsycCRITIQUES - Contemporary Psychology: APA Review of Books, 47 (2).
- Halpern, D. F. (2002). Cognitive science and the work of reform. New Directions for Higher Education, 119, 41-44.
- Halpern, D. F. (2002). Using test data to inform educational policies: How will we explain why girls and boys have different (average) scores on achievement tests? Issues in Education: Contributions from Educational Psychology, 8, 87-93.F
- Halpern, D. F. (2002). Sex differences in achievement scores: Can we design assessments that are fair, meaningful, and valid for girls and boys? Issues in Education: Contributions from Educational Psychology, 8, 1-19.
- Halpern, D. F. (2002, April 16). Create Work Policies Fit for a Mom. The Los Angeles Times.
- Halpern, D.F. (2001). Assessing the Effectiveness of Critical Thinking Instruction. The Journal of General Education, 50 (4) 238-254.
- Halpern, D. F. (2001). Why wisdom? Educational Psychologist, 36, 253-256.
- Halpern, D. F. (2001). For the Genius Who Doesn't Need Data. [Review of the book Liberating everyday genius: A revolutionary guide for identifying and mastering your exceptional gifts] PsycCRITIQUES—Contemporary Psychology: APA Review of Books, 46, (No. 6).
- Halpern, D. F., & Tan, U. (2001). Stereotypes and steroids: Using a psychobiosocial model to understand cognitive sex differences. Brain and Cognition, 45, 392-414.
- Halpern, D. F. (2001, January). Department-ism: More than just space wars. American Psychological Society Observer.
- Halpern, D. F. (2001, Winter). Sex, lies, and audiotapes: A cognitive analysis of the Clinton-Lewinsky scandal (Excerpted from Sternberg book). Eye on Psi Chi (pp. 24-27).
- Halpern, D. F. (2000). It will take more than a leap of faith to bridge the credibility gap in educational research. Issues in Education: Contributions from Educational Psychology, 6, 175-180.
- Halpern, D. F. (2000). Mapping cognitive processes onto the brain: Mind the gap. Brain and Cognition, 42, 128-130.
- Halpern, D. F. (2000, March). Creating cooperative learning environments. [Teaching Tips]. APS Observer, 13, 14-15/29-31.
- Halpern, D. F., & LaMay, M. (2000). The smarter sex: A critical review of sex differences in intelligence. Educational Psychology Review, 12, 229-246.
- Halpern, D. F. (2000). Validity, fairness, and group differences: Tough questions for selection testing. Psychology, Public Policy, and the Law, 6, 56-62.

- Halpern, D. F. (2000). Critical thinking, the cognitive psychology of. In N. J. Smelser & P. B. Baltes (Eds.), International encyclopedia of the social and behavioral sciences. Amsterdam: Pergamon.
- Loring-Meier, S., & Halpern, D. F. (1999). Sex differences in visuopatial working memory: Components of cognitive processing. Psychonomic Bulletin & Review, 6, 464-471.
- Halpern, D. F. (1999, November). Review of Robert Diamond's Designing & assessing courses & curricula. The Department Chair Newsletter.
- Halpern, D. F. (1999). Esperanto and the Tower of Babel: A taxonomy of thinking. Psychology, the Journal of the Hellenic Psychological Society, 6, 255-264.
- Halpern, D. F. (1999). How public policies support the skewed logic of the "Bell Curve." Journal of American Ethnic History, 18,145-146.
- Halpern, D. F., & Reich, J. N. (1999). Scholarship in Psychology: Conversations about change and constancy. American Psychologist, 54, 347-349.
- Halpern, D. F. (1999). The Russian perspective on the psychological landscape. [Review of the book Psychology in Russia: Past, Present, Future]. The American Journal of Psychology, 112, 321-324.
- Halpern, D. F. (1999). Review of Inequality by design: Cracking the myth of the bell curve. Edited by Claude A. Swidler, Michael Jout, Martin Sanchez Jankowski, Samuel R. Lucas, Ann Swindler, & Kim Vose. Journal of American Ethnic History, 18, 145-146.
- Halpern, D. F. et al. (1998). Scholarship in psychology: A paradigm for the 21st century. American Psychologist, 53, 1292-1297.
- Halpern, D. F. (1998). Teaching critical thinking for transfer across domains: Dispositions, skills, structure training, and metacognitive monitoring. American Psychologist, 53, 449-455. Reprinted in German.
- Halpern, D. F., Haviland, M. G., & Killian, C. D. (1998). Handedness and sex differences in intelligence: Evidence from the Medical College Admissions Test. Brain and Cognition, 38, 87-101.
- Halpern, D. F. (1998). PASSing as a grand theory: It's all in the plan [Review of the book Cognitive planning: The psychological basis of intelligent behavior]. The American Journal of Psychology, 463-466.
- Halpern, D. F. (1998). Recipe for a sexually dimorphic brain: Ingredients include ovarian and testicular hormones. Behavioral and Brain Sciences, 21, 330-331.
- Halpern, D. F. (1997). Students need "reality checks," Education Digest, 63, 24-26.
- Halpern, D. F. (1997). Sex differences in intelligence: Implications for education. American Psychologist, 52, 1091-1102.
- Reprinted in Smith, P. K., & Pellegrini, A. D. (Eds.). (1998). Major writings in the psychology of education: Volume B. Pupils and learning. London: Routledge.
- Halpern, D. F. (1997, March 14). The war of the worlds: When students' conceptual understanding clashes with their professors'. Chronicle of Higher Education, XLII, B4-B5.

- Reprinted in Pescosolido, B., & Aminzade, R. (Eds.). (1999). *The Social Worlds of Higher Education: Handbook for Teaching in a New Century* (pp. 91-94). Thousand Oaks, CA: Pine Forge Press.
- Halpern, D. F., & Haviland, M. G. (1997). The correlates of left-handedness: Moderating variables in the epidemiology of left-handedness. *Annals of Epidemiology*, *3*, 165-166.
- Halpern, D. F. (1996). Review of Prejudice, politics, and the American dilemma. Edited by Paul M. Sniderman, Philip E. Tetlock, and Edward G. Carmines. Political Psychology, 17, 803-805.
- Halpern, D. F. (1996). Public policy implications of sex differences in cognitive abilities. *Psychology, Public Policy, and the Law, 2,* 561-574.
- Halpern, D. F. (1996). Changing data, changing minds: What the data on cognitive sex differences tell us and what we hear. In D. F. Halpern (Ed.), Psychological and psychobiological perspectives on sex differences in cognition II. Commentaries and Controversies [Special Issue]. *Learning and Individual Differences*, 8, 71-80.
- Halpern, D. F., & Wright, T. (1996). A process-oriented model of cognitive sex differences.
 In D. F. Halpern (Ed.), Psychological and psychobiological perspectives on sex differences in cognition: II. Commentaries and Controversies [Special Issue].
 Learning and Individual Differences, 8, 3-24.
- Halpern, D. F. (1996). Sex, brains, hands, and spatial cognition. *Developmental Review,* 16, 261-270.
- Halpern, D. F. (1996). Mating, math achievement, and other multiple relationships. *Behavioral and Brain Sciences*, 19, 256.
- Halpern, D. F., Gilbert, R., & Coren, S. (1996). PC or not PC? Contemporary challenges to unpopular research findings. *Journal of Social Distress*, *5*, 251-271.
- Neisser, U., Boodoo, G., Bouchard, Jr., T. J., Boykin, A. W., Brody, N., Ceci, S. J., Halpern, D. F., Loehlin, J. C., Perloff, R., Sternberg, R. J., & Urbina, S. (1996). Intelligence: Knowns and Unknowns. *American Psychologist*, *51*, 77-101.
- Halpern, D. F., Waits, D. C., Fisher, D., & Guerra, E. (1995). Psychological determinants of voter attitudes: Information format and personally-relevant cost estimates. *Applied Psychology: An International Review, 44,* 333-344.
- Halpern, D. F. (1995). The skewed logic of the Bell-Shaped Curve. [Special Issue]. Race & IQ. Skeptic, 3, 64-71.
 - Reprinted in German in M. Shermer (ed.), (1997). *Skeptisches Jahrbuch: Rassismus, die Leugnung des Hlocause, Aids okne HIV und Andere Fragwurdige Behauptungen*. Die schiefe logik der Bell Curve: Wie sich wissenschaftliche daten in propaganda verwandeln (pp. 100-119). Berlin: IBDK Verlag. Reprinted in *Encyclopedia of Pseudoscience* (in press).
- Halpern, D. F. (1994). Stereotypes, science, censorship, and the study of sex differences. [Special Issue: Should We Study Sex Differences?]. Feminism and Psychology, 4, 523-530.
 - Reprinted in Anselmi, D. L., & Law, A. L. (1998). Questions of Gender: Perspectives & Paradoxes (pp. 99-104). NY: McGraw-Hill.

- Halpern, D. F. (1994). Critical thinking: The 21st century imperative for higher education. The Long Term View, 2, 12-16.
- Halpern, D. F. (1994). Evaluating support for the Geschwind-Behan-Galaburda model: With a rubber ruler and a thumb on the scale. Brain and Cognition, 26, 185-190.
- Halpern, D. F (1994). Sex, brains, and hands: How women and men think differently. Skeptic, 2, 96-103.
- Halpern, D. F., & Cass, M. (1994). Laterality, sexual orientation, and immune system functioning: Is there a relationship? International Journal of Neuroscience, 77, 167-180.
- Halpern, D. F., & Coren, S. (1993). Left-handedness and life span: A reply to Harris. Psychological Bulletin, 114, 235-241.
- Halpern, D. F. (1993). Assessing the effectiveness of critical thinking instruction. Journal of General Education, 42, 238 (2001) Reprinted in Journal of General Education, 50, 270-286.
- Coren, S., & Halpern, D. F. (1993). A replay of the baseball data. Perceptual and Motor Skills, 76, 403-406.
- Halpern, D. F. (1993). Teaching thinking: An anecdotal, atheoretical, anti-empirical approach [Review of Teaching thinking]. Contemporary Psychology, 38, 380-381.
- Clark, M., & Halpern, D. F. (1993). The million dollar question: Can an intensive learning experience help lowest quartile students succeed in college? Instructional Psychology, 20, 29-39.
- Halpern, D. F. (1992). South paws and righties: What we know about left- and righthanders. The Psychology Teacher Network, 2, 2-4, 11.
- Halpern, D. F., & Coren, S. (1991). Left-handedness and life expectancy: A reply. New England Journal of Medicine, 325, 1042-1043.
- Halpern, D. F., & Coren, S. (1991). Handedness and life span. New England Journal of Medicine, 324, 998.
- Coren, S., & Halpern, D. F. (1991). Left-handedness: A marker for decreased survival fitness. Psychological Bulletin, 109, 90-106.
- McGovern, T. V., Furomoto, L., Halpern, D. F., Kimble, G., & McKeachie, W. (1991). Liberal education, study in depth, and the liberal arts--Psychology. American Psychologist, 46, 598-605.
- Halpern, D. F. (1990). Gender, class, and ethnicity: Is all critical thinking the same? Critical Thinking Newsletter, 8, 1-6.
- Halpern, D. F. (1990). Models of cognitive processing: A single flexible workspace or a distributed model? Comment on Carlson, Khoo, Yaure, and Schneider. Journal of Experimental Psychology: General, 119, 331-332.
- Halpern, D. F., Hansen, C., & Riefer, D. (1990). Analogies as an aid to comprehension and memory. Journal of Educational Psychology, 82, 298-305.
- Halpern, D. F., Blackman, S., & Salzman, B. (1989). Using statistical risk information to assess oral contraceptive safety. Applied Cognitive Psychology, 3, 251-260.
- Halpern, D. F. (1989). Review of The Psychology of Gender: Advances through Meta-

- Analysis. (Edited by J.S. Hyde and M.C. Linn). American Journal of Psychology, 102, 285-289.
- Halpern, D. F. (1989). The disappearance of cognitive gender differences: What you see depends on where you look. American Psychologist, 44, 1156-1158.
- Halpern, D. F. (1989). Things and pictures of things: Are perceptual processes invariant across cultures? Behavioral and Brain Sciences, 12, 84-85.
- Halpern, D. F. (1988). Assessing student outcomes for psychology majors. Teaching of Psychology, 15, 181-186.
- Halpern, D. F. (1988). Sex differences in mathematical reasoning ability: Let me count the ways. Behavioral and Brain Sciences, 11, 191-192.
- Halpern, D. F., & Coren, S. (1988). Do right handers live longer? Nature, 333, 213.
- Halpern, D. F. (1988). The premises of a theory of induction. (Review of Induction: Processes of Inference, Learning, and Discovery by J.H. Holland, K.J. Holyoak, R.E. Nisbett, and P.R. Thagard). Contemporary Psychology, 33, 437-438.
- Halpern, D. F. (1986). A different answer to the question, "Do sex differences in spatial abilities exist?" American Psychologist, 41, 1014-1015.
- Halpern, D. F. & Blackman, S. (1985). Magazines vs. physicians: The influence of information source on intentions to use oral contraceptives. Women and Health, 10, 923.
- Halpern, D. F. (1985). The influence of sex role stereotypes on prose recall. Sex Roles, 12, 363375.
- Halpern, D. F (1985). A reviewer speaks. Teaching of Psychology, 12, 106107.
- Halpern, D. F. (1984). Age differences in response time to verbal and symbolic traffic signs. Experimental Aging Research, 10, 201204.
- Halpern, D. F., & Warm, J. S. (1984). The disappearance of dichoptically presented real and subjective contours. Bulletin of the Psychonomic Society, 22, 433436.
- Halpern, D. F., & Kagan, S. (1984). Sex, age, and cultural differences in individualism. Journal of Genetic Psychology, 145, 2335.
- Halpern, D. F., Salzman, B. (1983). The multiple determination of illusory contours: 1. A review. Perception, 12, 281291.
- Halpern, D. F., & Salzman, B., Harrison, W., & Widaman, K. (1983). The multiple determination of illusory contours: 2. An empirical investigation. Perception, 12, 293303.
- ClarksonSmith, L., & Halpern, D. F. (1983). Can age related deficits in spatial memory attenuated through the use of verbal coding? Experimental Aging Research, 9, 179184.
- Salzman, B., & Halpern, D. F. (1982). Subjective towers: Depth relationships in multilevel subjective contours. Perceptual and Motor Skills, 55, 12471256.
- Halpern, D. F. (1981). The determinants of illusory contour perception. *Perception*, 10, 199213.
- Halpern, D. F., & Warm, J. S. (1980). The disappearance of real and subjective contours, Perception & Psychophysics, 23, 229235.
- Halpern, D. F., Fishbein, H. D., & Warm, J. S. (1979). Similarity judgments of patterns and maps. Bulletin of the Psychonomic Society, 13, 2326.

- Halpern, D. F. (1979). Instructor's Manual for Psychology of Perception (2nd Ed.). New York: Holt, Rinehart, and Winston.
- Halpern, D. F., & Irwin, F. W. (1973). Selection of hypotheses as affected by their preference values. Journal of Experimental Psychology, 101, 105108.

TESTS AND SCALES (PUBLISHED)

- Halpern Critical Thinking Assessment (HCTA). Published by Schuhfried Test Publishers, Vienna, Austria. The HCTA assess five dimensions of critical thinking: verbal reasoning, argument analysis, thinking as hypothesis testing, likelihood and uncertainty, and decision making and problem solving. It is the only critical thinking assessment that uses both multiple choice and constructed responses. See www.HCTA.co for more information.
- Halpern, Straight, & Stephenson. Beliefs About Cognitive Gender Differences and Similarities. PsycTESTS, American Psychological Association.

PAPERS PRESENTED AT PROFESSIONAL MEETINGS

- Cheung, F.M., & Halpern, D. F. (2020). How Can International Psychology of Women Advance Gender Equality? Special Presentation. International Association of Applied Psychology, November 2020.
- Halpern, D. F. (2020, April). Looking at Psychology in the Rear-View Mirror. Invited presentation at the 100th Annual Convention of Western Psychological association. San Francisco, CA.
- Halpern, D.F. (July 2019 and three other dates). Critical thinking for business leaders. Indiana Wesleyan University.
- Halpern, D.F. (June, 2019). Teaching is a political act: Who decides what we need to know? Southwest Psychological Association. Denver, CO.
- Halpern, D. F. (May, 2019). Sex differences in cognitive abilities: What we know and don't know and why it matters. California State University, Bakersfield, CA.
- Appleby, K.M., Appleby, D. C, Wickline, V., Apple, K. J., Bouchard, L.M., Cook, R., Erickson, L., Halpern, D. F., & Kelly, S. M., (March, 2019) Putting skills on the syllabus: A syllabus-based strategy to help students prepare for the workforce. Intermountain Consortium for Faculty Development Teaching for Learning Conference. March, 2019, Logan, UT
- Halpern, D. F. (2017, August). Teaching and Assessing Critical Thinking: Helping Medical Students Become Better Thinkers. Invited Presentation at University of California School of Medicine. Palm Desert, CA.
- Halpern, D. F. (2017, August). Women in STEM: What are They Underrepresented in Some Fields and Overrepresented or at Parity in Others? Invited Presentation at ADVANCing Social Science Think Tank (NSF). Laguna Beach, CA.
- Halpern, D. F. (2017, March). Sex Differences in Cognitive Abilities: What We Know and Don't Know and Why It Matters. Invited presentation at Dominican University, San Rafael, CA.

- Halpern, D.F. (2017, February). Teaching and Assessing Critical Thinking: We Can Help Students Become Better Thinkers. Invited Workshop at Texas A & M International University, Laredo, TX.
- Halpern, D. F. (2016, September). Sex Differences in Cognitive Abilities: What We Know and Don't Know and Why it Matters. Invited Opening Keynote Speaker.
- Critical Thinking Workshop; Invited Symposium. Innovation in Psychology Education and Training: Opportunities, Barriers, and Solutions. Australian Psychological Association. Melbourne, Australia.
- Halpern, D.F. (2016, June). Teaching and Assessing Critical Thinking: Helping University Students Become Better Thinkers. Workshop Presented at Clemson University, Clemson, South Carolina.
- Halpern, D. F. (2016, May). Critical Thinking: Going Deeper; Sex Differences and Similarities in Science and Math. Invited Presentations at ETH Zurich (Swiss Federal Institute of Technology in Zurich). Switzerland.
- Halpern, D.F. (2016, May). Intersectionality and Educational Inequality: Single-Sex Education. Invited presentation at UCLA School of Law. Los Angeles, CA.
- Halpern, D.F. (2016, May). The Psychological Science Behind Partisanship Versus Cooperation. Distinguished Speakers Series. California State University, Dominguez Hills, CA.
- Halpern, D.F. (2016, March). Women in STEM: Why are They Underrepresented in Some Fields and Overrepresented or at Parity in Others? Sex Differences and Similarities in Cognitive Abilities. Invited Presentations at the Latin American School for Education, Cognitive, and Neural Sciences. Funded by the McDonnell Foundation. Buenos Aires, Argentina.
- Halpern, D. F. (2016, January). Teaching and Assessing Critical Thinking: We Can Help College Students Become Better Thinkers. Invited Workshop Chapman University, Orange, CA.
- Halpern, D. F. (2015, October). Understanding Sex Differences in Cognition. Invited Keynote Address at the Congreso Innovaciones en Psicologia y Sald Mental (Congress on Innovations in Psychology and Mental Health). Tunja, Colombia.
- Halpern, D. F. (2015, October). Applying the Science of Learning. Invited Keynote Address at the Congreso Innovaciones en Psicologia y Sald Mental (Congress on Innovations in Psychology and Mental Health). Tunja, Colombia.
- Halpern, D. F. (2015, May) Teaching and Assessing Critical Thinking: We Can Help Students Become Better Thinkers, Keynote Presentation at the Annual Meeting of the Teaching Professor, Atlanta, GA.
- Halpern, D. F. (2015, March). Applying the Science of Learning to the Art of Teaching. Keynote Presentation at the Teaching and Learning Conference, Hebrew University, Israel.
- Halpern, D. F. (2014, October). Sex Differences in Cognitive Abilities: New Data, New Theories, New Conclusions, Invited Presentation at the Sixth Annual Gender Development Research Conference, San Francisco, CA.

- Halpern, D. F. (2014, August). A is for Assessment: The Other Scarlet Letter. Invited Address presented at the 6th International Conference on Psychology Education, Northern Arizona University, Arizona.
- Halpern, D. F. (2014, June). Teaching and Assessing Critical Thinking: Helping College Students Become Better Thinkers. Invited Address presented at the Eastern Teaching of Psychology Annual Convention, James Madison University, Staunton, VA.
- Halpern, D. F. (2014, May). Teaching Critical Thinking for Transfer: The Why of Higher Education, Invited Address presented at the Annual Meeting of the Association for Psychological Science, San Francisco, CA.
- Halpern, D. F. (2014, April). The Psychological Science Behind Partisanship versus Cooperation. How You and I Can Fix our Broken Government. Invited Address presented at the Annual Meeting of the Western Psychological Association, Portland, OR.
- Halpern, D. F. (2014, April). Knowns and Unknowns of Cognitive Sex Differences, Invited Address presented at University of Southern Mississippi, Hattiesburg, MS.
- Halpern, D. F. (2014, April). Encouraging Girls and Women in STEM Disciplines. Invited Address presented at the University of Cincinnati, Cincinnati, OH.
- Halpern, D. F. (2014, March). Teaching for Critical Thinking: The Why of Higher Education. Invited Address presented at the University of British Columbia, Vancouver, Canada.
- Halpern, D. F. (2014, February). Teaching Critical Thinking for Transfer: The Why of Higher Education. Invited Address presented at the Annual Lilly Conference. Newport Beach, CA.
- Halpern, D. F. (2013, October). What We Know and Don't Know About Cognitive Sex Differences. Invited Presentation at Pasadena Senior Center Science on Tuesday Lecture Series. Pasadena, CA.
- Halpern, D. F. (2013, July). Teaching Critical Thinking for Transfer: The Why of Higher Education. Invited Keynote Address at the European Network for Psychology Learning and Teaching (EUROPLAT). Stockholm, Sweden.
- Halpern, D. F. (2013, July). Sex Differences in Cognitive Abilities: Sense and Nonsense. Arthur W. Staats Lecture on Unifying Psychology. American Psychological Association Meeting, Honolulu, HI.
- Halpern, D. F. (2013, May). The Psychological Science Behind Hyperpartisanship and What to Do About it. James McKeen Cattell Fellows Award Address. Washington, DC.
- Halpern, D. F. (2013, April), An Outsider's View and Recommendations for Fair and Valid Admissions to Austria's Medical Schools, Presented at the Austrian Rectors Conference. Vienna, Austria.
- Halpern, D. F. (2013, March). What We Learned from Powerful Women Leaders About Juggling Work and Family: A Short How-To Manual. The University of New Brunswick (UNB), Fredericton & St. John W. C. Desmond Pacey Memorial Lecture Award. Fredericton and St. John, Canada.

- Halpern, D. F. (2013, March). Operation ARA: What we can Learn About Scientific Reasoning from Aliens and Avatars. Presented at the Board of Trustees Meeting, Ojai, CA.
- Halpern, D. F. (2013, February). Teaching and Assessing Critical Thinking: Helping College Students Become Better Thinkers. Presented at Loyola Marymount University, Los Angeles, CA.
- Also presented at the University of North Carolina School of Pharmacy (2013, March), Raleigh, NC.
- Forsyth, C., Graesser, A., Zhiqaing, C., Pavlik, P., Jr., Millis, K., & Halpern, D. F. (2013, April) Learner Profiles Emerge from a Serious Game Teaching Scientific Inquiry Skills. Presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.
- Halpern, D. F. (2012, October). Sex, gender, and cognition: How data are being misused to support the pseudoscience of single-sex schooling. Presented at the Michael D. Eisner College of Education First Annual Research Colloquium, Northridge, CA.
- Halpern, D. F. (2012, September). The Psychological Science Behind Hyperpartisanship versus Bipartisanship. Presented at the Annual Meeting of TEDxCC. Claremont, CA.
- Halpern, D. F. (2012, September). How to Make Learning Stick: Applications from the Science of Learning and Teaching and Assessing Critical Thinking: Helping College Students Become Better Thinkers. Invited Presentations at University of Louisville, Louisville, KY.
- Halpern, D. F. (2012, July). Chair, Invited Symposium: The Assessment of Critical Thinking: Cross-cultural and Validity Issues. International Test Commission, Amsterdam, Netherlands.
- Halpern, D. F. (2012, June). Teaching and Assessing Critical Thinking: Helping Our students Become Better Critical Thinkers. Invited Presentation. Educational Testing Service, Kansas City, KS.
- Halpern, D. F. (2012, April). Sex Differences in Cognitive Abilities: What I Know Now. Invited Keynote Presentation at the British Psychological Society, London, England.
 - Also presented at Midwestern Psychological Association, (May, 2012) Chicago, IL. Wake Forest Medical School (June 2012) Wake Forest, SC.
- Halpern, D. F. (2012, January). Sex Differences in Cognitive Abilities: Sense and Nonsense. Invited Keynote Presentation at National Institute for Teaching of Psychology, St. Petersburg, FL.
- Cai, Z., Graesser, A., Forsyth, C., Burkett, C., Millis, K., Wallace, P., Halpern, D. F., & Butler, H. (2011, December). Trialog in ARIES: User Input Assessment in an Intelligent Tutoring System. Presented at the Institute of Electrical and Electronics Engineers, China.
- Halpern, D. F. (2011, November). How to Make Learning "Stick: Applications from the Science of Learning" and "Teaching and Assessing Critical Thinking: Helping College Students Become Better Thinkers" Invited presentation at Lamar University, Beaumont, TX.

- Forsyth, C.M., Graesser, A., Millis, K., Cai, Z., & Halpern, D. F. (2011, October). Operation ARIES!: Aliens, Spies, and Research Methods. Paper presented at the Affective Computing and Intelligent Interaction Conference, Memphis, TN.
- Halpern, D.F., & Reimer, N. (2011, September). Encouraging Girls in Math and Science. Presentation for Pacific Regional Education Laboratory.
- Forsyth, C. M., Burkett, C. M., Halpern, D. F., Millis, K., Graesser, A. C., & Germany, M-L. (2011, July). Readers in the malleable middle of prior knowledge benefit most from full texts over summaries. Presented at the 21st Annual Meeting of the Society for Text and Discourse, Poitiers, France.
- Halpern, D. F., Millis, K., & Graesser, A. (2011, June). Operation ARIES! Defending science; defeating ignorance: Using the principles of serious games and the science of learning to teach scientific thinking. Invited Keynote Address at the International Conference on Thinking. Belfast, Ireland.
- Butler, H. A., Halpern, D. F., Hogan, M., Dwyer, C., Franco, A., Rivas, S. F., Saiz, C., & Almeida, L. (2011, June). Halpern Critical Thinking Assessment predicts realworld outcomes of critical thinking. Symposium presented at the International Conference on Thinking. Belfast, Ireland.
- Halpern, D. F. (2011, April). Sex differences in cognitive abilities: New data, new theories, new conclusions. Invited presentation at the Annual Convention of the Western Psychological Association, Los Angeles, CA.
- Halpern, D. F. (2011, March). Making it Easier to Combine Work and Family: Theory, Research, and Good Advice. Invited presentation at the 2011 Industrial Organizational/ Organizational Behavior Conference, Alliant University, San Diego, CA.
- Halpern, D. F. (2011, January). Operation ARIES! Defending Science; Defeating Ignorance—a computerized game that teaches students how to think like scientists. Invited presentation at Reed College, Portland, OR.
- Halpern, D. F. (2010, November). What We Can Learn from Women at the Top. Invited presentation. Science Day at California Polytechnical University, Pomona.
- Halpern, D. F. (2010, November). The Science of Learning. Invited Presentation at Indiana University Purdue University Indianapolis Medical School.
- Halpern, D. F. (2010, November). Strategic Priorities: Striving in Work and Life. Invited Presentation at Indiana University Purdue University Indianapolis Medical School.
- Halpern, D. F. (2010, October). Psychologically Literate Students: How Will We Know if We Have Been Successful? Invited Presentation at Best Practices in Assessment Conference, Kennesaw, GA.
- Halpern, D. F. (2010, August). Balancing, juggling, and surviving the dual demands of work and life. Invited Plenary Speaker for First Bring-the Family Event. Presented at the Annual Meeting of the American Psychological Association, San Diego, CA.
- Halpern, D. F., Benbow, C., Geary, D., Gur, D., Hyde, J. & Gernsbacher, M.A., (2010, August). The science of sex-differences in science and mathematics. Invited

- Presentation for George A. Miller Award for the Outstanding Journal Article in Psychology. Presented at the Annual Meeting of the American Psychological Association, San Diego, CA.
- Halpern, D. F., Millis, K., Graesser, A., & the Talented Humans and Avatars from Team ARIES. (2010, August). Operation ARIES! Applying the Principles of Serious Games and the Science of Learning to Enhance Critical Thinking. Invited presentation presented at the Teaching Psychology in Secondary Schools track at the Annual Meeting of the American Psychological Association, San Diego, CA.
- Miller, D. I., Halpern, D. F., & Saeta, P. N. (2010, July). Can spatial skills training improve achievement in introductory mechanics? Paper presented at the Annual Meeting for Teaching Physics. Portland, OR.
 - Also presented at the Annual Meeting of the American Psychological Association, San Diego, CA (August 2010).
- Halpern, D. F. (2010, July). Educating Psychologically Literate Citizens Who Think Critically and Act Ethically. Invited Keynote Address at the International Conference on Psychology Education, University of New South Wales, Sydney, Australia
- Forsyth, C., Butler, H., Graesser, A. C., Halpern, D. F., Millis, K., Zhiquaing, C., & Wood, J. (2010, June). Higher Student Contributions Correlate With Higher Learning Gains Presented at the *Third International Conference on Educational Data Mining (EDM2010)*, Pittsburgh, PA.
- Millis, K., Cai, Z., Graesser, A., Wallace, P., Wiemer, K., Halpern, D. F., & Kopp, K. (2010, June). Teaching Scientific Inquiry with an Educational Game. Presented at the Annual Meeting of the Institute for Educational Sciences. Washington, DC.
- Graesser, A., Britt, A., Millis, K., Wallace, P., Halpern, D. F., Cai, Z., Kopp, K., & Forsyth, C. (2010, June). Critiquing media reports with flawed scientific findings: Operation ARIES!, a game with animated agents and natural language trialogues. Presentation at the Tenth International Conference on Intelligent Tutoring Systems, Pittsburgh. PA.
- Halpern, D. F. (2010, May). How and how much can we improve visual-spatial abilities? Invited presentation at Spatial Learning Conference. Harvard University, Boston, MA.
- Halpern, D. F., Graesser, A., Millis, K., & the Talented Humans and Avatars from Team ARIES. 2010, April). Operation ARIES! Using the Principles Of Serious Games and the Science of Learning to Teach Scientific Thinking. Invited Presentation at the Annual Meeting of the Western Psychological Association. Cancun, Mexico.
- Halpern, D. F. (2010, February). Operation ARIES! Acquiring Research Investigative and Evaluative Skills. Presented at the 2010 Annual Meeting of the Association for the Advancement of Science (AAS). San Diego, CA.
- Halpern, D. F. (2010, January). Sex Differences in Cognition. Invited presentation at the Arts and Sciences Dean's Social Science Seminar. Oklahoma State University, Stillwater, OK.

- Halpern, D. F. (2009, December). Using Social Science Research to Inform Public Policies. Invited Keynote Presentation at the Irish Social Sciences Platform. Galway, Ireland.
- Halpern, D. F. (2009, November). Invited Lecture for Association for Women in Science. Balancing Work and Science Careers. City of Hope, Duarte, CA.
- Halpern, D. F. (2009, October). Invited Mary H. Blum Lecture at University of New Hampshire. Teaching and Assessing Critical Thinking. Durham, NH.
- Halpern, D. F., (2009, August). Teaching and Assessing Critical Thinking. Keynote Speaker. Southern California Teachers of Psychology Conference, Irvine, CA. Beninger, A., & Halpern, D. F. (2009, August). UK Women in Academia: The Ouest for Work/Life Balance. The Proceedings of the Annual Convention of the American Psychological Association, Toronto.
- Cai, Z., Graesser, A. C., Millis, K. K., Halpern, D. F. Wallace, P. S., Moldovan, C., & Forsyth, C. (2009, July). Interactive event: ARIES. Presented at the 14th International Conference on Artificial Intelligence in Education, Brighton, UK.
- Halpern, D.F. (2009, July). Applying the Science of Learning to Teaching Psychological Science. Invited Keynote Presentation at the Eleventh European Congress of Psychology, Oslo, Norway.
- Millis, K. K., Graesser, A. C., Halpern, D. F., Cai, Z., & Wallace, P. (2009, June). Evaluating research by question asking in an educational game. Paper to be presented at the Fourth Annual Institute for Educational Studies Research Conference, Washington, DC.
- Halpern, D. F. (2009, June). Teaching Critical Thinking as Though Our Future Depends on It, Because It Does. Invited Presentation at National Institute for Technology and Liberal Education (NITLE). Claremont, CA.
- Millis, K. K., Halpern, D. F., Graesser, A. C., Cai, Z., & Wallace, P. (2009, May). Using Pedagogical Agents to Teach Scientific Inquiry in a Game Environment. Symposium Presented at the Association for Psychological Science, San Francisco, CA.
- Halpern, D. F., & Cheung, F. M. (2009, May). The Pushme-Pullme Pressure of $Combining A cademic \, Careers \, With \, Family \, Responsibilities. \, Invited \, Presentation$ at the Association for Psychological Science, San Francisco, CA.
- Halpern, D. F. (2009, April). What's New in Introductory Psychology? Invited Symposium Presentation at the Western Psychological Association. Portland, OR.
- Halpern, D. F., & Cheung, F. M. (2009). Women at the Top: Powerful Leaders Tell Us How to Combine Work and Family, Invited Presentation at the Western Psychological Association, Portland, OR.
- Hawkins, S. A., Tan, S. J., & Halpern, D. F. (2009, April). Making ends meet: Factors associated with new mothers' employment decisions. Paper Presented at the Western Psychological Association, Portland, OR.
- Halpern, D.F. & Cheung, F.M. (2009, April). Women at the Top: How Powerful Leaders Successfully Combine Work and Family. Invited Presentation at the Rocky Mountain Psychological Association Convention, Albuquerque, NM.

- Halpern, D.F. (2009, March). Can Students Learn to be Better Citizens and Better People? Only if We Teach for Long-Term Retention and Transfer. Invited Presentation at the Applied Social Psychology Conference at Claremont Graduate University, Claremont, CA.
- Halpern, D.F. (2009, March). Teaching and Assessing Critical Thinking: How to Make Critical Thinking a Learning Outcome. Invited Presentation at Texas Tech University, Lubbock, TX.
- Halpern, D.F. (2009, February). How to Make Learning "Stick": Applications from the Science of Learning. Invited Presentation at the California State University Fresno, Fresno, CA.
- Halpern, D.F. (2009, January). Teaching and Assessing Critical Thinking: Better Thinking Skills Really Can Be a College Outcome. Invited Presentation at the Society for the Teaching of Psychology, Ball State University, IN.
- Halpern, D.F. (2009, January). Learning is Not a Spectator Sport. Invited Presentation at the Midwest Institute for Students and Teachers of Psychology, Chicago, Illinois.
- Halpern, D. F. (2008, December). Data Don't Speak: Interpreting Data Regarding Cognitive Sex Differences. Invited Presentation Presented at the Ninth Annual conference of the International Society for Intelligence Research. Atlanta, GA.
- Millis, K., Wallace, P., Cai, Z., Graesser, A., Halpern, D., Magliano, J. (November, 2008). Using autotutor to promote scientific inquiry skills in a game environment. Presented at the annual meeting of the Society for Computers in Psychology, Chicago.
- Halpern, D. F. (2008, September). Public Policy Implications of Sex Differences in Cognitive Abilities. Invited Presentation for Special Conference in Celebration of James Watson's Eighty-Fifth Birthday, How Can We Improve Our Brains? Cold Springs Harbor, NY.
- Halpern, D. F. (2008, August). The National Conference on Undergraduate Education in Psychology. Presented at the Annual Convention of the American Psychological Association, Boston, MA.
- Hawkins, S. A., Tan, S. J., & Halpern, D. F. (2008, July). New Mothers Taking Time Off: A Look at California Paid Family Leave. Presented at the 1st National Research Conference on Child and Family Programs and Policy. Boston, MA.
- Halpern, D. F. (2008, July). The Science and Scholarship of Teaching at the Postsecondary Level. Invited Presentation at the European Psychology Teaching and Learning Conference. Berlin, Germany.
- Halpern, D. F. (2008, July). Applying the Science of Psychology to Intergroup Conflict: Promising Results from Intractable and Prolonged Areas of Conflict, A United States National Committee Symposium. Invited Applying the Science of Psychology to Intergroup Conflict: Promising Results from Intractable and Prolonged Areas of Conflict Presentation at the XXIX Meeting of the International Congress of Psychology, Berlin, Germany.
- Millis, K., Wallace, P., Cai, Z., Graesser, A., Halpern, D., & Magliano, J. (2008, July).

- Using AutoTutor to promote scientific inquiry skills in game environments. Presented at the Annual Meeting for the Society for Computers in Psychology, Chicago, IL.
- Halpern, D. F. (2008, May). The Science of Sex Differences in Science and Mathematics. Invited Keynote Address at the 20th Annual Convention of the American Psychological Society, Chicago, IL.
- Halpern, D. F. (2008, March). Applying the Science of Learning. Keynote Speaker at Bowling Green State University's Teaching Conference. Bowling Green Ohio.
- Halpern, D. F. (2008, February). The American Psychological Society's William James Lecture: Women at the Top: Powerful Leaders Tell Us How to Combine Work and Family, Presented at the Southeast Psychological Association Annual Convention, Charlotte, North Carolina.
- Millis, K., Graesser, A., Halpern, D., & Britt, A. (January, 2008). Learning science by conversing with animated agents. Presented at the Engineering Education conference at Texas Tech University.
- Halpern, D. F. (2008, January). Applying the Science of Learning in the Classroom and Beyond. Invited Presentation at the 30th Annual Meeting of the National Institute for the Teaching of Psychology. St. Petersburg Beach, FL.
- Halpern, D. F. (2007, December). Women at the Top: Redefining success as work + family. Invited Lindemann Leadership Lecture. Adelphi University, NY.
- Halpern, D. F. (2007, November) How to Think Like an Expert Clinician; Applications of Critical Thinking. Invited Presentation to the Hong Kong Psychological Association, Hong Kong, China.
- Halpern, D. F. (2007, November). How and How Much Can We Enhance Critical Thinking Skills in High School Students. Invited presentation at Hong Kong Department of Education and Manpower. Hong Kong, China.
- Halpern, D. F. (2007, October). Teaching Critical Thinking Skills that Transfer Beyond the Classroom and Strengthen After Graduation. Invited Presentation at Chinese University, Hong Kong, China.
- Halpern, D. F. (2007, October). The Science of Sex Differences in Math and Science. Invited Public Lecture sponsored by Hong Kong University, Hong Kong, China.
- Halpern, D. F. (2007, August). Workplace flexibility. Paper presented at the Annual Meeting of the American Psychological Association, San Francisco, CA.
- Halpern, D. F. & Hakel, M. (2007, July). Present at the Creation: Teaching, Deep Learning, and Creating Understanding and Skill. Invited Address at the Southern Association for Accreditation Institute On Quality Enhancement And Accreditation, Louisville, KY
- Halpern, D. F. (2007, June). Sex Differences in Cognitive Abilities: What Everyone Needs to Know, Keynote Presentation at Brain Basics, Denver, CO.
- Halpern, D. F. (2007, May). Nurturing Faculty Careers: Confronting the Challenges of Work and Family. Invited Presentation to the Faculty at the Michigan Technological University, Houghton, MI.
- Halpern, D. F. (2007, May) Using Psychological Research to Inform Public Policies.

- Invited Presentation at the Claremont Graduate University Graduation Forum. Claremont, CA.
- Halpern, D. F. (2007, May). Teaching With an Elephant in the Room: Sex Differences in Cognitive Abilities. Invited paper presented at the Annual Meeting of the Western Psychological Association, Vancouver, Canada.
- Halpern, D. F. (2007, April). Women at the Top: How Powerful Leaders Successfully Combine Work and Family. Invited Presentation to the Organization of Women Executives, Los Angeles, CA.
- Quinn, A., Halpern, D. F., & Hartley, A. A. (2007, April). The Opt-Out Revolution: Pull to Motherhood or Escape From Work?" Paper presented at the Twenty-Second Annual Conference of the Society for Industrial/Organizational Psychologists. New York, NY.
- Halpern, D. F. (2007, March). Life After Graduation: Survey Results from CMC Alumni. Presented at CMC Conference for Alumnae in Real Life: Work and Family Challenges. Claremont, CA.
- Halpern, D. F. (2007, March). Combining Work and Family. Invited speaker at Fielding Institute meeting for graduate students and faculty. Claremont, CA.
- Halpern, D. F. (2007, January). When Follow the Leader is no Longer a Children's Game. Invited keynote speaker at Psi Chi Leadership Conference. Atlanta, GA.
- Hau, K. T., Ho, I. T., & Halpern, D. (2006, November). Assessment of critical thinking in Chinese and US students: Cross-cultural validation. Paper presented at the International Conference on Educational Evaluation Conference, Taipei, Taiwan, Taiwan Normal University.
- Halpern, D. F. (2006, October). Understanding Sex Differences in Cognitive Abilities: Was Larry Summers Right? Invited presentation at University of Cincinnati. Cincinnati, OH.
- Halpern, D. F. (2006, October). Work and Family: Stress and Health. Invited Presentation at Fuller Theological Seminary Graduate School of Psychology. Pasadena, CA.
- Halpern, D. F. (2006, September). What University Professors Need to Know About the Science of Learning. Invited keynote address at California State University Northridge, Northridge, CA. Also presented at California State University, Dominguez Hills in September 2006.
- Halpern, D. F. (2006, September). Assessing Educational Outcomes: Goals, Guidelines, Good Practices. Invited workshop at the California State University Northridge, Northridge, CA.
- Halpern, D. F. (2006, June). Using Psychological Research as a Foundation for Public Policy. Invited symposium presentation at the 2006 Society for the Psychological Study of Social Issues annual convention. Long Beach, CA.
- Halpern, D. F. (2006, June). Can we teach critical thinking/scientific literacy skills that generalize across domains and last long into the future? Invited keynote presentation at the American Association for the Advancement of Science -Pacific Division annual meeting. San Diego, CA.

- Halpern, D. F. (2006, May). Critical thinking to help students become better thinkers. Invited presentation at New Mexico State University.
- Halpern, D. F. (2006, May). Weaving Conference Themes: Overwork and Flexibility. Invited presentation at the Sloan International Conference on Why Workplace Flexibility Matters: A Global Perspective. Chicago, IL.
- Halpern, D. F. (2006, April). Positive retirement: It's a whole new phase in the life span. Invited Psi Chi presentation at the 2006 Western Psychological Association Annual Convention. Palm Springs, CA
- Halpern, D. F. (2006, April). Sex, Lies, and Audiotapes; A Cognitive Analysis of the Clinton-Lewinsky Scandal. Invited presentation at University of Iowa Ida Beam Distinguished Visiting Professor Award Series.
- Halpern, D. F. (2006, April). Best Practices in Critical Thinking Instruction. Invited presentation at University of Iowa Ida Beam Distinguished Visiting Professor Award Series.
- Hau, K. T., Halpern, D. F., Marin-Burkhart, L., Ho, I. T., Ku, K., Chan, N., & Lun, V. (2006, April). Chinese and U.S. students' critical thinking: Cross-cultural construct validation of a critical thinking assessment. Paper presented at the American Education Research Association conference. San Francisco, CA.
- Ku, K., Chan, N., Lun, V., Halpern, D. F. (2006, April). Chinese and U.S. undergraduates' critical thinking skills: Academic and dispositional predictors. Paper presented at the American Education Research Association conference. San Francisco, CA.
- Halpern, D. F. (2006, March). How well has California Paid Leave Insurance Program has helped working caregivers? Invited presentation at the 23rd Annual Claremont Symposium on Applied Social Psychology, Work and Families: Changing Realities. Claremont, CA.
- Halpern, D. F. (2006, March). The Complex Nature of Sibling Relationships. Invited plenary presentation at the Biology and Beyond: Siblings in Adoption and Foster Care Conference. Claremont, CA.
- Halpern, D. F. (2006, February). Sex Differences in Cognitive Abilities: Was Lawrence Summers Right? Invited presentation at San Diego State University.
 - Also presented at: Invited presentation (2006, April) at California State University Long Beach Psychology Day.
 - Invited presentation (2006, April) at California State University San Marcos Psychology Day.
 - Invited presentation (2006, April) at California State University, Fullerton, Psychology Day.
 - Invited presentation (2006, April) at University of Iowa Ida Beam Distinguished Visiting Professor Award Series.
- Halpern, D. F. (2006, January). Converging Evidence and Large Effect Sizes Say We Should Move From "Can We?" to "Best Practices" in Developing College Students' Critical Thinking Skills. Invited presentation at the 29th Annual National Institute on the Teaching of Psychology. St. Petersburg Beach, FL.
- Halpern, D. F. (2005, December). Biopsychosocial Contributions to Cognitive

- Performance. Invited plenary presentation at the National Academy of Science Convocation on Maximizing the Potential of Women in Academic Science and Engineering, Washington, DC.
- Halpern, D. F. (2005, October). Educating Different Minds: Sex Differences in Cognitive Abilities. Invited Presentation at Harvard University Conference on Learning & the Brain. Cambridge, MA.
- Halpern, D. F. (2005, October). Positive Retirement: It's a While New Phase in the Life Span. Invited presentation at the Fourth International Positive Psychology Summit. Washington, DC.
- Halpern, D. F. (2005, August). Using Psychological Research as a Foundation for Public Policy. Invited presentation at the 113th Annual American Psychological Association Convention. Washington, DC.
- Halpern, D. F., & Hill, B. (2005, August). Orientation: Convention Survival Techniques
 Getting the Most Out of APA Conventions. Invited presentation at the 113th
 Annual American Psychological Association Convention, Washington, DC.
- Halpern, D. F. (2005, June). Work and Family, Stress and Health. Invited address at the Missouri Psychological Association Conference, Springfield, MO.
- Halpern, D. F. (2005, May). How Time-Flexible Work Policies Can Reduce Stress, Improve Health, and Save Money. Invited keynote address at the Irvine Family Friendly Business Forum, Irvine, CA.
 - Also presented at: Invited address (2005, June) at the Grand Rounds, Columbia, MO.
- Halpern, D. F. (2005, May). After Decades of Teaching Critical Thinking, Do We or Our Students Use What we Teach? Invited presentation at the American Psychological Society Conference, Los Angeles, CA.
- Halpern, D. F. (2005, April). Public Policies, Work, and Families: Using Social Science Research to Realign the World of Work with the realities of Working Families. Invited presentation at RAND, Los Angeles, CA.
- Halpern, D. F. (2005, March). How Social Science Data Can Inform Public Policies About Work, Families, and Children. Invited presentation at California State University, San Bernardino, CA.
- Halpern, D. F. (2005, February). Public Policy, Work, and Families: The Report of the APA Presidential Initiative on Work and Families. Invited presentation at the College and University Work/Family Association Conference, Atlanta, GA.
- Halpern, D. F. (2005, January). At the Core: Teaching Students to Think Critically
 About Clinical Practice. Invited Keynote presentation at National Council of
 Schools and Programs in Professional Psychology Annual Conference, San
 Diego, CA
- Halpern, D. F. (2004, November). The Future is Latino/a. Invited presentation at the National Association of Latino/a Psychologists Conference, Phoenix, AZ.
- Halpern, D. F. (2004, October). Work, Family, and Children Through a Psychological Lens. Invited paper presented at University of Cape Town, South Africa.
- Halpern, D. F. (2004, September). Teaching Students to Think Critically in Ways That Transfer to Novel Domains After the Final Exam is Taken. Invited address

- at the Education Leadership Conference, Washington, DC.
- Halpern, D. F. (2004, August). Contributions of Psychology to Enhancing Cognitive Competence. Invited address at the XXVIII International Congress of Psychology, Beijing, China.
- Halpern, D. F. (2004, August). The Development of Critical Thinking Skills: Our Best Hope for the Future. Invited address at the XXVIII International Congress of Psychology, Beijing, China.
- Halpern, D. F. (2004, August). States of Mind: Political Systems as Implicit Theories of Psychology. Invited keynote address at the XXVIII International Congress of Psychology, Beijing, China.
 - Also presented at: Invited keynote address (2004, September) at the Psychological Society of South Africa: 10th Anniversary of Democracy, Durban, South Africa.
- Halpern, D. F. (2004, July). New Models of Work-Family Interaction that Provide Returns on Investments to Employers and Working Families, Presidential address at the American Psychological Association Annual Convention, Honolulu, HI.
- Halpern, D. F. & Grey, H. (2004, July). "An American Legacy: 50th Anniversary of Brown v. Board of Education" Symposium Organizers. Presenters: M. Brewster Smith, Ph.D.; Minnijean Brown Trickey; Jacequeline Jordan Irvine, Ph.D.; and John P. Jackson, Jr., Ph.D. American Psychological Association Annual Convention, Honolulu, HI.
- Halpern, D. F. (2004, April). Academic-Practitioner Partnerships. Invited address at the Association of VA Psychologists Leaders, Washington, DC.
- Halpern, D. F. (2004, April). Work and Family: Stress and Health The Business Case for Family Friendly Work Policies. Invited address at the Western Psychological Association Annual Convention, Phoenix, AZ.
 - Also presented at: Invited address (2004, April) at the Southwestern Psychological Association, San Antonio, TX.
 - Invited address (2004, April) at the Southern Society for Philosophy and Psychology, New Orleans, LA.
 - Invited address (2004, September) at the Turkey Psychological Association, Istanbul, Turkey.
- Halpern, D. F. (2004, April). Teaching for the Test You Won't Be Giving: Teaching for Long-Term Retention and Transfer. Invited address at the Western Association of Schools and Colleges Annual Meeting, San Jose, CA.
- Halpern, D. F. (2004, March). Implications of the Multiple Roles of Women for Women's Mental Health. Invited address at the 2nd World Congress on Women's Mental Health, Washington, DC.
- Halpern, D. F. (2004, March). The Science of Learning: How Applications of Research Can Enhance Learning, Invited keynote address at the meeting of the Association of American Colleges and Universities Conference General Education and Assessment: Generating Commitment, Value, and Evidence, Long Beach, CA.
- Halpern, D. F. (2004, January). Applying the Science of Psychology to a Public that Distrusts Science and (Often) Prefers Parapsychology. Invited address at the

- Claremont Graduate University Stauffer Symposium on Applied Psychology, Claremont, CA.
- Halpern, D. F. (2003, November). The Science of Learning: How Applications of Research Can Enhance Learning. Invited address at the University of Newcastle. Newcastle, England.
- Halpern, D. F. (2003, October). An Academic-Practitioner Partnership to Determine if Treatment Goals are Being Achieved. Invited address at the Hawaii Psychological Association Annual Convention. Honolulu, HI.
- Halpern, D. F. (2003, September). Shaping the Future: Assessing the Fundamentals of Undergraduate Psychology. Invited address for education leaders. Washington, DC. For an on-line video of my presentation (which is being offered for continuing education) go to http://www.apa.org/ed/elc/elcmediahome.html
- Halpern, D. F. (2003, August). Can we really help students to think more critically? Show Me the Data! Invited address at the American Psychological Association Annual Convention, Toronto, Ontario, Canada.
- Halpern, D. F. (2003, July). Understanding cognitive sex differences with the wisdom of Hoca. Invited address at the XXIX Interamerican Congress of Psychology, Lima, Peru.
- Halpern, D. F. (2003, July). Applying the sciences of psychology and education: Perspectives and prospects. Invited address at the International Association for Cognitive Education and Psychology, Seattle, WA.
- Halpern, D. F. (2003, June). The science of learning: Using cognitive psychology to redesign education. Current status and future perspectives in psychology, Invited address at the University of Stockholm, Sweden.
- Halpern, D. F. (2003, June). Psychosocial factors that link workplace/workforce mismatch and health. Invited address at the National Institute of Child Health and Human Development Conference Workforce/Workplace Mismatch? Work, Family, Health and Well-Being meeting, Washington, DC.
- Wai, J., & Halpern, D. F. (2003, May). The competitive world of scrabble: Cognitive processes of expert players. Poster session presented at the Western Psychological Association Annual Meeting, Vancouver, Canada.
- Halpern, D. F., & Hakel, M. D. (2003, March). Present at the Creation: Applying the Science of Learning in Your Teaching. Invited keynote address at the Annual Convention of the Association for Higher Education, Washington, DC.
- Halpern, D. F. (2003, March). What We Know and Don't Know About Cognitive Sex Differences. Invited keynote address at the Annual Convention of the Eastern Psychological Association, Baltimore, MD.
- Halpern, D. F. (2003, March). Perspectives on Work and Family Life: The Contributions of Social Science Research. Symposium presentation at the Association for Work-Life Professionals and Business and Professional Women's Conference. Orlando, FL.
- Halpern, D. F., & Donaghey, B. (2003, March). The Business Case for Family-Friendly Policies: Health, Stress, and Productivity. Paper presented at American

- Psychological Association and National Institutes of Health Joint Conference on "Work, Stress, and Health." Toronto, Canada.
- Halpern, D. F. (2003, January). Invited Convocation Keynote Address. The Science of Learning, St. Thomas University, Houston, TX, (separate workshop for faculty on critical thinking instruction).
 - Also presented at: Invited Convocation Keynote Address (2003, January) Maricopa Community College District. (15 colleges) Phoenix, AZ (separate workshop for faculty on critical thinking instruction).
- Halpern, D. F. (2002, November). Work-Family Balance. Invited presentation at the Marshall School of Business, University of Southern California. Los Angeles, CA.
- Halpern, D. F. (2002, September). Covering Your Assessment Needs: Goals, Guidelines, Good Practices and Godliness, Invited Keynote Address at Best Practices in Assessment Conference, Atlanta, GA.
- Halpern, D. F. (2002, August). Session Chair and presenter: Genocide and hate: Origins and change. Presented at the Annual Convention of the American Psychological Association. Chicago, IL.
- Halpern, D. F. (2002, August). TOPSS Invited Address: Learning That Lasts a Lifetime: Teaching for Long-term Retention and Transfer. Presented at the Annual Convention of the American Psychological Association. Chicago, IL.
- Halpern, D. F. (2002, January). The Engaged Learner: Why Learning is Not a Spectator Sport. Invited Keynote address at the 10th Annual AAHE Conference on Faculty Roles and Rewards, Phoenix, AZ.
- Halpern, D. F. (2002, January). Understanding the Development of Cognitive Sex Differences. Invited presentation to the Interdisciplinary Program in Human Development, University of California, Santa Barbara, CA.
- Halpern, D. F. (2001, November). Is Intelligence Critical Thinking? Why We Need a New Construct Definition for Intelligence. Invited address at the Spearman 2001 Conference. Sydney, Australia.
- Halpern, D. F. (2001, October). Sex Differences in Achievement Scores: Can We Design Assessments that are Fair, Meaningful, and Valid for Girls and Boys? Invited presentation at Chinese University, Hong Kong (with similar presentations to a wide variety of audiences at the Hong Kong Department of Education, Hall of Justice, and Convention Center). Hong Kong, China.
- Halpern, D. F. (2001, August). Enhancing critical thinking skills in science majors. Invited presented to Howard Hughes Grantees, California State University, Long
- Halpern, D. F. (2001, July). Student-centered universities, Invited keynote address presented at the 26th International Conference of Improving University Learning and Teaching, Rand Afrikaans University, Johannesburg, South Africa.
- Halpern, D. F., & Hakel, M. D. (2001, June). Applying the science of learning to the university and beyond. Invited presentation at the Annual Meeting of the American Psychological Society, Toronto, Canada.
- Halpern, D. F. (2001, May). My last lecture: The secret of psychology. Invited

- presentation by Psi Beta Honorary Society at the Annual Meeting of the Western Psychological Association. Maui, HI.
- Halpern, D. F. (2001, April). Learning that lasts a lifetime: Teaching for long-term retention and transfer. Invited presentation at the 77th Annual Meeting of the Western Association of Senior Colleges and Universities. Irvine, CA.
- Halpern, D. F. (2001, March). A pedagogy for higher education. Invited presentation at the Program for Preparing Future Faculty at Claremont Graduate University. Claremont. CA.
- Halpern, D. F. (2000, December). Enhancing critical thinking in the United States military. Invited presentation to the U.S. Army Research Institute. Fort Leavenworth, KS.
- Halpern, D. F. (2000, November). Teaching critical thinking for transfer. Keynote Address at the Annual Meeting of the Southwest Teachers of Psychology. Fort Worth, TX.
- Halpern, D. F. (2000, July). Using the principles of cognitive psychology for the (re) design of education. Invited Keynote Presentation at Project Kaleidoscope (NSF-funded project to enhance learning in the sciences and mathematics). Colorado.
- Halpern, D. F. (2000, June). From rationalization to reason: The road less traveled. Invited presentation at the Annual Meeting of the American Psychological Society, Miami, FL.
- Halpern, D. F. (2000, May). Sex lies, and audiotapes: A cognitive analysis of the Clinton-Lewinsky scandal. "Psi Chi Distinguished Speaker" Invited presentation at the Midwestern Psychological Association, Chicago, IL.
- Halpern, D. F., Tan, U., & Tan, M. (2000, August). A psychobiosocial model of cognitive sex differences. International Behavioral Development Conference, Minot, ND.
- Tan, U., Tan, M., & Halpern, D. F. (2000, August). Monthly variations in hormone levels affect cognition. International Behavioral Development Conference, Minot, ND.
- Halpern, D. F. (2000, April). Stereotypes and steroids: Understanding cognitive sex differences and the wisdom of the Hoca. Presidential Address to be given at the Annual Meeting of the Western Psychological Association, Portland, Oregon.
- Halpern, D. F. (1999, November). A Cognitive Analysis of Public Events. Paper presented at Koc University, Istanbul, Turkey.
- Halpern, D. F. (1999, November). What We Know and Don't Know About the Psychology of Sex Differences. Public lecture presented at Bosphorus University, Istanbul, Turkey.
- Halpern, D. F. (1999, October). The Effects of Hormones on Cognitive Abilities. Paper presented at the Cerrapasa Medical Faculty, Istanbul, Turkey.
- Halpern, D. F. (1999, September). Hormonal Influences on Cognition. Paper presented at the 35th Annual Congress of Psychiatry. Black Sea Technical Institute, Trabzon, Turkey.
- Halpern, D. F. (1999, August). Helping Students Develop the Skills and attitudes of a Critical Thinker. Invited Address presented at the Annual Meeting of Teachers

- of Psychology in the Secondary Schools at the Annual Meeting of the American Psychological Association, Boston, MA.
- Halpern, D. F. (1999, June). P3: Raising Education to a Higher Power. Invited keynote address at the meeting of Partnerships in Psychology, Harrisonburg, VA.
- Halpern, D. F. (1999, May). Unpopular Research on Social Policy Issues. Paper presented at the Annual Meeting of the Western Psychological Association, Irvine, CA.
- Halpern, D. F. (1999, April). Thinking Critically About Critical Thinking. Keynote Address presented at the Annual Meeting of the Southern Society for Philosophy and Psychology, Louisville, KY.
- Halpern, D. F. (1999, April). Stereotypes, Hormones, and Spatial Cognition. Invited Colloquium at the University of Louisville. KY.
- Halpern, D. F. (1999, January). Universities in the New Millennium. Convocation Address presented to the faculty at Le Moyne University, Syracuse, NY.
- Halpern, D. F. (1999, January). Using Collaborative Learning Techniques in College Classes. Invited Address presented at the National Institute on the Teaching of Psychology, St. Petersburg Beach, FL.
- Halpern, D. F. (1998, October). Sex Differences in Cognitive Abilities: A Research Odyssey. Invited Colloquium presented at University of California, Davis, Davis, CA. Also presented at Loma Linda University, Loma Linda, CA.
- Halpern, D. F. (1998, August). Designing the 21st Century University: Pedagogy, Technology, and Life-Long Learning. Presidential Address for the Society for the Teaching of Psychology (Division 2) presented at the Annual Meeting of the American Psychological Association, San Francisco, CA.
- Halpern, D. F. (1998, April). Creating Collaborative Learning Environments. Keynote Address presented at the Annual Meeting of the American Association of Medical Colleges (Medical Education Division). Asilomar, CA.
- Halpern, D. F. (1998, April). Public Policy Implications of Sex Differences on Cognitive Ability Tests. Invited Address presented at the Annual Meeting of the Western Psychological Association, Albuquerque, NM.
- Halpern, D. F. (1998, March). Critical Thinking: A User's Guide. Keynote Address for a symposium jointly sponsored by the Smithsonian Institute, American Psychological Association's Board of Scientific Affairs, and the American Association for the Advancement of Science to be presented in Washington, DC.
- Halpern, D. F. (1998, February). Learning Outcomes in Ethnic Studies. Invited presentation for faculty and the administration of the College of Ethnic Studies, San Francisco State University, San Francisco, CA.
- Halpern, D. F. (1998, January). Guidelines for University Teaching. Invited Address to be presented at Crafton Hills Community College.
- Halpern, D. F. (1997, August). Teaching and Learning Critical Thinking: Lessons from Cognitive Psychology. Invited address presented at the annual convention of the American Psychological Association, Chicago, IL.
- Halpern, D. F. (1997, August). Academic Positions: Getting Hired, Getting

- Tenure. Invited Address presented at the annual convention of the American Psychological Association, Chicago, IL.
- Halpern, D. F. (1997, January). Thinking Critically About Critical Thinking Assessment. Invited address at the annual meeting of the Western Regional Intergovernmental Personnel Assessment Council, Phoenix, AZ.
- Halpern, D. F., & Marchese, T. (1997, January). What All Faculty Need to Know About Cognition. Invited address presented at the annual meeting of the American Association for Higher Education on Faculty Rewards and Priorities, San Diego, CA.
- Halpern, D. F. (1997, April; 1996, August). Using the Principles of Cognitive Psychology to Help Students Improve How They Think. Invited address at the Terman Conference at the Western Psychological Association, Seattle, WA and annual convention of the American Psychological Association, Toronto, Canada.
- Halpern, D. F. (1996, August). States of Mind: American and Post-Soviet Perspectives on Contemporary Issues in Psychology. Invited presidential address for Division 1 at the annual convention of the American Psychological Association, Toronto, Canada.
- Takooshian, H., & Halpern, D.F. (1996, March). Whither Post-Soviet Psychology? Paper presented at the annual meeting of the Eastern Psychological Association, Philadelphia, PA.
- Halpern, D. F. (1995, October). Can physical exercise reduce the cognitive effects of aging? Invited paper presented at Duke University on the occasion of the 50th anniversary of Gregory Kimble's doctoral degree, Raleigh, NC.
- Halpern, D. F. (1995, October). Social issues in testing. Invited paper presented at the annual meeting of The Personnel Testing Council, Newport Beach, CA.
- Halpern, D. F., & Crothers, M. (1995, May). The sex of cognition. Invited paper presented at grant-funded meeting on the origins of sexual orientation, Minot, ND.
- Halpern, D. F. (1995, April). My last lecture: Courage in research. Invited address presented for the Council of Teachers in Psychology at the annual convention of the Western Psychological Association, Los Angeles, CA.
- Halpern, D. F. (1995, April). The fusion of psychology, biology, and cognition: A politically incorrect time bomb. Invited paper presented at the 75th annual convention of the Western Psychological Association, Los Angeles, CA.
- Halpern, D. F. (1994, November). Exercise and everyday remembering: Are they related in older adults? Paper presented at the annual meeting of the Psychonomic Society, St. Louis, MO.
- Halpern, D. F. (1994, August). The Perils and Politics of Conducting Unpopular Research. Paper presentation and session chair at the annual meeting of the American Psychological Association, Los Angeles, CA.
- Halpern, D. F. (1994, July). Monitoring, Controlling, and Knowing: The Metacognition of Critical Thinking. Featured address at the Sixth International Conference on Critical Thinking, Massachusetts Institute of Technology, Boston, MA.
- Halpern, D. F. (1994, June). Master Plan or Master Scam? Why California Needs a New Model for Higher Education. Invited address at the American Association

- for the Advancement of Science, Pacific Division, San Francisco, CA.
- Halpern, D. F. (1994, May). Laterality and Longevity: Is There a Relationship? Invited presentation at Trinity College, University of Dublin, Dublin, Ireland.
- Halpern, D. F. (1994, April). Sex, Brains, and Hands: Individual Differences in Cognition. Invited address at University of Saint Petersburg, Saint Petersburg, Russia.
- Halpern, D. F. (1994, February). The Need for Breadth in Education in Psychology. Invited presentation to faculty at Moscow State University, Moscow, Russia.
- Halpern, D. F. (1993, December). The Assessment of Educational Outcomes. Invited presentation for the Minnesota State University (state-wide conference).
- Halpern, D. F. (1993, April). Sex, Brains, and Hands: Sex and Laterality Effects on Cognitive Abilities. Invited address for the Skeptics Society at California Institute of Technology, Pasadena, CA.
- Halpern, D. F. (1993, March). Sex Differences in Spatial Abilities. Invited discussant at the annual meeting of The Society for Research in Child Development, New Orleans, LA.
- Halpern, D. F. (1993, March). Teachism: The Anti-Teaching Prejudice. Invited keynote address at the Lilly Conference on College Teaching, Lake Arrowhead, CA.
- Halpern, D. F. (1992, August). Practice and Outcomes in Higher Education. Invited convocation speaker at Marietta College, Marietta, OH.
- Halpern, D. F. (1992, April and May). Controversial Issues in Sex Differences and Handedness Research. Invited keynote address for Psychology Day Community Lectures at St. Mary's College, St. Mary's City, MD; California State University, San Marcos, San Marcos, CA; and California State University, Dominguez Hills, Carson, CA.
- Halpern, D. F. (1991, October). Frontiers of the Disciplines: Critical Thinking Instruction. Invited presentation and the annual meeting of the Council of Arts and Sciences Deans, San Diego, CA.
- Halpern, D. F. (1991, August). Student Outcomes Assessment: What's a Nice Student Like You Learning in a University Like This? G. Stanley Hall invited address presented at the annual meeting of the American Psychological Association, San Francisco, CA.
- Halpern, D. F. (1991, July). What's the Evidence that Critical Thinking Can be Improved with Instruction? Invited paper presented at the Sonoma Critical Thinking Conference, Sonoma, CA.
- Halpern, D. F. (1991, April). How to Make A Lot of Money in College Teaching. Invited address presented to the Council of Teachers of Undergraduate Psychology at the annual convention of the Western Psychological Association, San Francisco, CA.
- Halpern, D. F., & Coren, S. (1990, November). Laterality and Life Span. Paper presented at the Thirty-first annual meeting of The Psychonomic Society, New Orleans, LA.
- Halpern, D. F. (1990, July). The Improvement of Thinking Skills. Invited address delivered to the Faculty at the Institute of Psychology (Academy of Sciences), Moscow, U.S.S.R. (via simultaneous translation).

- Halpern, D. F. (1990, May). Helping College Students Improve How They Think. Invited address delivered to the Faculty at the University of Cincinnati, Cincinnati, OH.
- Halpern, D. F. (1990, May). Causes and Correlates of Lateral Preference. Invited colloquium address delivered to the Psychology Department at the University of Cincinnati, Cincinnati, OH.
- Halpern, D. F. (1990, April). Implications of Cognitive Research for College Instruction. Keynote address at the Fifteenth Anniversary Celebration of the ADAPT Program, University of Nebraska, Lincoln, NE.
- Halpern, D. F. (1990, April). Laterality, Longevity, and Cognition. Invited colloquium address delivered to the Psychology Department at Duke University, Durham, NC.
- Halpern, D. F. (1990, April). Controversial Issues in Laterality Research. Invited address at the annual meeting of the Western Psychological Association, Los Angeles, CA.
- Halpern, D. F. (1990, January). Implications of Cognitive Research for Teaching and Learning. Invited presentation at the annual meeting of the Association of American Colleges, San Francisco, CA.
- Halpern, D. F. (1989, May). A Skills Approach to Critical Thinking. Invited address to the Faculty at Ventura Community College, Ventura, CA.
- Halpern, D. F. (1989, May). Teaching and Research in the California State University. Invited address to the Faculty at California State University, Los Angeles, CA.
- Halpern, D. F. (1989, March). Applying the Principles of Critical Thinking in Grades K-12. Invited address at the University of California, Irvine, CA.
- Halpern, D. F. (1989, February). Improving Student's Thinking Skills. Keynote address presented at The Second National Conference on Teaching, Thinking, and Learning, Myrtle Beach, SC.
- Halpern, D. F. (1989, January). Development of Thinking Skills in the Sciences and Mathematics. Chair of symposium presented at the One hundred fifty-fifth annual meeting of the American Association for the Advancement of Science, San Francisco, CA.
- Halpern, D. F., & Coren, S. (1988, November). Left Handedness as a Predictor of Reduced Longevity. Paper presented at the Twenty-ninth annual meeting of The Psychonomic Society, Chicago, IL.
- Halpern, D. F. (1988, October). Promoting the Development of Critical Thinking Skills. Keynote address presented at the annual meeting of the California Association of Independent Schools, Los Angeles, CA.
- Halpern, D. F. (1988, August). Controversial Issues in Sex Differences and Laterality Research. Invited paper presented at the Ninetysixth annual convention of the American Psychological Association, Atlanta, GA.
- Halpern, D. F. (1988, August). The Basic Ingredients of Excellent Teaching. Invited paper presented at the Ninetysixth annual convention of the American Psychological Association, Atlanta, GA.
- Halpern, D.F. (1988, April). Students Can Think Better: Actualizing the Potential. Invited presentation for the Pennsylvania Department of Education, University of Pittsburgh, PA.

- Hansen, C., Halpern, D. F., & Riefer, D. (1988, April). Analogy Domain Distance Effects on Text Comprehension and Recall. Paper presented at the Sixth-eighth annual meeting of the Western Psychological Association, Burlingame, CA.
- Morey, S. L., Halpern, D. F., & Riefer, D. (1988, April). Age Differences in Comprehension of Verbal and Symbolic Traffic Signs. Paper presented at the Sixty-eighth annual meeting of the Western Psychological Association, Burlingame, CA.
- Halpern, D.F. (1988, February). Sex Differences in Mathematical and Spatial Abilities. Invited paper presented at the One hundred fifty-fourth annual meeting of the American Association for the Advancement of Science, Boston, MA.
- Hansen, C., & Halpern, D. F. (1987, November). Using Analogies to Improve Comprehension and Recall of Scientific Passages, Paper presented at the Twentyeighth annual meeting of the Psychonomic Society, Seattle, WA.
- Halpern, D. F. (1987, June). The Anglo-Minority Achievement Gap: A National Disgrace. Paper presented at California State University Conference on "Eliminating the Anglo-Minority Achievement Gap," San Bernardino, CA.
- Halpern, D. F. (1987, April). Principles of Teaching Critical Thinking. Paper presented at the Sixty-seventh annual convention of the Western Psychological Association, Long Beach, CA.
- Martinez, D. & Halpern, D. F. (1987, April). Effects of Sex and Handedness on Cognitive Abilities. Paper presented at the Sixty-seventh annual convention of the Western Psychological Association, Long Beach, CA.
- Halpern, D. F. (1987, March). Understanding Statistical Risk Information. Invited paper presented at the Sixth Annual Conference on Applied Cognitive Psychology, Claremont Graduate School, Claremont, CA.
- Halpern, D. F. (1987, February). Cognitive Skills Development. Featured speaker at the annual meeting of California Community Colleges, Beverly Hills, CA.
- Halpern, D. F. (December, 1986). Higher Order Thinking Skills. Keynote address presented at the Arizona Conference on Critical Thinking, Arizona State University, Tempe, AZ.
- Halpern, D. F., Blackman, S., & Salzman, B. (1986, November). Using Statistical Risk Information to Assess Oral Contraceptive Safety. Paper presented at the Twentyseventh annual meeting of the Psychonomic Society, New Orleans, LA.
- Halpern, D. F. (1986, November). A Balancing Act: Teaching, Research and Community Service. Invited presentation at the Faculty Roundtable Series, California State University, Sacramento, CA.
- Halpern, D. F. (1986, July). Practical Suggestions for Promoting Critical Thinking in Every Classroom. Invited paper presented at the Fourth International Conference on Critical Thinking and Education, Sonoma, CA.
- Halpern, D. F. (1986, May). Practical Applications of Cognitive Psychology. Invited paper presented at the Sixtysixth annual convention of the Western Psychological Association, Seattle, WA.
- Halpern, D. F., Salzman, B., & Youngworth, C. (1985, November). The Functional Equivalence of Illusory and Objective Brightness Enhancement. Invited paper presented at the International Conference on Illusory Contours, Garden City, NY.

- ClarksonSmith, L., Widaman, K., & Halpern, D.F. (1985, August). Relationship of Verbal Analogy Components to Fluid and Crystallized Intelligence. Paper presented at the Ninetythird annual convention of the American Psychological Association, Los Angeles, CA.
- Phillips, C., & Halpern, D. F. (1985, August). Predicting Comingout Behavior in Lesbian Women. Paper presented at the Ninetythird annual convention of the American Psychological Association, Los Angeles, CA.
- Halpern, D. F. (1985, July). Analogies as a Critical Thinking Skill. Invited paper presented at the Third International Conference on Critical Thinking and Education, Sonoma, CA.
- Halpern, D. F. (1985, April). Critical Thinking Across the Disciplines. Invited paper presented at the California State University, Fullerton's Distinguished Speakers Symposia Series, Fullerton, CA.
- Halpern, D. F. (1985, April). Statistical Thinking as a Basic Thinking Skill. Paper presented at the Sixtyfifth annual convention of the Western Psychological Association, San Jose, CA.
- Halpern, D. F. (1985, March). Using Analogies to Solve Problems. Invited paper presented at the annual conference on Applied Cognitive Psychology, Claremont Graduate School, Claremont, CA.
- Halpern, D. F. (1984, November). Age Differences in Comprehension of Verbal and Symbolic Traffic Signs. Paper presented at the Twentyfifth annual meeting of the Psychonomic Society, San Antonio, TX.
- Halpern, D. F., Salzman, B., & Youngworth, C. (1984, September). The Functional Equivalence of Illusory and Objective Brightness Enhancement. Paper presented at the Seventh annual European convention on Visual Perception, Cambridge, England.
- Halpern, D. F. (1984, August). Empirical Studies of Critical Thinking Instruction. Paper presented at the Ninetysecond annual convention of the American Psychological Association, Toronto, Canada.
- ClarksonSmith, L. & Halpern, D. F. (1984, April). Visual and Acoustic Encoding in Young and Old Adults. Paper presented at the Sixtyfourth annual convention of the Western Psychological Association, Los Angeles, CA.
- Halpern, D. F., Salzman, B., Harrison, W., & Widaman, K. (1983, November). The Multiple Determination of Illusory Contours: An Empirical Investigation. Paper presented at the Twentyfourth annual meeting of the Psychonomic Society, San Diego, CA.
- Halpern, D. F. (1983, August). What are the Basic Critical Thinking Skills? Paper presented at the Ninetyfirst annual convention of the American Psychological Association, Anaheim, CA.
- Halpern, D. F. (1983, April). Teaching College Students How to Think: Can We Do Harm? Paper presented at the Sixtythird annual convention of the Western Psychological Association, San Francisco, CA.
- Halpern, D. F., & Kagan, S. (1982, August). Sex, Age, and Cultural Differences in Individualism. Paper presented at the Ninetieth annual convention of the American Psychological Association, Washington, DC.

- Halpern, D. F., & Blackman, S. (1981, August). Magazines vs. Physicians: Information Source Influences Attitudes Towards Oral Contraceptives. Paper presented at the Eightyninth annual convention of the American Psychological Association, Los Angeles, CA.
- Salzman, B., & Halpern, D. F. (1981, April). Subjective Towers: Depth Relationships in Multilevel Subjective Contours. Paper presented at the Sixtyfirst annual meeting of the Western Psychological Association, Los Angeles, CA.
- ClarksonSmith, L. & Halpern, D. F. (1981, April). Age Differences in the Use of Verbal Mediation in a Mental Rotation Task. Paper presented at the Sixtyfirst annual meeting of the Western Psychological Association, Los Angeles, CA.
- Halpern, D. F. Sex Biases in Prose Recall. (1981, March). Paper presented at the Eighth annual meeting of the Association for Women in Psychology, Boston, MA.
- Halpern, D. F., & Warm, J. S. (1980, November). The Disappearance of Dichoptically Presented Real and Subjective Contours. Paper presented at the Twentyfirst annual meeting of the Psychonomic Society, St. Louis, MO.
- Halpern, D. F., Warm, J. S., & Meder, D. (1979, May). The Adaptation of Real and Subjective Contours, Paper presented at the Fiftyfirst annual meeting of the Midwestern Psychological Association, Chicago, IL.
- Warm, J. S., Halpern, D. F. & Murphy, R. K. (1978, November). The Disappearance of Real and Subjective Contours. Paper presented at the Nineteenth Annual Meeting of the Psychonomic Society, San Antonio, TX.
- Halpern, D. F., Fishbein, H. D., & Warm, J. S. (1977, March). Similarity Judgments of Patterns and Maps. Paper presented at the Southern Society for Philosophy and Psychology, Orlando, FL.

NON-PRINT MEDIA

- Halpern, D. F., & Sternberg, R. J. (2020). Critical Thinking: Why We Need It Now More Than ever. Fifteen-eighty-four. http://www.cambridgeblog.org/2020/01/ critical-thinking-why-we-need-it-now-more-than-ever/
- Halpern, D. F. (2019, December 12). By Jenderator. Who is Smarter, Men or Women? Cognitive Psychologist Diane F. Halpern discusses her book "Sex Differences in Cognitive Abilities. https://www.jenderator.com/podcast/ep-12-who-is-smartermen-or-women-cognitive-psychologist-diane-f-halpern-discusses-her-book-sexdifferences-in-cognitive-abilities/
- Halpern, Diane F. Sex Differences in Cognitive Abilities, Interview with Ricardo Lopes, the Dissenter. https://www.youtube.com/watch?v=Su_8GgH63Wg
- PsychSessions. (2019). Society for Teaching of Psychology Charles Brewer Tribute from the APA Convention 2019. http://psychsessionspodcast.libsyn.com/e072stp-charles-brewer-tribute-from-the-apa-convention-2019
- Hale, J. (July 8, 2018). Analyzing the Thinking Process: Interview with Diane Halpern. https://psychcentral.com/blog/analyzing-the-thinking-process-interview-withdiane-halpern/

- Steiner, Marc and the center for Emerging Media. Interview with Diane Halpern on the Dynamics of Gender. https://www.steinershow.org/podcasts/june-26-2012-hour-2/
- Halpern, Diane F. The Importance of Critical Thinking in Education: Webinar with Diane Halpern. https://www.youtube.com/watch?v=PctngJnlaPO
- Halpern, D. F. (2016, September) Many television, newspaper, radio, and internet interviews about my keynote presentation at the Australian Psychological Society. Here is a sample:

RADIO

ABC The World Today (current affairs):

http://www.abc.net.au/worldtoday/content/2016/s4537861.htm

Radio National - Life Matters:

http://www.abc.net.au/radionational/programs/life matters/do-single-sex-schools-get-better-results/7844952

ONLINE/PRINT

- http://www.smh.com.au/national/education/no-benefit-to-singlesex-education-australian-psychological-society-congress-to-be-told-20160913-greydj.html
- http://www.news.com.au/lifestyle/parenting/school-life/which-is-thesmarter-sex-how-gender-affects-your-learning-and-career/news-story/ c4le2f17d180248707821133ad440377
- http://www.dailytelegraph.com.au/news/american-expert-diane-halpern-says-single-sex-schooling-leads-to-sexism-and-stereotyping/news-story/75ceca3b2fac a0d0ea1fc4daf0163fde
- https://www.theguardian.com/australia-news/2016/sep/14/single-sex-schools-offer-no-advantages-and-feed-stereotypes-psychologists-told

AN OPINION PIECE

- http://www.smh.com.au/comment/that-thinking-feeling/boys-schools-girls-schools-versus-coed-which-is-best-for-our-children-20160914-grgksx.html
- Halpern, D. F. (2016, May 26). Critical Thinking for College, Career, and Citizenship. Brookings Institute Skills for a Changing World, Number 13, http://www. brookings.edu/blogs/education-plus-development/posts/2016/05/26-critical-thinking-college-career-citizenship-halpern
- The Guardann. Single-sex schools offer no advantages and feed stereotypes. Diane F. Halpern https://www.theguardian.com/australia-news/2016/sep/14/single-sex-schools-offer-no-advantages-and-feed-stereotypes-psychologists-told
- Halpern, D. F. (2015, March 10). Sweet Briar is Fighting an Up-Hill Battle. New York Times Room for Debate. http://www.nytimes.com/roomfordebate/2015/03/10/are-same-sex-colleges-still-relevant/sweet-briar-is-fighting-an-up-hill-battle

- The Future of Women in Chemistry and Science, (2011, March 1). Video on combining work and family. http://www.futurewecreate.com.
- Eliot, L., & Halpern, D. F. (2010, December 15). The Single-Sex Trick. Retrieved from Slate.com. http://www.slate.com/id/2277928/?from=rss#add-comment
- Women Mean Business (2010). Radio interview regarding Women at the Top: Powerful Leaders Tell Us How to Combine Work with Family.
- Martha Stewart Radio; Chat With Women; Independent Business Radio, and Other Radio Programs (2009). Several radio shows on Women at the Top: Powerful Leaders Tell Us How to Combine Work with Family.
- Koch, C. (2008). An Interview with Diane F. Halpern. https://cdn.ymaws.com/www. psichi.org/resource/resmgr/journal_2008/Fall08JNKochint.pdf
- National Public Radio (2005, December). One of four panelist for Gender Differences in Learning on "Talk of the Nation: Science Friday" hosted by Ira Flatow.
- National Public Radio (2002). Interviewed by Kitte Feldi, host "Talk of the Town," a nationally broadcast radio show on general interest topics. I was interviewed about psychological perspectives on lust.
- British Broadcast Corporation (BBC). (2002). Consultant and narrator for 4-part series on Human Development.
- Dallas Public Television (2002). Starlink Presentation on Testing and Other Forms of Assessment. (Aired nationally)
- National Public Radio, (2001). My research in cognitive psychology was discussed.
- Turkey Public Radio. (2000). Half-hour show entitled "Science News" on cognitive sex differences. (taped in English-broadcast in English and in translation in Turkish).
- National Public Radio. (1996). Consultant and spokesperson in the series "The Brain," Syndicated internationally
- Radio Interviews. (1996, 1995). KFRG and others regarding general topics in psychology.
- Perspectives. (1995). Cable television interview program on Affirmative Action. Syndicated nationally.
- Intellectual Development. (1994). A 6-hour video segment made for broadcast on Mexican public television. Prepared under contract with the Center for Intellectual Development in Monterrey, Mexico.
- Larry King Show (CNN), Good Morning America, National Public Radio, Japanese television news and numerous other television and radio news programs carried interviews with me about my research on the relationship between laterality and longevity. (1991-1996).
- Critical Thinking in the Arts, internationally broadcast two-part series on critical thinking presented by the Public Broadcast System (PBS) filmed by WOED (Pittsburgh) under a grant from the National Education Association. I appear as a narrator in both segments. Aired first in 1990-1991, Periodically reshown.
- NBC News. (1991). Interview segment on my laterality research.
- Medical News. (1989). A news program that filmed an interview with me regarding

- my life span research. Aired on all ABC affiliates.
- Today Show. (1989). Discussed my laterality research before an international audience.
- Dialogues. (1986). A Public Broadcasting System television show. Half hour interview format in which my work and views on sex differences and similarities in thinking abilities were discussed.
- National Public Radio. (1985). National public service interview in which my work and views on critical thinking instruction were discussed.

POPULAR PRESS

- New York Times, Room for Debate. (March 2015). Are same-sex colleges still relevant? Debater: An Up-Hill Battle. http://www.nytimes.com/roomfordebate/2015/03/10/are-same-sex-colleges-still-relevant
- Live Science Media Interview. What psychology tells us about political gridlock. (May 2013). http://www.livescience.com/36980-psychology-of-political-hyperpartisanship. html
- New York Times, Washington Post, Boston Globe, and numerous other newspapers and radio shows around the world carried interviews and news following the publication of Halpern et al.'s article in Science (2011).
- U. S. News & World Report, Revista Ya (Spanish language magazine in Chile), and various newspapers presented interviews with me regarding my book, Women at the Top: Powerful Leaders Tell Us How to Combine Work and Family (2010).
- South China Morning Post, November 3, 2007, article by Liz Gooch, "Scientific ambitions caught in gender trap." Interview regarding my research.
- Association for Women in Science. (2007, Summer) Interview by Laura l. Mays Hoppes entitled: "Family-work issues for women scientists: an interview with Diane F. Halpern."
- Interviewed appeared in Coffey Communications for article titled, "Working mothers and stress." Article is posted online by hundreds of hospitals. (December 2006).
- Interview appeared in Los Angeles Daily Times, "Potential dropouts face early intervention" February 8, 2006.
- Seattle Times (2004, March). A Truce in the Mommy Wars. Op-Ed article.
- Los Angeles Times (2002, April). Create Work Place Policies Fit for a Mom. Op-Ed Article.
- Washington Post, Parent Magazine, Fitness Magazine and numerous others (1997-present). Quoted and referenced in numerous articles on psychological issues.
- Los Angeles Times, numerous other news outlets. (1995-1997). Coverage of presentations on controversies in psychology, sex differences in cognition, and laterality research.
- Redbook, Ladies' Home Journal, Reader's Digest, and other popular magazines. (1994). Excerpts from interviews on cognitive sex differences.
- Prevention Magazine (1991), Men's Health (1993), Women's Health (1994).

Interviewed about using critical thinking in health care decisions.

Omni Magazine. (1990). Interviewed about critical thinking instruction for special issue on education.

Scientific American, Medical Boardroom, Canadian Broadcast System Science Show, Reader's Digest, GEO Magazine, The Chronicle of Higher Education, Discover Magazine, People Magazine, and numerous newspapers and radio shows throughout the world (England, Australia, West Germany, United States, Canada, and Italy) carried news of my research on laterality. (1989-1993).

Quantas Magazine. (1988). Interview and review of my book entitled Thought and Knowledge.

Associated Press. (1988). National coverage of my research on sex and laterality effects on cognitive abilities.

United Press International (UPI). (1985). News of my work in the area of critical thinking was published in newspapers throughout the United States.

COLUMNS

President's Columns in Monitor on Psychology (A Publication of the American Psychological Association)

January 2004, Transition, reflections, and resolutions (p. 5)

February 2004, I dare you try this at home (or at work) (p. 5)

March 2004, Making it work: Recommendations for policies on working families (p. 5)

April 2004, Dr. Manners on e-mail dos and don'ts (p. 5)

May 2004, Hi vo' silver psychologists (p. 5)

June 2004, Prejudice in any language (p. 5)

July/August 2004, Rising above the situation (p. 5)

September 2004, The diversity among us (p. 5)

October 2004, In crisis, psychologist know no borders (p. 5)

November 2004, Obstacles to female full professorship: Another civil rights issue (p.5)

December 2004, Politicizing science (p. 5)



Article | DIANE F. HALPERN

Review

Critical Thinking: A Model of Intelligence for Solving Real-World Problems

Diane F. Halpern 1,* and Dana S. Dunn 2

- Department of Psychology, Claremont McKenna College, Emerita, Altadena, CA 91001, USA
- Department of Psychology, Moravian College, Bethlehem, PA 18018, USA; dunn@moravian.edu
- Correspondence: diane.halpern@claremontmckenna.edu

Abstract: Most theories of intelligence do not directly address the question of whether people with high intelligence can successfully solve real world problems. A high IQ is correlated with many important outcomes (e.g., academic prominence, reduced crime), but it does not protect against cognitive biases, partisan thinking, reactance, or confirmation bias, among others. There are several newer theories that directly address the question about solving real-world problems. Prominent among them is Sternberg's adaptive intelligence with "adaptation to the environment" as the central premise, a construct that does not exist on standardized IQ tests. Similarly, some scholars argue that standardized tests of intelligence are not measures of rational thought—the sort of skill/ability that would be needed to address complex real-world problems. Other investigators advocate for critical thinking as a model of intelligence specifically designed for addressing real-world problems. Yes, intelligence (i.e., critical thinking) can be enhanced and used for solving a real-world problem such as COVID-19, which we use as an example of contemporary problems that need a new approach.

Keywords: critical thinking; intelligence; real-world problems



Citation: Halpern, Diane F., and Dana S. Dunn. 2021. Critical Thinking: A Model of Intelligence for Solving Real-World Problems, Journal of Intelligence 9: 22. https://doi.org/ 10.3390/jintelligence9020022

Received: 13 January 2021 Accepted: 25 March 2021 Published: 7 April 2021

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations



Copyright: @ 2021 by the authors. Licensee MDPI, Basel, Switzerland This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/

1. Introduction

The editors of this Special Issue asked authors to respond to a deceptively simple statement: "How Intelligence Can Be a Solution to Consequential World Problems." This statement holds many complexities, including how intelligence is defined and which theories are designed to address real-world problems.

2. The Problem with Using Standardized IQ Measures for Real-World Problems

For the most part, we identify high intelligence as having a high score on a standardized test of intelligence. Like any test score, IQ can only reflect what is on the given test. Most contemporary standardized measures of intelligence include vocabulary, working memory, spatial skills, analogies, processing speed, and puzzle-like elements (e.g., Wechsler Adult Intelligence Scale Fourth Edition; see (Drozdick et al. 2012)). Measures of IQ correlate with many important outcomes, including academic performance (Kretzschmar et al. 2016), job-related skills (Hunter and Schmidt 1996), reduced likelihood of criminal behavior (Burhan et al. 2014), and for those with exceptionally high IQs, obtaining a doctorate and publishing scholarly articles (McCabe et al. 2020). Gottfredson (1997, p. 81) summarized these effects when she said the "predictive validity of g is ubiquitous." More recent research using longitudinal data, found that general mental abilities and specific abilities are good predictors of several work variables including job prestige, and income (Lang and Kell 2020). Although assessments of IQ are useful in many contexts, having a high IQ does not protect against falling for common cognitive fallacies (e.g., blind spot bias, reactance, anecdotal reasoning), relying on biased and blatantly one-sided information sources, failing to consider information that does not conform to one's preferred view of reality (confirmation bias), resisting pressure to think and act in a certain way, among

others. This point was clearly articulated by Stanovich (2009, p. 3) when he stated that," IQ tests measure only a small set of the thinking abilities that people need."

3. Which Theories of Intelligence Are Relevant to the Question?

Most theories of intelligence do not directly address the question of whether people with high intelligence can successfully solve real world problems. For example, Grossmann et al. (2013) cite many studies in which IQ scores have not predicted well-being, including life satisfaction and longevity. Using a stratified random sample of Americans, these investigators found that wise reasoning is associated with life satisfaction, and that "there was no association between intelligence and well-being" (p. 944). (critical thinking [CT] is often referred to as "wise reasoning" or "rational thinking,"). Similar results were reported by Wirthwein and Rost (2011) who compared life satisfaction in several domains for gifted adults and adults of average intelligence. There were no differences in any of the measures of subjective well-being, except for leisure, which was significantly lower for the gifted adults. Additional research in a series of experiments by Stanovich and West (2008) found that participants with high cognitive ability were as likely as others to endorse positions that are consistent with their biases, and they were equally likely to prefer one-sided arguments over those that provided a balanced argument. There are several newer theories that directly address the question about solving real-world problems. Prominent among them is Sternberg's adaptive intelligence with "adaptation to the environment" as the central premise, a construct that does not exist on standardized IQ tests (e.g., Sternberg 2019). Similarly, Stanovich and West (2014) argue that standardized tests of intelligence are not measures of rational thought—the sort of skill/ability that would be needed to address complex real-world problems. Halpern and Butler (2020) advocate for CT as a useful model of intelligence for addressing real-world problems because it was designed for this purpose. Although there is much overlap among these more recent theories, often using different terms for similar concepts, we use Halpern and Butler's conceptualization to make our point: Yes, intelligence (i.e., CT) can be enhanced and used for solving a real-world problem like COVID-19.

4. Critical Thinking as an Applied Model for Intelligence

One definition of intelligence that directly addresses the question about intelligence and real-world problem solving comes from Nickerson (2020, p. 205): "the ability to learn, to reason well, to solve novel problems, and to deal effectively with novel problems—often unpredictable—that confront one in daily life." Using this definition, the question of whether intelligent thinking can solve a world problem like the novel coronavirus is a resounding "yes" because solutions to real-world novel problems are part of his definition. This is a popular idea in the general public. For example, over 1000 business managers and hiring executives said that they want employees who can think critically based on the belief that CT skills will help them solve work-related problems (Hart Research Associates 2018)

We define CT as the use of those cognitive skills or strategies that increase the probability of a desirable outcome. It is used to describe thinking that is purposeful, reasoned, and goal directed—the kind of thinking involved in solving problems, formulating inferences, calculating likelihoods, and making decisions, when the thinker is using skills that are thoughtful and effective for the particular context and type of thinking task. International surveys conducted by the OECD (2019, p. 16) established "key information-processing competencies" that are "highly transferable, in that they are relevant to many social contexts and work situations; and 'learnable' and therefore subject to the influence of policy." One of these skills is problem solving, which is one subset of CT skills.

The CT model of intelligence is comprised of two components: (1) understanding information at a deep, meaningful level and (2) appropriate use of CT skills. The underlying idea is that CT skills can be identified, taught, and learned, and when they are recognized and applied in novel settings, the individual is demonstrating intelligent thought. CT skills

include judging the credibility of an information source, making cost-benefit calculations, recognizing regression to the mean, understanding the limits of extrapolation, muting reactance responses, using analogical reasoning, rating the strength of reasons that support and fail to support a conclusion, and recognizing hindsight bias or confirmation bias, among others. Critical thinkers use these skills appropriately, without prompting, and usually with conscious intent in a variety of settings.

One of the key concepts in this model is that CT skills transfer in appropriate situations. Thus, assessments using situational judgments are needed to assess whether particular skills have transferred to a novel situation where it is appropriate. In an assessment created by the first author (Halpern 2018), short paragraphs provide information about 20 different everyday scenarios (e.g., A speaker at the meeting of your local school board reported that when drug use rises, grades decline; so schools need to enforce a "war on drugs" to improve student grades); participants provide two response formats for every scenario: (a) constructed responses where they respond with short written responses, followed by (b) forced choice responses (e.g., multiple choice, rating or ranking of alternatives) for the same situations.

There is a large and growing empirical literature to support the assertion that CT skills can be learned and will transfer (when taught for transfer). See for example, Holmes et al. (2015), who wrote in the prestigious Proceedings of the National Academy of Sciences, that there was "significant and sustained improvement in students' critical thinking behavior" (p. 11,199) for students who received CT instruction. Abrami et al. (2015, para. 1) concluded from a meta-analysis that "there are effective strategies for teaching CT skills, both generic and content specific, and CT dispositions, at all educational levels and across all disciplinary areas." Abrami et al. (2008, para. 1), included 341 effect sizes in a meta-analysis. They wrote: "findings make it clear that improvement in students' CT skills and dispositions cannot be a matter of implicit expectation." A strong test of whether CT skills can be used for real-word problems comes from research by Butler et al. (2017). Community adults and college students (N = 244) completed several scales including an assessment of CT, an intelligence test, and an inventory of real-life events. Both CT scores and intelligence scores predicted individual outcomes on the inventory of real-life events, but CT was a stronger predictor.

Heijltjes et al. (2015, p. 487) randomly assigned participants to either a CT instruction group or one of six other control conditions. They found that "only participants assigned to CT instruction improved their reasoning skills." Similarly, when Halpern et al. (2012) used random assignment of participants to either a learning group where they were taught scientific reasoning skills using a game format or a control condition (which also used computerized learning and was similar in length), participants in the scientific skills learning group showed higher proportional learning gains than students who did not play the game. As the body of additional supportive research is too large to report here, interested readers can find additional lists of CT skills and support for the assertion that these skills can be learned and will transfer in Halpern and Dunn (Halpern and Dunn). There is a clear need for more high-quality research on the application and transfer of CT and its relationship to IQ.

5. Pandemics: COVID-19 as a Consequential Real-World Problem

A pandemic occurs when a disease runs rampant over an entire country or even the world. Pandemics have occurred throughout history: At the time of writing this article, COVID-19 is a world-wide pandemic whose actual death rate is unknown but estimated with projections of several million over the course of 2021 and beyond (Mega 2020). Although vaccines are available, it will take some time to inoculate most or much of the world's population. Since March 2020, national and international health agencies have created a list of actions that can slow and hopefully stop the spread of COVID (e.g., wearing face masks, practicing social distancing, avoiding group gatherings), yet many people in the United States and other countries have resisted their advice.

Could instruction in CT encourage more people to accept and comply with simple life-saving measures? There are many possible reasons to believe that by increasing citizens' CT abilities, this problematic trend can be reversed for, at least, some unknown percentage of the population. We recognize the long history of social and cognitive research showing that changing attitudes and behaviors is difficult, and it would be unrealistic to expect that individuals with extreme beliefs supported by their social group and consistent with their political ideologies are likely to change. For example, an Iranian cleric and an orthodox rabbi both claimed (separately) that the COVID-19 vaccine can make people gay (Marr 2021). These unfounded opinions are based on deeply held prejudicial beliefs that we expect to be resistant to CT. We are targeting those individuals who beliefs are less extreme and may be based on reasonable reservations, such as concern about the hasty development of the vaccine and the lack of long-term data on its effects. There should be some unknown proportion of individuals who can change their COVID-19-related beliefs and actions with appropriate instruction in CT. CT can be a (partial) antidote for the chaos of the modern world with armies of bots creating content on social media, political and other forces deliberately attempting to confuse issues, and almost all media labeled "fake news" by social influencers (i.e., people with followers that sometimes run to millions on various social media). Here, are some CT skills that could be helpful in getting more people to think more critically about pandemic-related issues.

Reasoning by Analogy and Judging the Credibility of the Source of Information

Early communications about the ability of masks to prevent the spread of COVID from national health agencies were not consistent. In many regions of the world, the benefits of wearing masks incited prolonged and acrimonious debates (Tang 2020). However, after the initial confusion, virtually all of the global and national health organizations (e.g., WHO, National Health Service in the U. K., U. S. Centers for Disease Control and Prevention) endorse masks as a way to slow the spread of COVID (Cheng et al. 2020; Chu et al. 2020). However, as we know, some people do not trust governmental agencies and often cite the conflicting information that was originally given as a reason for not wearing a mask. There are varied reasons for refusing to wear a mask, but the one most often cited is that it is against civil liberties (Smith 2020). Reasoning by analogy is an appropriate CT skill for evaluating this belief (and a key skill in legal thinking). It might be useful to cite some of the many laws that already regulate our behavior such as, requiring health inspections for restaurants, setting speed limits, mandating seat belts when riding in a car, and establishing the age at which someone can consume alcohol. Individuals would be asked to consider how the mandate to wear a mask compares to these and other regulatory laws.

Another reason why some people resist the measures suggested by virtually every health agency concerns questions about whom to believe. Could training in CT change the beliefs and actions of even a small percentage of those opposed to wearing masks? Such training would include considering the following questions with practice across a wide domain of knowledge: (a) Does the source have sufficient expertise? (b) Is the expertise recent and relevant? (c) Is there a potential for gain by the information source, such as financial gain? (d) What would the ideal information source be and how close is the current source to the ideal? (e) Does the information source offer evidence that what they are recommending is likely to be correct? (f) Have you traced URLs to determine if the information in front of you really came from the alleged source?, etc. Of course, not everyone will respond in the same way to each question, so there is little likelihood that we would all think alike, but these questions provide a framework for evaluating credibility. Donovan et al. (2015) were successful using a similar approach to improve dynamic decision-making by asking participants to reflect on questions that relate to the decision. Imagine the effect of rigorous large-scale education in CT from elementary through secondary schools, as well as at the university-level. As stated above, empirical evidence has shown that people can become better thinkers with appropriate instruction in CT. With training, could we encourage some portion of the population to become more

astute at judging the credibility of a source of information? It is an experiment worth trving.

6. Making Cost—Benefit Assessments for Actions That Would Slow the Spread of COVID-19

Historical records show that refusal to wear a mask during a pandemic is not a new reaction. The epidemic of 1918 also included mandates to wear masks, which drew public backlash. Then, as now, many people refused, even when they were told that it was a symbol of "wartime patriotism" because the 1918 pandemic occurred during World War I (Lovelace 2020). CT instruction would include instruction in why and how to compute costbenefit analyses. Estimates of "lives saved" by wearing a mask can be made meaningful with graphical displays that allow more people to understand large numbers. Gigerenzer (2020) found that people can understand risk ratios in medicine when the numbers are presented as frequencies instead of probabilities. If this information were used when presenting the likelihood of illness and death from COVID-19, could we increase the numbers of people who understand the severity of this disease? Small scale studies by Gigerenzer have shown that it is possible.

Analyzing Arguments to Determine Degree of Support for a Conclusion

The process of analyzing arguments requires that individuals rate the strength of support for and against a conclusion. By engaging in this practice, they must consider evidence and reasoning that may run counter to a preferred outcome. Kozyreva et al. (2020) call the deliberate failure to consider both supporting and conflicting data "deliberate ignorance"—avoiding or failing to consider information that could be useful in decisionmaking because it may collide with an existing belief. When applied to COVID-19, people would have to decide if the evidence for and against wearing a face mask is a reasonable way to stop the spread of this disease, and if they conclude that it is not, what are the costs and benefits of not wearing masks at a time when governmental health organizations are making them mandatory in public spaces? Again, we wonder if rigorous and systematic instruction in argument analysis would result in more positive attitudes and behaviors that relate to wearing a mask or other real-world problems. We believe that it is an experiment worth doing.

7. Conclusions

We believe that teaching CT is a worthwhile approach for educating the general public in order to improve reasoning and motivate actions to address, avert, or ameliorate real-world problems like the COVID-19 pandemic. Evidence suggests that CT can guide intelligent responses to societal and global problems. We are NOT claiming that CT skills will be a universal solution for the many real-world problems that we confront in contemporary society, or that everyone will substitute CT for other decision-making practices, but we do believe that systematic education in CT can help many people become better thinkers, and we believe that this is an important step toward creating a society that values and practices routine CT. The challenges are great, but the tools to tackle them are available, if we are willing to use them.

Author Contributions: Conceptualization, D.F.H. and D.S.D.; resources, D.F.H.; data curation, writing-original draft preparation, D.F.H.; writing-review and editing, D.F.H. and D.S.D. Both authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding

Institutional Review Board Statement: No IRB Review.

Informed Consent Statement: No Informed Consent.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Abrami, Philip C., Robert M. Bernard, Evguent Borokhovski, C. Anne Wade, Michael A. Surkes, Rana Tamim, and Dai Zhang. 2008. Instructional interventions affecting critical thinking skills and dispositions: A Stage 1 meta-analysis. Review of Educational Research 78: 1102–34. [CrossRef]
- Abrami, Philip C., Robert M. Bernard, Evgueni Borokhovski, David I. Waddington, and C. Anne Wade: 2015. Strategies for teaching students to think critically: A meta-analysis. Review of Educational Research 85: 275-341. [CrossRef]
- Buthan, Nik Ahmad Sufiar, Yohan Kurniawan, Abdul Halim Sidek, and Mohd Rosli Mohamad. 2014. Crimes and the Bell curve: The-role of people with high, average, and low intelligence. Intelligence 47: 12–22. [CrossRef]
- Butler, Heather A., Christopher Pentoney, and Maebelle P. Bong. 2017. Predicting real-world outcomes: Critical thinking ability is a better predictor of life decisions than intelligence. Thinking Skills and Creativity 25: 38–46. [CrossRef]
- Cheng, Vincent Chi-Chung, Shuk-Ching Wong, Vivien Wai-Man Chuang, Simon Yung-Chun So, Jonathan Hon-Kwan Chen, Sidharth Sridhar, Kelvin Kai-Wwang To, Jasper Fuk-Wu Chan, Ivan Fan-Ngai Hung, Pak-Leung Ho, and et al. 2020. The role of community-wide wearing of face mask for control of coronavirus disease 2019 (COVID-19) epidemic due to SARS-CoV-2. Journal of Infectious-Disease 81: 107-14. [CrossRef]
- Chu, Derek K., Elie A. Aki, Stephanie Duda, Karla Solo, Sally Yaacoub, and Holger J. Schunemann. 2020. Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: A system attc review and meta-analysis. Lunct 395: 1973-87. [CrossRef]
- Donovan, Sarah J., C. Dominick Guss, and Dag Naslund. 2015. Improving dynamic decision-making through training and self-reflection. Independ and Decision Making 10: 284-95.
- Drozdick, Lisa Whipple, Dustin Wahlstrom, Jianjun Zhu, and Lawrence G. Weiss. 2012. The Wechsler Adult Intelligence Scale—Fourth Edition and the Wechsler Memory Scale—Fourth Edition. In Contemporary Intellectual as sessment: Theories, Tests, and Issues. Edited by Dawn P. Flanagan and Patti L. Harrison. New York: The Guilford Press, pp. 197–223.
- Gigerenzer, Gerd. 2020. When all is just a click away: Is critical thinking obsolete in the digital age? In Critical Thinking IN Psychology, 2nd ed. Edited by Robert J. Sternberg and Diane F. Halpern. Cambridge: Cambridge University Press, pp. 197-223.
- Gottfredson, Linda S. 1997. Why g matters: The complexity of everyday life. Intelligence 24: 79-132. [CrossRef]
- Grossmann, Igor, Michael E. W. Varnum, Jinkyung Na, Shinobu Kitayama, and Richard E. Nisbett. 2013. A route to well-being: Intelligence ver sus wise reasoning. Journal of Experimental Psychology: General 142: 944-53. [CrossRef]
- Halpern, Dlane F. 2018. Halpern Critical Thinking Assessment. Mod ling: Schuhfried Test Publishers, Available online: www.schuhrried.com (accessed on 30 March 2021).
- Halpern, Diane F., and Heather A. Butler. 2020. Is critical thinking a better model of intelligence? In The nature of Intelligence, 2nd ed. Edited by Robert J. Stemberg. Cambridge: Cambridge University Press, pp. 183–96.
- Halpern, Diane F., and Dana S. Dunn. Forthcoming. Thought and Knowledge: An Introduction to Critical Thinking, 6th ed. New York: Taylor & Francis, in press.
- Halpern, Diane E, Keith Millis, Arthur Graesser, Heather Butler, Carol Forsyth, and Zhiqiang Cai. 2012. Operation ARA: A computerized learning game that teaches critical thinking and scientific reasoning. Thinking Skills and Creativity 7: 93–100. IC reselled.
- Hair Research Associates, 2018. Employers Express Confidence in Colleges and Universities: See College us Worth the Investment, New Research Finds, August 29. Available ordine: https://hairtessarch.com/upmployers-express-confidence-in-colleges-and-universales-see-college-as-worth-the-investment-investment-in-finds// faccessed on 30 March 2021.
- Heijltjes, Anita, Tamara van Gog, Jimmie Lippink, and Fred Paas. 2015. Unraveling the effects of critical thinking instructions, practice, and self-explanation on students' reasoning performance. Instructional Science 43: 487–506. [CrossRef]
- Holmes, Natissha G., Carl E. Wieman, and DougA. Bonn. 2015. Teaching critical thinking. Proceedings of the National Academy of Sciences 112: 11199-204. [CrossRef1[PubMed]]
- Hunter, John E., and Frank L. Schmidt. 1996. Intelligence and job performance: Economic and social implications. Psychology, Public Policy, and Law 2: 447–72. [CrossRef]
- Kozywa, Anastasia, Stephan Lewandowsky, and Ralph Hertwig. 2020. Citizens versus the internet: Confronting digital challenges with cognitive tools. Psychological Science in the Public Interest 21. Available online: https://www.psychologicalssrence.org/ publications/confronting-digital-challenges-with-cognitive-tools/fund (accessed on 30 March 2021). [CrossRef]
- Kretzschmar, Andre, Jonas C. Neubert, Sascha Wustemberg, and Samuel Greiff. 2016. Construct validity of complex problem-solving: A comprehensive view on different facts of intelligence and school grades. Intelligence 54: 55–69. [CrossRef]
- Lang, Jonas W.B., and Harrison J. Kell. 2020. General mental ability and specific abilities: Their relative importance for extrinsic career success. Journal of Applied Psychology 105: 1047–61. [CrossRef]
- Lovelace, Berkeley, Jr. 2020. Medical Historians Compare the Coronavirus to the 1918 Flu Pandemic: Both Were Highly Political. CNBC, Available online: https://www.cnbc.com/2020/09/28/comparing-1918-flu-vs-coronavirus.htm?rbchda-lwARIRAVRUOIdN9-ggyNnMflmifSQANN/-pm_qdC3DwcfnPu98avw.umDl2xqgXs/(accessed on 30 March 2021).
- Marr, Rhuaridh. 2021. Iranian Cleric Claims COVID-19 Vaccine Can Make People Gay. Metre Weekly. Available ordine: https://www.metroweekly.com/2021/02/franian-cleric-claims-covid-19-year-ine-can-ordin-people-gay./ (accessed on 30 March 2021).
- McCabe, Kira C., David Lubinski, and Camilla P. Benbow. 2020. Who shines most among the brightest?: A 25-year longitudinal study of elite STEM graduate students. Journal of Personality and Social Psychology 119: 390-416. [CrossRef]

- Mega, Emiliano R. 2020. COVID Has Killed more than One Million People. How Many more will Die? Nature. Available online: https://www.nature.com/articles/d41586-020-02762-y (accessed on 30 March 2021).
- Nickerson, Raymond S. 2020. Developing intelligence through instruction. In The Cambridge Handbook of Intelligence, 2nd ed. Edited by Robert J. Sternberg. Cambridge: Cambridge University Press, pp. 205-37.
- OECD. 2019. The Survey of Adult Skills: Reader's Companion, 3rd ed. OECD Skills Studies. Paris: OECD Publishing. [CrossRef]
- Smith, Matthew. 2020. Why won't Britons Wear Face Masks? YouGov. Available online: https://yougov.co.uk/topics/health/articlesreports/2020/07/15/why-wont-britons-wear-face-masks (accessed on 30 March 2021).
- Stanovich, Keith E. 2009. What Intelligence Tests Miss: The Psychology of Rational Thought. New Haven: Yale University Press.
- Stanovich, Keith E., and Richard F. West. 2008. On the failure of cognitive ability to predict my-side bias and one-sided thinking biases. Thinking & Reasoning 14: 129-67. [CrossRef]
- Stanovich, Keith E., and Richard F. West. 2014. What intelligence tests miss. The Psychologist 27: 80-83. [CrossRef]
- Sternberg, Robert J. 2019. A theory of adaptive intelligence and its relation to general intelligence. Journal of Intelligence 7: 23. [CrossRef] Tang, Julian W. 2020. COVID-19: Interpreting scientific evidence—Uncertainty, confusion, and delays. BMC Infectious Diseases 20: 653. [CrossRef] [PubMed]
- Wirthwein, Linda, and Detlef H. Rost. 2011. Giftedness and subjective well-being: A study with adults. Learning and Individuals Differences 21: 182-86. [CrossRef]

© Direcția Comunicare și Relații Publice Universitatea din București Tipărit la Tipografia E.U.B.–B.U.P. Editura Universității din București–*Bucharest University Press*

2023 UNIVERSITATEA DIN BUCUREȘTI Virtute et Sapientia

Şoseaua Panduri nr. 90, Bucureşti, România www.unibuc.ro