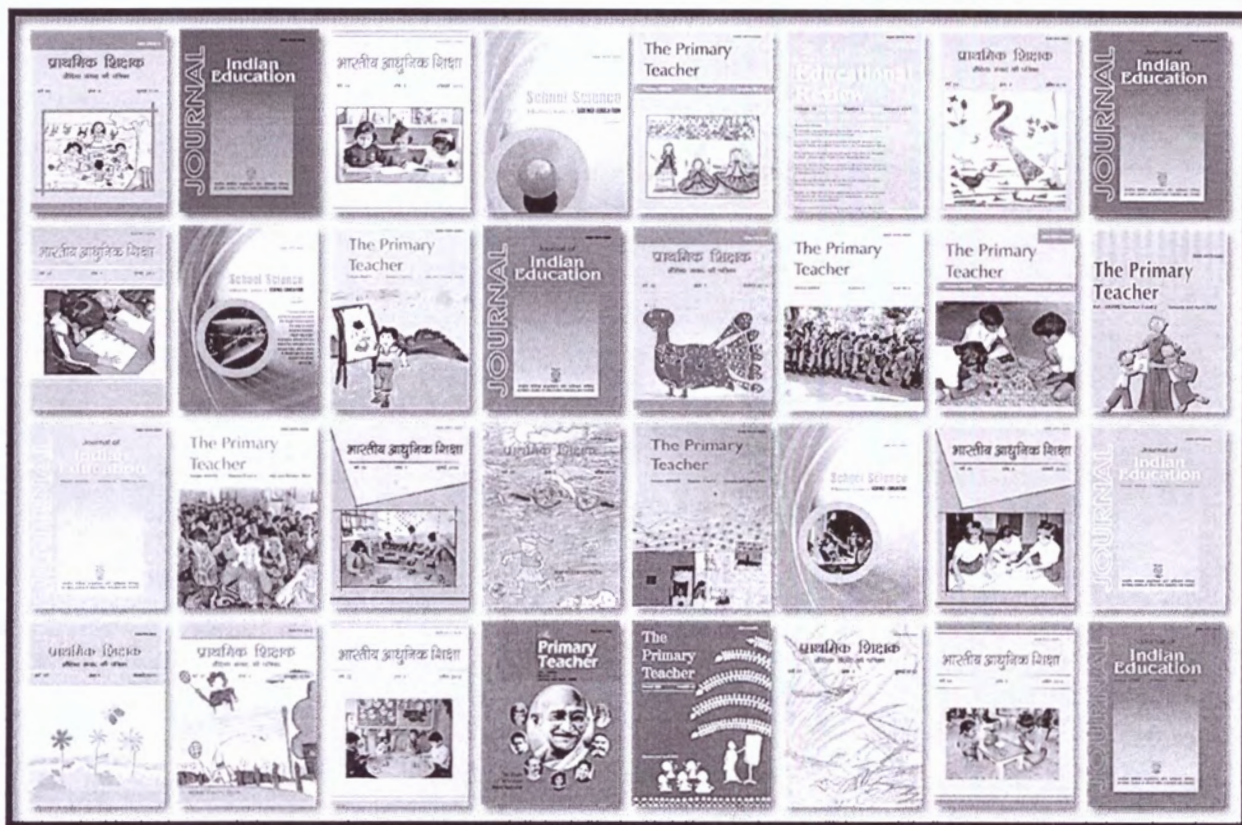


EDUDOC SERVICES: CURRENT CONTENT



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March to December – 2020

Volume: I, (A-M)



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J.P. Anand

A handwritten signature in black ink, appearing to be 'JP Anand', with a horizontal line extending to the right.

Introduction

“Current Contents” prepared by Library and Documentation Division aims to identify the articles published in the learned journals received by the library in the month of March-December 2020.

Current Contents are arranged alphabetically (Volume:I, A-M) under the broad subject headings. It gives the details about the name of the Journal, volume, issue month and year of publication. It will be our endeavour to bring out this as a reference tool, which will make our readers aware about the current contents available in different learned journals of their subject of interest.

Current Contents will be useful to our faculty members in selecting/recommending relevant articles for their research.

Keeping in mind the integration of ICT and Digitisation, attempt has been made to provide the Web-link of the current issues, which will facilitate the readers to access the articles, except the ‘*’ marked journal titles

We eagerly await to received your views and comments.



(Prof. A.D. Tewari)
Chairperson, LDD,
NCERT, New Delhi

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❖	Biology					
1.	<u>Biochemistry and Molecular Biology Education</u>	48	1 2 3 4	Jan-Feb Mar-Apr May-Jun Jul-Aug	2020	57-64
2.	<u>Journal of Biological Education</u>	54	1 2 3 4	Feb Apr Jun Sep	2020	321-324
❖	Curriculum					
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4.	Curriculum and Teaching	34 35	2 1	Oct Jan-Jun	2019 2020	161-162
❖	Economics					
5.	Economist	434	9183 9184 9185 9186	29 Feb 7 Mar 14 Mar 21 Mar	2020	171-178
6.	Economics of Education Review	74 75 76 77 78		Feb Apr Jun Aug Oct	2020	165-170
7.	<u>Journal of Economic Education</u>	51	1 2 3-4	Jan-Mar Apr-Jun Jul-Dec	2020	353-355
8.	<u>The Indian Economic and Social History Review</u>	57	1 2 3	Jan-Mar Apr-Jun Jul-Sep	2020	248-250
❖	Education					
9.	<u>Cambridge Journal of Education</u>	50	1 2 3 4 5	Feb Apr Jun Aug Oct	2020	78-82
10.	<u>Educational Policy</u>	34	1 2 3 4 5 6 7	Jan Mar May Jun Jul Sep Nov	2020	196-202

11.	International Journal of Educational Development	64 72 73 74 75 76		Jan Jan Mar Apr May Juy	2019 2020	282-287
12.	<u>International Journal of Inclusive Education</u>	24	1-2 3-4 5-6 7-8 9-10 11-12	Jan-Feb Mar Apr-May Jun Jul-Aug Sep-Oct	2020	299-304
13.	<u>Journal of Educational Measurement</u>	57	1 2 3	Spring Summer Fall	2020	356-358
❖	Educational Psychology					
14.	<u>British Journal of Educational Psychology</u>	90	1 2 3	Mar Jun Sep	2020	65-67
15.	Counseling and Values	65	1 2	Apr Oct	2020	112-113
16.	<u>Educational Psychologist</u>	55	1 2 3	Jan-Mar Apr-Jun Jul-Sep	2020	203-205
❖	Educational Research					
17.	<u>American Educational Research Journal</u>	57	1 2 3 4 5	Feb Apr Jun Aug Oct	2020	17-21
18.	<u>Applied Measurement in Education</u>	33	1 2 3 4	Jan-Mar Apr-Jun Jul-Sep Oct-Dec	2020	41-44
19.	<u>Assessment for Effective Intervention</u>	45	2 3 4	Mar Jun Sep	2020	45-47
20.	<u>Assessment in Education: Principles, policy & Practice</u>	27	2 3 4 5	Dec	2019	48-51
21.	<u>Australian Journal of Education</u>	64	1 2	Apr Aug	2020	52-53
22.	<u>Educational Action Research: an International Journal</u>	26 28	5 1 2 3 4	Dec Jan-Mar Apr-Jun Jul-Sep Oct-Dec	2018 2020 2020 2020	179-183

23.	<u>Educational Assessment, Evaluation and Accountability</u>	32	1 2 3	Feb May Aug	2020	184-186
24.	<u>Educational Evaluation and Policy Analysis</u>	42	1 2 3	Mar Jun Sep	2020	187-189
25.	<u>Educational Measurement: Issues and Practice</u>	39	1 2 3	Spring Summer Fall	2020	190-195
26.	<u>Educational Research</u>	62	1 2 3	Mar Jun Sep	2020	206-208
27.	International Journal of Educational Research	99 100 102 103		Jan Mar Jul Sep	2020	288-298
28.	Journal of Educational Research	112 113	4-6 1-3	Jul-Dec Jan-Jun	2019 2020	359-361
❖	Educational Technology					
29.	<u>British Journal of Educational Technology</u>	51	1 2 3 4 5	Jan Mar May Jul Sep	2020	68-75
30.	Computers and Education	144 145 146 147 148 149 150 151 152 153 154 155 156 157 159		Jan Feb Mar Apr Apr May Jun Jul Jul Jul Aug Sep Oct Oct Nov Dec	2020	89-109
31.	<u>Journal of Computer Assisted Learning</u>	36	1 2 3 4 6	Feb Apr Jun Aug Dec	2020	325-328
❖	Environmental Education					
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33.	<u>Globalisation, Societies and Education</u>	18	1 2 3 4 5	Feb Apr Jun Aug Oct	2020	243-247
34.	<u>International Research in Geographical and Environmental Education</u>	29	1 2 3 4	Feb May Aug Nov	2020	305-308
35.	Journal of Environmental Education	50 51	4-6 1-3	Jul-Dec Jan-Jun	2019 2020	364-366
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❖	Linguistics					
41.	ELT Journal	73 74	3 4 2	Jul Oct Apr	2019 2019 2020	212-217
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47.	Language Forum: A Journal of Language and Literature	45	1 2	Jan-Jun, Jul-Dec	2019	409-411
48.	Language Learning	70	2 2 Suppl. 3	Jun Jun Sep	2020	412-416
49.	Language Problems & Language Planning	44	1	Jan	2020	417
50.	<u>Linguistics and Education</u>	55 56 57 58		Feb Apr Jun Aug	2020	422-425
❖	Mathematics Education					
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❖	Physics					
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55.	<u>Contemporary Physics</u>	60, 61	3 4 1	Sep Dec Mar	2019 2019 2020	110-111
❖	Psychology					
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57.	Indian Journal of Positive Psychology	11	1 2	Mar Jun	2020	265-266
58.	Journal of Applied Developmental Psychology	67 68 70		Mar-Apr May-Jun Jul-Sep	2020	309-311
59.	<u>Journal of Applied Social Psychology</u>	50	1 2 3 4 5 7 8 9 10	Jan Feb Mar Apr May Jul Aug Sep Oct	2020	312-320
60.	<u>Journal of Counseling & Development</u>	98	2 3 4	Apr Jul Oct	2020	329-334
61.	Journal of Counseling Psychology	67	1 2	Jan Mar	2020	335-340
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63.	<u>Journal of Humanistic Psychology</u>	60	1 2 3 4 5	Jan Mar May Jul Sep	2019	372-376
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66.	<u>Journal of Research in Science Teaching</u>	57	1 2 3 4 5 6 7 8 9	Jan Feb Mar Apr May Aug Sep Oct Nov	2020	392-400
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69.	Biblio	25	1-3 4-6 7-9	Jan-Mar Apr-Jun Jul-Sep	2020	54-56
70.	<u>Indian Journal of Gender Studies</u>	27	1 2 3	Feb Jun Oct	2020	253-257
71.	<u>Indian Journal of Health and Well-being</u>	11	1-3 4-6 7-9	Jan-Mar Apr-Jun Jul-Sep	2020	258-264
72.	Journal of Democracy	31	1 2 3 4	Jan Apr Jul Oct	2020	349-352
73.	Man and Development *	42	1 2	Mar Jun	2020	426-427
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76.	<u>European Journal of Special Needs Education</u>	35	1 3 4	Jan Aug Oct	2020	228-230
77.	<u>Intellectual and Developmental Disabilities</u>	58	1 2 3	Feb Apr Jun	2020	278-281
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79.	Action in Teacher Education	42	1 2 3 4	Mar May Jun Dec	2020	1-4
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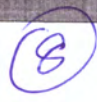
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AMERICAN JOURNAL OF PHYSICS

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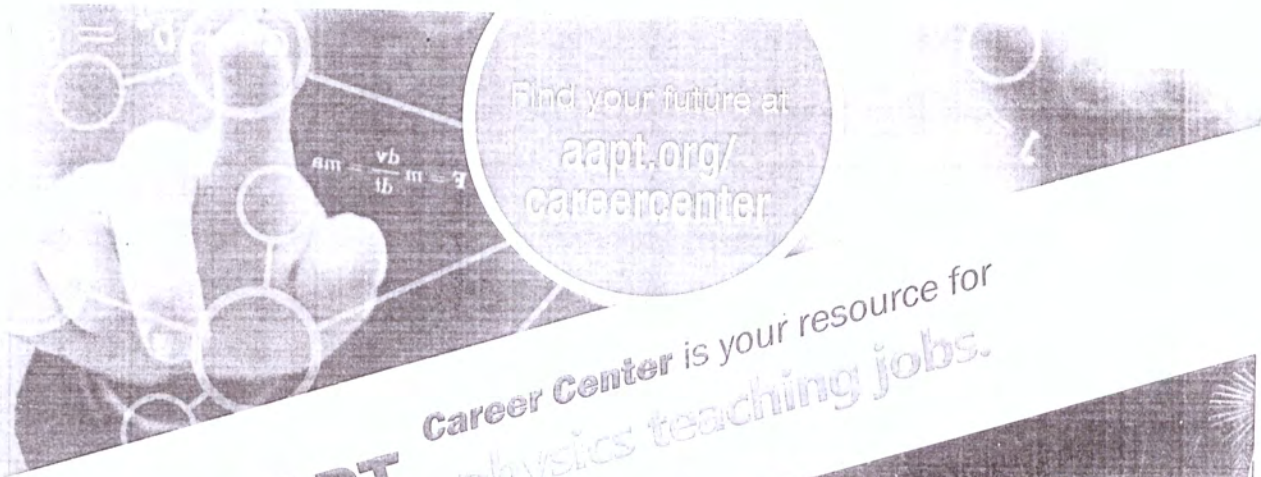
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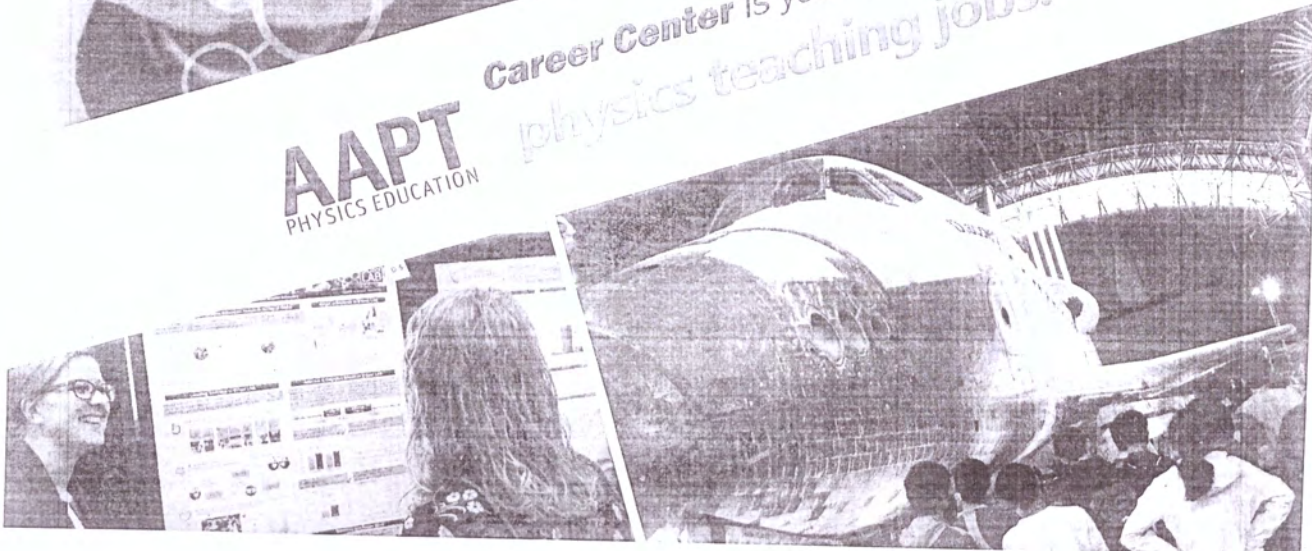
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Cover figure: A simulated image of the New York sky after a kilonova, the merger of two neutron stars, along with a plot of the apparent magnitude as a function of the number of days after the kilonova. For more details, see the article on p. 568.

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- 1 Parental Ethnic-Racial Socialization Practices and Children of Color's Psychosocial and Behavioral Adjustment: A Systematic Review and Meta-Analysis
Ming-Te Wang, Daphne A. Henry, Leann V. Smith, James P. Huguley, and Jiesi Guo
Despite growing support for the role of ethnic-racial socialization in minority youth development, no integrative research previously examined the practical significance of parental ethnic-racial socialization on minority youth's psychological and behavioral well-being. This meta-analysis synthesizes the existing literature across 102 empirical studies. The authors examined the nuanced ways in which specific dimensions of parental ethnic-racial socialization operate to influence development in youth of color.
- 23 Minor Infractions Are Not Minor: School Infractions for Minor Misconduct May Increase Adolescents' Defiant Behavior and Contribute to Racial Disparities in School Discipline
Jamie Amemiya, Elizabeth Mortenson, and Ming-Te Wang
Increases in minor misconduct is a hallmark of adolescent development. How do adolescents respond when they get in trouble for minor misbehavior? The authors find evidence suggesting that punishment for minor misconduct may actually worsen behavioral problems and that African American adolescents in particular are most likely to receive such punishment.
- 37 Understanding, Educating, and Supporting Children With Specific Learning Disabilities: 50 Years of Science and Practice
Elena L. Grigorenko, Donald L. Compton, Lynn S. Fuchs, Richard K. Wagner, Erik G. Willcutt, and Jack M. Fletcher
Fifty years after the first Federal recognition of specific learning disabilities (SLDs), this article summarizes advances in scientific understanding of SLDs, emphasizing the integration of information from psychology, education, psychiatry, genetics, and cognitive neuroscience. The article stresses, given the high prevalence and the life-long nature of SLDs, that it is critically important to implement effective prevention, surveillance, and treatment systems involving professionals from various disciplines trained to minimize the risk and maximize the protective factors for SLDs.
- 52 The Enhanced Examination for Professional Practice in Psychology: A Viable Approach?
Jennifer L. Callahan, Debora J. Bell, Joanne Davila, Sheri L. Johnson, Timothy J. Strauman, and Cindy M. Yee
This article describes plans by the Association of State and Provincial Psychology Boards (ASPPB) to augment the national licensing exam but challenges the notion that the resulting Enhanced Examination for Professional Practice in Psychology (Enhanced EPPP) is ready for implementation. The authors consider how a more comprehensive, transparent, and prospective validation process, in concert with public and stakeholder engagement, is of crucial significance to the welfare of both the field and the public.

- 66 **Would I Be Helped? Cross-National CCTV Footage Shows That Intervention Is the Norm in Public Conflicts**
Richard Philpot, Lasse Suonperä Liebst, Mark Levine, Wim Bernasco, and Marie Rosenkrantz Lindegaard
 Decades of experimental research on the bystander effect show that individuals are less likely to intervene to help in an emergency when in the presence of others than when alone. Yet, little is known regarding the likelihood that a *victim* will receive bystander help, particularly in dangerous and populated emergencies. This study, utilizing closed circuit television recordings of real-life public disputes, is the first to address this question.
- 76 **Police Lineups of the Future?**
Neil Brewer, Nathan Weber, and Nicola Guerin
 Eyewitnesses often err when trying to identify the culprit from a police lineup. In a series of studies, witnesses viewed mock crimes and then indicated how confident they were that each lineup member was the culprit—rather than picking someone or rejecting the lineup, as occurs with a traditional lineup. The resulting confidence patterns provided sensitive information about the probability of suspect guilt, offering a novel and more informative lineup procedure.
- 92 **The Publication Gender Gap in Psychology**
Darko Odic and Erica H. Wojcik
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On the cover: El Mirador, 2018, by Gonzalo Bacigalupe. Mixed media (acrylics, watercolor, Japanese ink), 90 centimeters by 70 centimeters. Courtesy of the artist, <http://bacigalupe.wordpress.com>. See p. 290 for more about Bacigalupe and his art.

Special Issue: Obesity: Psychosocial and Behavioral Aspects of a Modern Epidemic

Special Issue Editors: David B. Sarwer, Carlos M. Grilo, and Anne E. Kazak

- 135 Obesity: Psychosocial and Behavioral Aspects of a Modern Epidemic: Introduction to the Special Issue

David B. Sarwer and Carlos M. Grilo

Obesity, one of the major public health problems in the United States, is now seen as a chronic refractory medical condition that continues to increase in prevalence and negative impact. The articles in this special issue highlight important contributions by psychologists to our emerging understanding of the development, prevention, and treatment of obesity in children, adolescents, and adults. The guest editors provide an overview of this collection, which offers a foundation for future efforts to arrest the obesity epidemic.

Obesity in Childhood and Adolescence

- 139 Choice Is Relative: Reinforcing Value of Food and Activity in Obesity Treatment

Katelyn A. Carr and Leonard H. Epstein

The choices available in the environment influence the foods and activities on which a person spends their time. The current environment provides an easy choice for sedentary activities and high energy-dense foods. This article introduces behavioral economic principles and how they apply to healthy eating and activity behaviors and presents ideas about how targeting the environment and available choices may be used for obesity prevention and treatment.

- 152 Behavioral and Social Routines and Biological Rhythms in Prevention and Treatment of Pediatric Obesity

Chantelle N. Hart, Elissa Jelalian, and Hollie A. Raynor

A growing body of research supports the potential importance of behavioral routines such as eating and sleep routines for obesity risk reduction. Alignment of such routine behaviors with underlying circadian rhythms may be particularly important for enhancing children's weight regulation. The authors recommend that obesity prevention and treatment approaches consider promotion of consistency in and optimal timing of health behaviors in an effort to enhance child outcomes.

- 163 Examining Childhood Obesity Through the Lens of Developmental Psychopathology: Framing the Issues to Guide Best Practices in Research and Intervention

Amy M. Bohnert, Dorothy M. Loren, and Alison L. Miller

Comprehensive models of childhood obesity delineate key contributing factors to this epidemic but none fully conceptualize how these processes unfold over time. Drawing on the central tenets of developmental psychopathology, this article proposes an innovative framework for advancing childhood obesity research and practice.

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- 178 Summary of the Clinical Practice Guideline for Multicomponent Behavioral Treatment of Obesity and Overweight in Children and Adolescents
Guideline Development Panel for Treatment of Obesity, American Psychological Association
Almost one third of youth ages 2–19 in the United States are overweight or obese and thus at risk for both immediate and long-term health problems. This article summarizes the clinical practice guideline developed by the American Psychological Association to provide recommendations concerning multicomponent behavioral treatment of obesity and overweight in children and adolescents.
- 189 A Developmental Framework of Binge-Eating Disorder Based on Pediatric Loss of Control Eating
Marian Tanofsky-Kraff, Natasha A. Schvey, and Carlos M. Grilo
Binge-eating disorder is the most common eating disorder in the United States. Adults with binge-eating disorder often report that symptoms began during childhood or adolescence, suggesting that a developmental perspective of binge-eating may be warranted. The authors provide a novel conceptual model focusing on loss-of-control eating to elucidate which youths may be at greatest risk for the development of binge-eating disorder and obesity.

Obesity in Adulthood

- 204 Randomized Controlled Trial Testing the Effectiveness of Adaptive “SMART” Stepped-Care Treatment for Adults With Binge-Eating Disorder Comorbid With Obesity
Carlos M. Grilo, Marney A. White, Robin M. Masheb, Valentina Ivezaj, Peter T. Morgan, and Ralitza Gueorguieva
Binge-eating disorder (BED), the most prevalent eating disorder among adults in the United States, is associated strongly with severe obesity. Although emerging treatment research has identified specific treatments effective for reducing binge eating, weight losses for BED seem dampened relative to those for obesity without BED. This article describes an innovative “sequential multiple assignment randomized trial” (SMART) design to evaluate a proposed treatment model for patients with BED and coexisting obesity.
- 219 Cognitive Dysfunction Is a Risk Factor for Overeating and Obesity
John Gunstad, Victoria Sanborn, and Misty Hawkins
A rapidly evolving literature shows that even subtle cognitive deficits and biases can lead to unhealthy eating habits, weight gain, and obesity. This article provides an overview of the innovative work in this area and proposes a conceptual framework for “what, when, and how” to compensate for cognitive deficits as part of weight loss treatment.
- 235 Lifestyle Modification Approaches for the Treatment of Obesity in Adults
Thomas A. Wadden, Jena S. Tronieri, and Meghan L. Butryn
Intensive lifestyle modification provides individuals with principles and techniques by which to adopt new eating and physical activity habits to reduce body weight by 5–10% in 6 months. A major challenge, addressed in this article, is increasing the availability of this treatment for the millions of Americans who would benefit from it. These efforts must be combined with societal, policy-based initiatives to prevent the development of obesity.
- 252 A Review of the Psychosocial Aspects of Clinically Severe Obesity and Bariatric Surgery
David B. Sarwer and Leslie J. Heinberg
Individuals with clinically severe obesity typically report a significant, comorbid psychosocial burden. The substantial weight loss seen with bariatric surgery, the most effective and durable treatment for obesity, is associated with clinically significant improvements in many areas of psychosocial functioning. The authors review the literature on the psychosocial functioning of individuals who undergo bariatric surgery and highlight the important role that psychologists play in pre- and postoperative care.

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265 How Psychological Insights Can Inform Food Policies to Address Unhealthy Eating Habits
Christina A. Roberto
Unhealthy eating habits and obesity are among the world's biggest public health threats. This article discusses how modern food environments exploit psychological vulnerabilities to create unhealthy eating habits. The paper argues that an understanding of human psychology makes clear the pressing need to implement government and institutional policies that will create healthier food environments.

274 Weight Stigma as a Psychosocial Contributor to Obesity
Rebecca M. Puhl, Mary S. Himmelstein, and Rebecca L. Pearl
Weight stigma is an important but often overlooked factor for consideration in the etiology and treatment of obesity. This article examines the ways that weight stigma may contribute to weight-related health and highlights the importance of addressing weight stigma in clinical practice to promote a supportive culture of patient care for youth and adults vulnerable to weight stigma.

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On the cover: Aspiration, by Marcy Dunn Ramsey. Oil on canvas, 30 inches by 36 inches. Courtesy of the artist and the Carla Massoni Gallery, <https://massoniart.com/>. See p. 416 for more about Ramsey and her art.

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- 301 Gender Stereotypes Have Changed: A Cross-Temporal Meta-Analysis of U.S. Public Opinion Polls From 1946 to 2018
Alice H. Eagly, Christa Nater, David I. Miller, Michèle Kaufmann, and Sabine Sczesny
There has been considerable change in gender relations, especially in women's roles. This research integrated 16 nationally representative U.S. public opinion polls on gender stereotypes from 1946 to 2018. The findings showed that women's relative advantage in communion increased over time, but men's relative advantage in agency did not change. Belief in competence equality increased, along with some belief in female superiority.
- 316 A Systematic Review of the Psychology Literature Addressing Hospital Practice
Sean A. Kidd and Thomas H. Styron
Psychologists have played an important role in the evolution of behavioral health care in hospitals for over 100 years. It is a complex and, at times, fraught history. This systematic review captures the psychology literature addressing hospital practice to inform how we think about work in this area today—both the challenges and the opportunities.
- 329 Discordance in Parents' and Adolescents' Reports of Parenting: A Meta-Analysis and Qualitative Review
Yang Hou, Aprile D. Benner, Su Yeong Kim, Shanting Chen, Shiri Spitz, Yi Shi, and Tasha Beretvas
Parents and children often provide discrepant reports on parenting practices in the family. Which parent-child dyads are more likely to provide discrepant reports? How do discrepancies in reports of parenting relate to adolescent outcomes? How should researchers and clinicians make the best use of parents' and children's reports? This study provided the most comprehensive discussion of these questions to date.
- 349 What the Face Displays: Mapping 28 Emotions Conveyed by Naturalistic Expression
Alan S. Cowen and Dacher Keltner
With new methodological and statistical approaches, this study reexamines the emotions perceived in the face. Facial expressions signal a much broader range of emotions than previously considered, including nuanced states like "awe" and "interest" that can be blended together in complex ways. These findings support an emerging theory that proposes a far richer taxonomy of emotional behavior, with applications ranging from the treatment of depression to socially aware artificial intelligence.
- 365 Assortativity of Suicide-Related Posting on Social Media
Ian Cero and Tracy K. Witte
For prevention experts and the public, the social clustering of suicide is a frightening phenomenon—and the rise of social media platforms has amplified that concern for many. This investigation is the first large-scale study of the social clustering of suicide-related talk on social media. The authors explore how knowledge of those clustering patterns can be harnessed to improve prevention.
- 380 Suicide and the Transgender Experience: A Public Health Crisis
lore m. dickey and Stephanie L. Budge
Suicide risk in transgender people is a public health crisis that calls for the attention of psychologists. The authors adapted a public health model to provide a psychological lens that explores avenues to address suicidal thinking and behavior in transgender communities. Recommendations are provided for psychologists to play a key role in addressing this clinical concern.

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391 Searching for the Impossible: Parapsychology's Elusive Quest

Arthur S. Reber and James E. Alcock

Parapsychology has struggled for a century and a half to establish itself as an empirically sound (if theoretically shaky) enterprise. Literally dozens of methodologies have been developed, hundreds of books written, and thousands of papers published. Yet the field is precisely where it was 150 years ago—there are no reliable, replicable effects. The authors point out why this is so: Psi effects are simply not possible.

Comments

400 Continuing to Acknowledge the Power of Dehumanizing Environments:

Comment on Haslam et al. (2019) and Le Texier (2019)

Philip G. Zimbardo and Craig Haney

403 Identity Leadership Is Manifested via Integrative Complexity: Comment on Haslam et al. (2019)

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406 Debate Around Leadership in the Stanford Prison Experiment: Reply to Zimbardo and Haney (2020) and Chan et al. (2020)

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414 Janet Rogers Matthews (1944–2019)

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415 Charles S. Carver (1947–2019)

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On the cover: Approaching Snow Squall, Connecticut River Valley, 2009, by David Pellegrini. Oil on canvas, 12 inches by 12 inches. Courtesy of the artist and the private collection of Lorrie Hallman, <https://www.pellegrinifineart.com>. See p. 596 for more about Pellegrini and his art.

Special Issue: Rethinking Adult Development: New Ideas for New Times

Special Issue Editors: Jeffrey Jensen Arnett, Margie E. Lachman,
Oliver Robinson, and Nancy Eisenberg

425 Rethinking Adult Development: Introduction to the Special Issue

Jeffrey Jensen Arnett, Oliver Robinson, and Margie E. Lachman

Adulthood is changing rapidly in ways that call for new thinking by psychologists. Pathways of education, work, and family life are more open and diverse than ever, and in some ways more challenging. Technology is also reshaping how relationships and jobs change over the adult lifespan. Life expectancy is increasing, presenting people with more healthy years following their exit from full-time work. This introduction highlights the key themes of the special issue and some of the most important questions for research, practice, and policy.

431 Established Adulthood: A New Conception of Ages 30 to 45

Clare M. Mehta, Jeffrey Jensen Arnett, Carlie G. Palmer, and Larry J. Nelson

Research on adulthood has increased over the last half-century; however one period of adult development is underdefined and underexplored—the age period from 30–45. In this article, the authors put forth a new theoretical framework for established adulthood, highlighting this period's uniqueness from other developmental periods across the lifespan, its historical and cultural variations, and why it deserves increased empirical and theoretical attention.

445 Reproductive Identity: An Emerging Concept

Aurélie M. Athan

While there are well-known theories on human development for other identities ranging from race to sexuality and gender, the same attention has not been given to reproductive life. Deciding whether, when, or how to become a parent is a major milestone and the evolving reproductive experiences of people can impact their well-being, relationships, social status, economic livelihood, and beyond.

457 Sociohistorical Context and Adult Social Development: New Directions for 21st Century Research

Janina Larissa Bühler and Jana Nikitin

Given that the current knowledge on adult social development confounds age-related and context-related effects, it is essential to disentangle both influences. This research discusses how the sociohistorical contexts in which today's young adults have been socialized will shape their social development throughout adulthood. As the core of this article, theoretical and methodological directions for future research on adult social development are provided.

470 Midlife in the 2020s: Opportunities and Challenges

Frank J. Infurna, Denis Gerstorf, and Margie E. Lachman

Middle-aged adults nowadays are facing unprecedented societal challenges in the form of changing intergenerational relationships with family members and financial vulnerabilities from economic failures, the changing landscape of the workplace and insufficient paid family leave policies and healthcare coverage. The authors outline and discuss how these challenges are impacting mental and physical health and offer intervention and policy changes to help promote reversibility and resilience.

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486 Work in the 21st Century: New Directions for Aging and Adult Development

Phillip L. Ackerman and Ruth Kanfer

The simultaneous aging of the workforce and the changing nature of work have powerful consequences for the nation's economic well-being, public policy, and individuals. The authors discuss the implications of these trends for the development of new tools, training methods, and organizational practices to promote job and career transitions and successful aging at work.

499 The Bucket List Effect: Why Leisure Goals Are Often Deferred Until Retirement

Alexandra M. Freund

In today's society lengthier education pushes work and family tasks into later young and middle adulthood. In addition, the unprecedented longevity creates the expectation of a long post-retirement phase. Moreover, the Protestant work ethic emphasizes to first fulfill the duties of work and family before leisure goals. Together, this might lead middle-aged adults to postpone leisure and social goals to the post-retirement phase (i.e., the bucket list effect).

511 Charting Adult Development Through (Historically Changing) Daily Stress Processes

David M. Almeida, Susan T. Charles, Jacqueline Mogle, Johanna Drewelies, Carolyn M. Aldwin, Avron Spiro III, and Denis Gerstorf

Using data from the National Study of Daily Experiences, this article charts how stress in the daily lives of Americans changed from the 1990 to 2010. Adults in 2010 not only reported more daily stressors compared with adults in 1990, they also reported that stressors were more severe and posed more risks to future plans and finances. These historical changes were particularly pronounced among middle-aged adults.

525 Adult Development and Aging in Historical Context

Denis Gerstorf, Gizem Hülür, Johanna Drewelies, Sherry L. Willis, K. Warner Schaie, and Nilam Ram

Over the last half-century, functioning and development during older adulthood have changed. In many developed nations, old age is getting younger both on behavioral measures and in people's own perception. This paper considers why aging is changing, identifies pressing questions that still need to be answered, and discusses reasons why the rosy picture of historical change obtained so far may not necessarily continue in the future.

540 The Positive Plasticity of Adult Development: Potential for the 21st Century

Ursula M. Staudinger

Adult development and aging concern us all. We are living longer than ever in human history. But are we living longer healthily? Lifespan psychology has played a major role in deciphering the opportunities and constraints of adult development and aging. This article provides an overview of what we know to date and how psychological science is at the center of this interdisciplinary endeavor.

554 Rethinking Social Relationships in Old Age: Digitalization and the Social Lives of Older Adults

Gizem Hülür and Birthe Macdonald

Older adults are increasingly using the Internet and digital communication technologies. This article reviews research on older adults' social internet use. The authors discuss whether and how the use of digital communication technologies contributes to well-being in old age, and whether digital technologies are reshaping social relationships or merely reinforcing existing social preference and behavior patterns in older adults.

567 Culture and Well-Being in Late Adulthood: Theory and Evidence

Shinobu Kitayama, Martha K. Berg, and William J. Chopik

Much of what is known about lifespan development during late adulthood is confined to European American cultural contexts. In these contexts, there is a strong normative demand to stay active, energetic, and metaphorically "forever young," even when one is no longer young. Consequences of this normative demand are thrown into sharp relief when American age-trajectories of well-being are compared with those of their Asian counterparts.

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577 Optimizing Aging: A Call for a New Narrative

Manfred Diehl, Michael A. Smyer, and Chandra M. Mehrotra

Despite decades of research showing that human aging is not as predetermined as had been thought for a long time, the general public and many individuals still hold mostly negative views of aging. This article addresses three big misconceptions at the heart of these negative views of aging and argues that psychologists play an essential role in establishing a new narrative on aging.

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590 Wilbert ("Bill") James McKeachie (1921–2019)

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592 Anne Marie Treisman (1937–2018)

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594 Armand W. Loranger (1930–2019)

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On the cover: Self-Portrait During COVID-19, 2020,
by John Bonner. Oil on canvas, 11 inches by 14 inches.
Courtesy of the artist, <https://www.johnbonner.com>. See
p. 736 for more about Bonner and his art.

COVID-19 Pandemic

- 605 Psychology Is an Essential Science: *American Psychologist* Highlights the Role of Psychology in Understanding and Addressing COVID-19

Anne E. Kazak

The Editor-in-Chief introduces a series of articles reflecting international contributions in psychological science to a range of issues wrought by the pandemic.

- 607 Negative Cognitive and Psychological Correlates of Mandatory Quarantine During the Initial COVID-19 Outbreak in China

Meiqi Xin, Sitong Luo, Rui She, Yanqiu Yu, Lijuan Li, Suhua Wang, Le Ma, Fangbiao Tao, Jianxin Zhang, Junfeng Zhao, Liping Li, Dongsheng Hu, Guohua Zhang, Jing Gu, Danhua Lin, Hongmei Wang, Yong Cai, Zhaofen Wang, Hua You, Guoqing Hu, and Joseph Tak-fai Lau

This article delineates the significant and positive relationships between mandatory quarantine and negative cognitions and mental distress related to COVID-19 observed at a critical point when quarantine measures were widely imposed in China for containing the spread of SARS-COV-2. The findings emphasize the importance of developing interventions to respond to the psychological needs of quarantined persons during the pandemic.

- 618 Effects of the COVID-19 Pandemic and Nationwide Lockdown on Trust, Attitudes Toward Government, and Well-Being

Chris G. Sibley, Lara M. Greaves, Nicole Satherley, Marc S. Wilson, Nickola C. Overall, Carol H. J. Lee, Petar Milojev, Joseph Bulbulia, Danny Osborne, Taciano L. Milfont, Carla A. Houkamau, Isabelle M. Duck, Raine Vickers-Jones, and Fiona Kate Barlow

In the unprecedented situation of the pandemic, data in New Zealand on how people would react to lockdown, and the pandemic in general, were very limited. The authors collected rapid-turnaround high-quality data on how New Zealanders were coping under lockdown at the start of the COVID-19 pandemic; their levels of well-being and psychological distress; and their levels of trust in police and politicians, and satisfaction with government.

- 631 Risk and Resilience in Family Well-Being During the COVID-19 Pandemic

Heather Prime, Mark Wade, and Dillon T. Browne

This article reviews the literature on natural and human-made disasters and recessions in order to illustrate the possible consequences of the COVID-19 on the well-being of families and children. The authors present a conceptual framework linking social disruption due to COVID-19 to child adjustment through a cascading process involving caregiver well-being and family processes. Throughout, the authors highlight processes of vulnerability and resilience.

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- 644 Ethical Considerations for Psychologists in the Time of COVID-19

Tiffany Chenneville and Rebecca Schwartz-Mette

This article is intended to provide guidance to psychologists who encounter ethical issues while offering services during the COVID-19 pandemic. Psychologists working across settings (e.g., private practice, hospitals, clinics, universities or colleges, research centers) and various roles (e.g., clinicians, scientists, educators, advocates) are likely to find the information contained in this article useful. The authors hope this article will encourage ethical decision making during these unprecedented times.

2019 APA Presidential Paper

- 655 Bringing Psychologists to the Fight Against Deep Poverty

Rosie Phillips Davis and Wendy R. Williams

Deep poverty, compared to poverty, is especially dehumanizing, difficult to exit, complex to solve, obscures human strengths, and causes physical and psychological harm. Psychologists have an important role to play in interrupting these outcomes through interventions, policy, and action. This article reviews the 2019 APA Presidential Deep Poverty Initiative, which was designed to consider the unique contributions of psychologists to the eradication of deep poverty.

Articles

- 668 Global Approaches to Integrated Care: Best Practices and Ongoing Innovation

Lisa K. Kearney, Antonette M. Zeiss, Mary Ann McCabe, Jill E. Thistlethwaite, Nav Chana, Shulin Chen, and Barry S. Anton

The integration of behavioral health in primary care settings across the globe is an important piece in addressing access to, and quality of, health care services for physical and mental health promotion, prevention, and disease management. This manuscript supplies a summary of best practices and recommendations for integrated care from APA's international summit of interdisciplinary experts from ten countries.

- 683 This Is Not a Drill: Anxiety on Twitter Following the 2018 Hawaii False Missile Alert

Nickolas M. Jones and Roxane Cohen Silver

Although false alarms of threats occur with some regularity, little is known about their psychological consequences. In this study of the 2018 false missile alert in Hawaii, where for 38 minutes before the alert was cancelled residents awaited an impending missile that never arrived, trends in anxiety expression were examined among 1.2 million tweets generated by over 14,000 Twitter users during the hours and days that followed.

- 694 In the Immediate Wake of Hoffman's Independent Review: Psychologist and General Public Perceptions

Alice Thornewill, David DeMatteo, and Kirk Heilbrun

This article presents results from a novel research project that examined psychologist and public opinions shortly after the release of the APA-commissioned Independent Review, which concluded that APA officials maintained a broad ethics policy to remain aligned with the Department of Defense and permit enhanced interrogations. Findings provide valuable information as the field considers the complex implications of psychologists' involvement in national security settings.

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- 711 Gold Medal Award for Life Achievement in the Applications of Psychology: William E. Cross
- 714 Gold Medal Award for Life Achievement in the Science of Psychology: Phoebe C. Ellsworth
- 717 Gold Medal Award for Life Achievement in Psychology in the Public Interest: Richard M. Suinn
- 720 Charles L. Brewer Award for Distinguished Teaching of Psychology: Linda M. Woolf

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Practical Issues in Linking and Equating with Small Samples

Guest editor: Michael R. Peabody

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Using Human Raters in Constructed Response Scoring: Understanding, Predicting, and Modifying Performance

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Middle right provided by John H. Wise from '**Cosmic reionisation**', *Contemporary Physics* (2019), 60:2, 145–163. Section of Figure 9. Next-generation 21-cm radio telescopes that will directly explore the Epoch of Reionisation.

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Middle left provided by D. R. Bowler from 'Building bridges: matching density functional theory with experiment', *Contemporary Physics* (2018), 59:4, 377–390. Section of Figure 3. The Haiku model for the Bi nanolines, seen in perspective. This slab model has ten layers of silicon, with the base fixed and terminated in hydrogen to mimic semi-infinite bulk. The normal tetrahedral bonding of silicon is clear in the lower layers. The significant reconstruction below the bismuth dimers, shown in purple, is formed of five-membered and seven-membered rings. The Bi nanoline replaces four silicon dimers in the surface.

Middle right provided by S. E. Venegas-Andraca, W. Cruz-Santos, C. McGeoch and M. Lanzagorta from 'A cross-disciplinary introduction to quantum annealing-based algorithms', *Contemporary Physics* (2018), 59:2, 174–197. Section of Figure 5. Each qubit is a loop of niobium controlled by Josephson junctions and biases represented by Φ_s in this diagram. The direction of current in the loop controls the state of the qubit, which may be spin-up or spin-down. When cooled to temperatures below 20 mK, niobium loops can be placed in superposition, with current running in both directions, corresponding to a superposition of spin-up and spin-down states.

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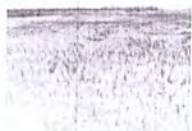
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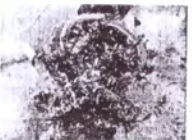


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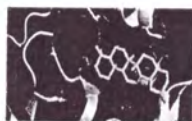
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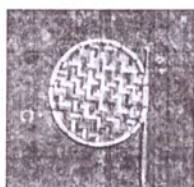
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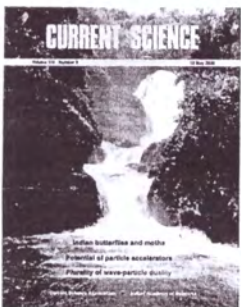
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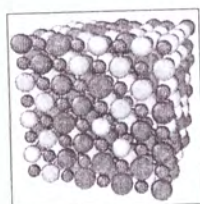
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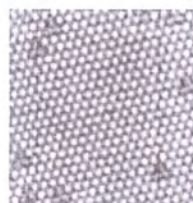
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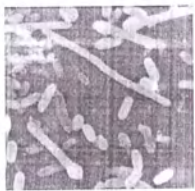
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The editor thanks Dr Shailesh Nayak (National Institute of Advanced Studies, Bengaluru, India) for agreeing to be Guest Editor for special section.

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**1939 Wheat production functions under irrigated saline environment and foliar potassium fertigation**

Mukesh Kumar, A. Sarangi, D. K. Singh, S. Sudhishri and A. R. Rao

1946 Prevalence and spread of potato cyst nematodes, *Globodera* spp. in northern hilly areas of India

Y. S. Chandel, Surendra Singh Bhadu, Rajan Salalia, Sharmishtha Thakur, Satya Kumar, Vishal Singh Somvanshi, Abhishek Mukherjee and R. K. Walia

1953 Non-destructive selection of genotypes with better wood properties from morphologically superior genotypes of *Eucalyptus pellita*

A. N. Arunkumar and S. S. Chauhan

1959 Characteristic properties of pine needle biochar blocks with distinctive binders

Hemant Kumar Sharma, Akanksha Kumain and T. K. Bhattacharya

1968 Chennai extreme rainfall event of 2015 under future climate projections using the pseudo global warming dynamic downscaling method

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Mohit Mann, Subodh Kumar, A. S. Rao and Ramesh C. Sharma

1984 Line-source field dripper for the measurement of *in situ* unsaturated hydraulic conductivity function

Rohit Pratap Ojha, Chhedi Lal Verma, Derrick M. Denis and Sanjay Arora

PERSONAL REMINISCENCES**1991 Seventy years in scientific research**

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1998 **Einstein Rediscovered: Interactions with Indian Academics.** Rajinder Singh; reviewed by Banibrata Mukhopadhyay

2000 **Annual Reviews of Biochemistry, 2019.** Roger D. Kornberg, James E. Rothman, JoAnne Stubbe and Jeremy W. Thorner (eds); reviewed by Prasanna K. Santhekadur

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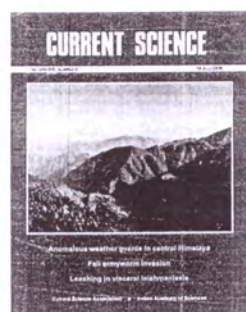
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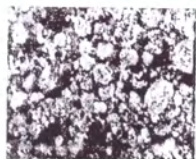
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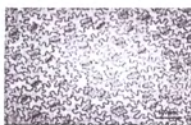
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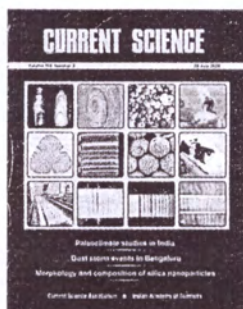


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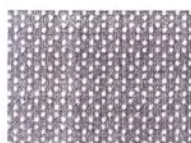
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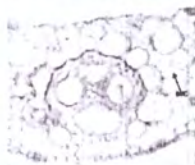
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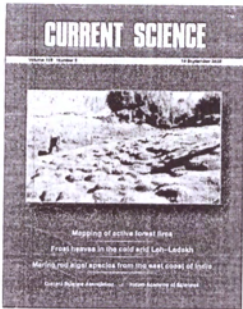
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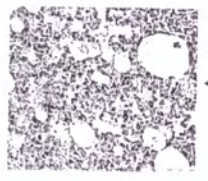
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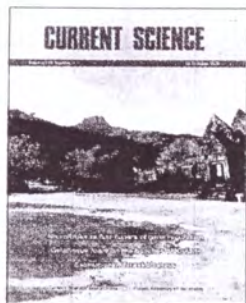
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The editor thanks Dr Roddam Narasimha (Jawaharlal Nehru Centre for Advanced Scientific Research, Bengaluru) and Dr K. Kasturirangan (National Institute of Advanced Studies, Bengaluru) for agreeing to be Guest Editors for special section.

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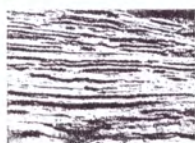
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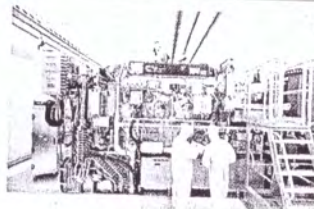
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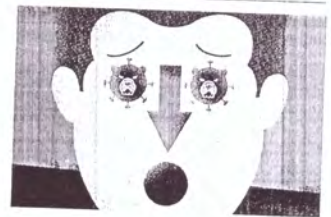
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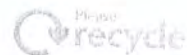
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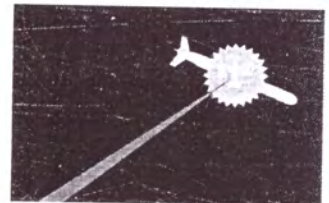
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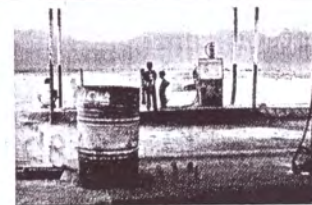
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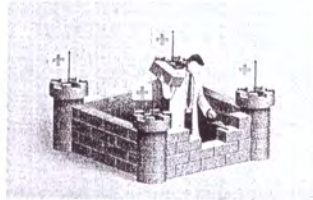
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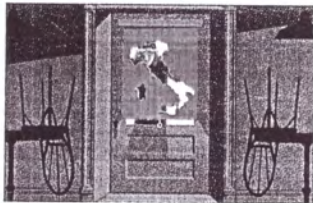
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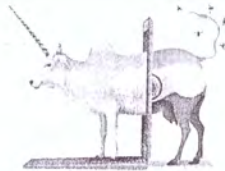
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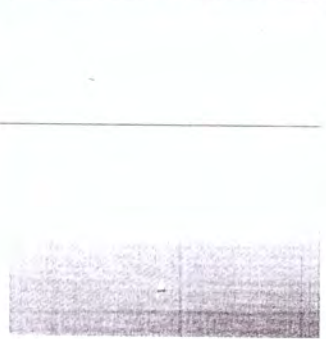
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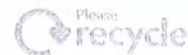
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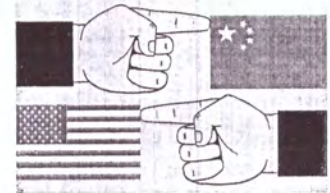
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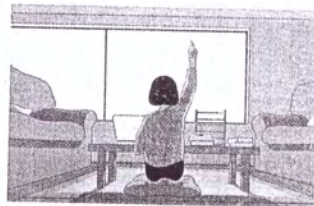
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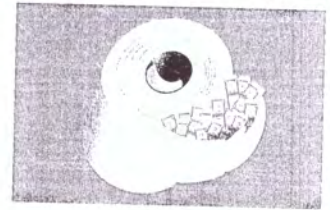
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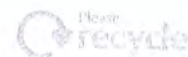
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Editorial

Welcome to February *EiS*.

This issue features some of the highlights from our 2020 Annual Conference, held at the University of Reading in early January. With an impressive 1824 delegates, 390 speakers and 102 exhibitors over four days, it was an exciting and inspiring event!

This year was my first Annual Conference as CEO and also the first Annual Conference for our new Conferences and Communications & Marketing teams, so it was wonderful to see everything go so well and the positive buzz throughout. My thanks go to all of the ASE team as well as to our volunteers and stewards for their support before, during and after the event. Steering us through was our Honorary Conference Secretary, Susie Burr. This was Susie's seventh and final year in the role and we were immensely grateful for her support and experience. On pages 10-11 are some reflections from Susie, as well as a message from our new Honorary Conference Secretary, Chris Harrison, who we're looking forward to working with on the 2021 Conference in Birmingham.

Pages 11-23 provide a taste of some of the highlights from this year's event, including our International Day (attracting delegates from over 20 countries), our ever-popular primary strand and our timely series of workshops on sustainability. We know how important senior leadership is in supporting school and college science teams and, on page 20, you can read about this year's leadership session on recruitment and retention, featuring a panel of experts including HM Chief Inspector of Education, Children and Skills, Amanda Spielman. Other personal highlights included (among many others!) our 'Teacher Takeaway' session for new conference speakers and the brilliant projects highlighted in our Schools' Exhibition, including Science on Stage. On page 8, you can find out more about the 'Best of Science on Stage' from last year's Festival in Portugal and how to get involved next time.

Please do share your feedback on this year's Annual Conference. We very much welcome your views, to ensure that we're providing the best support and experience for our community. You can complete our survey at <https://www.surveymonkey.co.uk/r/ASE2020Reading>. If you missed this year's event, don't worry, we have a fantastic programme of other conferences and events lined up over the next few months; see the Events section for details.

I couldn't end without congratulating our Field Officer for Wales, Cerian Angharad, who received an MBE in the Queen's New Year's Honours. See page 27 to find out more about the fantastic work she's done and continues to do to support the science education community.



Hannah Russell
Chief Executive

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The Association
for Science Education

Promoting Excellence in Science Teaching and Learning

Editorial

Welcome to May *EiS*.

When I joined ASE last year, nobody could have guessed what challenges lay ahead of us in 2020, as Covid-19 spread across the world.

As in many countries, we have had to adapt to new ways of teaching. Teachers and support staff have bravely kept schools open for vulnerable children and those of key workers, while supporting other young people continuing their learning at home. Many education consultants and technicians have lost valuable income, while student teachers face cancelled placements and grapple with how to prepare for their first term as NQTs. And many of us have had to juggle our work with home schooling, family commitments, illness and, in some cases, family tragedy. Nobody has been left untouched by the pandemic.

Despite the darkness of recent weeks, there have been many actions providing hope for the future. Within our own community, we have seen an outpouring of positivity and offers of assistance. This has enabled us to launch several new activities to support our members and the wider community, ranging from our popular Coronavirus resource hub on the ASE website, to our recent Open Access journals offer and new online events. The sense of camaraderie binding us together as science educators has been inspirational, and we are proud to be part of this community.

That sense of positivity is reflected in this issue of *EiS*, where we bring together a number of ideas and perspectives on how to support teaching and learning in the current crisis, including a selection of practical activities for primary and lower secondary students, hand-picked to support home schooling, as well as ideas for supporting older students with special needs, trainee teacher and teacher educator perspectives on how to cope during the pandemic, and a focus on doing outdoor science beyond the school grounds. We also offer a key article on how to deal with the new assessment requirements in schools.

So – what does all this mean for the future of science education? The latest Wellcome Science Education Tracker, published in March, found that only 41% of young people aged 11-18 in England consider an understanding of science to be important to their everyday lives. If the last few weeks have highlighted anything, it is that the need for a strong future pipeline of scientists, engineers and medics, together with wider scientific literacy for all, has never been clearer. Having a strong and well-supported science education community is vital in making this happen.

No doubt there will be further challenges to come over the next few months, but we stand ready to face them together. Please do continue to get in touch if you would like our help or to offer your support.

We look forward to 'seeing' you at one of our virtual events soon!

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Hannah Russell
Chief Executive

Education in Science

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Education in Science (*EiS*) is the ASE house magazine and is published four times a year. It is sent to all members as one of the many benefits of membership. The contents of this magazine do not necessarily represent the views or policies of ASE except where explicitly identified as such.

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The Association
for Science Education

Promoting Excellence in Science Teaching and Learning

Editorial

Welcome to the September issue of *EiS* and to a new school year like no other before...

In our last issue, we focused on teaching and learning during lockdown. This time we're looking at the return to classroom-based teaching, with a 'Back to School' special, providing a wealth of ideas and perspectives on how to support science teaching and learning in a post-lockdown world. There are

articles on a CALM approach to Covid-19 curriculum catch-up for students aged 5-14; preparing for a new year with a newly qualified teacher; valuable advice on practical work post-lockdown, and an up-to-the-minute summary of practical work in the new 'normal'.

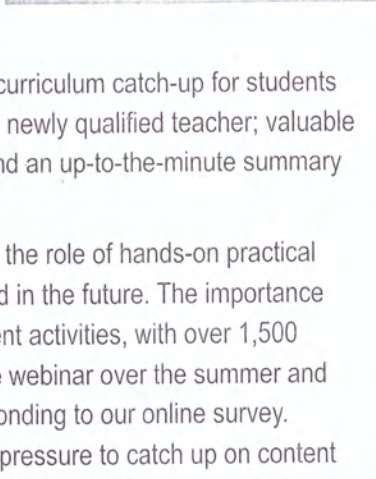
At ASE, we are committed to championing the role of hands-on practical science, both through the current crisis and in the future. The importance of this issue has been reflected in our recent activities, with over 1,500 people registering for our practical science webinar over the summer and almost 900 teachers and technicians responding to our online survey. These activities have highlighted both the pressure to catch up on content missed during lockdown and challenges associated with social distancing within classrooms and school laboratories, both of which will impact the likelihood and frequency of practical work being carried out over the next school year. In response to these issues, and with generous support from the Gatsby Foundation, we are also publishing a new report this September, looking at the *Good Practical Science* benchmarks through a Covid-19 lens and providing practical recommendations for schools, colleges and others working in this area. Please do visit the ASE website (www.ase.org.uk) to download a copy and look out for our practical science webinars, in partnership with learned societies, coming later this term.

Elsewhere in this issue you can find the first in a new regular section for early career teachers, with two of last year's newly qualified teachers providing a fascinating perspective on how Covid-19 has helped to shape and develop their practice.

And of course there's a look back at our online events over the past few months and ahead to our first ever online Annual Conference in January (we are very much looking forward to seeing you there!), as well as an overview of our new BEST STEPS resources and much more.

Lastly, I would like to thank Janice Griffiths for such wonderful support in her role as ASE Chair last year, and to welcome our new Chair, Simon Quinnell, who I'm very much looking forward to working with. Thank you also to all our committee members and others who have supported our Covid-19 activities. We are proud to be part of such a strong community. #wearetheASE

Mannah Richards
Chair, Executive



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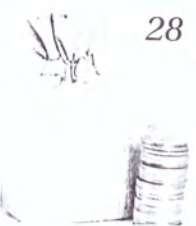
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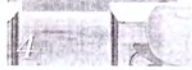
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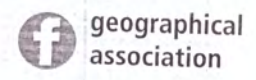
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We'd love to hear more about the great work that is going on in GA member schools and beyond so please do send us your articles, write-ups and photos. The deadline for the summer issue (published in May) is **1 March 2020**. Send your contributions via email to Elaine Anderson (eanderson@geography.org.uk)



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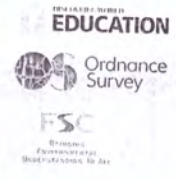
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GA Magazine contains articles, advice, information and all the latest geography education news from the Geographical Association.

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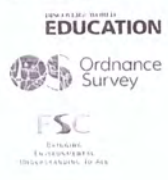
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**Homosexual Indian Civil S
Reading Mah
Dattani After
Decriminaliz
of Section-37**

Bhaskar Lama¹

Abstract

The Indian Supreme Court judgement (6th September 2013) However, the space immediately availed of by the defined space doesn't negate the formation of this identity in civil society. It will that homosexuals encourage ensuing misunderstandings proper medium is necessary that would then treat the Dattani's plays enable the accepting civil society.

Keywords

Civil society, homosexual

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"... True, the word "plague" had been uttered; true, at this very moment one or two victims were being seized and laid low by the disease. Still, that could stop, or be stopped. It was only a matter of lucidly recognizing what had to be recognized; of dispelling extraneous shadows and doing what needed to be done. Then the plague would come to an end, because it was unthinkable, or, rather, because one thought of it on misleading lines. If, as was most likely, it died out, all would be well. If not, one would know it anyhow for what it was and what steps should be taken for coping with and finally overcoming it." {Page 20, of the PDF version of the French novel by Albert Camus, *The Plague*, (*La Peste*, published in 1947), translated into English by Stuart Gilbert, first published in 1948.}}

These are times when the novel corona virus (SARS-CoV-2) that causes the latest pestilence in human history for which the name COVID-19 was coined just recently, is sweeping across the world. The latest reports say that 13,069 people worldwide have perished because of it and 308,564 people in 188 countries of the world have been affected (as on 22 March; 12 Noon IST). The good news is that 95,829 patients worldwide have fully recovered. Several such pandemics have occurred throughout history; recorded history alone provides frightening accounts over the last three millennia, which Camus cites just before the above quote in the novel. We can take heart in the pro-active way in which our country is facing this calamity, hoping for the best outcome in the coming months. The above-quoted lines from the novel reflect exactly the sentiments we exhibit these days. Commentators cite *The Plague* as a super-allegory that illustrated Fascism (popularly characterized as "The Brown Plague" following the "Brown-shirts" of Mussolini, in those times) and its bitter aftermath which overwhelmed Europe at about the same time Camus wrote the novel (during World War II). Critics and students of literature down the last seven decades had endorsed this notion. The book is also illustrative of Camus' concept of "Absurdism" in which he pondered over the meaning of life in the face of inevitable death. He asserted that the individual can make the most of his/her individual freedom and do things that give meaning to his/her life. Honestly countenancing such testing periods, as urged by Socrates {"The unexamined life is not worth living," as narrated in Plato's *Apology* (38a 5-6)} makes one's existence meaningful, Camus seems to imply.

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People all over the world have spent more than six months of their lives in COVID-19 conditions and we Indians are in the second phase of Unlocked-2, or the process of bowing out of the grim lockdown period that extended from 25th March to 31 May. COVID-19 cases have crossed the sixteen million mark worldwide, and more than six hundred thousand have died by now, of which 1.34 million cases and thirty-two thousand deaths happening in India (as on 26th July). By this time, the situation has become too complex. Recently, the *New York Times* in its blog brought out the following bullet-points about COVID-19, which sum up the global situation for us:

- We'll have to live with this for a long time.
- You should be wearing a mask.
- American public health infrastructure needs an update.
- Responding to the virus is extraordinarily expensive.
- We have a long way to go to fix virus testing.
- We can't count on herd immunity to keep us healthy.
- The virus produces more symptoms than expected.
- We can worry a bit less about infection from surfaces.
- We can also worry less about a mutating virus.
- We can't count on warm weather to defeat the virus.

Of the above, items four and five seem confined only to the US, but the implications are applicable to us also. There is no doubt that our public health infrastructure needs strengthening to meet similar public health emergencies in future too.

There are, of course, reassuring reports of vaccines being developed, with contradictory claims of trial periods extending from three months to one year. For now, the only way to escape contagion is maintaining social distance, wearing a mask, and washing or sanitizing hands. Social distancing has literally restructured society, with the intimate touch absent in human interactions. No shaking hands to seal business deals. The traditional Indian way of greeting with joined palms is in vogue now. Lovers, married couples, parents-offspring, students-teachers, boss and employees, crowds in public places and so on must keep at least two metres' distance. Shopping malls, cinemas and theatres, religious gatherings, political gatherings, sporting galas, etc., are off-limits for the crowds for now.

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IMPRESSIONS, EXPRESSIONS

This is the third issue of *Indian Literature* that is coming out after the COVID-19-related lockdown was imposed on 25th March 2020. In the previous two issues, I have shared my thoughts about the condition of humanity after the pandemic struck. I cannot but continue to dwell on our current situation, as we are far from seeing an end to it. If I do not mention anything about it, it will appear as if it must be accepted as the new normal, which it is not. However, we find from some news-reports that people in certain metropolises have plunged back into normal life regardless of the consequences. It is better to keep in mind the reality that these are abnormal times, and the pandemic-free wholesome times are yet to come. Therefore we have to be aware that just as we wear face masks, maintain social distancing, and use hand sanitisers, these measures are meant only for these times. Only such thoughts will cheer one up.

No one can now predict how long it is going to take for the pestilence to die down, but the debilitating effect it has on the world's leading economies is on record, indicating the long-term harm it can inflict on the human race. Major activities like running of educational institutions and anything that requires more than 50 people to gather, are still unthinkable. The terrible psychological consequences of the home-confinement of people — especially children, youth, and the aged — are becoming apparent, as reflected in news reports and features.

Experts, like Dr. P.K. Sasidharan, Professor and Head, Department of Medicine (Retd), Government Medical College, Kozhikode, Kerala, who gave out a video message recently, suggest that our approach to prevention or cure of the pandemic has to be reassessed. In every virus attack, there are three inevitable factors involved: the agent, the host, and the environment, and all three factors must be taken into account while devising countermeasures. In the present case, the agent is the virus, the host is the human body, and the environment is what determines the spread of the droplets from the host's mouth, which determines the external actions related to the prevention of the contagion. Many eminent physicians specializing in the field of contagious diseases point out that the approach of most of the world governments so far, except Sweden, was centred around only the agent and not on the host and environment. Decisive action by the administrations in countries around the

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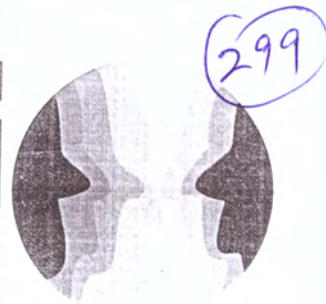
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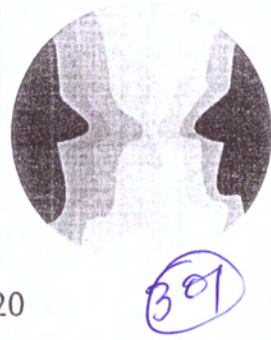


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January 2020

Volume 67

Number 1

Articles

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- 1 It's Like Herding Cats: Atheist Minority Stress, Group Involvement, and Psychological Outcomes
Melanie E. Brewster, Brandon L. Velez, Elizabeth F. Geiger, and Jacob S. Sawyer
Atheist people in the United States experience marginalization that can take the form of discrimination and/or stigma because of their religious nonbelief. These negative experiences may contribute to poorer mental health outcomes (i.e., increased distress; lower self-esteem). Being involved in a community of other atheist people may be associated with some benefits, such as higher self-esteem.
- 14 The Effectiveness of Helping Skills Training for Undergraduate Students: Changes in Ethnocultural Empathy
Yun Lu, Clara E. Hill, Gregory R. Hancock, and Brian Taehyuk Keum
We found evidence that Hill's model (2014) of helping skills training may help White undergraduate students enhance some aspects of their ethnocultural empathy. In contrast, racial minority women started high and remained high on ethnocultural empathy. These findings suggest the value of incorporating helping skills training in multicultural education and the importance of examining the intersection of race and gender to understand different student needs in helper training.
- 25 What "Good Outcome" Means to Patients: Understanding Recovery and Improvement in Psychotherapy for Major Depression From a Mixed-Methods Perspective
Melissa Miléna De Smet, Reitske Meganck, Rosa De Geest, Ufuoma Angelica Norman, Femke Truijens, and Mattias Desmet
Good psychotherapy outcome cannot be grasped by symptom reduction according to depressed patients' perspectives: Patients feel empowered, find personal balance but also encounter ongoing struggle. This shows the importance of understanding statistical outcome findings within patients' experiences.
- 40 Dyadic, Longitudinal Associations Among Outcome Expectation and Alliance, and Their Indirect Effects on Patient Outcome
Michael J. Constantino, Adi Aviram, Alice E. Coyne, Katie Newkirk, Roger P. Greenberg, Henny A. Westra, and Martin M. Antony
When patients and therapists cultivate a shift toward more optimistic outcome expectation (OE) for a given treatment, it can translate into a better personal experience of their relationship; moreover, when patients shift toward higher OE, it can be contagious for their therapist's experience of the alliance. These OE-alliance "actor" and "partner" effects can also then be parlayed into symptom reduction in brief psychotherapy for generalized anxiety disorder.
- 51 Change Processes Related to Long-Term Outcomes in Eating Disorders With Childhood Trauma: An Explorative Qualitative Study
Malin E. Olofsson, Hanne W. Oddli, Asle Hoffart, Hanna P. Eielsen, and KariAnne R. Vrabel
This study uses a patient perspective on therapeutic change processes in good and poor outcome cases at 1-year follow-up. Findings are reported from a patient sample for which proper treatments and successful outcomes are scarce: eating disorder patients with childhood trauma. Findings indicate that trauma exposure, fostering patient agency, and an experience of a supportive yet agency-promoting therapist-patient relationship may be potent ED treatment elements across treatment models.

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- 66 Therapists' Interventions as a Predictor of Clients' Emotional Experience, Self-Understanding, and Treatment Outcomes
Hadar Fisher, Eshkol Rafaeli, Eran Bar-Kalifa, Jacques P. Barber, Nili Solomonov, Tuvia Peri, and Dana Atzil-Slonim
Both emotional experience and self-understanding are therapeutic clients' processes associated with improved client functioning. Therapists' use of moderate levels of AF interventions may enhance clients' in-session emotional experience and greater use of psychodynamic interventions may facilitate better client self-understanding.

- 79 Childhood Maltreatment Predicts Daily Stressor Exposure in College Students but Not Perceived Stress or Stress Reactivity
Majel R. Baker, Viann N. Nguyen-Feng, Haema Nilakanta, and Patricia A. Frazier
Clinicians working with young adults, particularly college students, should be aware that many have experienced at least some form of child maltreatment. Assessment of maltreatment may therefore be important. Students who have experienced maltreatment reported more daily stressors, including more interpersonal conflicts, financial stress, job issues, career concerns, lower grades, and more daily negative mood. In contrast, they did not generally perceive their stressors as more severe or react to them more strongly. Therefore, interventions that aim to reduce stressors in students' lives may be more effective than interventions that focus on stress appraisals for those with a history of childhood maltreatment.

- 90 The Effect of Implementing the Partners for Change Outcome Management System in a Nationwide Student Counseling Service
Ole K. Østergård, Mia S. O'Toole, Majken M. Svendsen, and Esben Hougaard
This study was not able to confirm the positive effect of using the Partners for Change Outcome Management System (PCOMS) as a feedback tool in student counseling when using an outcome measure independent of the PCOMS intervention. Routine outcome monitoring does not necessarily improve client outcome, even when it has been acceptably implemented.

- 104 Suicide Among College Students in Psychotherapy: Individual Predictors and Latent Classes
Jeffrey A. Hayes, Justin Petrovich, Rebecca A. Janis, Ying Yang, Louis G. Castonguay, and Benjamin D. Locke
This study demonstrates that psychotherapists should attend to particular indicators of possible suicide behavior among their college student clients and that there are different types of suicidal college student clients, each with their own associated risk of suicide behavior.

Brief Reports


- 115 Does Practice Quality Mediate the Relationship Between Practice Time and Outcome in Mindfulness-Based Stress Reduction?
Simon B. Goldberg, Cara Knoeppel, Richard J. Davidson, and Lisa Flook
This study suggests that improvement in practice quality functions as a mechanism linking meditation practice time and outcomes within mindfulness-based stress reduction.

- 123 The Ripple Prediction of Ambiguity Aversion in Career Decision-Making
Hui Xu
The present study contributes to career research and counseling by revealing that individuals with less ambiguity aversion in career decision-making tend to experience job and life satisfaction. Additionally, the results show that the likely reason for this relation is that individuals with less ambiguity aversion tend to develop an adaptive decision-making style and a person-environment fit in their current job.

- 132 Seeking Help Despite the Stigma: Experiential Avoidance as a Moderated Mediator
Rachel E. Brenner, Marilyn A. Cornish, Patrick J. Heath, Daniel G. Lannin, and Madelyn M. Losby
This study introduced the idea that it may be possible to increase help seeking without needing to reduce stigma. Experiential avoidance moderated the indirect effect of public stigma and the direct effect self-stigma of seeking psychological help on help-seeking intentions, suggesting the use of tailored interventions aimed at increasing emotional acceptance.

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- 141 Social Justice Interdependence Among Students in Counseling Psychology Training Programs: Group Actor-Partner Interdependence Model of Social Justice Attitudes, Training Program Norms, Advocacy Intentions, and Peer Relationships
Brian TaeHyuk Keum and Matthew J. Miller
Community and social justice interdependence in training programs is important for supporting students' social justice interests. Compared to individual attitudes and perceptions, students' advocacy intentions were higher when other students in the program collectively espoused and perceived greater social justice principles among students and faculty in their programs. Students in programs with closer peer relationships, who collectively perceived higher social justice norms, reported greater advocacy intentions.
- 156 Trans Adolescents' Perceptions and Experiences of Their Parents' Supportive and Rejecting Behaviors
Kelly C. Johnson, Allen J. LeBlanc, Paul R. Sterzing, Julianna Deardorff, Tamar Antin, and Walter O. Bockting
This study qualitatively describes the specific parental behaviors that trans adolescents perceive as rejecting, supportive, or mixed (i.e., simultaneous supportive and rejecting behaviors). Overall, participants perceived that rejecting and mixed parental behaviors contributed to a range of psychosocial problems (e.g., depression and suicidal ideation), while supportive behaviors increased positive wellbeing. Interventions should target these specific parental behaviors to improve trans adolescent mental health and well-being.
- 171 Testing a Critical Cultural Wealth Model of Well-Being Among First-Generation Students
Ryan D. Duffy, Haram J. Kim, Nicholas P. Gensmer, Leslie H. Pendleton, Shaun Boren, and Patton O. Garriott
First-generation students are enrolling at colleges and universities at higher rates. The current study showcased predictors of career choice and life satisfaction among this growing population, demonstrating the importance of feeling choice in one's career and having a sense of belonging on campus.
- 184 College Alcohol Belief and Alcohol Use: Testing Moderations by Cultural Orientations and Ethnicity
P. Priscilla Lui, Shalanda R. Berkley, and Byron L. Zamboanga
Although beliefs that alcohol plays an integral part in college experiences are associated with greater alcohol consumption, individuals who are less immersed in their ethnic heritage cultures are more likely to be drinkers and are predisposed to greater alcohol consumption. This study highlights the importance of considering both cultural factors and individual differences in cognitions that underlie alcohol involvement in both Euro and Asian American groups.

195 A Qualitative Exploration of Women's Work Aspirations and Beliefs on Meritocracy
Saliha Kozan, Ellen Gutowski, and David L. Blustein
 This study shares voices of American women from diverse backgrounds by documenting women's work aspirations and beliefs in the American ethos of meritocracy in relation to their working lives. It provides insights on individual, interpersonal, and systemic factors that affect women's work-related experiences and aspirations.

208 Career-Related Parental Behaviors, Adolescents' Consideration of Future Consequences, and Career Adaptability: A Three-Wave Longitudinal Study
Yue Liang, Nan Zhou, Kai Dou, Hongjian Cao, Jian-Bin Li, Qinglu Wu, Yuxuan Liang, Zhong Lin, and Yangang Nie
 The present study suggests that career-related parental support may foster adolescents' capacity of thinking about future possible careers and making career-related decisions, promote their curiosity to explore different potential occupational roles, and facilitate their confidence in managing career-related tasks. More importantly, it highlights that parents' career-related supportive behaviors may promote adolescents' abilities to consider the potential influences of their current behaviors on future career paths, which, in turn, may ultimately benefit adolescents' acquisition of psychological resources for coping with challenges during their career transition period.

222 Processes of Therapeutic Change: Results From the Cornell-Penn Study of Psychotherapies for Panic Disorder
Jacques P. Barber, Barbara Milrod, Robert Gallop, Nili Solomonov, Marie G. Rudden, Kevin S. McCarthy, and Dianne L. Chambless
 Panic disorder is associated with disability and personal suffering, posing a significant public health problem not fully remediated by available treatments. Identifying processes of change associated with symptomatic improvement can guide development of targeted interventions and potentially improve response rates. We found that both the ability to reflect on panic symptoms and to accurately interpret one's bodily sensations predict subsequent symptomatic improvement in both cognitive-behavioral therapy (CBT) and brief psychodynamic therapy. This suggests that a sharper focus on these elements has the potential to improve outcomes in short-term treatments of panic disorder.

232 Ambiguity Aversion in Career Decision-Making: Its Longitudinal Prediction for College Career Outcomes
Hui Xu and Papa Adams
 The present study longitudinally demonstrates that college students with less ambiguity aversion in career decision-making tend to experience better career outcomes by the end of college. While the study supports the clinical utility of reducing ambiguity aversion, it additionally reveals that commitment anxiety likely explains the link from ambiguity aversion to career outcomes.

241 Living a Calling and Perceived Work Ability in Domestic Violence Services
Benjamin M. Walsh, Allison Burrus, Dana Kabat-Farr, Alyssa K. McGonagle, Elizabeth Call, Allie McIntire, and Frances C. Shen
 This study advances the idea that living out one's calling is a beneficial resource, especially in stressful work environments like domestic violence prevention. Women working in domestic violence services who are able to live out their calling perceive less relationship conflict among coworkers, which enhances their perceived ability to do this important work.

251 Women Attaining Decent Work: The Important Role of Workplace Climate in Psychology of Working Theory
Jessica W. England, Ryan D. Duffy, Nicholas P. Gensmer, Haram J. Kim, Aysenur Buyukgoze-Kavas, and Dylan M. Larson-Konar
 Experiences of marginalization and economic constraints impact women's ability to secure decent work. Workplace climate for women employees is also an important additive predictor of their sense of choice and attainment of decent work, emphasizing the need for further investigation into how workplace climate shapes the systemic oppression of women.

Brief Report

265 College Environment and Basic Psychological Needs: Predicting Academic Major Satisfaction

Mary Schenkelfelder, Elise A. Frickey, and Lisa M. Larson


When students feel supported by faculty and peers in their academic major, they feel more able to make their own choices, to succeed academically, and to connect with others in their major. Students' sense of autonomy in their major plays an important role in explaining the relationship between perceived faculty and peer support and students' satisfaction in their academic major.

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Item Calibration Methods With Multiple Subscale Multistage Testing

Chun Wang

University of Washington

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*The articles were accepted under the previous editors.

Many large-scale educational surveys have moved from linear form design to multistage testing (MST) design. One advantage of MST is that it can provide more accurate latent trait (θ) estimates using fewer items than required by linear tests. However, MST generates incomplete response data by design; hence, questions remain as to how to calibrate items using the incomplete data from MST design. Further complication arises when there are multiple correlated subscales per test, and when items from different subscales need to be calibrated according to their respective score reporting metric. The current calibration-per-subscale method produced biased item parameters, and there is no available method for resolving the challenge. Deriving from the missing data principle, we showed when calibrating all items together the Rubin's ignorability assumption is satisfied such that the traditional single-group calibration is sufficient. When calibrating items per subscale, we proposed a simple modification to the current calibration-per-subscale method that helps reinstate the missing-at-random assumption and therefore corrects for the estimation bias that is otherwise existent. Three mainstream calibration methods are discussed in the context of MST, they are the marginal maximum likelihood estimation, the expectation maximization method, and the fixed parameter calibration. An extensive simulation study is conducted and a real data example from NAEP is analyzed to provide convincing empirical evidence.

With the advent of web-based technology, computer based testing (a.k.a., online testing) is becoming the mainstream form of large-scale educational assessments. The landscape of educational assessment is changing rapidly with the growth of computer-administered tests. As an example, National Assessment of Educational Progress (NAEP), the largest nationally representative and continuing assessment (e.g., Beaton & Zwick, 1992), has recently moved from paper-based assessment (PBA) to digitally based assessment (DBA).

A particular mode of DBA that NAEP has piloted for Mathematics is multistage testing (MST), which refers to a testing format where "subsets of test items are presented to students based on item difficulty and student performance" (Governing Board and NAEP Resources¹). Figure 1 illustrates a simple, two-stage MST design. The routing block contains items spread across a typical range of difficulty levels in PBA, and the targeted blocks differ by difficulty—blocks of easy, medium, and hard items.

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Integrating Multiple Sources of Validity Evidence for an Assessment-Based Cognitive Model

Thomas Langenfeld, Jay Thomas, Rongchun Zhu, and Carrie A. Morris

An assessment of graphic literacy skills based on a cognitive model of reading comprehension. Model validity was evaluated using data derived from large-scale field testing. Psychometric analyses were augmented with eye-tracking, pupillometry, and cognitive load analyses. Results provide strong evidence supporting the use of gaze pattern analysis in assessment. Implications for assessment are discussed.

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Construct validation is critical to the interpretation of test scores (Kane, 2006; Kane, 2013; Mislevy, 2006). As we come to increasingly appreciate the value of cognitive modeling to inform item design (Gorin, 2001; Luecht, 2013), we need a “simplified description of human learning tasks, which helps to characterize the processes of learning that have been acquired and to inform performance” (p. 6). Cognitive models of learning involved in decoding information, reading, and problem making (Keehner, Gorin, Feng, & Wang, 2013) are those that constitute educational or psychological processes by which the formalized processes by which a student works to solve the problem.

Designing assessments grounded in cognitive models (i.e., items) informed by cognitive models of the evidence elicited by the tasks and the tasks themselves. By aligning the tasks or items with the processes and uses of test scores is important (Nichols, 2017; Gorin, 2006; Mislevy, 2006). We require as sources of evidentiary evidence to evaluate a cognitive model. The

*The articles were accepted under the previous editors.

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*The article written by Sunbok Lee (that starts on page 443) was accepted by the previous editors.

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RESEARCH ARTICLE

Validity evaluation of the Place-Based Learning Paradigm Scale

George M. Harris
University of Hawaii

ABSTRACT
The Children's Learning Environment Scale (CLE) with older participants showed invariance between these two groups, consistent in response to expected when critiques of the scale in its present form.

Introduction

Measuring environmental quality for decades (Harris instrument for the Dunlap and Van Jones, 2000). The scale across multiple studies.

The overarching paradigm, which is for human use and on the environmental statements with simplified into five factors (c) anthropocentric the anthropocentric respondent with it is worded as an

The primary primary environmental Dunlap's (2008) that it would be a samples of the participants about how well the response was about conflated the whole that although the

CONTACT George M. Harris
Mānoa, 1776 University
Color versions of one or more of the figures in this article are available online at <https://doi.org/10.1080/10704965.2019.1644444>
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<p>EDITOR Meredith Marsh <i>Lindenwood University</i></p> <p>ASSOCIATE EDITORS Timothy Hawthorne <i>University of Central Florida</i></p> <p>Injeong Jo <i>Texas State University</i></p> <p>Alex Oberle <i>University of Northern Iowa</i></p>	<p>GEORGE J MILLER AWARD Citation for John Harrington, Jr. 2019 Recipient of the George J Miller Award for Distinguished Service <i>Sarah Witham Bednarz</i></p> <p>ARTICLES</p> <p>From Hopelessness to Transformation in Geography Classrooms <i>Brian Petersen and Jessica R. Barnes</i></p> <p>An Assessment of Geospatial Technology Integration in K–12 Education <i>Zachary M. Osborne, Saskia L. van de Gevel, Montana A. Eck, and Margaret Sugg</i></p> <p>Defining and Measuring the Influences of GIS-Based Instruction on Students’ STEM-Relevant Reasoning <i>Erin A. Jant, David H. Uttal, Robert Kolvoord, Katherine James, and Camille Msall</i></p> <p>Geography Outdoor Education from the Perspective of Czech Teachers, Pupils and Parents <i>Hana Svobodová, Darina Mísařová, Radek Durna, and Eduard Hofmann</i></p>	<p>1</p> <p>3</p> <p>12</p> <p>22</p> <p>32</p>
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[Cover Image: NCGE along with NCSS (National Council for the Social Studies) held their annual meetings in downtown Austin, Texas from November 22–24, 2019. In addition to informative sessions on geography education, participants enjoyed the unique human and physical geography of the city. Image courtesy of Kirk Goldsberry.]

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[Cover Image: Hurricane Irma over the Caribbean on September 6, 2017. Perugini and Bodzin's article, "Using Web-based GIS to Assess Students' Geospatial Knowledge of Hurricanes and Spatial Habits of Mind" explores how students can use web-based GIS with real-life datasets to better understand and prepare for these types of catastrophic storms. Image source: NOAA.]

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[Cover Image: Children's normal spring spaces have been significantly impacted by COVID-19. At the time of publication, most US schools remain closed as do most playgrounds and many public parks. Image courtesy of Lucy Marsh.]

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[Cover Image: Learning about slash and burn agriculture in an indigenous community just outside of Tena, Ecuador. This plot produces cassava and plantains; both products are planted and harvested on a rotating basis. Photo credit: Meredith Marsh.]

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[Cover Image: Map of the distribution of risk factors throughout Portugal from Nunes, Martins, and Azevedo's interesting research looking at spatial perception of risk among geography students. Source: Direção Geral do Território (DGT) 2019.]

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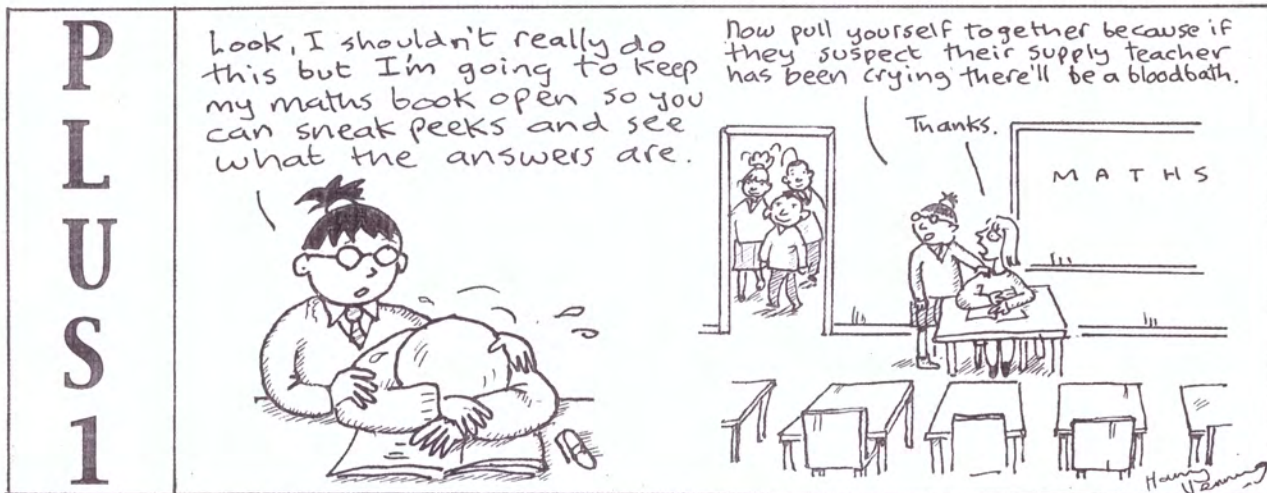


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