

Preliminary program of symposia

BY DAY

Wednesday 11th

Topic: Cognition and Perception

Time: 11.30-13.10

Room: Auditorium

Cognitively engaging physical activity and cognitive functions in children and young adults

Symposium chair: *Caterina Pesce (1), Philip Tomporowski (2)*

(1) Department of Human Movement and Health Sciences, University of Rome "Foro Italico", Rome, Italy; (2) Department of Kinesiology, University of Georgia, Athens, GA (USA)

Programme

1) Breaking up classroom sitting with cognitively challenging active breaks to improve children's cognition.

Mazzoli E (1), Salmon J (2), Teo WP (2), Pesce C (3), He J (4), Ben-Soussan TD (5), Barnett LM (1,2)

(1) School of Health and Social Development, Faculty of Health, Deakin University, Geelong, Australia; (2) Institute for Physical Activity and Nutrition, Faculty of Health, Deakin University, Geelong, Australia; (3) Department of Human Movement and Health Sciences, University of Rome "Foro Italico", Rome, Italy; (4) School of Psychology, Faculty of Health, Deakin University, Geelong, Australia; (5) Research Institute for Neuroscience, Education and Didactics, Cognitive Neurophysiology Laboratory, Patrizio Paoletti Foundation, Assisi, Italy

2) Learning by Moving: Effects of aerobic and cognitively engaging physical activity on cardiovascular fitness, motor skills and brain functioning: A cluster randomized controlled trial.

Van der Fels IMJ (1), Hartman E (1), Bosker RJ (2), de Greeff JW (1), de Bruijn AGM (2), Meijer A (3), Oosterlaan J (3, 4), Renken RJ (5), Königs M (3, 4), Smith J (1), Visscher C (1)

(1) University of Groningen, University Medical Center Groningen, Center for Human Movement Sciences, Groningen, The Netherlands; (2) University of Groningen, Groningen Institute for Educational Research, Groningen, The Netherlands; (3) Vrije Universiteit Amsterdam, Faculty of Behavioural and Movement Sciences, Amsterdam, The Netherlands; (4) Emma Children's Hospital, Amsterdam UMC, University of Amsterdam, Emma Neuroscience Group, Amsterdam, The Netherlands; (5) University of Groningen, University Medical Center Groningen, Cognitive Neuroscience Center, Biomedical Sciences of Cells and Systems, Groningen, the Netherlands

3) Integrating physical activity in primary school students' English lessons.

Mavilidi MF (1), Lubans DR (1), Morgan P (1), Eather N (1), Karayanidis F (2), Lonsdale C (3), Noetel M (3), Shaw K (4), Miller A (4), & Riley N (1)

(1) Priority Research Centre for Physical Activity and Nutrition, University of Newcastle, University Drive, 2308 Newcastle, Australia; (2) School of Psychology, Faculty of Science, University of Newcastle, University Drive, 2308 Newcastle, Australia; (3) Institute for Positive Psychology and Education, Faculty of Health Sciences, Australian Catholic University, 2060 North Sydney, Australia; (4) School of Education, Faculty of Education and Arts, University of Newcastle, Newcastle, Australia

4) Acute Exercise and Memory: The Role of Type and Timing.

Tomporowski P

University of Georgia, Department of Kinesiology, Athens, GA (USA)

5) Cognitively engaging physical activity and cognitive performance: Is there a dose-response relationship?

Schmidt M (1), Benzing, V (1), Bonadimann P (1), Martin-Niedecken, AL (2)

(1) Institute of Sports Science, University of Bern, Switzerland; (2) Subject Area Game Design, Department of Design, Zurich University of the Arts, Zurich, Switzerland

Topic: Infant development

Time: 11.30-13.10

Room: Sala Convegni

Origins of manual skill

Symposium chair: Jeffrey J. Lockman

Department of Psychology, Tulane University, New Orleans, LA, USA

Programme

1) The impact of object complexity on infant reaching latency.

John P. Connell and Daniela Corbetta

Department of Psychology, University of Tennessee, Knoxville, USA

2) Development of flexibility during reaching movements.

Christiane Lange-Keuttner

School of Social Sciences-Psychology, London Metropolitan University, London, United Kingdom

3) Motor foundations of tool use.

Jeffrey J. Lockman

Department of Psychology, Tulane University, New Orleans, LA, USA

4) Influence of dynamical changes in infants' action and strategy selection in the discovery of tool use.

Lauriane Rat-Fischer (1), S. Forestier (2), P.Y. Oudeyer (2), K. Plunkett (3), M. Hamer (3), A. Kacelnik (4)

(1) Laboratoire Ethologie, Cognition, Développement (LECD), Université Paris Nanterre, France; (2) INRIA Bordeaux, France; (3) Experimental Psychology, Medical Sciences Division, Oxford University, UK; Department of Zoology, University of Oxford, UK

Topic: Teaching, Learning

Time: 11.30-13.10

Room: Sala Multifunzionale

Water competence of young children (initiative from the AIESEP early years SIG group)

Symposium chair: Kristine De Martelaer

Department of Movement and Sport Science, Vrije Universiteit, Brussel, Belgium & Universiteit Utrecht, The Netherlands

Programme

1) Reliability of the CEReKi water competence testing battery.

Jidovtseff Boris, Boulanger Julie, Dheur Caroline, Vidal Andora

Research Unit on Childhood, Department of Movement Sciences, University of Liège, Belgium, Belgium

2) Face validity of the pictorial scale of perceived water competence

Morgado, L. (1), Martelaer, K. (2), Costa, A. M. (3), Sääkslahti, A. (4), Howells, K. (5), Barnett, L. (6), D'Hondt, E. (7), Jidovtseff, B. (1)

(1) Department of Movement Sciences, University of Liège, Belgium; (2) Department of Movement and Sport Science, Vrije Universiteit, Brussel, Belgium; (3) Department of Sport Sciences, University of Beira Interior, Covilhã, Portugal; (4) Department of Sport Sciences, University of Jyväskylä, Jyväskylä, Finland; (5) School of Childhood and Education Sciences, Canterbury Christ Church University, Canterbury, UK; (6) School of Health and Social Development, Faculty of Health, Deakin University, Geelong, Australia

3) Relationship between children's and parents' perceived water competence of the child

De Martelaer, K. (1,2), Van der Linden, E. (1), Buelens, L. (1), Stainier, J. (1), D'Hondt, E. (1)

(1) Department of Movement and Sport Science, Vrije Universiteit, Brussel, Belgium; (2) Department of Education and Pedagogy, University of Utrecht, The Netherlands

4) Aquatic Competence - 'adding capital' to young children's.

Costa, A. M. (1,2), Garrido, N. D. (2,3), Campaniço, J. (3), Silva, A. J. (3,4)

(1) Department of Sport Sciences, University of Beira Interior, Covilhã, Portugal; (2) Portuguese Swimming Coaches Association; (3) Departamento de Ciências do Desporto, Exercício e Saúde, Universidade de Trás-os-Montes e Alto Douro (UTAD), Vila Real, Portugal; (4) Portuguese Swimming Federation

Topic: Teaching, Learning

Time: 11.30-12.30

Room: Bouvette

Active school communities? Concept, efficacy, effectiveness and feasibility of the community-based primary school physical activity intervention Healthy Children in Sound Communities

Symposium chair: Utesch Till (1), Naul Roland (1,2)

(1) Institute for Sport and Exercise Sciences, University of Münster, Münster, Germany; (2) Willibald Gebhardt Institute, Münster, Germany

Symposium Discussant: Scheuer, Claude

Faculty of Language and Literature, Humanities, Arts and Education, University of Luxembourg, Esch-sur-Alzette, Luxembourg and European Physical Education Association (EUPEA)

Programme

1) Healthy Children in Sound Communities' – A multi-component community-based intervention approach to foster physical activity in children

Dreiskämper, Dennis (1, 2), Utesch, Till (1), l'Hoir, Monique (3), Henning, Lena (1), Naul, Roland (1, 2)

(1) Institute for Sport and Exercise Sciences, University of Münster, Münster, Germany; (2) Willibald Gebhardt Institute, Münster, Germany; (3) Wilhelmina Children's Hospital, University Medical Center Utrecht (UMCU), University of Utrecht, The Netherlands

2) Effectiveness and feasibility of the community-based physical activity intervention Healthy Children in Sound Communities (GER/PL)

Henning Lena (1), Dreiskämper Dennis (1, 2), Utesch Till (1), Becker Silke (3), Zimmer Annegret (3), Naul Roland (1, 2)

(1) Institute for Sport and Exercise Sciences, University of Münster, Münster, Germany; (2) Willibald Gebhardt Institute, Münster, Germany; (3) European Sports Academy

3) A comparison of a multi- and single-component school-based physical activity intervention on BMI and motor development in primary school

Utesch Till (1), Niehues David (1,2), Dreiskämper Dennis (1, 2), Naul, Roland (1, 2)

(1) Institute for Sport and Exercise Sciences, University of Münster, Münster, Germany; (2) Willibald Gebhardt Institute, Münster, Germany

Topic: Infant development

Time: 14.30-16.10

Room: Auditorium

The importance of early motor intervention for learning and development

Symposium chair: *Patrizia Tortella*

Faculty of Educational Sciences, Free University of Bozen, Italy

Programme

1) Story telling as motivating factor for motor task execution in pre-schoolers: age related differences in efficacy

Patrizia Tortella (1,2), Guido Fumagalli (2,3)

(1) Faculty of Educational Sciences, Free University of Bozen, Italy; (2) Laboratorio 0246 - Ghirada-Treviso, Italy; (3) Department of Diagnostics & Public Health, University of Verona, Italy.

2) Developmental cascades: how new motor skills create new opportunities for exploration and learning.

Monika Haga

Department of Teacher Education, Norwegian University of Science and Technology, Trondheim, Norway

3) Gross motor skill development of US preschoolers: Developmental delay does not discriminate

Ali Brian (1), Adam Pennell (1), Sally Taunton (1), Angela Starrett (1), David Stodden (1), (2) Candice Howard-Shaughnessy, Jacqueline D. Goodway (3), Danielle Wadsworth (4), Mary Rudisill (4)

(1) Department of Physical Education, University of South Carolina, Columbia, SC, USA; (2) Department of Kinesiology and Health Promotion, Troy University, Troy, Alabama, USA; (3) Department of Human Sciences at The Ohio State University, Columbus, Ohio, USA; (4) Auburn University, College of Education, Auburn, Alabama, USA

4) Baby swimming: exploring the effects of early intervention on subsequent motor abilities

Hermundur Sigmundsson

Department of Psychology, Norwegian University of Science and Technology, Trondheim, Norway

Topic: Cognition and Perception

Time: 14.30-15.30

Room: Sala Convegni

Towards a better understanding of perceived motor competence in young people: Theoretical and practical considerations

Symposium chair: *Isaac Estevan(1), Farid Bardid (2,3)*

(1) AFIPS Research Group, Department of Teaching of Music, Visual and Corporal Expression, University of Valencia, Spain; (2) School of Education, University of Strathclyde, Glasgow, UK; (3) Department of Movement and Sports Sciences, Ghent University, Belgium

Symposium discussant: *Lisa Barnett*

School of Health and Social Development, Deakin University, Australia

Programme

1) A systematic review and meta-analysis of the relationship between children's and adolescents' actual and self-perceived motor competence

An De Meester(1), Lisa Barnett(2), Ali Brian(3), Femke Van Duyse (1), Megan Irwin (3), David Stodden (3), Eva D'Hondt (4), Judith Jimenez (5), Leah Robinson (6), Steve Bowe (2), Matthieu Lenoir (1), Leen Haerens (1)

(1) Department of Movement and Sports Sciences, Ghent University, Ghent, Belgium; (2) School of Health and Social Development, Deakin University, Australia;; (3) Department of Physical Education, University of South Carolina, Columbia, SC, USA; (4) Department of Movement and Sports Sciences, Vrije Universiteit Brussel, Belgium; (5) School of Physical Education and Sports, University of Costa Rica, Costa Rica; (6) School of Kinesiology, University of Michigan, Ann Arbor, USA

2) How the choice of measuring instrument impacts the strength of the relationship between children's actual and perceived motor competence.

Ryan S. Sacko (1), An De Meester (2), Megan Irwin (3), Chelsea Shortt (3), David F. Stodden (3)

(1) Department of Health and Human Performance, The Citadel, Charleston, SC USA; (2) Department of Movement and Sports Sciences, Ghent University, Ghent, Belgium;(3) Department of Physical Education, University of South Carolina, Columbia, SC, USA

3) The role of perceived motor competence and perceived physical fitness in the relationship between actual motor competence and physical activity in early adolescents: A mediation analysis

Isaac Estevan (1), Till Utesch (2), Cristina Menescardi (1), Javier Molina-García (1), Lisa Barnett (3), Farid Bardid (4,5)

(1) AFIPS Research Group, Department of Teaching of Music, Visual and Corporal Expression, University of Valencia, Spain; (2) Department of Sport Psychology, University of Münster, Germany; (3) Institute of Physical Activity and Nutrition, School of Health and Social Development, Deakin University, Australia; (4) School of Education, University of Strathclyde, Glasgow, UK; (5) Department of Movement and Sports Sciences, Ghent University, Belgium

Topic: Development

Time: 14.30-16.10

Room: Sala Multifunzionale

Gross motor coordination & friends. A multifaceted and multicultural perspective

Symposium chair: José Maia

Centre of Research, Education, Innovation and Intervention in Sport (CIFi2D), Faculty of Sport, University of Porto, Porto, Portugal

Programme

1) What exactly do we know from gross motor coordination longitudinal studies?

José Maia

Centre of Research, Education, Innovation and Intervention in Sport (CIFi2D), Faculty of Sport, University of Porto, Porto, Portugal

2) Gross motor coordination, physical fitness, physical activity and metabolic syndrome. Stories from twin and sibling studies.

Sara Pereira

Centre of Research, Education, Innovation and Intervention in Sport (CIFi2D), Faculty of Sport, University of Porto, Porto, Portugal

3) How sound is the allometric approach to better illuminate children gross motor coordination results?

Marcos André

Department of Physical Education. University of Pernambuco, Recife, Brazil.

4) How consistent are environmental “effects” on physical growth, physical fitness and gross motor coordination?

Carla Santos

Centre of Research, Education, Innovation and Intervention in Sport (CIFI2D), Faculty of Sport, University of Porto, Porto, Portugal

Topic: Cognition and Perception

Time: 14.30-16.10

Room: Bouvette

Evaluation, understanding and practice of creativity on children’s motor development

Symposium chair: *Danilo Bondi, Sergio Di Sano*

Department of Neuroscience, Imaging and Clinical Sciences, University “G. d’Annunzio” of Chieti-Pescara, Chieti, Italy

Programme

1) Creativity and motor learning: focus on drawing

Chris Lange-Küttner

London Metropolitan University, UK

2) Creativity and physical activity: focus on mindful movement

Antonio De Fano

Research Institute for Neuroscience, Education and Didactics, Patrizio Paoletti Foundation, Assisi, Italy

3) Creativity and motor strategies: focus on team sport

Daniel Memmert

Institute of Training and Computer Science in Sport, German Sport University Cologne, 50933 Cologne, Germany

4) Creativity and motor performances: focus on sports active environment

Nuno Leite

University of Trás-os-Montes and Alto Douro, Parque Desportivo da UTAD Apartado 1013, 5001-801 Vila Real, Portugal

Thursday 12th

Topic: Cognition and Perception

Time: 9.00 – 10.40

Room: Auditorium

Towards a better understanding of the motor-cognition link in typically developing children

Symposium chair: *M. Maurer (1), E. Hartman (2)*

(1) Clinical Neuroscience Bern, Department of Developmental Psychology, University of Bern, Bern, Switzerland; (2) Center of Human Movement Sciences, University Medical Centre Groningen, University of Groningen, Groningen, The Netherlands

Programme

1) Motor Performance and Executive Functioning: Stability and Prediction During Early Childhood.

Suzanne Houwen, Gerda van der Veer, Erica Kamphorst, Marja Cantell

University of Groningen, Faculty of Behavioural and Social Sciences, Special Needs Education and Youth Care Unit, Groningen, The Netherlands

2) Easy and Difficult Motor Tasks are Differentially Related to Executive Functions in Healthy 5- to 6-Year-Olds

Michelle Maurer & Claudia M. Roebers

Clinical Neuroscience Bern, Department of Developmental Psychology, University of Bern, Bern, Switzerland

3) Motor Coordination and Executive Functions: Hints for a Developmental Differentiation? A Comparison of 6- and 10-Year-Olds

Claudia M. Roebers, Nicole Oberer, & Laura Dapp

Clinical Neuroscience Bern, Department of Developmental Psychology, University of Bern, Bern, Switzerland

4) Learning by Moving: Effects of Aerobic and Cognitively-Engaging Physical Activity on Cognitive Functions With a Cluster RCT

E. Hartman (1), A. Meijer (2), I.M.J. van der Fels (1), M. Königs (2,3), C. Visscher (1), R.J. Bosker (4), J. Oosterlaan (2,3)

(1)Center of Human Movement Sciences, University Medical Centre Groningen, University of Groningen, Groningen, The Netherlands; (2) Faculty of Behavioral and Movement Sciences, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands; (3) Emma Children's Hospital, Amsterdam UMC, University of Amsterdam, Emma Neuroscience Group, Amsterdam, The Netherlands; (4) University of Groningen, Groningen Institute for Educational Research, University of Groningen, Groningen, The Netherlands

5) Motor Proficiency, Creativity and Cognition: Does a History of Enrichment in Primary Physical Education Matter?

Antonio De Fano (1), Rosalba Marchetti (2), Caterina Peisino (3), Tal Dotan Ben-Soussan (1,4), Giancarlo Condello (5), Caterina Pesce (6)

(1) Research Institute for Neuroscience, Education and Didactics, Patrizio Paoletti Foundation for Development and Communication, Assisi, Italy; (2) High-School "Malpighi", Italian Ministry of Education, Rome, Italy; (3) "Village" Amateur Sports Club, Alba, Italy; (4) The Leslie and Susan Gonda (Goldschmied) Multidisciplinary Brain Research Center, Bar-Ilan University, Ramat-Gan, Israel; (5) Graduate Institute of Sports Training, University of Taipei, Taipei, Taiwan; (6) Department of Movement, Human and Health Sciences, University of Rome "Foro Italico", Rome, Italy

Topic: Infant development

Time: 9.00 – 10.40

Room: Sala Convegni

Body representation: The foundation of physical activity

Symposium chair: Daniela Corbetta

Department of Psychology, The University of Tennessee, Knoxville, TN, USA

Programme

1) How do infants explore their own bodies and peripersonal space in the first 2 months of life?

Daniela Corbetta (1), John Connell (1), Matthew Clark (1), Abigail DiMercurio (1), Marianne Jover (2)

(1) Department of Psychology, The University of Tennessee, Knoxville, TN, USA; (2) Université Aix-Marseille, Centre PsyCLE, Aix en Provence, France

2) The development of body know-how during the first months of life

Eszter Somogyi (1), Mollie Hamilton (1), Lisa Jacquy (1), Tobias Heed (2), Matej Hoffmann (3,4), Francesco Mannella (5), Vieri Santucci (5), Gianluca Baldassarre (5), Jeffrey J. Lockman (6), Jacqueline Fagard (1) and J. Kevin O'Regan (1)

(1) Laboratoire Psychologie de la Perception, Centre Biomedical des Saints-Peres, Université Paris Descartes, CNRS UMR 8242, France; (2) Biopsychology & Cognitive Neuroscience, Faculty of Psychology & Sports Science and Center of Excellence "Cognitive Interaction Technology", Bielefeld University, Germany; (3) Center for Machine Perception, Department of Cybernetics, Faculty of Electrical Engineering, Czech Technical University, Prague, Czech Republic; (4) iCub Facility, Istituto Italiano di Tecnologia, Genova, Italy; (5) Institute of Cognitive Sciences and Technologies, National Research Council, CNR, Rome, Italy; (6) Department of Psychology, Tulane University, New Orleans, Louisiana, USA

3) Body reaching

Jeffrey J. Lockman and Lisa K. Chinn

Department of Psychology, Tulane University, New Orleans, Louisiana, USA

4) Scale errors in early childhood: What do they tell us about how young children represent their bodies in space?

Karl S. Rosengren

Department of Psychology, University of Wisconsin-Madison, Madison, WI, USA

Topic area: Cognition and Perception

Time: 9.00 – 10.40

Room: Sala Multifunzionale

The interrelationship between motor, physical activity and cognition: learning, exercise and embodied cognition approaches

Symposium chair: Maria Isabel Mourão Carvalhal

Research Center in Sports Sciences, Health Sciences and Human Development, CIDESD, Universidade de Trás-os-Montes e Alto Douro, Portugal

Programme

1) *Learning geometry with whole-body movement*

Maria Isabel Mourão Carvalhal (1), Maria Cecília Costa (2)

(1) CIDESD, Universidade de Trás-os-Montes e Alto Douro, Portugal; (2) CIDTFF, Universidade de Trás-os-Montes e Alto Douro, Portugal

2) *Motor development, academic achievement, perceptions of competence and bmi: the impact of mastery climate intervention in children with dcd, at risk of dcd and typically develop*

Nadia Cristina Valentini

Universidade Federal do Rio Grande do Sul, Brazil

3) *Combined movement and storytelling approaches to enhance motor language skills in preschoolers*

Michael J. Duncan, Emma L. J. Eyre

School of Life Sciences, Coventry University, UK

4) *A neurophysiological approach linking motor competences with working memory in children*

Sebastian Ludyga

Department of Sport, Exercise and Health, University of Basel, Switzerland

Topic: Teaching, Learning

Time: 14.30 – 15.30

Room: Auditorium

Basic Motor Competencies in Europe (BMC-EU)

Symposium chair: Erin Gerlach (1), Christian Herrmann (2)

(1), Division of Educational Sciences, University of Potsdam, Germany; (2) Department of Sport, Exercise and Health, University of Basel, Switzerland

Programme

1) *Basic Motor Competencies in Europe (BMC-EU): Conceptual Framework*

Erin Gerlach & Jeffrey Sallen

Division of Educational Sciences, University of Potsdam, Germany

2) *Assessment and Monitoring of Basic Motor Competencies in Europe (BMC-EU)*

Christian Herrmann (1), Harald Seelig¹, Marina Wälti¹ & Erin Gerlach (2)

(1) Department of Sport, Exercise and Health, University of Basel, Switzerland; (2) Division of Educational Sciences, University of Potsdam, Germany

3) *Basic Motor Competencies in Europe (BMC-EU): Modular support-toolkit for teachers*

Claude Scheuer & Andreas Bund

Institution of Applied Educational Sciences, University of Luxembourg, Luxembourg

Topic: Development

Time: 14.30 – 15.30

Room: Sala Convegni

Motor awkwardness: truth or myth? A closer look at motor competence and growth from childhood to emerging adulthood

Symposium chair: *M. Lenoir*

Department of Movement and Sports Sciences, Ghent University, Belgium

Programme

1) The effect of body height on performance based on product- and process-oriented motor competence test batteries in primary school children

Coppens Eline (1,2), Eva D'Hondt (2), Farid Bardid (3), & Lenoir Matthieu (1)

(1) Department of Movement and Sports Sciences, Ghent University, Belgium; (2) Department of Movement and Sports Sciences, Vrije Universiteit Brussel, Belgium; (3) School of Education, University of Strathclyde, Glasgow, United Kingdom

2) Development of Motor Coordination in Relation to Growth among Adolescent Elite Level Soccer Players.

D'Hondt Eva (1), Rommers Nikki (1,2,3), Witvrouw Erik (4), Lenoir Matthieu (2)

(1) Department of Movement and Sports Sciences, Vrije Universiteit Brussel, Belgium; (2) Department of Movement and Sports Sciences, Ghent University, Belgium; (3) Research Foundation Flanders (FWO), Belgium; (4) Department of Rehabilitation Sciences and Physiotherapy, Ghent University, Belgium.

3) Body Height as a Potential Contributor to Motor Awkwardness in Young Adults

Lenoir Matthieu (1), Laureys Felien (1), Mostaert Mireille (1), Bardid Farid (2)

(1) Department of Movement and Sports Sciences, Ghent University, Belgium; (2) School of Education, University of Strathclyde, Glasgow, United Kingdom.

Topic: Assessment

Time: 14.30 – 15.30

Room: Sala Multifunzionale

Assessment and monitoring of motor development in children and adolescents: a novel perspective through emerging technological solutions

Symposium chair: *R. Stagni (1), M. C. Bisi (1), C. C. T. Clark (2)*

(1) Dipartimento di Ingegneria dell'Energia Elettrica e dell'Informazione "Guglielmo Marconi", University of Bologna, Bologna, Italy, (2) Coventry University, Coventry, CV1 5FB, U.K.

Programme

1) Using sensors to measure individual components of motor competence: Is the whole greater than the sum of all its' parts? Part 1

Cain C. T. Clark

Coventry University, Coventry, CV1 5FB, U.K.

2) Using sensors to measure individual components of motor competence: Is the whole greater than the sum of all its' parts? Part 2

Rita Stagni

University of Bologna, Italy

3) Using sensors to measure individual components of motor competence: Is the whole greater than the sum of all its' parts? Part 3

Maria Cristina Bisi

University of Bologna, Italy

Topic: Teaching, Learning

Time: 14.30 – 15.30

Room: Bouvette

Teaching PE and wellbeing in child development

Symposium chair: *S. Nicolosi (1), P. Tortella (2)*

(1) Faculty of Human and Social Sciences, Kore University of Enna, Italy; (2) Faculty of Educational Sciences, Free University of Bozen, and Laboratorio 0246 – Ghirada, Treviso, Italy

Programme

1) Integrated quali-quantitative teaching, in physical- education, and wellbeing in developmental age

Andrea Ceciliani

Department for Life Quality Studies, University of Bologna, Italy

2) Dual role of scaffolding on motor and cognitive development in early childhood education

Patrizia Tortella (1, 2), Guido Fumagalli (2,3)

(1) Faculty of Educational Sciences, Free University of Bozen, Italy; (2) Laboratorio 0246 – Ghirada, Treviso, Italy; (3) Department of Diagnostics & Public Health, University of Verona, Italy

3) Changing teaching practice through the interdisciplinary physical education: an intervention study in primary school

Simona Nicolosi

Faculty of Human and Social Sciences, Kore University of Enna, Italy

Friday 13th

Topic: Teaching, Learning

Time: 9.00 – 10.40

Room: Auditorium

Physical activity and movement behaviour guidelines in children: what are we missing with a focus on quantity and duration?

Symposium chair: Greet Cardon

Department of Movement and Sports Sciences, Ghent University, Belgium

Programme

1) Development of the UK 24-Hour Movement Guidelines for children under the age of 5 years

Anne Martin (1), Xanne Janssen (2), Adrienne R Hughes (2), Kathryn Hesketh (3), Catherine Hill (4), Ruth Kipping (5), Catherine Draper (6), Sonia Livingstone (7), Anthony D Okely (8), and John J Reilly (2)

(1) MRC/CSO Social and Public Health Sciences Unit, Institute for Health and Wellbeing, University of Glasgow UK; (2) Physical Activity and Health Group, School of Psychological Sciences and Health, University of Strathclyde Glasgow, UK; (3) Institute of Child Health, University College London Great Ormond Street, UK; (4) School of Medicine, University of Southampton, UK; (5) Bristol Medical School, University of Bristol, UK; (6) Developmental Pathways for Health Research Unit, University of The Witwatersrand, South Africa; (7) Department of Media and Communications, The London School of Economics and Political Science, UK; (8) Early Start Research Institute, University of Wollongong, Australia,

2) Compliance with 24-Hour Movement Behaviour Guidelines among Belgian Pre-School Children: The ToyBox-Study

Marieke De Craemer (1), Duncan McGregor (2), Odysseas Androutsos (3), Yannis Manios (3), and Greet Cardon (1)

(1) Department of Movement and Sports Sciences, Ghent University, Ghent, Belgium; (2) Department of Health and Community Sciences, Glasgow Caledonian University, Glasgow, UK; (3) Department of Nutrition and Dietetics, School of Health Sciences & Education, Harokopio University, Athens, Greece

3) We know it is not just about quantity, so how do we advocate for movement quality in physical activity guidelines?

Lisa M Barnett (1), Kelly Mackintosh (2)

(1) Institute of Physical Activity and Nutrition, Deakin University, Melbourne, Australia; (2) Applied Sports Science, Technology, Exercise and Medicine Research Centre, Swansea University, Swansea, Wales, UK

4) Are skilled children more physically active than their less skilled peers?

An De Meester (1), David Stodden (2), Megan Irwin (2), Ryan Sacko (3), Leen Haerens (1)

(1) Department of Movement and Sports Sciences, Ghent University, Ghent, Belgium; (2) Department of Physical Education and Athletic Training, University of South Carolina, Columbia, SC, USA; (3) Department of Health and Human Performance, The Citadel, USA.

Topic: Cognition and Perception

Time: 9.00 – 10.40

Room: Sala Convegni

Using functional near-infrared spectroscopy to investigate cognitive and motor development across the life span

Symposium chair: N. Getchell

Department of Kinesiology and Applied Physiology, University of Delaware, Newark, Delaware, USA

Programme

1) Exploring cortical activation and connectivity in infants with and without familial risk for autism during naturalistic social interactions: A preliminary study.

Bhat, Anjana; Su, Wan-Chun; Culotta, McKenzie; McDonald, Nicole; Eilbott, Jeffrey; Pelphrey, Kevin.

Biomechanics and Movement Science Interdisciplinary Program and Department of Physical Therapy, University of Delaware, Newark, Delaware, USA

2) What lies beneath: Using fNIRs to explore cortical activation differences in children with and without developmental disabilities.

Nancy Getchell (1), Kim Milla Ceja (1), Elham Bakshipour (1), Reza Koiler (1), Mandy Plumb (2)

(1) Department of Kinesiology and Applied Physiology and Biomechanics and Movement Science Interdisciplinary Program, University of Delaware, Newark, Delaware, USA; (2) School of Health and Life Science, Federation University Australia, Ballarat, Australia

3) The effect of motor fatigue on prefrontal cortex correlates during dual task fine motor control

Nadja Schott, Soo-Yong Park, Berkin Yanarsönmez, Eunike Hofelich, Maren Reinl

Department of Sport Psychology and Human Movement Science, Institute for Sport and Exercise Science, University of Stuttgart, Germany

4) Functional Near Infrared Spectroscopy (fNIRs): Assessing performance and learning paradigms in gaming and virtual environments.

Shewokis, Patricia A (1), O'Neil, Margaret E. (2), Gentili, Rodolphe (3), Lind, David S (4). & Izzetoglu M (5).

(1) Nutrition Sciences Department, College of Nursing and Health Professions, School of Biomedical Engineering, Science and Health Systems, Drexel University, Philadelphia, PA, USA; (2) Columbia University, Medical Center, Vagelos College of Physicians and Surgeons, Department of Rehabilitation and Regenerative Medicine, Program in Physical Therapy, New York, NY, USA; (3) Department of Kinesiology, School of Public Health, Program in Neuroscience and Cognitive Science, Maryland Robotics Center, University of Maryland, College Park, MD, USA; (4) Department of Surgery, Division of General Surgery, University of Florida – Jacksonville, FL, USA ; (5) College of Engineering, Electrical and Computer Engineering Department, Villanova University, Villanova, PA, USA

Topic area: Development

Time: 9.00 – 10.40

Room: Sala Multifunzionale

Motor proficiency, health, physical activity and academic performance challenges experienced by children growing up in a developing country: data of a 7 year longitudinal study of primary school children

Symposium chair: Anita E. Pienaar

School of Biokinetics, Recreation and Sport Sciences, Faculty of Health Sciences, North-West University, Potchefstroom Campus, Republic of South Africa

Programme

1) *Longitudinal influences of socio-economic status on visual-motor integration: NWCHILD study*

Dané Coetzee, Anita E. Pienaar, Yolanda van Wyk

School of Biokinetics, Recreation and Sport Sciences, Faculty of Health Sciences, North-West University, Potchefstroom Campus, Republic of South Africa

2) *Influences of socio-economic status and early perceptual-motor proficiency and later academic achievement of primary school learners: NW-CHILD study*

Anita E Pienaar, Elna de Waal

School of Biokinetics, Recreation and Sport Sciences, Faculty of Health Sciences, North-West University, Potchefstroom Campus, Republic of South Africa

3) *The relationship between object control skills and physical activity levels and types in nine- to 10-year old girls from different socio-economic status: NW-CHILD study*

Wilmarié du Plessis, Dané Coetzee, Anita E. Pienaar, Marilette Visagie

School of Biokinetics, Recreation and Sport Sciences, Faculty of Health Sciences, North-West University, Potchefstroom Campus, Republic of South Africa

4) *Lessons learned from presenting a tailor-made perceptual-motor program to 3-5 year old preschool children in a disadvantaged area.*

Barry Gerber, Anita E. Pienaar, Irma van Reenen

School of Biokinetics, Recreation and Sport Sciences, Faculty of Health Sciences, North-West University, Potchefstroom Campus, Republic of South Africa

Topic: Cognition and Perception

Time: 14.00 – 15.40

Room: Auditorium

It Begins with Movement: A Developmental Perspective on Promoting Children's Health and Well-Being

Symposium chair: David Stodden

Department of Physical Education, College of Education, University of South Carolina, Columbia, SC, USA

Programme

1) *The cascading effects of early childhood and adolescent motor competence on later physical, cognitive, and social-emotional adjustment*

Nicole Zarrett, Stephen Taylor

Department of Psychology, University of South Carolina, Columbia, SC, USA

2) Physical activity, motor competence and cognition during development: Broadening the synthesis of evidence and background theory

Caterina Pesce (1), Phillip D. Tomporowski (2)

(1) Department of Movement, Human and Health Sciences, University of Rome "Foro Italico", Rome, Italy; (2) Department of Kinesiology, University of Georgia, Athens, GA (USA)

3) Exploring the link across gross motor, social-emotional, and executive function skills within gross motor interventions for preschool children in the US

Ali Brian (1), Sally Taunton (1), Kelly Lynn Mulvey (2).

(1) Department of Physical Education, College of Education, University of South Carolina, Columbia, SC, USA; (2) Department of Psychology, North Carolina State University, Raleigh, NC, USA

4) Moving Child, Adolescent and School Mental Health to a more Holistic Approach

Mark D. Weist

Department of Psychology, University of South Carolina, Columbia, SC, USA

Topic: Development

Time: 14.00 – 15.40

Room: Sala Convegni

Fundamental movement skill proficiency across childhood – an Irish and UK perspective

Symposium chair: *W. O'Brien (1), E. Eyre (2)*

(1) Sports Studies and Physical Education Programme, School of Education, University College Cork, Cork, Ireland; (2) Centre for Sport Exercise and Life Sciences, Coventry University, Coventry, UK

Programme

1) Is Fundamental Movement Skill Competency Important for Keeping Children Physically Active and a Healthy Weight?

Jonathan Foulkes (1), Lawrence Foweather (2), Zoe Knowles (2), Stuart Fairclough (3)

(1) Faculty of Education, Health and Community, Sport Studies, Leisure and Nutrition, Liverpool John Moores University, Aigburth, Liverpool, UK; (2) Physical Activity Exchange, Research Institute for Sport and Exercise Sciences, Liverpool John Moores University, Liverpool, UK; (3) Department of Sport & Physical Activity, Edge Hill University, St Helens Road, Ormskirk, Lancashire, UK.

2) What are current fundamental movement skill proficiency levels of deprived children in early and middle childhood in the UK?

Emma Eyre, Leanne Walker, Mark Noon, Michael Duncan

Centre for Sport Exercise and Life Sciences, Coventry University, Coventry, UK.

3) The effectiveness of a school-based intervention on fundamental movement skill proficiency among a cohort of Irish primary school children

Bolger, Lisa E. (1), Bolger, Linda A. (1), O' Neill, Cian (1), Coughlan, Edward (1), O'Brien, Wesley (2), Lacey, Seán (3), Burns, Con (1)

(1) Department of Sport, Leisure and Childhood Studies, Cork Institute of Technology, Cork, Ireland; (2) Sports Studies and Physical Education Programme, School of Education, University College Cork, Cork, Ireland; (3) Department of Mathematics, Cork Institute of Technology, Cork, Ireland

4) Lay of land in Ireland - Delayed Motor development?

Issartel, J. (1), McGrane, B. (1), O'Brien, W. (2), Powell, D. (3), Behan, S. (1), Britton, Ú (1), Duff, C. (1), Peers, C. (1), Kavanagh, J. (1), Belton, S. (1)

(1) School of Health and Human Performance, Dublin City University, Dublin, Ireland; (2) Sports Studies and Physical Education Programme, School of Education, University College Cork, Cork, Ireland; (3) Carnegie School of Sport Leeds Beckett University, Leeds, UK

5) Putting a focused lens on Irish adolescent movement skill proficiency

Wesley O'Brien (1), Diarmuid Lester (1), Brian Donovan (1), Conor Philpott (1), Mike Duncan (2), Sarahjane Belton (3)

(1) Sports Studies and Physical Education Programme, School of Education, University College Cork, Cork, Ireland; (2) Centre for Sport Exercise and Life Sciences, Coventry University, Coventry, UK; (3) School of Health and Human Performance, Dublin City University, Dublin, Ireland.

Topic: Assessment

Time: 14.00 – 15.40

Room: Sala Multifunzionale

Motor Competence Assessment (MCA). Norms and results from all over the world

Symposium chair: R. Cordovil (1), L. P. Rodrigues (2) C. Luz (3)

(1) Universidade de Lisboa, Faculdade Motricidade Humana, CIPER, 1499-002 Cruz Quebrada, Portugal; (2) Instituto Politécnico de Viana do Castelo, Escola Superior Desporto e Lazer Melgaço. 4960-320 Melgaço, and CIDESD, Portugal; (3) Instituto Politécnico de Lisboa, Escola Superior de Educação de Lisboa, 1549-003 Lisboa, Portugal.

Programme

1) Development of the normative assessment of the MCA (Motor Competence Assessment).

Luis Paulo Rodrigues (1), Carlos Luz (2), Rita Cordovil (3), Ricardo Lima (1), Miguel Camões (1)

(1) Instituto Politécnico de Viana do Castelo, Escola Superior Desporto e Lazer Melgaço. 4960-320 Melgaço, and CIDESD, Portugal; (2) Instituto Politécnico de Lisboa, Escola Superior de Educação de Lisboa, 1549-003 Lisboa, Portugal; (3) Universidade de Lisboa, Faculdade Motricidade Humana, CIPER, 1499-002 Cruz Quebrada, Portugal

2) A cross-cultural comparison of American and Portuguese children's motor competence.

An De Meester (1), David Stodden (2), Megan Irwin (2), Ryan Sacko (3), Leen Haerens (1)

(1) Department of Movement and Sports Sciences, Ghent University, Watersportlaan 2, 9000 Ghent, Belgium; (2) Department of Physical Education & Athletic Training, University of South Carolina, Columbia, SC, USA; (3) Department of Health and Human Performance, The Citadel, Charleston, SC USA,

3) Skillful body in a healthy mind? Exploring the relationship between motor competence and executive functions in children.

Carlos Luz (1), Rita Cordovil (2), Luis Paulo Rodrigues (3)

(1) Instituto Politécnico de Lisboa, Escola Superior de Educação de Lisboa, CIED, 1549-003 Lisboa, Portugal; (2) Universidade de Lisboa, Faculdade Motricidade Humana, CIPER, 1499-002 Cruz Quebrada, Portugal; (3) Instituto Politécnico de Viana do Castelo, Escola Superior Desporto e Lazer Melgaço, 4960-320 Melgaço, and CIDESD, Portugal.

4) The Motor Competence Assessment battery and the time-constrained Supine-toStand (STS) task: descriptive and correlational study in preschoolers.

Maria Teresa Cattuzzo (1), Anderson Henry Pereira Feitoza (1), Clarice Maria de Lucena Martins (2), Ívina Andrea Aires Soares (3), Rafael dos Santos Henrique (1), Alessandro Hervaldo Nicolai Ré (4)

(1) Universidade de Pernambuco, Escola Superior de Educação Física, Recife, PE, Brasil; (2) Departamento de Educação Física, Universidade Federal da Paraíba, João Pessoa, PB, Brasil; (3) Secretaria da Educação Básica do Ceará, Fortaleza, CE, Brasil; (4) Universidade de São Paulo, Escola de Artes e Humanidades, São Paulo, SP, Brasil

5) The relationship between motor competence, cardiorespiratory fitness and body mass index in children of a city with low human development index.

Rafael dos Santos Henrique (1), José António Ribeiro Maia (2), Go Tani (3), Thaliane Mayara Pessoa dos Prazeres (1), Marcos André Moura dos Santos (1)

(1) University of Pernambuco, Higher School of Physical Education, 50100-130, Recife, Brazil; (2) University of Porto, Faculty of Sport, 4200-450, Porto, Portugal; (3) University of São Paulo, School of Physical Education and Sport, 05508-030, São Paulo, Brazil.

Saturday 14th

Topic area: Teaching, Learning

Time: 9.00 – 10.40

Room: Auditorium

Outdoor challenging play: adult representations and children practice

Symposium chair: *Boris Jidovtseff (1), Ingunn Fjørtoft (2)*

(1) Department of Sport and Rehabilitation Sciences, University of Liège, Belgium; (2) Department of Sports, Physical Education and Outdoor Studies. Campus Notodden (N-116) University of South Eastern Norway, Nottoden, Norway

Programme

1) Learning landscapes: Promoting motor learning through the materiality and contexts of challenging landscapes

Ingunn Fjørtoft

Department of Sports, Physical Education and Outdoor Studies. Campus Notodden (N-116) University of South Eastern Norway, Nottoden, Norway

2) Perception of the investment of outdoor space by children and young people and risks related to it. Analysis of representations of parents and professionals.

Vidal Andora, Jidovtseff Boris

Research Unit on Childhood, Department of Sport and Rehabilitation Sciences, Liège University, Belgium

3) Preschool children's types of physical activity during free play while outdoors in different seasons of the year

Iivonen, S. (1), Niemistö, D. (2), Itkonen, J. (2), Sääkslahti, A. (2)

(1) School of Applied Educational Science and Teacher Education, University of Eastern Finland, Kuopio, Finland; (2): Department of Sport Sciences, University of Jyväskylä, Jyväskylä, Finland

4) The design and implementation of the "sound world" cognition-oriented outdoor program in chinese kindergartens

Jinxia Dong, Yijing Zhong

Department of Physical Education, Peking University, Beijing, China

5) PLAYGROUND PRIMO SPORT 0246: structured activity and not free play improves motor skills, physical activity and executive functions in 5 years old children.

Patrizia Tortella (1,2), Guido Fumagalli (2,3)

(1) Faculty of Educational Sciences, Free University of Bozen, Italy; (2) Laboratorio 0246 - Ghirada-Treviso, Italy; (3) Department of Diagnostics & Public Health, University of Verona, Italy.

6) Fundamental Motor Skill Development Strategies in Outdoor Settings Using Minimal Instruction

Wirth, C. W.(1), Vinci, D. M. (1), & Venezia, A. P. (2)

(1) University of West Florida, Department of Movement Sciences & Health, Pensacola, FL, USA; (2) Auburn University, School of Kinesiology, Auburn, AL, USA

Topic area: Assessment

Time: 9.00 – 10.40
Room: Sala Convegni

Motor assessment in children and adolescents: Current practices and future directions

Symposium chair: *Farid Bardid (1,2), Till Utesch (3)*

(1) School of Education, University of Strathclyde, Glasgow, UK; (2) Department of Movement and Sports Sciences, Ghent University, Ghent, Belgium; (3) Department of Sport Psychology, University of Münster, Münster, Germany

Programme

1) Assessment of young people's motor competence by proxy reports

Farid Bardid (1,2), Isaac Estevan (3), Lisa Barnett (4)

(1) School of Education, University of Strathclyde, Glasgow, UK; (2) Department of Movement and Sports Sciences, Ghent University, Belgium; (3) AFIPS Research Group, Department of Teaching of Music, Visual and Corporal Expression, University of Valencia, Spain; (4) Institute of Physical Activity and Nutrition, Deakin University, Australia

2) As good as it gets? Validity and reliability of motor skill assessments

Ryan Hulteen (1), Larissa True (2), Natalie Lander (3), Lisa Barnett (3), Borja del Pozo Cruz (4), Chris Lonsdale (4)

(1) School of Kinesiology, University of British Columbia, Canada; (2) Department of Kinesiology, State University of New York-Cortland, NY, USA; (3) Institute of Physical Activity and Nutrition, Deakin University, Australia; (4) Institute for Positive Psychology and Education, Australian Catholic University, Australia

3) The Dragon Challenge v1.0: A dynamic measure of physical competence in children and adolescents

Gareth Stratton

Research Centre in Applied Sports, Technology, Exercise and Medicine, Swansea University, Swansea, UK

4) Physical education teachers' diagnostic competence to assess children's motor competence and how it is affected by their innate biases

Till Utesch (1), James Rudd (2), Lawrence Fowweather (3)

(1) Department of Sport Psychology, University of Münster, Münster, Germany; (2) Department of Sport Studies, Leisure and Nutrition, Liverpool John Moores University, Liverpool, UK; (3) Research Institute for Sport and Exercise Sciences, Liverpool John Moores University, Liverpool, UK

5) Objective assessment of motor competence in young children: toward an in-field approach using motion devices

Giuseppe Vannozzi

Department of Movement, Human and Health Sciences, University of Rome "Foro Italico", Italy

Topic: Development

Time: 9.00 – 10.40

Room: Sala Multifunzionale

Like a Girl: Examining gender disparities in physical play environments in early childhood

Symposium chair: *Danielle D. Wadsworth*

Auburn University College of Education, Auburn, AL, USA

Programme

1) *Like a girl: Examining gender differences in physical activity programs in preschool children.*

Danielle D. Wadsworth, Alexandra Venezia, Jerraco Johnson, Mary Rudisill, Melissa Pangelinan
Auburn University College of Education, Auburn, AL, USA

2) *Differences in young preschool boys and girls overhand throwing practice behaviors during a mastery motivational climate.*

Jerraco Johnson, Monaye Merritt, Michael Morris, Julia Sassi, Danielle Wadsworth, Mary Rudisill, Peter Hastie

School of Kinesiology, Auburn University College of Education, Auburn, AL, USA

3) *Are motor skill gender effects 'typical'?*

Pamela Haibach-Beach (1), Melanie Perreault (1), Lauren Lieberman (1), Beth Foster

(1) Department of Kinesiology, Sport Studies and Physical Education, State University of New York, College at Brockport, NY, USA; (2) California State Polytechnic University, Pomona, CA, USA

4) *Effects of a Gender Stereotype Motor Skill Intervention for Preschool Children*

Sally Taunton (1), Kelly Lynn Mulvey (2), Danielle Wadsworth (3), Emily Gilbert (1), Alex Striving (1), Jenna Fisher, Adam Pennell, Matthew Patey, Ali Brian (1)

(1) Department of Physical Education, University of South Carolina, Columbia, SC, USA; (2) Department of Psychology, North Carolina State University, Raleigh, NC, USA; (3) Auburn University College of Education, Auburn, AL, USA

5) *The Effect of a Preschool-Based Dance Intervention on Skill Development in Boys and Girls*

Anne R. Lindsay (1), Jennifer Lucas (2), Teresa Byington (1), Madeleine Sigman-Grant (1), Amy Mobley (3), Deanna Hildebrandt (4), Nurgül Fitzgerald (5)

(1) University of Nevada Cooperative Extension, Reno, NV, USA; (2) Department of Healthcare Administration and Policy, University of Nevada, Las Vegas, Nevada, USA; (3) Department of Health Education & Behavior, College of Health and Human Performance, University of Florida, Gainesville, FL; (4) Department of Nutritional Sciences, Oklahoma State University, Stillwater, OK, USA; (5) Department of Nutritional Sciences, Rutgers School of Environmental and Biological Sciences, State University of New Jersey, New Brunswick, NJ, USA

Topic area: Development

Time: 14.10 – 15.50

Room: Auditorium

What are the modifiable factors that can assist children from infancy to school age to develop motor competence?

Symposium chair: Lisa Barnett

Institute of Physical Activity and Nutrition, Deakin University, Australia

Programme

1) *Early caregiving experiences, positioning, handling and motor play contribute to motor competence in healthy term infants.*

Beaton H.E. (1), Travlos V. (1), Hands B. (2)

(1) The School of Physiotherapy, The University of Notre Dame Australia, Fremantle, Australia; (2) The Institute for Health Research, The University of Notre Dame Australia, Fremantle, Australia.

2) *Does screen time behavior effect gross motor development in toddlers?*

Sanne LC Veldman (1,2), Rute Santos (1,3), Rachel A Jones (1), Anthony D Okely (1)

(1) Early Start Research Institute, University of Wollongong, Australia; (2) Department of Public and Occupational Health and Amsterdam Public Health Research Institute, VU University Medical Center, Amsterdam, The Netherlands; (3) Research Centre in Physical Activity, Health and Leisure, University of Porto, Portugal

3) *The way mums and dads play with their preschool children makes a difference to their gross motor competence*

Linda Saraiva (1), Rita Cordovil (2)

(1) Escola Superior de Educação, Instituto Politécnico de Viana do Castelo; CIEC, UM, Portugal; (2) CIPER, Faculdade de Motricidade Humana, Universidade de Lisboa, Portugal

4) *Early experiences matters!*

Arja Sääkslahti, Donna Niemistö and Arto Laukkanen

Faculty of Sport and Health Sciences, University of Jyväskylä, Jyväskylä, Finland

5) *How can parents ensure their child will develop the fundamental movement skill needed to be physically active?*

Lisa M Barnett (1), Jill A Hnatiuk (2), Jo Salmon (2), Kylie D Hesketh (2).

(1) Institute of Physical Activity and Nutrition, School of Health and Social Development, Deakin University, Geelong, VIC, Australia; (2) Institute for Physical Activity and Nutrition, School of Exercise and Nutrition Sciences, Deakin University, Geelong, VIC, Australia.

Topic area: Assessment

Time: 14.10 – 15.50

Room: Sala Convegni

What have we been missing? Novel and innovative methodologies for improving children's physical activity assessment and motor competence

Symposium chair: *Ryan S. Sacko,*

The Citadel, Department of Health and Human Performance, Charleston, SC, USA

Programme

1) *Sequence maps of children's physical activity and sedentary behavior – novel accelerometer data-analysis*

Mai Chin A Paw (1), Xinhui Wang (1), Lars Bo Andersen (2), Teatske Altenburg (1)

(1) Amsterdam University Medical Centers/Vrije Universiteit Amsterdam, Department of Public & Occupational Health, Amsterdam Public and Occupational Health, section Child Health & Care Research, Amsterdam Public Health Research Institute, Amsterdam, The Netherlands

2) *Cross-validation of wrist- and hip-worn ActiGraph accelerometers during preschool children's free play*

Teatske Altenburg, (1), Rianne op den Buijsch (1), Lotte de Vries (1), Emma Eyre (2), Alexandra Dobell (2), Michael Duncan (2), Mai Chinapaw (1)

(1) Amsterdam UMC, Vrije Universiteit Amsterdam, Dept. of Public and Occupational Health, Amsterdam Public Health Research Institute, Amsterdam, The Netherlands; (2) School of Life Sciences, Coventry University, Coventry, UK;

3) *Energy expenditure in selected motor skills in children aged 7-11 years*

Michael J. Duncan, Emma L. J. Eyre

School of Life Sciences, Coventry University, Coventry, UK

4) *Energy expenditure of discrete skill performance (ages 7-9) and measurement and discrepancies using accelerometry, SOFIT, SOPLAY, and OSRAC*

Ryan S. Sacko (1), David F. Stodden (2)

(1) The Citadel, Health and Human Performance, Charleston, SC, USA; (2) Department of Physical Education, University of South Carolina, Columbia, SC, USA

4) Novel analytics and novel insights into movement quality using sensors

Gareth Stratton,

Research Center in Applied Sports, Technology, Exercise and Medicine, Swansea University, Swansea, UK-

Topic: Teaching, Learning

Time: 14.15 – 15.50

Room: Sala Multifunzionale

The efficacy of linear and non-linear pedagogy in physical education on children's development (5-6 years): Cluster RCT main outcomes and mediating pathways

Symposium chair: James Rudd (1), Lawrence Fowweather (2)

(1) Faculty of Education, Health and Community, Sport Studies, Leisure and Nutrition, Liverpool John Moores University, Liverpool, UK; (2) Physical Activity Exchange, Research Institute for Sport and Exercise Sciences, Liverpool John Moores University, UK

Programme

1) Skill Acquisition Methods fostering Physical Literacy in Early-Physical Education (SAMPLE-PE) in 5-6 year old children: Rationale and study protocol for a cluster-randomised controlled trial

Rudd, J. (1), Crotti, M (1), Fitton-Davies, K (1), O'Callaghan, L (1), Grace, R (1), Bardid F (2,3), Utesch, T (4), Roberts, S (1), Boddy, L.M (5), Walsh, B (1), Cronin, C.J (1), Knowles, Z (5), Watson, P.M. (5), Button, C.(6), Lubans, D. R.(7), Pesce, C.(8), Buszard, T.(9), Foulkes, J.(1), Fowweather, L. (5)

(1) Faculty of Education, Health and Community, Sport Studies, Leisure and Nutrition, Liverpool John Moores University, Liverpool, UK; (2) School of Education, University of Strathclyde, Glasgow, United Kingdom; (3) Department of Movement and Sports Sciences, Ghent University, Ghent, Belgium; (4) Institute for Sport and Exercise Sciences, University of Münster, Münster, Germany; (5) Physical Activity Exchange, Research Institute for Sport and Exercise Sciences, Liverpool John Moores University, Liverpool, UK; (6) School of Physical Education, Sport and Exercise Sciences, University of Otago, Dunedin, Otago, New Zealand; (7) Priority Research Centre in Physical Activity and Nutrition, School of Education, University of Newcastle, Callaghan, Australia; (8) Department of Human Movement and Health Sciences, University of Rome "Foro Italico", Rome, Italy; (9) Institute for Health and Sport (IHES), Footscray Park Campus, Victoria University, Melbourne, Victoria 3011, Australia.

2) Understanding high and low skill children's early years motor affordances and physical activity

Rachael Grace (1), James Rudd (1), Zoe Knowles (2), Farid Bardid (3, 4), Lawrence Fowweather (2)

(1) Faculty of Education, Health and Community, Sport Studies, Leisure and Nutrition, Liverpool John Moores University, Liverpool, UK; (2) Physical Activity Exchange, Research Institute for Sport and Exercise Sciences, Liverpool John Moores University, Liverpool, UK; (3) School of Education, University of Strathclyde, Glasgow, United Kingdom; (4) Department of Movement and Sports Sciences, Ghent University, Ghent, Belgium.

3) Exploring the effects of a pedagogical intervention upon psychological factors in 5-7-yearold children.

Fitton Davies, K. (1), Fowweather, L. (2), Roberts, S. (1). Utesch, T. (3), Bardid, F. (4, 5), Watson, P. (2), Button, C. (6), Lubans, D. (7), Pesce, C. (8), Crotti, M. (1), Laura O'Callaghan (1), James Rudd (1)

(1) Faculty of Education, Health and Community, Sport Studies, Leisure and Nutrition, Liverpool John Moores University, Liverpool, UK; (2) Physical Activity Exchange, Research Institute for Sport and Exercise Sciences, Liverpool John Moores University, Liverpool, UK; (3) Institute for Sport and Exercise Sciences, University of Münster, Münster, Germany; (4) School of Education, University of Strathclyde, Glasgow, UK; (5) Department of Movement and Sports

Sciences, Ghent University, Ghent, Belgium; (6) School of Physical Education, Sport and Exercise Sciences, University of Otago, Dunedin, Otago, New Zealand; (7) Priority Research Centre in Physical Activity and Nutrition, School of Education, University of Newcastle, Callaghan, NSW, Australia; (8) Department of Human Movement and Health Sciences, University of Rome "Foro Italico", Rome, Italy

4) Examining the effects of physical education pedagogy on executive function and self-regulation in 5-7-year-old children.

Laura O'Callaghan (1), Fowweather, L. (2), Boddy, L. (1), Buszard, T.; Utesch, T., Bardid, F. (5, 6), Button, C. (7), Lubans, D. (8), Pesce, C. (9), Crotti, M. (1), Fitton Davies, K. (1), James Rudd (1)

(1) Faculty of Education, Health and Community, Sport Studies, Leisure and Nutrition, Liverpool John Moores University, Liverpool, L17 6BD, UK; (2) Physical Activity Exchange, Research Institute for Sport and Exercise Sciences, Liverpool John Moores University, Liverpool, UK; (3) Institute for Health and Sport (IHES), Footscray Park Campus, Victoria University, Melbourne, Victoria, Australia; (4) Institute for Sport and Exercise Sciences, University of Münster, Münster, Germany; (5) School of Education, University of Strathclyde, Glasgow, UK; (6) Department of Movement and Sports Sciences, Ghent University, Ghent, Belgium; (7) School of Physical Education, Sport and Exercise Sciences, University of Otago, Dunedin, Otago, New Zealand; (8) Priority Research Centre in Physical Activity and Nutrition, School of Education, University of Newcastle, Callaghan, NSW, Australia; (9) Department of Human Movement and Health Sciences, University of Rome "Foro Italico", Rome, Italy

5) Efficacy of sample-pe curriculum on physical activity within and beyond the school day

Matteo Crotti (1), James Rudd (1), Roberts, S. (1), Utesch, T. (2), Bardid, F. (3, 4); Cronin, C. (1); Button, C. (5); Lubans, D. (6); Pesce, C. (7); Fitton Davies, K. (1), O'Callaghan, L. (1), Fowweather, L (8)

(1) Faculty of Education, Health and Community, Sport Studies, Leisure and Nutrition, Liverpool John Moores University, Liverpool, L17 6BD, UK; (2) Institute for Sport and Exercise Sciences, University of Münster, Münster, Germany; (3) School of Education, University of Strathclyde, Glasgow, UK; (4) Department of Movement and Sports Sciences, Ghent University, Ghent, Belgium; (5) School of Physical Education, Sport and Exercise Sciences, University of Otago, Dunedin, Otago, New Zealand; (6) Priority Research Centre in Physical Activity and Nutrition, School of Education, University of Newcastle, Callaghan, NSW, Australia; (7) Department of Human Movement and Health Sciences, University of Rome "Foro Italico", Rome, Italy; (8) Physical Activity Exchange, Research Institute for Sport and Exercise Sciences, Liverpool John Moores University, Liverpool, UK
