17th annual Congress of the
EUROPEAN COLLEGE OF SPORT SCIENCE
4-7th July ECSS Bruges 2012 – Belgium

BOOK OF ABSTRACTS

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Hosted by:
Vrije Universiteit Brussel & Université Libre de Bruxelles

chronic exercise training and/or conditions for efficient fatty acid utilization. Chronic exercise has been shown to increase MC1R in parallel with improved IR, thus leading to a paradigm, known as the white paradox where MC1R accumulation per se does not directly affect insulin action but where this negative effect is actually linked with non-activation of the fatty acid and with the accumulation of metabolically active lipid intermediates. Among others, diacylglycerol (DAG) have been largely implicated in cellular and animal studies. In cross-sectional and intervention studies, we measured comprehensive profiles of distinct molecular species of DAG in skeletal muscle of normal weight and atrophic human subjects. Total DAG content was highest in athletes and was positively associated with insulin sensitivity. Furthermore, disaturated DAG were significantly lower in highly insulin sensitive athletes compared to their insulin resistant counterpart. Our results, in accord with other recent studies, point to the fact that some DAG species are particularly abundant in human skeletal muscle. C16:0/C18:0, C16:0/C16:1 and D1-D16:0. Summed together, these three DAG species account for approximately 80% of total DAG. Thus, by dissection of the overall content of DAG that may be lost due to the overall loss of tissue DAG, that may be lost due to the overall loss of tissue and that particular DAG molecules, even in smaller amounts, may carry the lipotoxic effect. Thus, DAG content in chronically exercised lean sensitive muscle may represent another Achilles’ paradox.

09:50 - 11:20
Oral presentations

OP-SHT1 Physical Education and pedagogics 2

QUALITATIVE ANALYSIS OF THE INTERACTIVE DECISIONS OF THREE COACHES INVOLVED IN A “START TO RUN” SESSION

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A growing number of programs are implemented to enable a smooth resumption of physical activity. “Start to run” is a running program promoted by the athletics federation that has gained a great popularity in Belgium. This program consists of 10 weeks during which participants are trained to run 5 km without stop (10 km for those who are not beginners). No data seems to be available about the coaching process in this specific context of active leisure. The purpose of this study was to enlarge knowledge on this topic. Based on the principles of the qualitative research, we analyzed three sites: three groups involved in a start to run session. In different communities of the Liege area (Liege, Chimay, and Valenciennes) in all sites, data were collected before, during, and at the end of 12 weeks after the session. The collected information can be described as a sequence of three lessons in each site (8th, 9th and 10th weeks) one of the authors attended to the training session as participant observer. Moreover, we will also use data collected through interviews (description of the organization and content of the program) and questionnaires (feelings about the lessons). Participants were also requested to provide their perceptions about the lessons. As evidenced above, the validity of the analysis in this context of active leisure and the interpretation of the data. The three coaches described a similar teaching model but only subject 1 pointed out technical skills. Only subject 1 respected the “official” program developed by the athletics federation. The two other adopted it according to their experience and purposes of their groups. All of them considered that they were providing enough feedback and were active. On the other hand, they thought themselves as needing to encourage more and to be more effective in group management. Globally, participants confirmed the opinions of their respective coaches but they seemed more critical in group 1. Allowing a lower self-confidence in the motivational behaviors and feedback. The observation pointed out some errors in the clarity of the explanations (subject 1) and some divergences were reported with the actors. Discussion of the transcribed data allows us to consider that the three coaches are doing a very good job and adapt themselves to the expectations and needs of the participants. The identification of the positive and negative aspects in each subject provides a basis to propose some recommendations. Moreover, we pointed out that encouragement to speak about their own training process, all coaches modified spontaneously their interactive decisions during the study. This underlines the interest of this systematic analysis in leisure physical activity as well as in other educational contexts.

DOES PERCEIVED SPORT COMPETENCE INFLUENCE PHYSICAL ACTIVITY ENJOYMENT?

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Introduction: In the sport and physical activity (PA) field, enjoyment is a positive affective response to the sport experience (Sakala & Simons, 1992) and it can also be considered an important factor in promoting active lifestyles and regular PA among school-aged children (Kanaya et al., 2008). The aim of the present study was to investigate the effect of perceived sport competence on PA enjoyment. Methods: Participants were 394 pupils (173 boys and 221 girls) aged between 12 and 13 years (M=12.21). The Physical Self-Description Questionnaire-Sport (PSDS-S, Marsh et al., 1994) and the Physical Activity Enjoyment Scale (PACES, Carraro et al., 2008) were completed. Pearson’s correlation test was used to measure the association between variables. Multiple linear regression analysis was conducted to determine the correlations between the perceived sport competence and the enjoyment of PA. The dependent variables were the perceived sport competence scores, the independent variables were the perceived enjoyment of PA and the social support. The results showed that perceived sport competence had a significant positive influence on the enjoyment of PA. Conclusion: These results highlight the importance of perceived sport competence in determining the enjoyment of PA. This is consistent with previous research findings (Kanaya et al., 2008). The findings of this study suggest that perceived sport competence may be an important factor in promoting active lifestyles and regular PA among school-aged children. Future research should investigate the mediating role of perceived sport competence in the relationship between physical activity and enjoyment.