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enable
healthy food choices in all stages of life

THE CONNECTION BETWEEN PHYSICAL ACTIVITY AND HEALTHY FOOD CHOICES

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Background

- Unhealthy diets as well as low levels of physical activity (PA) are the main contributors of rising obesity numbers worldwide [1].
- Low levels of PA can trigger a liking for energy-dense, unhealthy foods [2].
- However, how levels of PA are connected to food shopping choices has been widely unexplored.

Aims

- **Identify groups** of people based on their levels of PA and **assess sociodemographic characteristics** of those groups.
- **Compare** those groups based on **psychological constructs.**
- **Identify differences in attribute preferences driving product purchase** between the groups concerning **yogurts,** a product that is considered healthy [3].

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Methods

- National representative online survey in Germany in 2021, using quota sampling
- Choice-Based Conjoint (CBC) experiment investigating 5 yogurt attributes (per 100g):
  - ➢ Price (0.59€, 0.39€, 0.19€)
  - ➢ Production (organic, no information)
  - ➢ Nutri-Score (A, B, C, no information)
  - ➢ Flavor (plain, fruit)
  - ➢ Nutrients (six combinations of varying fat- and protein levels)
- Participants (n=1182) were grouped based on their levels of PA [4]
- Analysis using χ2 tests, ANOVAs, Hierarchical Bayes and Counting Analyses

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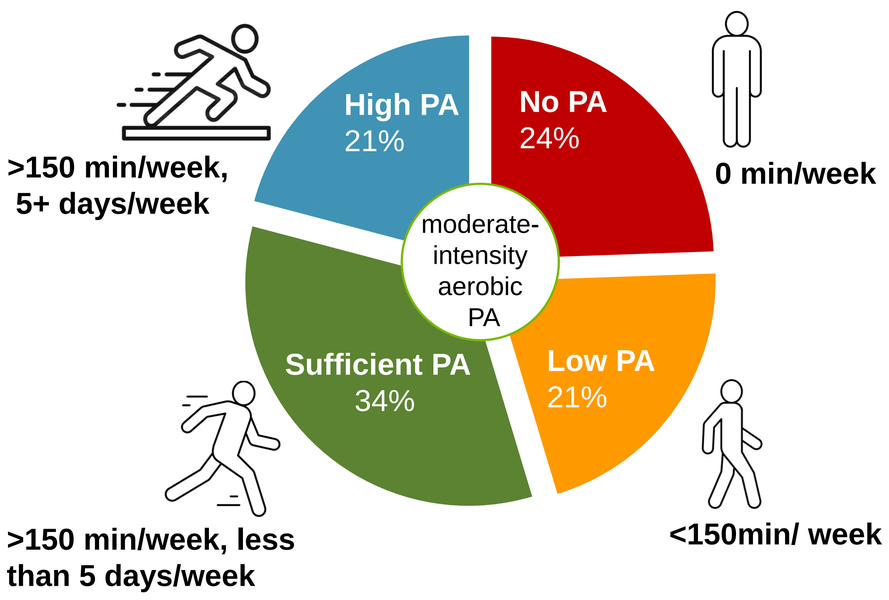
PA level groups



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PA level groups and their yogurt preferences

No PA Group (n= 289)

Characteristics of group members
- Lower levels of education
- Lower monthly net income (<1000€)
- Higher proportion in the age group 50-69

Yogurt preferences
Most frequently chosen:
- Cheapest option (0.19€)
- No information on production method
- Fruit option
- None option (compared to other groups)

Low PA Group (n=247)

Characteristics of group members
- Medium to high levels of education
- Medium to higher levels of monthly net income
- Mainly aged 30-49, or 50-69

Yogurt preferences
Most frequently chosen:
- Medium-priced (0.39€)
- Organic option
- Plain option

Sufficient PA Group (n=399)

Characteristics of group members
- Medium to high levels of education
- Medium to higher levels of monthly net income
- Mainly aged 30-49, or 50-69

Yogurt preferences
Most frequently chosen:
- Medium-priced (0.39€)
- Organic option
- Fruit option

High PA Group (n=247)

Characteristics of group members
- Higher levels of education
- Higher monthly net income
- Mainly aged 30-49, or 50-69

Yogurt preferences
Most frequently chosen:
- Medium-priced (0.39€)
- Organic option
- Plain option

No differences in terms of gender and household size between all groups

Increase in positive attitude towards healthy food, health self-efficacy and intention to buy healthier options

No differences in terms of Nutri-Score and nutrient preferences between all groups

Higher price acceptance, higher preference for organic option, higher preference for plain option, less preference for none option

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Conclusion & Implications

- The results characterize **target groups** for PA interventions based on psychological and sociodemographic factors.
- **Higher levels of PA** were connected to **healthy food product preferences**, such as a preference for organic and plain in flavor products.
- PA interventions could trigger an **overall healthier lifestyle** by also **encouraging healthier, organic food choices** in a shopping context.
- The results may inform **researchers and practitioners** interested in PA and healthy eating interventions and identified relevant psychological constructs that can be used for shaping corresponding **marketing/communication** activities.

References
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[3] Tremblay, A. and S. Panahi (2017). "Yogurt consumption as a signature of a healthy diet and lifestyle." The Journal of Nutrition **147**(7): 1476S-1480S.
[4] Rütten, A., et al. (2016). National Recommendations for Physical Activity and Physical Activity Promotion. Erlangen, FAU University Press.

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