

Assessment of adolescent food preferences using online surveys: A validation study in urban Laos

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Introduction

- Lao PDR is undergoing the nutrition transition, and the prevalence of non-communicable diseases (NCDs) is increasing.
- NCDs are affected by diet, but there is limited data on food preferences and practices in Lao PDR.
- Independent food choices become more common during adolescence, and food preferences and practices developed in adolescence can affect lifetime behaviors and NCD risk.
- Paper-based, in-person data collection can be more resource-intensive and therefore limiting; online data collection can use fewer resources and appeal to adolescents.
- However, not all adolescents have internet access, and online data may not be representative.
- Assessment online may also affect adolescents' responses, compared to traditional paper-based in-person methods.

Aim: We conduct a validation study to determine bias in assessing adolescent food preferences using an internet-based tool.

Methods

Participants and their characteristics: Adolescents: 10-19 years old, Vientiane High school

Sample size: n= expected 200 Adolescents

- Internet access at home

- (‘A group’) Randomized, used paper-based: n=72
- (‘C group’) Used online form at home: n=17

- No internet access at home

- (‘B group’) using paper-based: n= 55

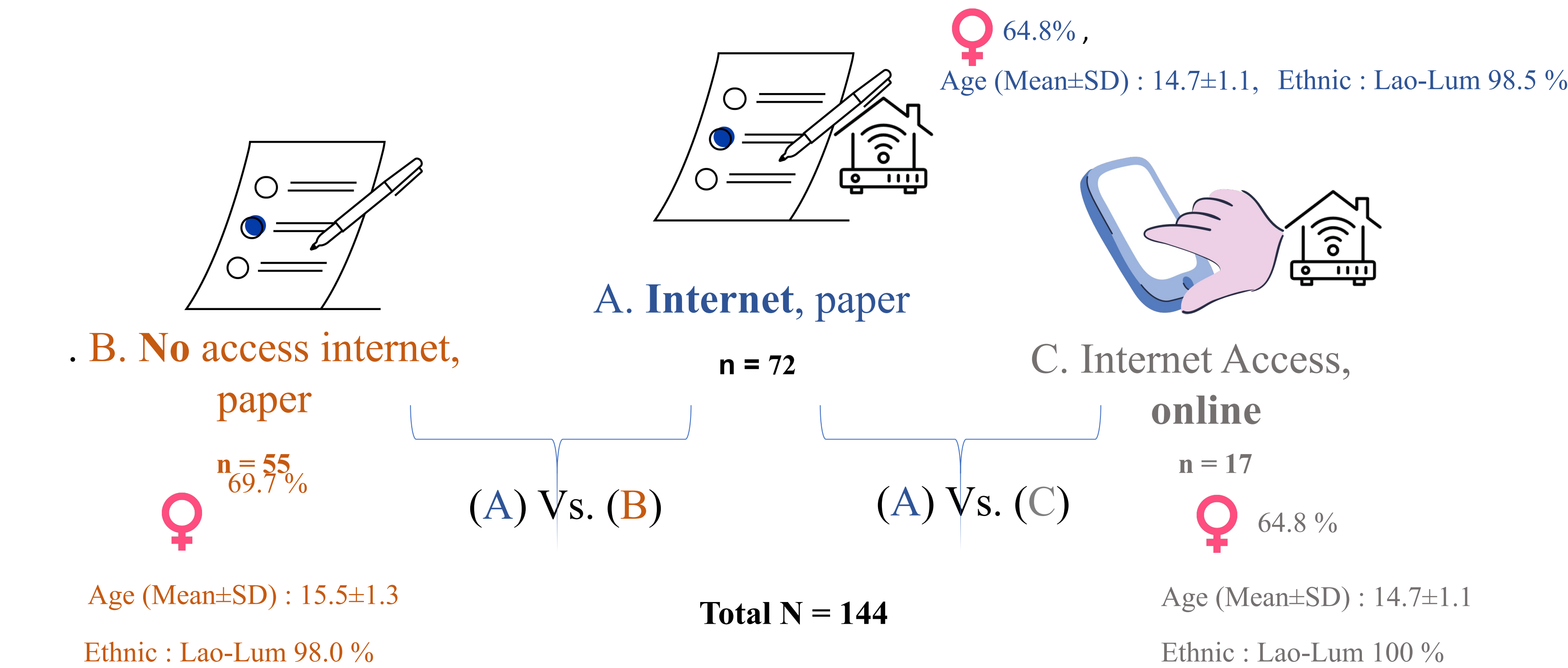
- This study was approved by the National Ethics Committee for Health Research of the Lao People's Democratic Republic (No. 080/NECHR, Vientiane capital 06/ 09/2022)

Acknowledgements

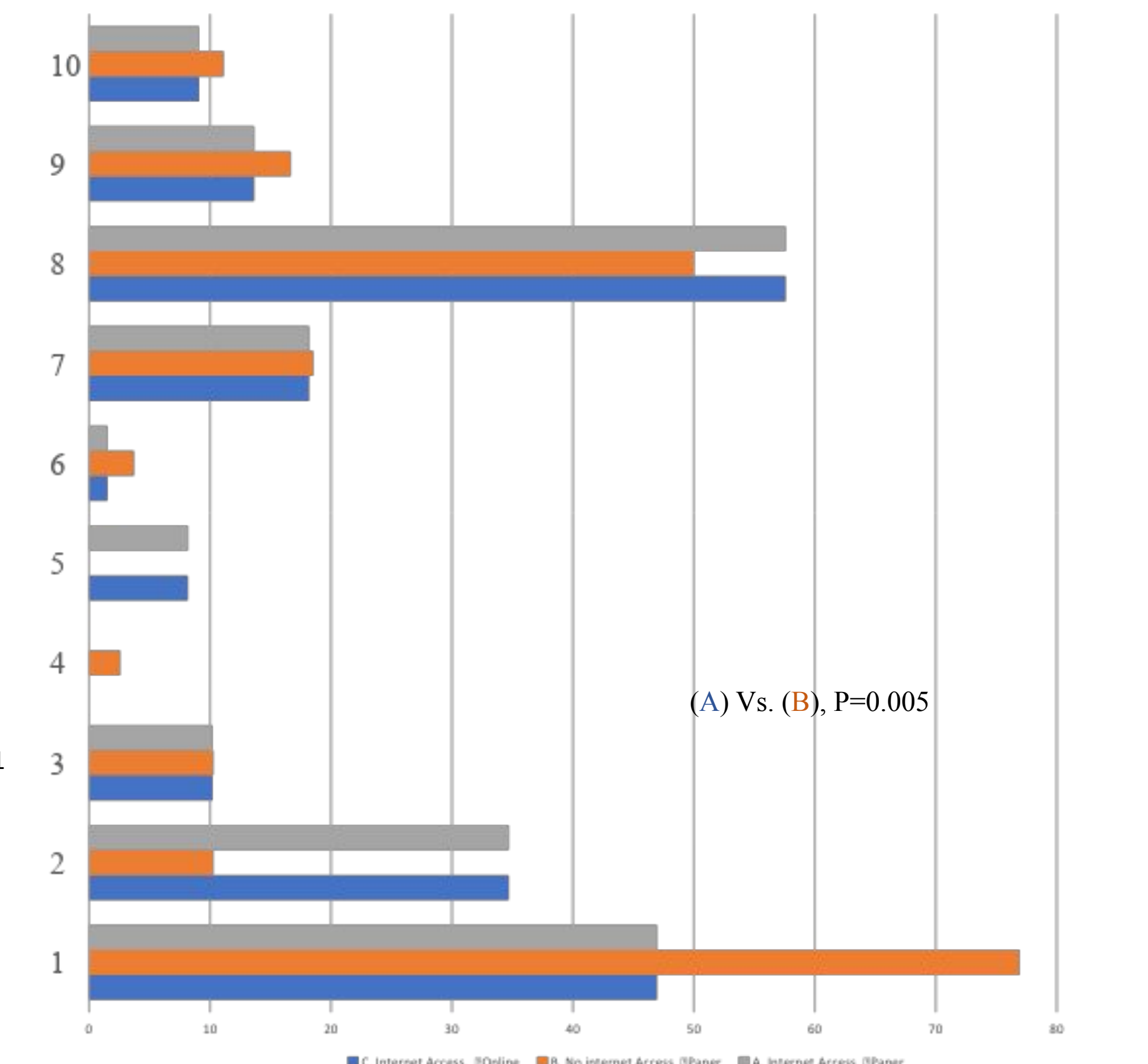
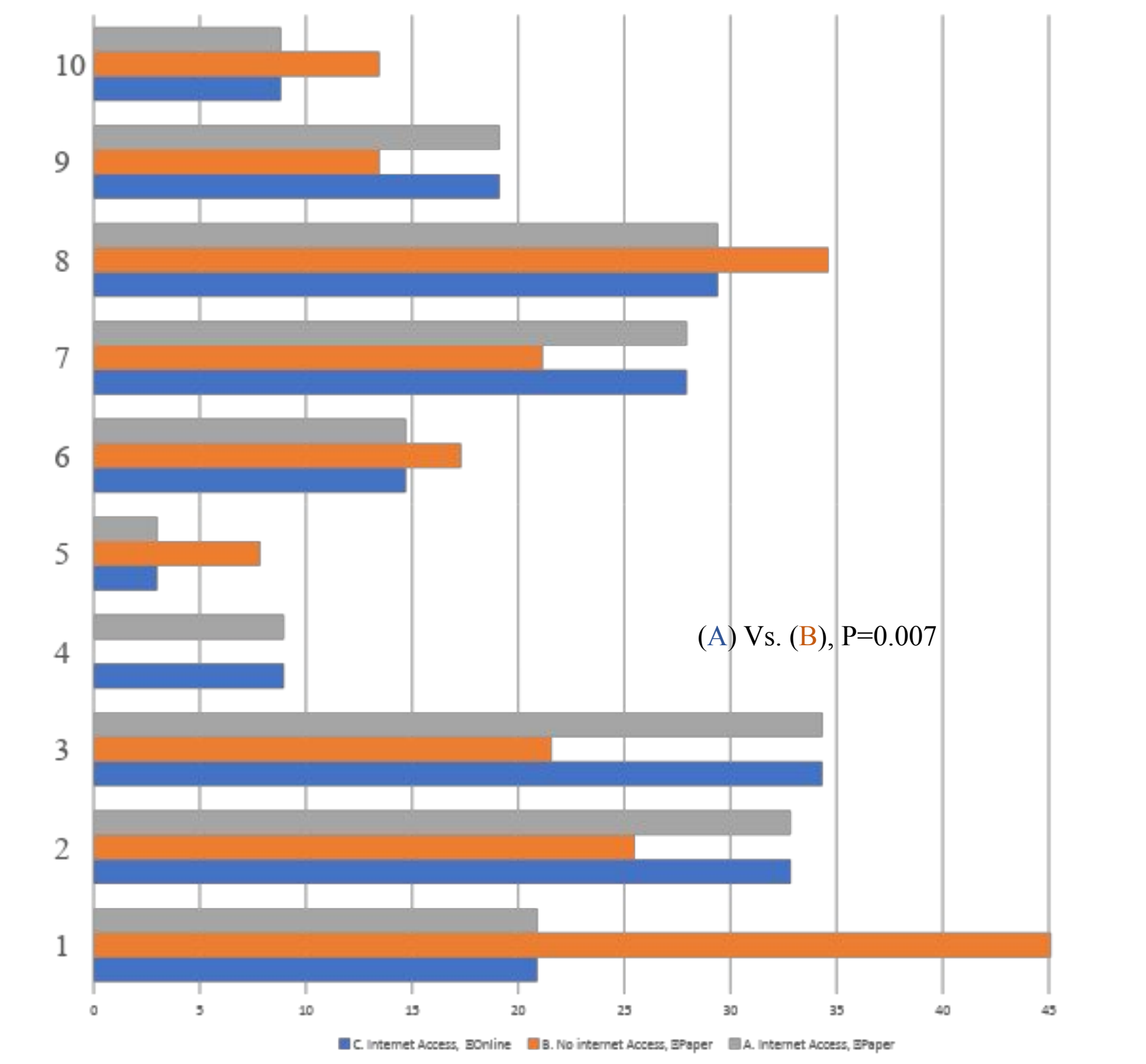
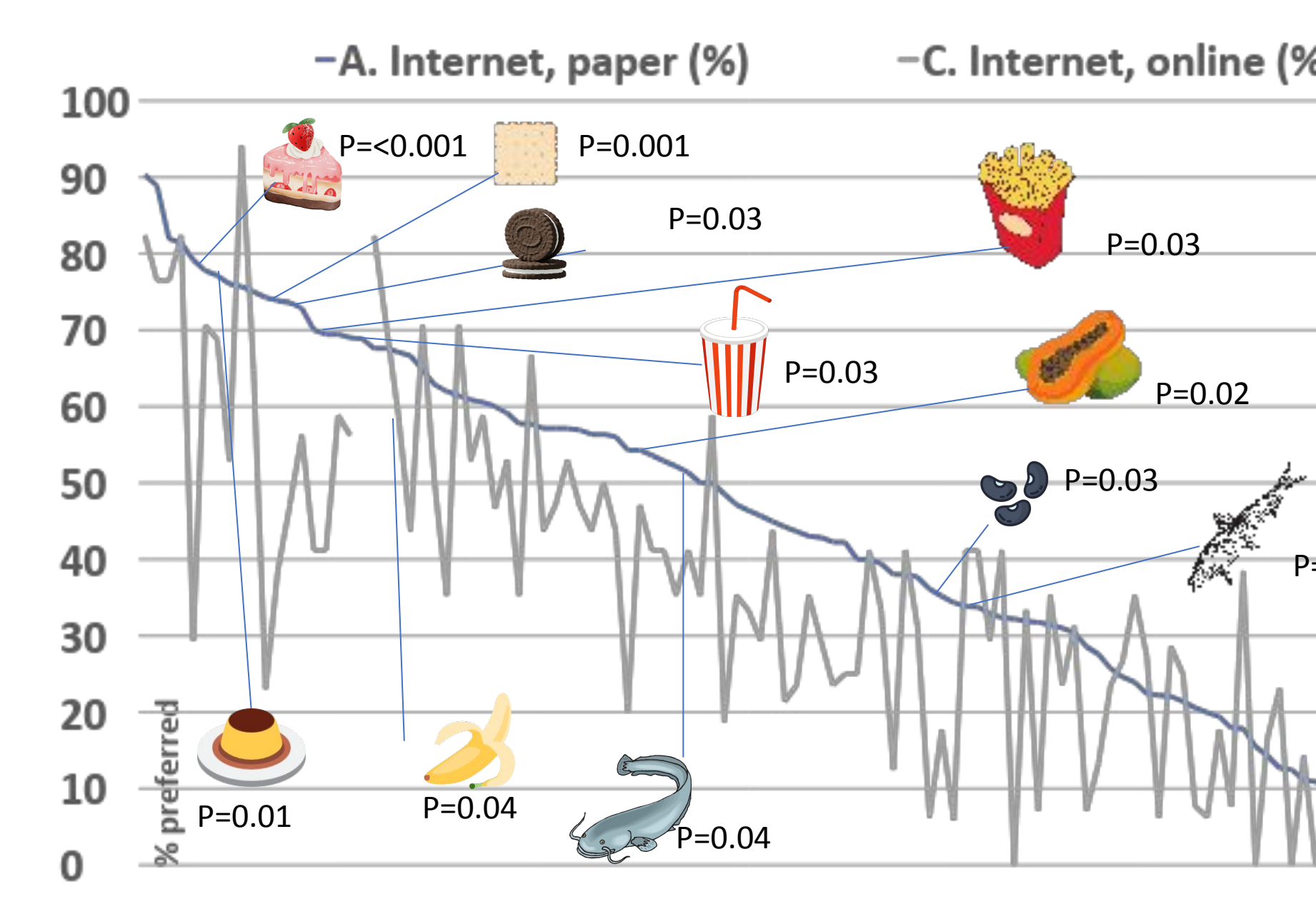
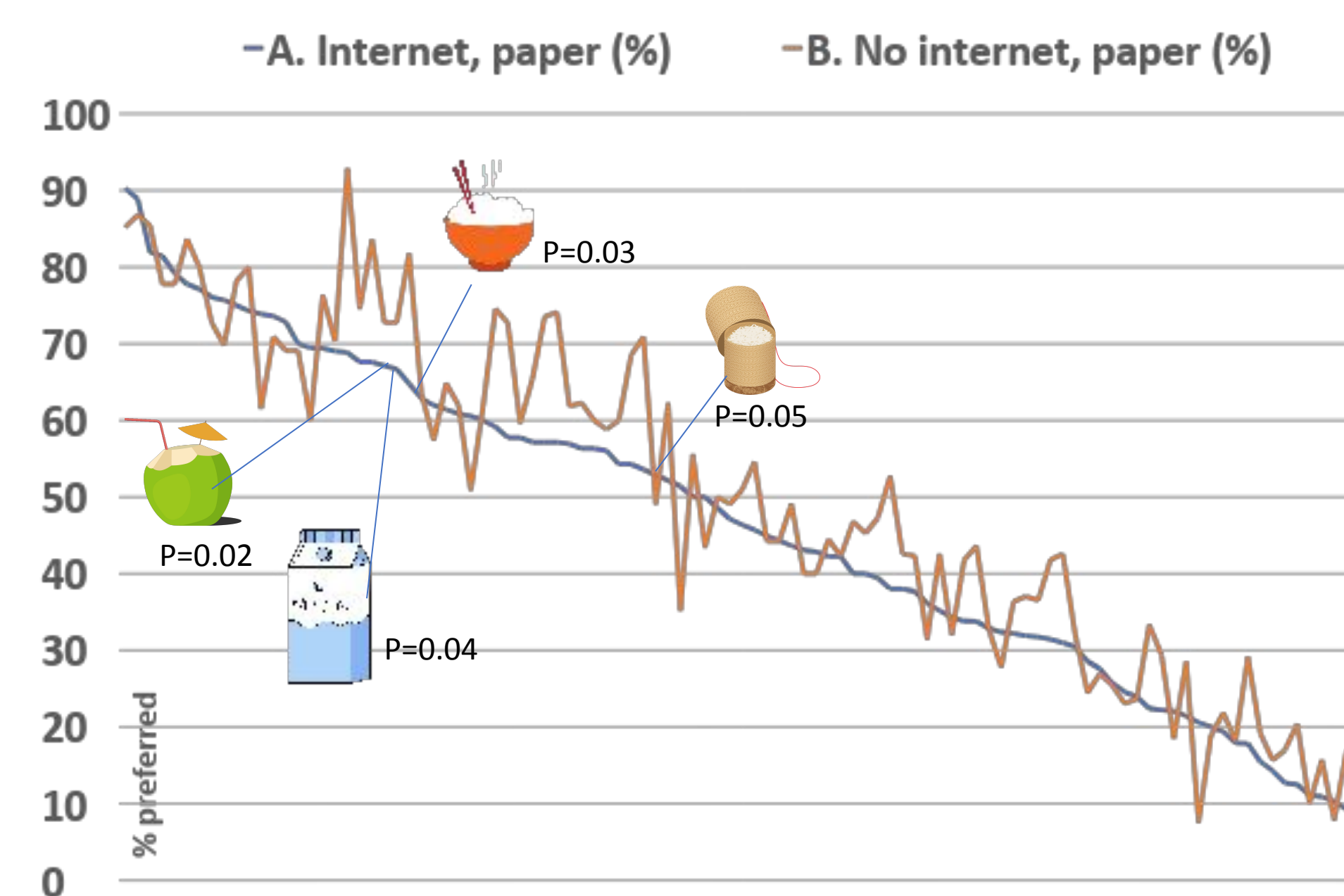


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Results



Nutrition knowledge score	A.	B.	C.
Identify foods for a balanced diet / 8	5.01±2.21	5.42±2.04	5.47±1.87
Identify food and drinks with added sugar / 5	2.41±1.32*	1.86±1.44*	1.71±0.99*
Identify foods with high salt / 5	1.8±1.55	1.38±1.55	2.06±1.29



Conclusion & Recommendation

- Overall, food preferences reported by adolescents with and without internet access were similar, suggesting limited bias.
- Meanwhile, in general, reported preferences for foods were lower when adolescents used the online form at home, compared with paper assessment at school. The nature of the observed bias needs more investigation.
- In contrast, adolescents without internet access may have different food practices: those without internet access may consume less added sugar and salt.
- Online assessment has many advantages in resource-limited settings, but these biases must be considered.
- Future research: validation with larger sample size and adolescents from rural and peri-urban areas.