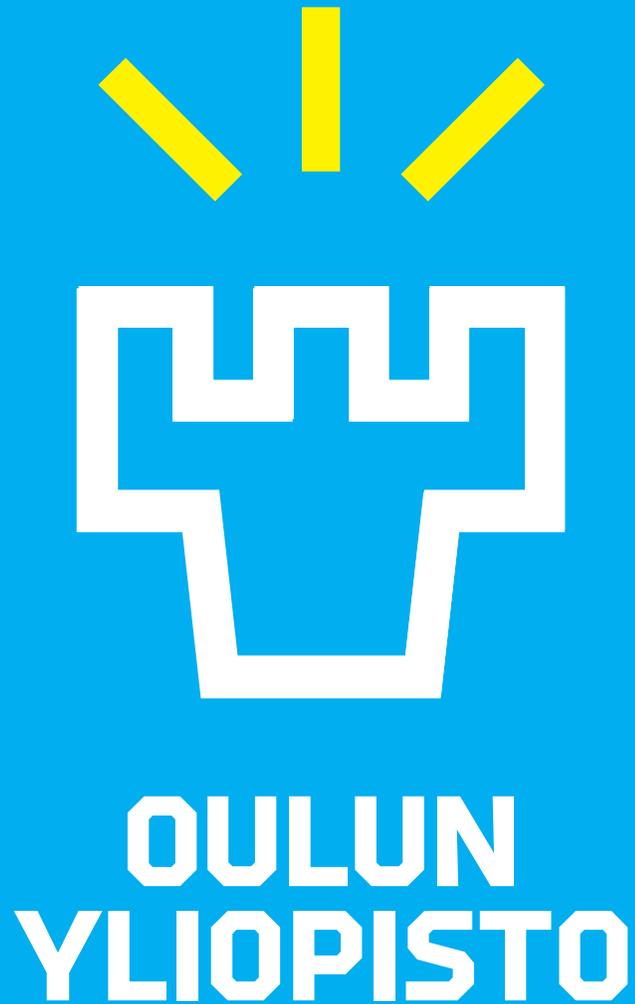


Learning analytics supporting career decision making process: End-user experience

Eglė Gedrimienė, Antti Kaasila
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Who are we?

Eglè is a PhD student in an educational psychology, University of Oulu. Her research topic is a technology supported career guidance.

Antti is a MSc in mathematics and a teacher currently working in University of Helsinki.



Intro: Context of career and educational choices

- The world of work is changing and there is a continuous need for up-skilling and re-skilling.
- The number of transitions in the working life is increasing (Sullivan & Al Ariss, 2019).
- These choices have far reaching consequences and are connected to gender gaps in workforce (Stearns, et al 2020), income inequalities (Sullivan, Parsons, Green, Wiggins & Ploubidis, 2018), inhibited social mobility (Wolniak, Seifert, Reed & Pascarella, 2008) and stratification of society (Thompson, 2005).



Learning analytics (LA) supporting career choices

- New ways could be used to support peoples' career choices.
- LA – utilized personal educational data to provide end-users with overview of their educational decisions and history.
- LA can be used to support self-knowledge and reflection upon own educational achievements.
- We tested LA application utilizing National registry KOSKI and studyinfo.fi (opintopolku.fi) to present users with their competencies and interest.



Screenshots of the LA app

Education

Finnish degrees

We have identified your following education:

Stadin ammattiopisto, Lehtikuusentien toimipaikka

Ympäristönhoitaja: Luonto- ja ympäristöalan perustutkinto
Graduated, 2016

Tell us how you liked the topics of your education, and we can give you better recommendations. You can also leave the selection empty.

- Kestävällä tavalla toimiminen
- Ympäristön hoitaminen
- Uusiutuvien energialähteiden hyödyntäminen
- Ulkoilureittien rakentaminen ja hoitaminen
- Kulttuuriympäristöjen kunnostaminen ja hoitaminen

Fields of interest

Next we will look at your fields of interest.

Choose 3 – 10 topics you'd like to work with.

ART AND CULTURE

Linguistics

Literature

Music

Art in general

Art periods and genres

Art History

Architecture

Visual Arts

Painting

Graphic Arts

Sculpture

Interior decoration

Theatre

Dance

Photography

Film

Printing

Museums

Exhibitions

Textile Industry

Clothing Industry

Footwear Industry

Glass Industry

Environment

Recommended study places

Showing the most suitable study places from your selected area based on your studies and selected fields of interests. You can restrict the area further, if you want.

Location:

Tanssija

Tanssialan perustutkinto: Tanssialan perustutkinto

5 learning opportunities

Metsuri-metsäpalvelujen tuottaja

Metsätalouden osaamisala: Metsäalan perustutkinto

19 learning opportunities

Muusikko

Musiikin osaamisala: Musiikkialan perustutkinto

18 learning opportunities



Research questions

1. How did different end-user groups evaluate the usefulness of the LA application for career guidance and how career goal selection self-efficacy was connected to evaluation?
2. How did the LA application for career guidance support the career decision making process from the perspective of the end-user?
3. How end-users evaluated current functionalities in a LA application for career guidance?
4. What LA application functionalities end-users wished to have in the future to support their career decision making process?

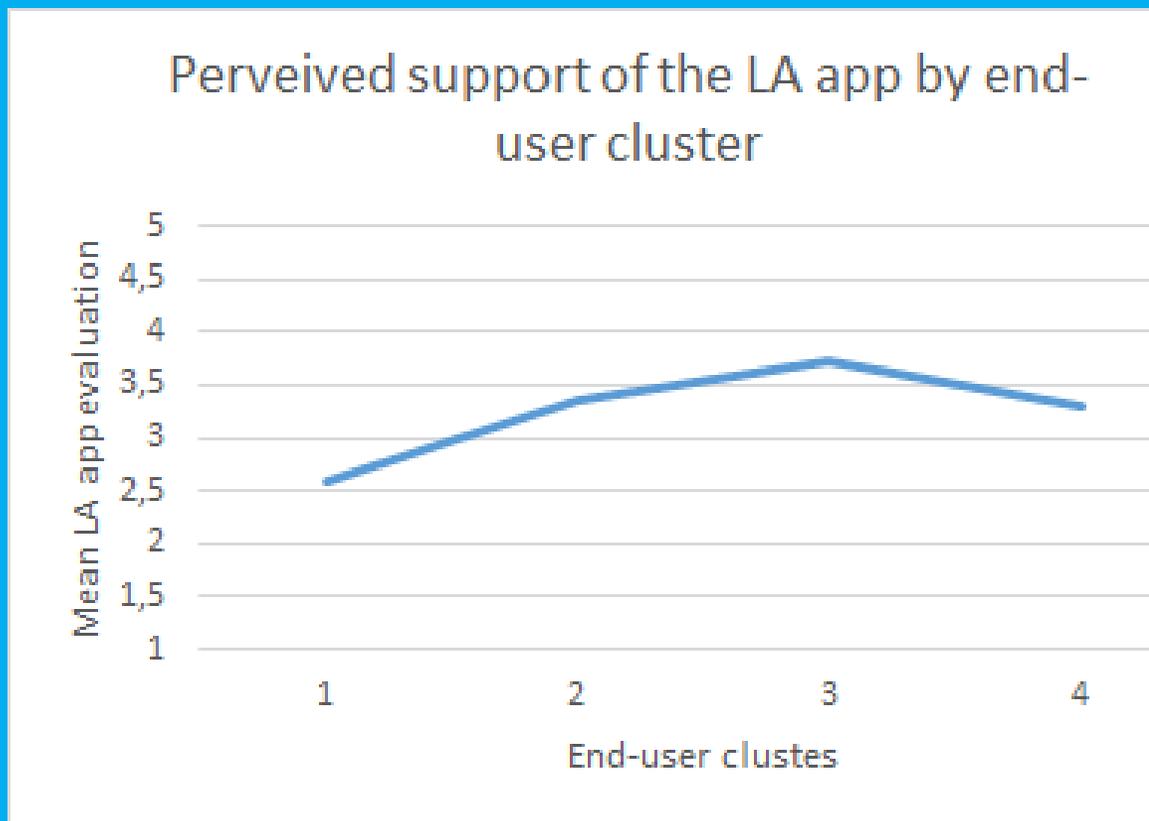


Participants and research methods

- 106 end-users in need of career and educational guidance.
- Varying demographic characteristics.
- End-users tried out the LA application in a guidance session.
- 3 vocational education and training institutions in Finland (VET).
- Gave their feedback using a questionnaire also including open-ended questions.
- Answers were analyzed using thematic analysis and career decision making model (Gati & Asher, 2001) as a framework.



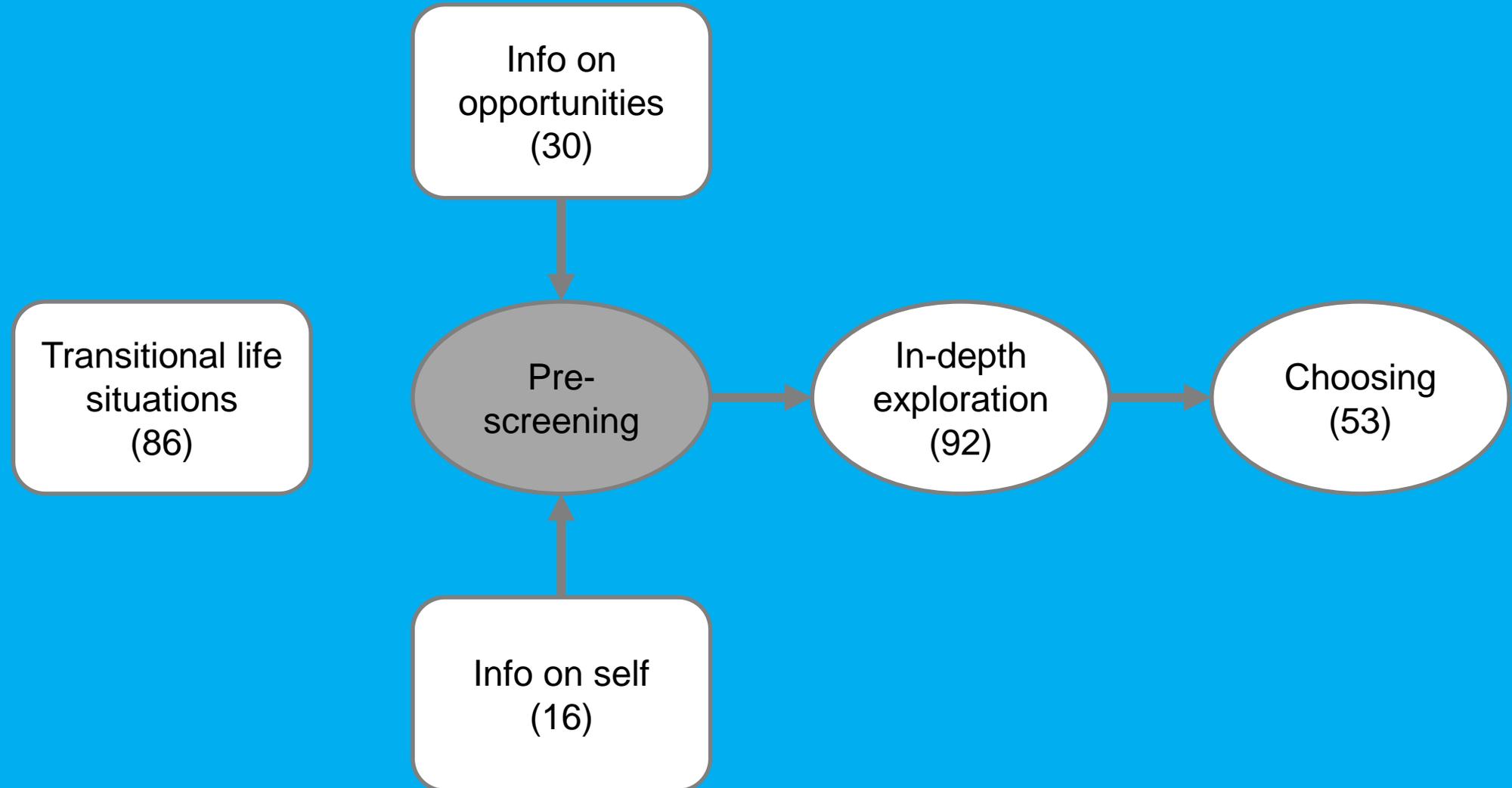
How did different end-user groups evaluate the usefulness of the LA app for career guidance?



	N (%)	Self-efficacy level	Gender	Age mean	Evaluation of the app's usefulness
Cluster 1	15 (15,8)	Low	F	24,7	2,6
Cluster 2	33 (34,7)	High	F	19,7	3,36
Cluster 3	12 (12,6)	Average(10) / Low (2)	M(8) F(4)	18,8	3,73
Cluster 4	35 (36,8)	High	M	23,3	3,30



How did the LA app for career guidance support the career decision making process?





Conclusions and further development

- Research on using LA to support career choices using national level educational data is lacking.
- LA app could be used in transitional points in life for personalized career exploration.
- Pre-screening and in-depth exploration were supported.
- Self-efficacy was important to the perceived usefulness of the LA app.
- Reflection on self must be supported more.



- **Are there national registries in other countries and are they used?**
- **Is there a need for services supporting career decisions?**
- **What is the future of career decision making?**
- **Is there another way of using personal data for the benefit of people?**