**Symposium I**

*Wednesday, April 5th, 2017, 9:15 – 10:45*

**Symposium: Longitudinal follow-ups of PIAAC**

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<th>Chair</th>
<th>Beatrice Rammstedt &amp; Anouk Zabal (<em>GESIS – Leibniz-Institute for the Social Sciences, Germany</em>)</th>
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**Abstract**

Four PIAAC Round 1 countries have carried out longitudinal follow-ups of their PIAAC 2012 surveys. This symposium will give an overview of the somewhat different approaches followed by Canada, Germany, Italy, and Poland, thus bringing a variety of insights both from a methodological as well as a content-oriented perspective. The Canadian PIAAC respondents are followed biannually as a part of the comprehensive Canadian longitudinal social survey LISA (Longitudinal and International Study of Adults). Andrew Heisz will focus on methodological and design aspects of LISA, addressing topics such as data collection, data linkage, and access. This first presentation is complemented by a second presentation by Gilles Bérubé which delineates how the information from PIAAC and its longitudinal follow-up can inform policy making. In Germany, the project PIAAC-Longitudinal (PIAAC-L) carried out three additional waves of data collection with the PIAAC 2012 respondents. Anouk Zabal and Beatrice Rammstedt will elaborate on the PIAAC-L design and share some of the lessons learnt. Gabriella Di Francesco and her colleagues will present some of their research results in the context of their single-wave longitudinal follow-up of PIAAC in Italy. Finally, in Poland, the post-PIAAC survey was carried out with one additional wave of data collection, and Marta Palczyńska will report on results regarding the measurement properties of specific non-cognitive skills assessed as a part of their longitudinal study.

**Presentations**

- **Title:** The Longitudinal and International Study of Adults: A Canadian PIAAC-Longitudinal.
  
  **Authors:** Andrew Heisz & Cathy Oikawa (*Statistics Canada, Canada*)

- **Title:** Skills research using the first two waves of Canada’s Longitudinal and International Study of Adults.
  
  **Authors:** Bruno Rainville & Gilles Bérubé (*Employment and Social Development Canada, Government of Canada, Canada*)

- **Title:** Following-up on German PIAAC respondents: The PIAAC-Longitudinal (PIAAC-L) project.
  
  **Authors:** Anouk Zabal & Beatrice Rammstedt (*GESIS – Leibniz-Institute for the Social Sciences, Germany*)

- **Title:** Skills, non-cognitive dimensions and job complexity: A new framework for analysis from the “PIAAC Italy Survey”.
  
  **Authors:** Fabio Roma (*National Agency for Active Labour Market Policies – ANPAL*), Simona Mineo (*National Institute for the Public Policies Analysis – INAPP*) & Orazio Giancola (*Sapienza University of Rome, Italy*)

- **Title:** Getting to know PIAAC respondents better: Polish follow-up study.
  
  **Author:** Marta Palczyńska (*Educational Research Institute, Poland*)
### Title: The Longitudinal and International Study of Adults: A Canadian PIAAC-Longitudinal.

**Authors**
Andrew Heisz & Cathy Oikawa *(Statistics Canada, Canada)*

**Abstract**
The Longitudinal and International Study of Adults (LISA) is a PIAAC-Longitudinal for Canada built upon the 2011-12 PIAAC collection cycle. In LISA, Canadian PIAAC respondents were re-interviewed in 2014 and 2016, and their cohabitants were also interviewed, with interviews covering a diverse set of subjects, such as labour market activity, health, family changes, caregiving, income, assets and debts, and non-cognitive skills (a 2018 collection is also planned). LISA incorporates an additional sample of households not initially eligible for PIAAC, making the LISA sample representative of the Canadian population overall, including children and seniors. An additional feature of LISA is that up to 30 years of data from four different administrative datasets representing income, tax, pension, immigration, and employment records are also linked to LISA. The presentation will describe the main features of the LISA survey design such as the LISA sampling methodology, collection procedures, record linkage, weighting and content.

### Title: Skills research using the first two waves of Canada’s Longitudinal and International Study of Adults.

**Authors**
Bruno Rainville & Gilles Bérubé *(Employment and Social Development Canada, Government of Canada, Canada)*

**Abstract**
Launched in 2012, the Longitudinal and International Study of Adults (LISA) collects information every two years from people across Canada about their jobs, education, health and family. A particularity of LISA is that the initial sample in 2012 included 8,600 respondents who also participated in the OECD Programme for the International Assessment of Adult Competencies (PIAAC). With a focus on PIAAC respondents, this presentation will discuss three research projects exploiting the first two waves of LISA. The first project examines returns to non-cognitive skills, measured by personality traits, taking literacy and numeracy proficiencies and educational attainment into consideration. The second project looks at how self-reported changes in skill proficiency are associated with participation in job-related formal and non-formal learning activities, and whether those changes in skill proficiencies led to changes in labour market status, job mobility and wages between the two waves. The third project uses the historical administrative tax data that are linked to LISA to assess the relationship between reception of unemployment insurance benefits and literacy and numeracy proficiencies. Issues related to the attrition of the group of PIAAC respondents over the successive waves of LISA will also be discussed.

### Title: Following-up on German PIAAC respondents: The PIAAC-Longitudinal (PIAAC-L) project

**Authors**
Anouk Zabal & Beatrice Rammstedt *(GESIS – Leibniz-Institute for the Social Sciences, Germany)*

**Abstract**
The German PIAAC-L project aims at enriching and enhancing the PIAAC (Programme for the
International Assessment of Adult Competencies) data to address research questions and policy issues that are beyond the scope of the available data from PIAAC. In order to achieve this objective, a longitudinal design with three follow-up waves of data collection was implemented. This design makes it possible to explore longitudinal effects on skill acquisition and loss. It also significantly expands the background information available, enabling the identification of additional correlates of the key skills assessed in PIAAC.

The German PIAAC 2012 respondents that were successfully recruited for PIAAC-L were administered very varied questionnaires and also a cognitive assessment with PIAAC literacy and numeracy instruments as well as reading and mathematics instruments from the NEPS (National Education Panel Survey). In addition, the design included an extension to include the household by also addressing adults aged 18 years and above living in the same household as the targeted PIAAC anchor persons. We will present the PIAAC-L design, discuss some methodological issues, and give an overview of the wide variety of information to be found in the PIAAC-L data sets. Furthermore, we will reflect on some lessons learnt, especially with a view to inputting on the next cycle of PIAAC.

Title: Skills, non-cognitive dimensions and job complexity: A new framework for analysis from the “PIAAC Italy Survey”.

Authors
Fabio Roma (National Agency for Active Labour Market Policies - ANPAL), Simona Mineo (National Institute for the Public Policies Analysis - INAPP) & Orazio Giancola (Sapienza University of Rome, Italy)

Abstract
Background and research design: The presentation explains the origin, the purpose and the design of the “PIAAC - ITALY Survey”, conducted by the Institute for the Development of Vocational Training for Workers (ISFOL) in 2014. The “PIAAC - ITALY Survey” is a continuation of the OECD PIAAC Survey but it is not merely a longitudinal study in the strict sense as the cognitive skills have not been measured again. The sample is representative at national level and it is composed by 2003 respondents interviewed from a panel of 4043 respondents (18-68 years old) that had participated to the OECD PIAAC Survey (2011-2012). The panel is based on the 4621 respondents of PIAAC-OECD study less those retired and disabled people. The questionnaire, administered in Computer-Aided Personal Interview format by the interviewer, is a revised version of the OECD PIAAC background questionnaire.

Aims: The presentation focuses on the results of the Job Requirements Approach Module (“JRA”) adopted in the “PIAAC - ITALY Survey”. This module represents an extended version of the JRA adopted by the OECD PIAAC Survey and includes 44 items relating to work activities required from the professional position. The objectives were: to go beyond the few, albeit crucial, OECD PIAAC skill domains and to strengthen the framework of the generic skills measured; to promote a validate self-report instrument for acted-out competences analysis; and to investigate the relationship between job requirements and other variables such as proficiency scores, non-cognitive skills and job complexity.

Results: Using the Principal Component Analysis the 44 items have been reduced to 26 and five main factors (job requirements) were extracted: 1) working with data, 2) problem solving and problem setting, 3) cooperation, 4) leadership, 5) physical work. Results show the five factors: display satisfactory reliability indices; have significant correlations with literacy and numeracy proficiency scores; are correlated with several non-cognitive dimensions and with job complexity. Conclusions: the JRA module can be considered a standardized and reliable instrument for measuring and analyzing skills at work and foundation skills are higher in people involved in more complex jobs.
Title: Getting to know PIAAC respondents better: Polish follow-up study.

Author
Marta Palczyńska (Educational Research Institute, Poland)

Abstract
The Polish Follow-up Study on PIAAC (postPIAAC) involved a single-wave follow-up of PIAAC respondents after 3 years. The main objectives of the project were to gather longitudinal information on PIAAC respondents in Poland and to collect wider set of background information on participants not available in the international study. Additionally, it aimed at broadening the PIAAC analytical potential by including short assessments possibly related to literacy and numeracy. The important extension of the postPIAAC study is the inclusion of measures of noncognitive skills, the self-assessment of competences, short cognitive tests and a test of basic ICT skills. We will give an overview of the study design and present selected research results relevant for the next PIAAC cycle. The analysis shows that non-cognitive skills play an important role in determining meaningful life outcomes and are incremental to cognitive skills. The next important topic covered by the study are ICT skills. The basic ICT test included is an expansion of the PIAAC core ICT locator test. The additional items can be compared with self-reports on ICT use analogical to Eurostat indicators. This comparison suggests that individuals in Poland overstate the level of their ICT skills. Finally, the relationship between self-assessment of literacy and numeracy and their direct assessment will be shown. We conclude with several implications for the next cycle of PIAAC.