

Isabella Sulis
Department of Social Sciences and Institutions
University of Cagliari

CONTACT DETAILS

Name: Isabella Sulis, PhD
Nationality Italian
Position Full Professor
Professional address: Department of Social Sciences and Institutions
University of Cagliari
Viale Fra Ignazio 78

E-mail : isabella.sulis@unica.it

EDUCATION

PhD in Applied Statistics, University of Palermo (Italy) *April 2007*
Supervisor: Prof. Vincenza Capursi
Dissertation: “Measuring students’ assessments on ‘university course quality’ using mixed-effects models” .

Visiting research PhD student, Department of Statistics, University of Warwick. Supervisor Prof. David Firth *September 2005-
July 2006*

M. Sc. in Economics: Quantitative Methods pathway, University of Tor Vergata (Italy) *September 2003*

First degree in Political Sciences, field of Economics, Faculty of Political Sciences, University of Cagliari, final mark 110/110 with laude *March 2002*

PROFESSIONAL EXPERIENCE

Full Professor in Social Statistics (SEC-S/05), Department of Social Sciences and Institutions, Faculty of Economics, Law and Political Sciences, University of Cagliari *October 2023-*

Associate Professor in Social Statistics (SEC-S/05), Department of Social Sciences and Institutions, Faculty of Economics, Law and Political Sciences, University of Cagliari *October 2018-
September 2023*

Assistant Professor in Statistics (SEC-S/01), Department of Social Sciences and Institutions, Faculty of Economics, Law and Political Sciences, University of Cagliari	<i>December 2008- September 2018</i>
Visiting Scholar at the Department of Educational, School, and Counseling Psychology, University of Kentucky (USA).	<i>November 2015 to January 2016</i>
Visiting Scholar , Apalachian Center, University of Kentucky	<i>September 2013- November 2013</i>
Postdoctoral position in Social Statistics (SEC-S/05), Department of Social and Economic Researches, University of Cagliari	<i>June 2007- December 2008</i>

TEACHING EXPERIENCE

Course	Year
<u>Data Analysis</u> (SECS-S/05), 3 CFU [18h] Master degree in Science of Public Administration, University of Cagliari.	<i>From a.a. 2023/24</i>
<u>Socioeconomic Indicators</u> (SECS-S/05), 6 CFU [36h] Master degree in International Relations, University of Cagliari.	<i>From a.a. 2018/19- -</i>
<u>Social Statistics</u> (SECS-S/05), 1st level degree program in Organization and Administration, University of Cagliari	<i>From a.a. 2018/19-</i>
<u>Data Analysis and Management for Development</u> (SECS-S/05), 3 CFU [18h] Master's Degree in Social Innovation and Communication, University of Cagliari.	<i>a.a. 2021/22</i>
<u>Statistics</u> (SECS-S/01), 1st level degree program in Political Sciences, University of Cagliari	<i>From 2010/11 to 2017/18</i>
<u>Models and Methods for the Evaluation of Services</u> (SECS-S/05)[part B], 2st level degree program (master), Faculty of Political Sciences, University of Cagliari	<i>2008/09</i>
<u>Models and methods for evaluation and programming</u> (SECS-S/05) [part A], 2nd level degree program (master), Faculty of Political Sciences, University of Cagliari	<i>2008/09</i>
<u>Social Statistics</u> (SECS-S/05), 1st level degree program at the Faculty of Education and Psychology , University of Cagliari	<i>2008/09</i>

PhD Programs

Member of the Academic Board and Executive Committee of the National PhD Program in Life Course Research. *From 2023*

Member of the Academic Board of the PhD Program in Research and Social Innovation, University of Cagliari. *From 2023*

Academic administrative duties (main)

Deputy Coordinator of the PhD Program in Research and Social Innovation, University of Cagliari *From September 2024*

Director of the Interuniversity Research Center for Didactics – Research in Education and Culture (CIRD-REC) of the Universities of Cagliari and Sassari *From October 2022*

RESEARCH PROJECTS (MAIN)

Project	Position	Length
PRIN 2022 From high school to university: Assessing peers' influence in educational inequalities and performances. Principal Investigator : Isabella Sulis. CUP F53D2300615 0006. Directorate Decree of Admission to Funding Prot. No. 1060 of July 17, 2023	Principal Investigator	2 years
RIN 2017 South Line: From High School to Job Placement - Micro-Data Life Course Analysis of University Student Mobility and Its Impact on the Italian North-South Divide. National Scientific Coordinator: Prof. Massimo Attanasio. Scientific Coordinator of the Cagliari Unit: Prof. Mariano Porcu [8/19/2019-8/19/2023]	Member	3 years
LR7-RAS 2015 - Capitale Umano ad Alta Qualificazione- “ <i>Students’ mobility in Sardinia. A comparative analysis of the tertiary education supply in Sardinia</i> ” Cod_CRP 39 [04/04/2017-04/03/2019]	Principal Investigator	2 years
LR 7-RAS 2011 “ <i>The digital revolution in the Sardinian school. Structural characteristics of the system, professional organizational and didactical cultures facing the challenge of the innovation</i> ”. Coordinator Prof. Marco Pitzalis. [06/13/2012-12/12/2015]	Member	3 years
PRIN 2007 `Models, indicators and methods for the analysis of the educational effectiveness of a university study programme to the purpose of its accreditation and	Member	2 years

improvement'. Coordinator Prof. Luigi Fabbris.

PRIN 2005 “Indicators Construction for Public Decision Making Processes between Measurement Issues and Knowledge”. Coordinator Prof. Vincenza Capursi [09/22/2008-10/21/2010] **Member** 2 years

PUBLICATIONS (MAIN)

Peer Review Journal Articles

1. Fabrizi, E., **Sulis**, I., Busetta, A., & Ragozini, G. (2024). Intergenerational transmission of disadvantages in the Italian labour market. *Socio-Economic Planning Sciences*, 96, 102097. <https://doi.org/10.1016/j.seps.2024.102097>
2. Usala, C., **Sulis**, I., Salaris, L., Tedesco, N., Porcu, M., & Barbieri, B. (2024). Disentangling the secondary school effects in the assessment of university inefficiencies. *Studies in Higher Education*, 1-21. <https://doi.org/10.1080/03075079.2024.2345188>
3. **Sulis**, I., Barbieri, B., Salaris, L., Melis, G. & Porcu, M. (2024), Gender bias in university student mobility: a cohort analysis in Italy, *International Journal of Manpower*, Vol. 45 No. 5, pp. 1076-1092. <https://doi.org/10.1108/IJM-02-2023-0101>
4. Porcu, M., **Sulis**, I., Usala, C. & Giambona, F. (2023). Will the gap ever be bridged? A cross-national comparison of non-native students' educational achievements. *Genus* 79, 19. doi: 10.1186/s41118-023-00199-5.
5. Usala, C., Porcu, M. & **Sulis**, I. (2023) The high school effect on students' mobility choices. *Statistical Methods & Applications*. <https://doi.org/10.1007/s10260-023-00694-1>
6. Giambona F., Porcu, M. & **Sulis** I. (2022). Does education protect families' well-being in times of crisis? Measurement issues and empirical findings from IT-SILC data. *Statistical Methods & Applications*. (ISSN: 1618-2510). doi: 10.1007/s10260-022-00644-3.
7. Columbu, S., Porcu, M., Primerano, I., **Sulis** I. & Vitale M.P. (2021). Analysing the determinants of Italian university student mobility pathways. *Genus* 77, 34. doi: 10.1186/s41118-021-00146-2.
8. Barbieri B., Balia S., **Sulis** I., Cois E., Cabras C., Atzara S. & De Simone S. (2021). Don't call it smart: working from home during the pandemic crisis. *Frontiers in Psychology*, 12, 1-13. (ISSN: 1664-1078). doi: 10.3389/fpsyg.2021.741585.
9. Columbu S., Porcu M. & **Sulis** I. (2021). University choice and the attractiveness of the study area: Insights on the differences amongst degree programmes in Italy based on generalised mixed-effect models. *Socio-Economic Planning Sciences*, 74. (ISSN: 0038-0121). doi: 10.1016/j.seps.2020.100926.
10. Columbu S., Porcu M., Primerano I., **Sulis** I. & Vitale M.P (2021). Geography of Italian

- student mobility: A network analysis approach. *Socio-Economic Planning Sciences*, 73. (ISSN: 0038-0121). doi: 10.1016/j.seps.2020.100918.
11. **Sulis I.**, Giambona F. & Porcu M. (2020). Adjusted indicators of quality and equity for monitoring the education systems over time. Insights on EU15 countries from PISA survey. *Socio-Economic Planning Sciences*. 69, 1-16. (ISSN: 0038-0121). doi: 10.1016/j.seps.2019.05.005.
 12. Barbieri B., **Sulis I.**, Porcu M. & Toland M.D. (2019). Italian Teachers' Well-Being Within the High School Context: Evidence From a Large Scale Survey. *Frontiers in Psychology*. (ISSN: 1664-1078). doi: 10.3389/fpsyg.2019.01926.
 13. **Sulis I.**, Porcu M. & Capursi V. (2019). On the use of student evaluation of teaching. A longitudinal analysis combining measurement issues and implications of the exercise. *Social Indicators Research*, 142, 1305–1331. (ISSN: 0303-8300). doi: 10.1007/s11205-018-1946-8.
 14. Barbieri B., Farnese M. L., **Sulis I.**, Dal Corso L. & De Carlo A. (2018). One Perception, two perspectives: measuring psychological contract dimensionality through the psychological contract content questionnaire. *Testing, Psychometrics, Methodology in Applied Psychology*. 25 (1), 21-47. (ISSN: 1972-6325). doi: 10.4473/TPM25.1.2.
 15. **Sulis I.** & Porcu M. (2017). Handling Missing Data in Item Response Theory. Assessing the Accuracy of a Multiple Imputation Procedure Based on Latent Class Analysis. *Journal of Classification*. 34 (2), 327–359. (ISSN: 0176-4268). doi:10.1007/s00357-017-9220-3.
 16. Toland M. D., **Sulis I.**, Giambona F., Porcu M. & Campbell J. M. (2017). Introduction to bifactor polytomous item response theory analysis. *Journal of School Psychology*. 60, 41-63. (ISSN: 0022-4405). doi:10.1016/j.jsp.2016.11.001.
 17. La Rocca M., Parrella L., Primerano I., **Sulis I.** & Vitale M.P. (2017). An integrated strategy for the analysis of student evaluation of teaching: from descriptive measures to explanatory models. *Quality & Quantity*. 51 (2), 675-691. (ISSN: 0033-5177). doi: 10.1007/s11135-016-0432-0.
 18. Giambona F., Porcu M. & **Sulis I.** (2017). Students mobility: assessing the determinants of attractiveness across competing territorial areas. *Social Indicators Research*. 133(3), 1105–1132 (ISSN: 0303-8300). doi: 10.1007/s11205-016-1407-1.
 19. Giambona, F., Pitzalis, M., Porcu, M., & **Sulis I.** (2016). Measuring Digital Teaching Innovation Using Item Response Theory Models. *Italian Journal of Sociology of Education*, 8 (2), 68-109. (ISSN 2035-4983). doi: 10.14658/pupj-ijse-2016-2-5.
 20. **Sulis I.** & Toland M. D. (2017). Introduction to Multilevel Item Response Theory Analysis: Descriptive and Explanatory Models. *The Journal of Early Adolescence*. 37 (1), 85-128. (ISSN: 0272-4316). doi: 10.1177/0272431616642328.
 21. **Sulis I.** & Porcu M (2015). Assessing Divergences in Mathematics and Reading Achievement in Italian Primary Schools: A proposal of adjusted indicators of school effectiveness. *Social Indicators Research*, 122 (2), p. 607-635 (ISSN: 0303-8300). doi: 10.1007/s11205-014-0701-z.
 22. Giambona F., Porcu M. & **Sulis I.** (2014). Does Education affect individual well-being? Some Italian Empirical evidences. *Open Journal of Statistics*, 4 (5), 319-329 (ISSN: 2161-718X). doi: 10.4236/ojs.2014.45032.

23. **Sulis I. & Capursi V. (2013).** Building up adjusted indicators of students' evaluation of university courses using generalized item response models. *Journal of Applied Statistics*, 40 (1), p. 88-102. (ISSN 0266-4763). doi: 10.1080/02664763.2012.734796.
24. **Sulis I. & Porcu M. (2012).** Comparing degree programs from students' assessments: A LCRA-based adjusted composite indicator. *Statistical Methods & Applications*, 21, p. 193-209, (ISSN: 1618-2510). doi: 10.1007/s10260-011-0185-9.
25. **Sulis I. & Tedesco N. (2009).** Measures of Quality of Life among University Students. *STATISTICA APPLICATA - Italian Journal of Applied Statistics*, 21 (3,4), p. 245-264 (ISSN: 1125-1964)

*Book Chapters
(International publisher)*

Sulis I., Giambona F & Tedesco N. (2015). Using Discrete-Time Multistate Models to Analyze Students' University Pathways. In: Morlini I., Minerva T., Vichi M. (Eds.), *Advances in Statistical Models for Data Analysis*. (p. 259-268). BERLIN HEIDELBERG: Springer-Verlag. ISBN 978-3-319-17376-4.

Porcu M. & Sulis I. (2013). The Credit Accumulation Process to Assess the Performances of Degree Programs: An Adjusted Indicator Based on the Result of Entrance Tests. In: Ingrassia S., Giudici P., Rocci R., Vichi M. (Eds.), *Statistical Models for Data Analysis*. p. 279-288. BERLIN HEIDELBERG: Springer-Verlag . ISBN 978-3-319-00031-2.

Sulis I (2013). A Further Proposal to Perform Multiple Imputation on a Bunch of Polytomous Items Based on Latent Class Analysis. In: Ingrassia S., Giudici P., Rocci R., Vichi M., *Statistical Models for Data Analysis*, p. 361-370. BERLIN HEIDELBERG: Springer-Verlag. ISBN 978-3-319-00031-2.

Sulis I. & Porcu M. (2011). Assessing the Quality of the Management of Degree Programs by Latent Class Analysis. In: ATTANASIO M., CAPURSI V. (Eds), *Statistical Methods for the Evaluation of University Systems, Contributions to Statistics*, p. 161-172. BERLIN HEIDELBERG: Springer-Verlag. ISBN: 978-3-7908-2375-2.

Sulis I., Porcu M. & Tedesco N. (2011). Evaluating lecturer's capability over time. Some evidence from surveys on university course quality. In: INGRASSIA S., ROCCI R., VICHI M. (Eds), *New Perspectives in Statistical Modeling and Data Analysis*, p. 13-20. BERLIN HEIDELBERG: Springer-Verlag . ISBN: 978-3-642-11362-8

Sulis I., Porcu M. & Pitzalis M. (2011). Scaling the latent variable cultural capital via Item Response models and Latent Class Analysis. In: FICHET, B., PICCOLO, D., VERDE, R., VICHI, M. (Eds), *Classification and Multivariate Analysis for Complex Data Structures*. p. 269-277. BERLIN HEIDELBERG: Springer-Verlag, ISBN: 978-3-642-13311-4

Sulis I. & Porcu M. (2010). A multiple imputation approach in a survey on university teaching evaluation. In: F. PALUMBO, C. N. LAURO, M. J. GREENACRE (Eds), *Data Analysis and Classification Studies in Classification, Data Analysis and Knowledge Organization*, p. 473-

482. BERLIN HEIDELBERG: Springer-Verlag, ISBN: 978-3-642-03738-2

(National publisher)

Busetta A., Fabrizi E, **Sulis I.**, Ragozini G. (2023). (Im)mobilità sociale delle famiglie. In Tomassini C. & Vignoli D. (Editors). Rapporto sulla popolazione Le famiglie in Italia. Forme, ostacoli, sfide. Bologna: il Mulino. ISBN 9788815383006.

Porcu M., **Sulis I.**, Carta A., Usala C. (2020) La mobilità degli studenti e gli strumenti per il Diritto allo Studio Universitario, In: Attanasio M., Ragozini G. e Porcu M. (Editors) Verso Nord. Le nuove e vecchie rotte delle migrazioni universitarie. Milano: Franco Angeli. ISBN 978-88-35-10562-6.

La Rocca, M., Parrella M.L., Primerano I., Sulis I., Vitale M.P. (2016). L'analisi dell'opinione degli studenti sulla didattica universitaria: potenzialità dei modelli IRT e dei modelli multilivello, in Buono. P, Gallo M, Ragozini G., Reverchon E., Rostirolla P., Il sistema universitario campano tra miti e realtà. Aspetti metodologici, analisi e risultati. Milano: Franco Angeli. ISBN 978-88917-4230-8

Giambona F., Pitzalis M., Porcu M, Sulis I. (2015). Insegnanti e innovazione. La scuola sarda e la sfida del digitale. In Calidoni P. and Casula C (Ed), Education 2.0: esperienze, riflessioni, scenari. CUEC. ISBN 978-88-8467-946-8

Pitzalis M., Giambona F., De Feo A., Ghiaccio M.F., Porcu M., Sulis I. (2015). La rivoluzione digitale nella scuola sarda. Caratteristiche strutturali del sistema, culture professionali, organizzative e didattiche di fronte alla sfida dell'innovazione. CUEC. ISBN:978 -88 -8467-895 -9

Sulis I., Tedesco N., Zavarrone E. (2011). Scalare la reputazione degli Atenei nella percezione dello studente attraverso la Mokken Scale Analysis. In CIVARDI M. (Ed). Modelli e metodi per valutare la reputazione di strutture formative, vol. 15, p. 135-154. PADOVA: CLEUP, ISBN: 978-88-6129-899-6.

Books

Porcu M., Usala C., **Sulis I.**, Atzori R., Melis E. (2023). I sentieri I sentieri dell'università: I percorsi nell'istruzione terziaria in Sardegna. Cagliari: UNICApres, 978-88-3312-093-5.

Sulis I., Columbu S., Carta A., Aru P. (2023). La mobilità degli studenti universitari Sardi: Un'analisi comparativa della domanda e dell'offerta di istruzione universitaria in Sardegna. Collana Resoconti, Cagliari: UNICApres, ISSN 2974-6671. DOI: <https://doi.org/10.13125/unicapres.978-88-3312-035-5>.

RESEARCH INTERESTS

The research activity mainly focuses on methods and models for the measurement of latent variables with main interests toward the evaluation of the education systems, the validation of measurement instruments and the building up of adjusted composite indicators suitable to make

comparative evaluations across education institutions and systems.

The main fields of application concern: the assessment of quality and equity in education; the building up of indicators of the efficiency and effectiveness of educational institutions; the monitoring of students' careers at the university; the monitoring of students' competences using large-scale assessment surveys; the measurement of complex constructs such as students' cultural capital, well-being, university attractiveness, students' perception of teaching quality. A further area of interest concerns methods and models for handling missing data in surveys

Main Methodologies:

Generalized Item Response Theory Models (Multilevel IRT models, Multidimensional IRT models, Person-explanatory IRT models) Latent Class Regression Analysis, Multilevel Models, Multi-State Models, Multiple Imputation Methods and Analysis

PROFESSIONAL AFFILIATION

- Department of Political and Social Sciences, University of Cagliari
- Member of the Italian Statistics Society and of AISP (ASSOCIAZIONE ITALIANA PER GLI STUDI DI POPOLAZIONE).
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- Member of CIRD (Center for Interdisciplinary Research in Education), University of Cagliari & Sassari, Italy

CONTRIBUTIONS TO CONFERENCES AND WORKSHOPS

[Conference] Fostering resilience at the university: Statistical models for assessing the influence of high schools and peers (with Silvia Columbu, Mariano Porcu, Cristian Usala) 18th International Joint Conference on Computational and Financial Econometrics (CFE) and Computational and Methodological Statistics (CMStatistics), CFE-CMStatistics 2024, King's College London, 14-16 December 2024 [*Organizers Invited Sessions, Speaker*]

[Conference] Indicators for assessing secondary school effectiveness and peers' impacts on facilitating tertiary education access and completion (with Sulis I, Porcu M, Columbu S, Usala C.) INVALSI, IX Seminario "I dati del e per il sistema educativo: strumenti per la ricerca e la didattica", Roma, Ottobre 17 – Ottobre 19 [Speaker]

[Conference] Percorsi degli studenti nell'università (Isabella Sulis, Università di Cagliari) Convegno Intermedio AISP - 2024 DISEGUAGLIANZE EDUCATIVE NELLA SCUOLA E NELL'UNIVERSITÀ IN ITALIA 11 settembre 2024 ore 11-18 Istituto Nazionale di Studi Romani, Piazza dei Cavalieri di Malta 2 – Roma [Speaker]

[Conference] From high school to university: assessing school influence on students' career at the university (with Porcu M., Usala C.). The 52nd Scientific Meeting of the Italian Statistical Society, University of Bari Aldo Moro, Bari, Italy, June 17-20, 2024. [Specialized session, Speaker]

[Conference] Evaluating The School Effect On Enhancing Resilience In University Students' Performances (with Columbu S., Porcu M., Usala C.) Third International Conference of the journal "Scuola Democratica", University of Cagliari, Italy, June 3-6, 2024.[Speaker]

[Conference] Inequalities at entrance, labor market conditions and university dropout: first evidence from Italy. (with Porcu M., Usala C.). CLADAG 2023 - 14th Scientific Meeting of Classification and Data Analysis Group, University of Salerno, Fisciano.

[Conference] The influence of labor market conditions on students' career disruption: first insights from Italy (with Porcu M., Usala C.). Statistical Methods For Evaluation And Quality: Techniques, Technologies And Trends University "G. D' Annunzio" Of Chieti-Pescara August 30, 2023 – September 1, 2023

[Conference] Intergenerational transmission of disadvantages in the Italian labour market: evidence from AD-SILC data (with Busetta A., Fabrizi E., Ragozini G). Statistical Methods For Evaluation And Quality: Techniques, Technologies And Trends University "G. D' Annunzio" Of Chieti-Pescara August 30, 2023 – September 1, 2023 [Invited Session, Speaker]

[Conference] Inequalities at entrance, labour market conditions and university dropout: first evidence from Italy (with Porcu M. e Usala C.). 1st Italian Conference on Economic Statistics Labour market: Analysis, trends and new scenarios. University of Milano-Bicocca, 17 February 2023 [Invited Session, Speaker]

[Conference] Does family background play the same role for sons and daughters? The role of intergenerational transmission.(con A. Busetta e E. Fabrizi). Giornate di Studio sulla Popolazione Population Days 2023 14th edition Rome, 1-3 February 2023.[Speaker]

[Conference] University dropout and churn in Italy: an analysis over time (with Barbieri B., Porcu M., Salaris L., Tedesco N., Usala C.). 51st Scientific Meeting of the Italian Statistical Society, Caserta, 22-24 June 2022. [Speaker]

[Conference]. Does family of origin make a difference in occupational outcomes ? (with Busetta A., Fabrizi E., Sulis I., Ragozini G.) 51st Scientific Meeting of the Italian Statistical Society, Caserta, 22-24 Giugno 2022. [Specialized Session]

[Conference] Estimating peers effect in university students' dropout decisions (with Porcu M., Usala C.). 51st Scientific Meeting of the Italian Statistical Society, Caserta, 22-24 June 2022. [Solicited Session]

[Conference] Estimating the peers effect on students' university choices (con M. Porcu e C. Usala). 10th International Conference IES 2022 Innovation & society 5.0: Statistical and Economic Methodologies for Quality Assessment, University of Campania "L. Vanvitelli", 27-28 January 2022 [Session of Solicited Contributes]

[Conference] Detecting the effect of secondary school in higher education university choices. (con M. Porcu e C. Usala) 13th Scientific Meeting of the Classification and Data Analysis Group, 9-11 September 2021.

[Conference] Detecting Gender Bias In Students' Mobility Choices In Tertiary Education In Italy: A Comparative Analysis Among Geographical Macro-Areas (with Barbieri B., Salaris L., Melis G., Porcu M.). Second International Conference of "Scuola Democratica" 2-5 June 2021. [Speaker]

December 2024

Isabella Gulis