

Prof. NURSEL KOYUNCU

Personal Information

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International Researcher IDs

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Education Information

Doctorate, Hacettepe University, Fen Fakültesi, Turkey 2007 - 2012

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Örneklem kuramında tahmin edicilere kalibrasyon yönteminin uygulanması, Hacettepe Üniversitesi, Fen Fakültesi, İstatistik Bölümü, 2012

Postgraduate, Tabakalı rasgele örneklemede yardımcı değişken bilgisi kullanılarak kitle ortalaması ve varyansının tahmin edilmesi, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, İstatistik (YI) (Tezli), 2007

Research Areas

Statistics, Statistical Analysis and Applications, Natural Sciences

Academic Titles / Tasks

Professor, Hacettepe University, Fen Fakültesi, İstatistik Bölümü, 2020 - Continues

Associate Professor, Hacettepe University, Fen Fakültesi, İstatistik Bölümü, 2014 - 2020

Assistant Professor, Hacettepe University, Fen Fakültesi, İstatistik Bölümü, 2014 - 2014

Research Assistant, Hacettepe University, Fen Fakültesi, İstatistik Bölümü, 2006 - 2014

Published journal articles indexed by SCI, SSCI, and AHCI

- New robust class of estimators for population mean under different sampling designs**
Çetin A. E., KOYUNCU N.
Journal of Computational and Applied Mathematics, vol.441, 2024 (SCI-Expanded)

- II. **Calibration estimator of population mean in stratified extreme ranked set sampling with simulation study**
Çetin A. E., KOYUNCU N.
Filomat, vol.38, no.2, pp.599-608, 2024 (SCI-Expanded)
- III. **Variance estimation based on L-moments and auxiliary information**
Shahzad U., Ahmad I., Almanjahie I. M., KOYUNCU N., Hanif M.
MATHEMATICAL POPULATION STUDIES, vol.29, no.1, pp.31-46, 2022 (SCI-Expanded)
- IV. **Designing robust modified R control charts for asymmetric distributions under ranked set and median ranked set sampling**
KOYUNCU N., KARAGÖZ D.
COMPUTATIONAL STATISTICS, vol.36, no.2, pp.1093-1121, 2021 (SCI-Expanded)
- V. **Generalized robust-regression-type estimators under different ranked set sampling**
KOYUNCU N., Al-Omari A. I.
MATHEMATICAL SCIENCES, vol.15, pp.29-40, 2021 (SCI-Expanded)
- VI. **Neoteric ranked set sampling for robust (X)over-bar and R control charts**
KOYUNCU N., KARAGÖZ D.
SOFT COMPUTING, vol.24, no.22, pp.17195-17204, 2020 (SCI-Expanded)
- VII. **A Niftymean chart method based on median ranked set sampling design**
KARAGÖZ D., KOYUNCU N.
SOFT COMPUTING, vol.24, no.7, pp.5199-5216, 2020 (SCI-Expanded)
- VIII. **Proportional hazards model under ranked set sampling scheme using censored data of coronary heart disease**
KOYUNCU N., Tutkun N. A.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.49, no.1, pp.458-477, 2020 (SCI-Expanded)
- IX. **New Acceptance Sampling Plans Based on Truncated Life Tests for Akash Distribution With an Application to Electric Carts Data**
Al-Omari A. I. F., KOYUNCU N., Alanzi A. R. A.
IEEE ACCESS, vol.8, pp.201393-201403, 2020 (SCI-Expanded)
- X. **Discrete-time survival analysis under ranked set sampling: an application to Turkish motor insurance data**
Tutkun N. A., KOYUNCU N., KARABEY U.
JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION, vol.89, no.4, pp.660-667, 2019 (SCI-Expanded)
- XI. **A new estimator for mean under stratified random sampling**
Shahzad U., Hanif M., KOYUNCU N.
MATHEMATICAL SCIENCES, vol.12, no.3, pp.163-169, 2018 (SCI-Expanded)
- XII. **Calibration estimator of population mean under stratified ranked set sampling design**
KOYUNCU N.
COMMUNICATIONS IN STATISTICS-THEORY AND METHODS, vol.47, no.23, pp.5845-5853, 2018 (SCI-Expanded)
- XIII. **New mean charts for bivariate asymmetric distributions using different ranked set sampling designs**
KOYUNCU N., KARAGÖZ D.
QUALITY TECHNOLOGY AND QUANTITATIVE MANAGEMENT, vol.15, no.5, pp.602-621, 2018 (SCI-Expanded)
- XIV. **New difference-cum-ratio and exponential type estimators in median ranked set sampling**
KOYUNCU N.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.45, no.1, pp.207-226, 2016 (SCI-Expanded)
- XV. **Calibration Weighting in Stratified Random Sampling**
KOYUNCU N., KADILAR C.
COMMUNICATIONS IN STATISTICS-SIMULATION AND COMPUTATION, vol.45, no.7, pp.2267-2275, 2016 (SCI-Expanded)
- XVI. **A new calibration estimator in stratified double sampling**
KOYUNCU N., KADILAR C.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.43, no.2, pp.337-346, 2014 (SCI-Expanded)

- XVII. **NUMERICAL SOLUTION TO THE OPTIMIZATION PROBLEM IN SAMPLING**
KOYUNCU N., YENIAY O.
PAKISTAN JOURNAL OF STATISTICS, vol.30, no.2, pp.285-289, 2014 (SCI-Expanded)
- XVIII. **Exponential-Type Estimators of the Mean of a Sensitive Variable in the Presence of Nonsensitive Auxiliary Information**
KOYUNCU N., GUPTA S., Sousa R.
COMMUNICATIONS IN STATISTICS-SIMULATION AND COMPUTATION, vol.43, no.7, pp.1583-1594, 2014 (SCI-Expanded)
- XIX. **Efficient estimators of population mean using auxiliary attributes**
Koyuncu N.
APPLIED MATHEMATICS AND COMPUTATION, vol.218, no.22, pp.10900-10905, 2012 (SCI-Expanded)
- XX. **ON THE FAMILY OF ESTIMATORS OF POPULATION MEAN IN STRATIFIED RANDOM SAMPLING**
KOYUNCU N., KADILAR C.
PAKISTAN JOURNAL OF STATISTICS, vol.26, no.2, pp.427-443, 2010 (SCI-Expanded)
- XXI. **On improvement in estimating population mean in stratified random sampling**
KOYUNCU N., KADILAR C.
JOURNAL OF APPLIED STATISTICS, vol.37, no.6, pp.999-1013, 2010 (SCI-Expanded)
- XXII. **EFFICIENT ESTIMATORS FOR THE POPULATION MEAN**
KOYUNCU N., KADILAR C.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.38, no.2, pp.217-225, 2009 (SCI-Expanded)
- XXIII. **Ratio and product estimators in stratified random sampling**
KOYUNCU N., KADILAR C.
JOURNAL OF STATISTICAL PLANNING AND INFERENCE, vol.139, no.8, pp.2552-2558, 2009 (SCI-Expanded)
- XXIV. **Family of Estimators of Population Mean Using Two Auxiliary Variables in Stratified Random Sampling**
KOYUNCU N., KADILAR C.
COMMUNICATIONS IN STATISTICS-THEORY AND METHODS, vol.38, no.14, pp.2398-2417, 2009 (SCI-Expanded)

Articles Published in Other Journals

- I. **A new family of robust regression estimators utilizing robust regression tools and supplementary attributes**
Sajjad I., Hanif M., KOYUNCU N., Shahzad U., Al-Noor N. H.
Statistics in Transition New Series, vol.22, no.1, pp.207-216, 2021 (Scopus)
- II. **ESTIMATION OF POPULATION MEAN UNDER DIFFERENT STRATIFIED RANKED SET SAMPLING DESIGNS WITH SIMULATION STUDY APPLICATION TO BMI DATA**
Cetin A. E., KOYUNCU N.
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.69, no.1, pp.560-575, 2020 (ESCI)
- III. **ESTIMATION OF THE PARAMETERS OF THE NEW WEIBULL-PARETO DISTRIBUTION USING RANKED SET SAMPLING**
Samuh M. H., Al-Omari A. I., KOYUNCU N.
STATISTICA, vol.80, no.1, pp.103-123, 2020 (ESCI)
- IV. **Some new classes of estimators under linear systematic sampling in absence and presence of non-response**
Shahzad U., Hanif M., KOYUNCU N.
JOURNAL OF STATISTICS & MANAGEMENT SYSTEMS, vol.22, no.6, pp.1067-1091, 2019 (ESCI)
- V. **A Family of Ratio Estimators in Stratified Random Sampling Utilizing Auxiliary Attribute Along Side the Nonresponse Issue**
Shahzad U., Hanif M., KOYUNCU N., Garcia Luengo A. V.

JOURNAL OF STATISTICAL THEORY AND APPLICATIONS, vol.18, no.1, pp.12-25, 2019 (ESCI)

- VI. **Estimation of Mean of a Sensitive Quantitative Variable in Complex Survey: Improved Estimator and Scrambled Randomized Response Model**
Saleem I., Sanaullah A., KOYUNCU N., Hanif M.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.32, no.3, pp.1021-1043, 2019 (ESCI)
- VII. **Improvement estimation on two successive occasions in cluster sampling**
Luengo G., Victoria A., Shahzad U., KOYUNCU N., Muhammad H.
PAKISTAN JOURNAL OF STATISTICS AND OPERATION RESEARCH, vol.15, no.4, pp.1037-1050, 2019 (ESCI)
- VIII. **A REGRESSION TYPE ESTIMATOR FOR MEAN ESTIMATION UNDER RANKED SET SAMPLING ALONGSIDE THE SENSITIVITY ISSUE**
Shahzad U., Hanif M., KOYUNCU N., Garcia Luengo A. V.
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.68, no.2, pp.2037-2049, 2019 (ESCI)
- IX. **An efficient generalized family of estimators for mean estimation under simple random sampling**
Shahzad U., Hanif M., KOYUNCU N., Luengo A. V. G., Khan N.
Investigacion Operacional, vol.40, no.1, pp.28-45, 2019 (Scopus)
- X. **A new estimator of mean under ranked set sampling alongside the sensitivity issue**
Shahzad U., Hanif M., KOYUNCU N., Garcia Luengo A. V.
JOURNAL OF STATISTICS & MANAGEMENT SYSTEMS, vol.21, no.8, pp.1553-1564, 2018 (ESCI)
- XI. **On the estimation of population variance using auxiliary attribute in absence and presence of non-response**
Shahzad U., Hanif M., KOYUNCU N., Sanaullah A.
ELECTRONIC JOURNAL OF APPLIED STATISTICAL ANALYSIS, vol.11, no.2, pp.608-621, 2018 (ESCI)
- XII. **Generalized Exponential-Type Estimators for Population Mean Taking Two Auxiliary Variables for Unknown Means in Stratified Sampling with Sub-sampling the Non-Respondents**
Sanaullah A., Noor ul Amin M., Hanif M., KOYUNCU N.
International Journal of Applied and Computational Mathematics, vol.4, no.2, 2018 (Scopus)
- XIII. **Regression Estimators in Ranked Set, Median Ranked Set and Neoteric Ranked Set Sampling**
KOYUNCU N.
PAKISTAN JOURNAL OF STATISTICS AND OPERATION RESEARCH, vol.14, no.1, pp.89-94, 2018 (ESCI)
- XIV. **On efficiency of cluster sampling on sampling on two occasions when there is non-response**
Garcia Luengo A. V., Shahzad U., KOYUNCU N., Hanif M.
JOURNAL OF STATISTICS & MANAGEMENT SYSTEMS, vol.21, no.1, pp.139-162, 2018 (ESCI)
- XV. **A NEW FAMILY OF ESTIMATORS FOR MEAN ESTIMATION ALONG SIDE THE SENSITIVITY ISSUE**
Shahzad U., Hanif M., Koyuncu N., Garcia Luengo A. V.
JOURNAL OF RELIABILITY AND STATISTICAL STUDIES, vol.10, no.2, pp.43-63, 2017 (ESCI)
- XVI. **SHEWHART MEAN AND RANGE CONTROL CHARTS USING NEWRANKED SET SAMPLING SCHEMES**
KOYUNCU N., KARAGÖZ D.
Journal of the Turkish Statistical Association, vol.10, 2017 (Peer-Reviewed Journal)
- XVII. **Preface of the "symposium on Recent Advances in Statistical Theory and Applications"**
KOYUNCU N.
AIP Conference Proceedings, vol.1863, 2017 (Scopus)
- XVIII. **Estimation of population variance using quartiles in absence and presence of non-response**
Shahzad U., Hanif M., KOYUNCU N., Garcia Luengo A. V.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.30, no.2, pp.205-218, 2017 (ESCI)
- XIX. **Improved Exponential Type Estimators for Finite Population Mean in Stratified Random Sampling**
KOYUNCU N.
PAKISTAN JOURNAL OF STATISTICS AND OPERATION RESEARCH, vol.12, no.3, pp.429-441, 2016 (ESCI)
- XX. **Preface of the "symposium on recent advances in statistics"**
KOYUNCU N.
AIP Conference Proceedings, vol.1648, 2015 (Scopus)

- XXI. **Ratio estimation of the population mean in extreme ranked set and double robust extreme ranked set sampling**
KOYUNCU N.
International Journal of Agricultural and Statistical Sciences, vol.11, no.1, pp.21-28, 2015 (Scopus)
- XXII. **On improvement in estimating median in two phase sampling using two auxiliary information**
KOYUNCU N.
International Journal of Agricultural and Statistical Sciences, vol.10, no.1, pp.27-33, 2014 (Scopus)
- XXIII. **Preface of the "symposium on advances in sampling theory and applications"**
KOYUNCU N.
AIP Conference Proceedings, vol.1558, pp.1437, 2013 (Scopus)
- XXIV. **Families of Estimators for Population Mean Using Information on Auxiliary Attribute in Stratified Random Sampling**
KOYUNCU N.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.26, no.2, pp.181-193, 2013 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **Various ranked set sampling designs to construct mean charts for monitoring the skewed normal process**
KARAGÖZ D., KOYUNCU N.
International Statistics Congress, 6 - 08 December 2017
- II. **Shewhart X and S charts for bivariate normal distribution under ranked set, median ranked set and neoteric ranked set sampling schemes**
KARAGÖZ D., KOYUNCU N.
International Symposium on Econometrics, Operations Research and Statistics, 5 - 07 October 2017
- III. **Robust shewhart control charts by using ranked set sampling and neoteric ranked set sampling schemes**
KARAGÖZ D., KOYUNCU N.
Robust shewhart control charts by using ranked set sampling and neoteric ranked set sampling schemes, 24 - 28 July 2017
- IV. **Ratio Estimation of Population Mean based on Truncated Ranked Set Sampling**
KOYUNCU N.
International Conference on Numerical Analysis and Applied Mathematics (ICNAAM), Rhodes, Greece, 19 - 25 September 2016, vol.1863
- V. **Improved Ratio Estimation of Population Mean under Median and Neoteric Ranked Set Sampling**
KOYUNCU N.
International Conference on Numerical Analysis and Applied Mathematics (ICNAAM), Rhodes, Greece, 19 - 25 September 2016, vol.1863
- VI. **A Class of Estimators of Finite Population Variance in Simple Random Sampling**
Koyuncu N.
International Conference on Numerical Analysis and Applied Mathematics (ICNAAM), Rhodes, Greece, 22 - 28 September 2014, vol.1648
- VII. **Exponential Estimators of Finite Population Variance in Simple Random Sampling**
Koyuncu N.
International Conference on Numerical Analysis and Applied Mathematics (ICNAAM), Rhodes, Greece, 22 - 28 September 2014, vol.1648
- VIII. **Exponential Estimators using Characteristics of Poisson Distribution An Application to Earthquake Data**
KOYUNCU N., ÖZEL KADILAR G.
ICNAAM 2013, 22 September 2013

- IX. **Efficient Combined Estimators of Population Mean using Auxiliary Attribute under Stratified Random Sampling**
Koyuncu N.
11th International Conference of Numerical Analysis and Applied Mathematics (ICNAAM), Greece, 21 - 27 September 2013, vol.1558, pp.1466-1469
- X. **A CLASS OF ESTIMATORS OF POPULATION VARIANCE IN STRATIFIED RANDOM SAMPLING**
KOYUNCU N.
6th International Days of Statistics and Economics, Prague, Czech Republic, 13 - 15 September 2012, pp.605-613

Supported Projects

KOYUNCU N., Project Supported by Higher Education Institutions, Tabakalı medyan sıralı küme örneklemesinde oran tahmini, 2017 - 2017

KOYUNCU N., Project Supported by Higher Education Institutions, Sıralı Kume Orneklemesi Medyan Sıralı Kume Orneklemesi ve Neoterik Sıra Kume Orneklemesi Yontemleri Altında İki Degiskenli Normal Dagılım icin Shewhart And S Kartları, 2017 - 2017

KARAGÖZ D., KOYUNCU N., Project Supported by Higher Education Institutions, Sıralı örnekleme yöntemlerine dayalı sağlam Shewhart kontrol kartları, 2017 - 2017

KOYUNCU N., Project Supported by Higher Education Institutions, Tabakalı Sıralı Küme Örneklemesinde Kitle Ortalamasının Etkin Tahmin Edicileri, 2016 - 2016

KOYUNCU N., Project Supported by Higher Education Institutions, Medyan Sıralı Küme Örneklemesi ve Neoterik Sıralı Küme Örneklemesinde Oransal Tahminler, 2016 - 2016

KOYUNCU N., Project Supported by Higher Education Institutions, Üstel Tahmin Edici Kullanılarak Hassas Değişkenin Kitle Ortalamasının Tahmini İşyeri Verisi Üzerine Bir Uygulama, 2016 - 2016

KOYUNCU N., Project Supported by Higher Education Institutions, Medyan Sıralı Küme Örneklemesinde Oransal Tahminler, 2015 - 2015

KOYUNCU N., Project Supported by Higher Education Institutions, Medyan Sıralı Küme Örneklemesinde Yardımcı Değişken Bilgisi Kullanılarak Kitle Ortalamasının Oransal Tahmini, 2015 - 2015

KOYUNCU N., Project Supported by Higher Education Institutions, Tabakalı Sıralı Medyan Küme Örneklemesi Türk Eğitim Verisi Üzerine Bir Uygulama, 2015 - 2015

Activities in Scientific Journals

HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, First Editor, 2020 - Continues

Metrics

Publication: 59
Citation (WoS): 282
Citation (Scopus): 496
H-Index (WoS): 8
H-Index (Scopus): 11

Non Academic Experience

TKGM