Curriculum vitae of Mushfigul Anwar Siraji

Personal detail:

Name: Mushfiqul Anwar Siraji

Date of birth: 01/01/1993
Gender: Male
Marital status: Married
Nationality: Bangladeshi
Language fluency: Bengali and English

Residential address: 2-F, Aporajita, 24/B, Doctor Goli, West Malibagh,

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Professional Summary

Assistant Professor of Psychology with a Ph.D. in the visual and non-image-forming effects of light on cognition, alertness, and sleep. Over five years of experience in psychometric validation, international collaborations, and cutting-edge research in light and cognitive science. Published extensively in Q1 journals and developed psychometric tools with global impact. Proficient in R programming, statistical analysis, and reproducible research practices.

Work Experience:

• Assistant Professor of Psychology (January 2024-Present),

Department of History and Philosophy North South University, Bangladesh

• Adjunct Faculty of Psychology (July 2023-December 2023),

Department of History and Philosophy North South University, Bangladesh

Educational Qualification:

Doctor of Philosophy (October 2020 – July 2023: Awarded on 26 July 2023)

Thesis Title: Visual and Non-image-forming Effects of Light on Sleep, Alertness and Cognition Supervisor: Professor Shamsul Haque

Jeffrey Cheah School of Medicine and Health Science, Monash University.

• Master of Biomedical Science (June 2019 – October 2020; Degree Transferred to Ph.D.) Supervisor: Professor Shamsul Haque

Jeffrey Cheah School of Medicine and Health Science, Monash University.

• Master of Science (July 2014 – June 2015; Degree Received in September 2017)

Thesis Title: Adaptation of Rotter's Internal-External Scale in Bangla.

Department of Psychology, University of Dhaka.

CGPA: 3.22 out of 4.00

• Bachelor of Science (July 2010 – June 2014; Degree Received in August 2015)

Project: Perception without Awareness and Memory Span Limit.

Department of Psychology, University of Dhaka

CGPA: 3.60 out of 4.00

Awards and Scholarships:

- Commendation for JCSMHS best research publication award 2022 Monash University.
- Recipient of a Ph.D. Scholarship form Monash University (100% fee waiver and a monthly stipend for 21 months; 2021-2023)
- Recipient of a monthly stipend for 24 months from an industry grant (Grant code ENG/ITRAMAS/08-2018/008; 2019-2021)
- Recipient of a Student Travel Award from the Good Light Group, The Netherlands, in 2022 for
 presenting outstanding research work at the 33rd annual meeting of the Society for Light
 Treatment and Biological Rhythms (SLTBR).
- Recipient of the Best Mentor Award from Bangladesh Psychometric Society in 2021 for mentoring 15 graduates and professionals in a professional development training program.

Professional membership:

- Member, Society for Light Treatment and Biological Rhythms (SLTBR; 2021 current).
- Executive Member, Bangladesh Psychometric Society (2021 2022).

Research Interest and Experience:

Lighting and Cognition Research

- Conducted extensive research on the impact of lighting on cognitive performance, mood, and well-being in various environments.
- Collaborated with international research teams on several projects to investigate the relationship between lighting and cognitive performance.
- Developed and psychometrically validated an inventory to facilitate healthy light exposurerelated behaviors.

Test Validation

- Extensive experience in test validation as evidenced by four published works.
- Collaborated with international research groups as a principal consultant on psychometric procedures, providing expert advice on study design, data analysis, and report writing.
- Improved research efficiency by creating computer-based cognitive tests, including the Psychomotor Vigilance Test, N-Back, and Motor Sequence Task.
- Conducted validation studies in accordance with international standards.
- Used advanced statistical techniques, including item response theory and structural equation modeling, to analyze data and ensure the reliability and validity of tests.
- Presented validation results and recommendations to clients and stakeholders in professional settings, including academic journals, conferences and workshops.

Data Analysis in R

- Demonstrated expertise in data analysis using the R programming language throughout my Ph.D. work, utilizing R for data analysis in all studies.
- Developed a deep understanding of data reproducibility using GitHub and R, ensuring that all analyses are transparent, repeatable, and accessible to others.
- Created one R package and one shiny app to facilitate data analysis, streamlining data processing and analysis for researchers in my field.
- Proficient in data visualization using R, including ggplot2 and other related packages, to create visually appealing and informative graphics to communicate complex data patterns.
- Experienced in using RMarkdown to integrate text, code, and visualizations into dynamic and reproducible documents, streamlining the creation of reports and manuscripts.
- Demonstrated ability to communicate complex statistical concepts and findings to both technical and non-technical audiences.

Teaching and Supervision:

- Developed intensive course outlines and delivered lectures appropriate for undergraduate students.
- Co-supervised a Master of Philosophy (Clinical Psychology) thesis work.
- Extensive experience in providing development training programs in R statistical language.

Research Grants

- CTRG Grant (Conference Travel and Research Grant; CTRG-23-SHSS-04) 2023-2024, North South University
 - Role: Co-Investigator
 - Project: The Development and Validation of the Revised 'Illness Perception
 Questionnaire' (IPQ-R) among Patients with Long-term Conditions in Bangladesh.
 - Status: Completed. Manuscript under preparation
- Small Startup Fund Grant 2023-2024, North South University
 - o **Role:** Principal Investigator
 - Project: The Bangla Big Five Inventory-2: A Comprehensive Psychometric Validation.

- Status: Completed. In-principle acceptance for publication in 'Scientific Reports'.
- CTRG Grant (CTRG-24-SHSS-04) 2024-2025, North South University
 - Role: Principal Investigator
 - Project: Unraveling the Compound Effect of Climate Change on Mental Health in Bangladeshi Community: A Comprehensive Study Using PLS-SEM
 - Status: Ongoing. Manuscript under preparation

International Collaborations:

- Currently collaborating with researchers from Malaysia, Bangladesh and the United States to validate Big Five Inventory 2.
- Collaborated with a tri-nation team from Malaysia, Switzerland, and Germany as part of an international grant to investigate light exposure-related behaviors and their potential impact on health and wellness.
- Worked with researchers from Harvard Medical School to evaluate the impact of daytime electric light exposure on students' cognitive performance and alertness. The collaboration resulted in a high-quality manuscript that has been submitted to a top-tier academic journal.
- Collaborated with research teams from the United States, Germany, Switzerland, and the Netherlands during my Ph.D. to develop a novel tool to categorize people's light exposurerelated behaviors for a healthy light diet.
- Gained expertise in cross-cultural communication and international collaboration, learning to manage diverse teams and effectively produce high-quality research outputs.

Publications

Published works (Peer reviewed):

- 1. <u>Siraji, M. A.,</u> Karim, F., & Haque, S. (2024). Validation of Bangla Big Five 2 among Bangladeshi community sample. (in-principle acceptance in *Scientific Reports*. Impact factor: 4.997, Scopus-Top 10%; Scimago-Q1).
- 2. Islam, A., <u>Siraji, M. A.,</u> Shaoli, S. S., Jerin, R., Elahi, S. F., Ahmed, T., ... & Haque, S. (2024). Psychometric Assessment of the Bangla Version of General Health Questionnaire-12 (GHQ-12). Psychological Test Adaptation and Development.
- 3. Islam, A., <u>Siraji, M.A.</u>, Haque, M., Chowdhury, M., (2024). Development of a multidomain gender norm attitude scale for youth in Bangladesh, *Preventive Medicine Reports*, *45*, 102848, ISSN 2211-3355, https://doi.org/10.1016/j.pmedr.2024.102848 (Scimago-Q1; Impact Factor: 2.4)
- Siraji, M.A., Grant, K.L., Schaefer, A., Haque, S., Rahman, S.A., Lockley, S.W., & Kalavally, V. (2024). Effects of daytime exposure to short-wavelength-enriched white light on alertness and cognitive function among moderately sleep-restricted university students. *Building and Environment*. 111245. https://doi.org/10.1016/j.buildenv.2024.111245 (Scopus-Top 3%; Scimago-Q1; Impact Factor: 7.093).
- 5. <u>Siraji, M. A.,</u> & Rahman, M. (2024). Primer on Reproducible Research in R: Enhancing Transparency and Scientific Rigor. Clocks & Sleep; 6(1):1-10. https://doi.org/10.3390/clockssleep6010001 (Impact factor: 3.1).
- Siraji, M. A., Lazar, R., van Duijnhoven, J., Schlangen, L., Haque, S., Kalavally, V., Vetter, C., Glickman, G., Smolders, K., & Spitschan, M. (2023). An inventory of human light exposure-related behaviour. *Scientific Reports*, *13*, 22151 (2023). https://doi.org/10.1038/s41598-023-48241-y (Impact factor: 4.997, Scopus-Top 10%; Scimago-Q1).
- 7. <u>Siraji, M. A.,</u> Spitschan, M., Kalavally, V., & Haque, S. (2023). Light exposure behaviors predict mood, memory and sleep quality. *Scientific Reports*, *13*(1), 1-14. https://doi.org/10.1038/s41598-023-39636-y (Impact factor: 4.997, Scopus-Top 10%; Scimago-Q1).
- 8. <u>Siraji, M. A.,</u> Rahman, M., Saha, B., & Haque, S. (2023). Validation of the Five Facet Mindfulness Questionnaire-Bangla Using Classical Test Theory and Item Response Theory.

- Mindfulness (2023). https://doi.org/10.1007/s12671-023-02240-2 (Impact factor: 3.801, Scopus-Top 10%; Scimago-Q1).
- 9. <u>Siraji, M. A.,</u> Jahan, N., & Borak, Z. (2023). Validation of the Bangla Communication Scale among Bangladeshi adolescents: A Classical Test Theory and Item Response Theory approach. *Asian Journal of Psychiatry, 84,* 103586. https://doi.org/10.1016/j.ajp.2023.103586 (Impact factor: 13.89, Scopus-Top 10%; Scimago-Q1).
- 10. Mahmood, S., <u>Siraji, M.A.</u>, Naher, R., Arato, N., & Kalo, Z. (2023). Psychometric validation of revised Olweus Bully/Victim Questionnaire (OBVQ-R) among adolescents in Bangladesh. *Asian Journal of Psychiatry*, 83, 103514. https://doi.org/10.1016/j.ajp.2023.103514 (Impact factor: 13.89, Scopus-Top 10%; Scimago-Q1).
- **11.** <u>Siraji, M.A.,</u> & Haque, S. (2022). Psychometric evaluation of the Bangla-translated Rotter's Internal-External scale through classical test theory and item response theory. *Frontiers in Psychology, 13*(1023856). https://doi.org/10.3389/fpsyg.2022.1023856 (Impact factor: 4.232, JCR-Q1).
- Siraji, M.A., Kalavally, V., Schaefer, A., & Haque, S. (2022). Effects of daytime electric light exposure on human alertness and higher cognitive functions: A systematic review. *Frontiers in Psychology*, 12(6079). https://doi.org/10.3389/fpsyg.2021.765750 (Impact factor: 4.232, JCR-Q1).

Manuscripts in Preparation:

1. Siraji, M.A., & Zinnatul, B. (2024) Psychometric Evaluation of Guilt and Shame Questionnaire in Bangladesh

Book and Book Chapter:

- 1. Haque, S., Ng, A.L.O., Goh, C-L., Alias, A., & <u>Siraji, M.A.</u> (2023). Psychology in Malaysia. In Bullock, M., Clinton, A., Stevens, M., & Wedding, D. (Eds.), *The Handbook of International Psychology* (pp. 1-4). Routledge (**Accepted in May 2023**).
- 2. Weinzaepflen, C., Spitschan, M., & <u>Siraji, M.A.</u> (2021). *Enlighten your clock: How your body tells time (Bangla)*. https://doi.org/10.17605/OSF.IO/AVJ49.
- 3. Siraji, M.A. (2021). Morganite. Agami Prokashoni.
- 4. Siraji, M.A. (2020). 29 Days of Ramij. Rhythm Publishers.

Conference/seminar participation:

No	Name of conference/seminar	Paper presented	Date & Venue
1	International Commission on Illumination (CIE), Australia: Lighting Research Conference	Light exposure-related behaviors can predict chronotype, sleep quality, trouble in memory and concentration: A PLS-SEM analysis	Feb 2023, Australia
2	TransformED: Learning and Teaching Showcase	A study on classroom lighting and its effect on student alertness and work performance.	July 2022, Monash University Malaysia
3	Society for Light Treatment and Biological Rhythms (SLTBR)	A novel self-reported instrument to capture light exposure-related behavior.	June 2022, Manchester, UK.
4	International Commission on Illumination (CIE), Australia: Lighting Research Conference	Light Exposure Behavior Assessment (LEBA): Development of a novel instrument to capture light exposure-related behaviors.	Feb 2022, Australia
5	International Commission on Illumination (CIE), Australia: Lighting Research Conference	Influence of daytime short-wavelength dominant electric light exposure on human alertness and higher cognitive functions: A CIE S026-based pilot study.	Feb 2022, Australia

Citation (source: Google Scholar, as of 1st January 2025):

No	Title of Publication	Year of Publication	Citation Count
1	Effects of daytime electric light exposure on human alertness and higher cognitive functions: A systematic review	2022	47
2	Light Exposure Behavior Assessment (LEBA): A novel self-reported instrument to measure light exposure-related behavior	2023	2

3	Psychometric validation of revised Olweus Bully/Victim Questionnaire (OBVQ-R) among adolescents in Bangladesh	2023	5
4	Light exposure behaviors predict mood, memory and sleep quality.	2023	20
5	Psychometric evaluation of the Bangla-Translated Rotter's Internal- External Scale through classical test theory and item response theory	2023	3
6	An inventory of human light exposure behaviour	2023	8
7	Validation of the Bangla Communication Scale among Bangladeshi adolescents: A Classical Test Theory and Item Response Theory approach	2023	2
8	Effects of daytime exposure to short-wavelength-enriched white light on alertness and cognitive function among moderately sleep-restricted university students	2024	2
	Total Citations		89

Referees:

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