



**KDI School-3ie-ADB-ADBI  
Conference on Impact Evaluation**

# **Challenges and Promise for Human Capital Development in Asia**

Date: November 17<sup>th</sup>(Tue), 2020

Time: 13:00-17:10(PHT, HKT) / 14:00~18:10(KST, JST)



**KDI SCHOOL**  
KDI School of Public Policy and Management



International  
Initiative for  
Impact Evaluation



## PROGRAM

| PHT(UTC+8:00)<br>KST(UTC+9:00) | Program   | Speaker   |
|--------------------------------|---|---|
|                                | Opening Remarks (Yasuyuki Sawada, Chief Economist and Director General, Asian Development Bank)   |   |
| 13:00-13:20<br>14:00-14:20     | Congratulatory Remarks<br>(Jong-Il Yoo, Dean, KDI School of Public Policy and Management)<br>(Tetsushi Sonobe, Dean, Asian Development Bank Institute)<br>(Emmanuel Jimenez, Former Executive Director, International Initiative for Impact Evaluation) |   |
| 13:20-14:10<br>14:20-15:10     | Keynote Speech: Evaluating the Long-term Impacts of Family and Neighborhood Poverty on Boys and Girls in China<br>(Albert Park, Chair Professor of Economics, Hong Kong University of Science and Technology)   |   |
| 14:10-14:20<br>15:10-15:20     | 3ie Video on Big Data Systematic Map  |   |
|                                | <b>Session 1: Human Capital Development under COVID-19</b><br>(Chair: Wook Sohn, Associate Dean, KDI School)  |   |
|                                | 1-1   | What works to control COVID-19?: Econometric Analysis of a Cross-country Panel<br>David A. Raitzer, Economist, ADB  |
|                                | 1-2   | Impacts of COVID-19 on Households in ASEAN Countries and Their Implications for Human Capital Development<br>Peter J. Morgan, Senior Consulting Economist, ADBI   |
|                                | 1-3   | The Impact of COVID-19 and Government Lockdown on Children's Schooling, Time Use and Marriage Timing in Rural Bangladesh<br>Abu Shonchoy, Assistant Professor, Florida International University             |
|                                | <b>Session 2: Impact Evaluation Studies on Education</b><br>(Chair: Linda Faustina Arthur, Senior Capacity Building and Training Specialist, ADBI)  |   |
| 14:30-15:40<br>15:30-16:40     | 2-1   | Fighting Against Learning Crisis in Developing Countries: A Randomized Experiment of Self-Learning at the Right Level<br>Minhaj Mahmud, Senior Research Fellow, Bangladesh Institute of Development Studies |
|                                | 2-2   | Parental Investment, School Quality, and the Persistent Benefits of Intervention in Early Childhood<br>Nele Warrinnier, Marie Skłodowska-Curie Research Fellow, Queen Mary University of London             |
|                                | 2-3   | Scores, Camera, Action? Incentivizing Teachers in Remote Areas<br>Arya Gaduh, Associate Professor, University of Arkansas   |
|                                | <b>Session 3: Randomized Control Trials on Finance and Technology</b><br>(Chair: Aiko Kikkawa Takenaka, Economist, ADB)   |   |
|                                | 3-1   | Microfinance Can Raise Incomes: Evidence from a Randomized Controlled Trial in China<br>Shu Cai, Associate Professor, Jinan University  |
|                                | 3-2   | Conditional Cash Transfer, Loss Framing, and SMS Nudges: Evidence from a Randomized Field Experiment in Bangladesh<br>Tomoki Fujii, Associate Professor, Singapore Management University                    |
|                                | 3-3   | The Effect of Computer Assisted Learning on Children's Cognitive and Non-cognitive Skills: Evidence from a Randomized Experiment in Cambodia<br>Makiko Nakamuro, Professor, Keio University                 |

| PHT(UTC+8:00)<br>KST(UTC+9:00) | Program  | Speaker  |
|--------------------------------|--|--|
|                                | <b>Session 4: Big Data Use on Impact Evaluation Studies</b><br>(Chair: Taejun Lee, Associate Professor, KDI School)                    |  |
|                                | 4-1  | Does Commitment Savings Alter Seasonal Poverty Dynamics Among the Ultra-poor? Evidence from High-frequency Data<br>Kazushi Takahashi, Professor, National Graduate Institute for Policy Studies                |
|                                | 4-2  | Impact of Floods on Education Outcomes: Evidence from Bangladesh Using Satellite and Census Data<br>Kazi Iqbal, Senior Research Fellow, Bangladesh Institute of Development Studies.                           |
|                                | 4-3  | Cumulative Impacts of Conditional Cash Transfer Programs: Experimental Evidence from Indonesia<br>Elan Satriawan, Associate Professor, Universitas Gadjah Mada   |
| 15:50-17:00<br>16:50-18:00     | <b>Session 5: Impact Evaluation Studies on Health</b><br>(Chair: Bryant Kim, Associate Professor, HKUST)                               |  |
|                                | 5-1  | A Bit of Salt, A Trace of Life: Gender Norms and the Impact of a Salt Iodization Program on Human Capital Formation of School Aged Children<br>Zichen Deng, Postdoctoral fellow, Norwegian School of Economics |
|                                | 5-2  | Nudging by Beauty: Improving Women's Health Decisions and Well-being in the Field<br>Hisaki Kono, Associate Professor, Kyoto University  |
|                                | 5-3  | The Female Secondary Stipend and Assistance Program in Bangladesh: What Did It Accomplish?<br>Ryotaro Hayashi, Social Sector Economist, ADB  |
|                                | <b>Session 6: Impact Evaluation Training</b><br>(Chair: Linda Faustina Arthur, Senior Capacity Building and Training Specialist, ADBI) |  |
|                                | Impact Evaluation Training Session   |  |
| 17:00-17:05<br>18:00-18:05     | Closing Remarks (Bryant Kim, Associate Professor, Hong Kong University of Science and Technology)                                      |  |



#### Wook Sohn

Associate Dean  
KDI School of  
Public Policy and  
Management

Wook Sohn is a professor and Associate Dean of the Office of Development Research and International Cooperation at the KDI school of Public Policy and Management. He specializes in financial intermediaries, financial markets and monetary policy. Sohn published many articles in academic journals and edited several books on the Korean economic and financial issues, and participated in the collaborative research projects among the Korean, Hungarian and Cambodian governments. He was a visiting professor at the University of British Columbia's Sauder School of Business and taught at Yonsei University, Seoul National University, and the KAIST Business School. Most recently, he was Executive Director of Economic Research Institute of Bank of Korea. After receiving his B.A. from Seoul National University, He was awarded his M.A. and Ph.D. from Columbia University.



#### David A. Raitzer

Economist  
Asian Development  
Bank

#### What Works to Control COVID-19?: Econometric Analysis of a Cross Country Panel

Liming Chen, **David Raitzer**, Rana Hasan, Rouselle Lavado, and Orlee Velarde, Economic Research and Regional Cooperation Department, Asian Development Bank (ADB)

Countries from around the world have used a variety of non-pharmaceutical interventions (NPIs) to suppress the spread of COVID-19. These include lockdowns of varying intensity and duration; efforts to test, track and isolate potential carriers of disease; and the use of masks and other social distancing policies. In this paper, we use cross-country panel data to examine the relationship between various NPIs and transmission rates of COVID-19 as captured by the reproduction rate ( $R(t)$ ), including interventions not previously given attention. We find that while lockdown measures are strongly associated with a reduction in  $R(t)$ , gathering bans appear to be more effective than workplace and school closures, both of which are associated with large declines in GDP. Further, our estimates suggest that stay-at-home orders are less effective in countries with larger family size and that efforts at ramping up testing and tracing COVID-19 cases are more effective in controlling the spread of disease in countries with greater coverage of paid sick leave benefits. As future waves of the disease emerge, control measures proven to be effective and with lower economic costs should be implemented early and fast. Such measures should also be central features of the “new normal” until herd immunity is achieved.

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David A. Raitzer is an Economist in the Economic Research and Regional Cooperation Department of ADB, where he normally focusses on impact evaluation of development interventions and research on environmental policy challenges and agricultural development constraints. In the COVID-19 era, he has also become involved in epidemiological modeling and use of cost benefit analysis on measures to control the pandemic. His over 17 years of research experience at a range of international organizations have focused on evaluating the effects and benefits of policies and interventions, using a range of methods from randomized experiments, to quasi-experimental approaches, bio-economic modeling, and economy-wide modeling His work has been published in various peer reviewed journals, such as *Agricultural Economics*, *Scientific Reports*, and *World Development*.



**Peter J. Morgan**

Senior Consulting  
Economist & Vice  
Chair of Research  
Asian Development  
Bank Institute

## Impacts of COVID-19 on Households in ASEAN Countries and Their Implications for Human Capital Development

Peter J. Morgan and Long Q. Trinh, Asian Development Bank Institute (ADBI)

The outbreak of the COVID-19 virus and the resulting falls in demand due both to uncertainty and policy interventions such as lockdowns, ‘social distancing’ and travel restrictions are having a severe impact on Asian economies and hence on Asian households. These negative impacts come through a variety of channels, including: loss of employment or lower working hours, loss of sales and income of the household business, inability to travel to work, increased need to stay at home to look after children or sick household members, higher prices and/or lack of availability of staple items, reduced access to schooling, etc. Low-income and vulnerable groups are likely to be particularly susceptible due to a lack of resources they can draw on during periods of reduced income. In order to develop appropriate policy responses, it is necessary to obtain a correct understanding of the current situation of households. As part of the Asian Development Bank’s overall strategy to deal with the current crisis, the ADBI has carried out surveys of households to better understand the size, aspects and incidence of impacts on vulnerable people. In particular, this study will focus on the implications for human capital formation of reduced access to education due to reduced school attendance because of the pandemic and inability to access online learning due to insufficient internet connectivity and lack of devices to connect. Specifically, we carried out computer-assisted telephone interview (CATI) and online surveys of households in eight ADB developing member countries—Cambodia, Lao People’s Democratic Republic (Lao PDR), Indonesia, Malaysia, Myanmar, Philippines, Thailand and Viet Nam. (Face-to-face surveys were impractical due to the lockdowns being implemented in response to the pandemic.) The CATI surveys were implemented by Indochina Research Ltd. (IRL) and other subcontracting firms under the coordination and project management of IRL and overall quality control and direction of ADBI. The surveys were carried out from end of May to end of July. Representative samples of 1,000 households in each country were surveyed.

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Peter J. Morgan is Senior Consulting Economist and Vice Chair of Research at the Asian Development Bank Institute (ADBI), and has been with ADBI since 2008. He has 23 years of experience in the financial sector in Asia, most recently serving in Hong Kong as Chief Asia Economist for HSBC, responsible for macroeconomic analysis and forecasting for Asia. Previously, he served as Chief Japan Economist for HSBC, and earlier held similar positions at Merrill Lynch, Barclays de Zoete Wedd and Jardine Fleming. Prior to entering the financial industry, he was a consultant for Meta Systems Inc in Cambridge, MA, in energy and environmental analysis, and at International Business Information KK in Tokyo, in financial sector consulting. He earned his MA and PhD degrees in economics from Yale University. His research interests are in macroeconomic policy and financial sector regulation, reform, financial development, financial inclusion, fintech, financial literacy and financial education.



### Abu Shonchoy

Assistant Professor of Economics  
Florida International University

## The Impact of COVID-19 and Government Lockdown on Children's Schooling, Time Use and Marriage Timing in Rural Bangladesh

Momoe Makino, **Abu Shonchoy**, Zaki Wahhaj (Makino: Population Council and Institute of Developing Economies, Shonchoy: Florida International University, Wahhaj: University of Kent)

The impact of the COVID-19 pandemic on the poor in developing countries is increasingly becoming a matter of concern. The poor seem more vulnerable to the COVID-19 infection given a congested and unhygienic environment, and its insufficient treatment in a poor medical system. Not only these direct health impacts, they may be more vulnerable to the indirect negative impacts, which were generated by the lockdown and school closure, including job loss, return migration and suspension of remittances, and deprivation of children's learning opportunities. In order to explore the impact of COVID-19 and lockdown, we conducted a phone-based household survey in rural Bangladesh, characterized by high population density, high dependence on remittances, and prevalence of girls' child marriage right after schooling. The phone-based survey revealed that the poorer households were more likely to experience economic hardship after the lockdown. After the school closure, girls increased time spent on household chores and unpaid work more often than boys. It also hinted at the direct impact of infection leading to increasing children's school drop-out and girls' early marriage. The results suggest that the poor, especially girls, are more vulnerable to the lockdown and school closure following COVID-19 pandemic. Because these preventive measures will be taken following any pandemic in future, the current study cautions policy makers about such disproportionate consequences among the most vulnerable.

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Dr. Shonchoy is an applied economist with interests in issues of global development. He has a wide range of experience in conducting field research and experiments in South Asia and West Africa. His papers appeared in peer-reviewed international journals including the Journal of Public Economics, American Economic Journal: Applied Economics, Journal of Development Economics, World Bank Economic Review, and World Development to name a few. Recently he published a book titled "Seasonality and Micro-credit" from Springer. His research has been highlighted in international and local news outlets such as BBC World, ABC Net, TVS Japan and other media outlets around the world. His works have been showcased in the Global Development Blog and World Bank Research Digest.

Dr. Abu Shonchoy is currently a JPAL affiliated Professor, and a fellow of the Institute of Labor Economics (IZA) and global Labor Organization (GLO). Before FIU, he was a visiting scholar at New York University. He also worked as a tenured research fellow at the Institute of Developing Economies (IDE) JETRO, Japan, as well as an adjunct assistant professor at the Graduate School of Public Policy (GraSPP) at the University of Tokyo. He had previous positions in various capacities with the International Monetary Fund (IMF), the World Bank and the Asian Development Bank (ADB).

Dr. Shonchoy received several awards and recognitions, including Sasakawa Young Leaders Fellowship, AusAid, and Neil Vousden Memorial Scholarship. He has been awarded the Albert Berry Prize at the Canadian Economic Association (CEA) Conference for the Best Paper in Development Economics. Dr. Shonchoy graduated from the University of Dhaka, Bangladesh, with a B.Sc. (1st Class Honors) in economics, a master's degree in economic policy from the Australian National University (ANU) and a Ph.D. in economics from the University of New South Wales (UNSW), Australia. He holds the position of the founder and advisory of the MOMODa Foundation, a research-based NGO working with marginalized populations in Bangladesh. He is also the General Secretary of the Association for Economic and Development Studies on Bangladesh (AEDSB) – a professional body of economists, development practitioners, and others interested in the development issues of Bangladesh.



**Linda Faustina  
Arthur**

Senior Capacity  
Building and Training  
Specialist  
Asian Development  
Bank Institute

Dr. Arthur's areas of specialization include comparative policy analysis, education policy reform, project evaluation, and portfolio management. Prior to joining ADBI, she worked in the Asian Development Bank's South Asia, Central and West Asia, and Independent Evaluation departments as well as ADB's country offices in Afghanistan and Pakistan. She holds a doctorate from Oxford University, and an MA and BA from the University of Toronto.



**Minhaj  
Mahmud**

Senior Research  
Fellow  
Bangladesh Institute  
of Development  
Studies

### Fighting Against Learning Crisis in Developing Countries: A Randomized Experiment of Self-Learning at the Right Level

Yasuyuki Sawada, **Minhaj Mahmud**, Mai Seki, An Le, and Hikaru Kawarazaki,  
(Sawada: Asian Development Bank, Mahmud: Bangladesh Institute of Development Studies, Seki: Ritsumeikan University,  
Le: NextGeM Inc., Kawarazaki: University College London)

This paper investigates the effectiveness of a globally popular method of self-learning at the right level in improving learning outcome — the cognitive and non-cognitive abilities — of disadvantaged pupils in a developing country, Bangladesh. Using a randomized control trial design, we find substantial improvement in cognitive ability measured by mathematics test scores and catchup effects on aspects of non-cognitive ability or a personality trait measured by a pupil's self-esteem scale. These findings are consistent with a longer-term impact found in grades on a national-level primary school completion exam. Moreover, the teachers' ability to assess student performance substantially improves. Based on our estimates, program benefit exceeds cost in a plausible way. Above findings suggest that self-learning at right level can effectively improve quality of primary education and hence address the learning crisis in developing countries.

Dr. Minhaj Mahmud is a Senior Research Fellow at the Bangladesh Institute of Development Studies (BIDS). He is also a Visiting fellow to the JICA Ogata Research Institute, Tokyo. Previously he held academic and research positions, respectively, at Queens University Belfast, Keele University, BRAC University and Jahangirnagar University and BRAC Institute of Governance and Development and BIDS. He has also held visiting appointments at Jawaharlal University, University of Tokyo and University of Dhaka. His field of research is broadly in the area of behavioral economics, development economics, experimental economics and political economy issues. He is the co-editor of the book *Economic and Social Development of Bangladesh: Miracle and Challenges* published by Palgrave Macmillan. He holds a Ph.D. degree in Economics from the University of Gothenburg, Sweden.



### Nele Warrinnier

Marie Skłodowska-Curie Research Fellow  
Queen Mary  
University of London

## Parental Investment, School Quality, and the Persistent Benefits of Intervention in Early Childhood

Lei Wang, **Nele Warrinnier**, Yiwei Qian, Sean Sylvia, and Scott Rozelle

(Wang: Shaanxi Normal University, Warrinnier: Queen Mary University of London and LICOS, KU Leuven; Qian: University of Southern California, Sylvia: University of North Carolina at Chapel Hill; Rozelle: Stanford University)

We present evidence from a randomized experiment on the impacts of a six-month early childhood home-visiting program on child outcomes at school entry. Two and a half years after completion of the program, we find persistent intervention effects on child working memory - a key skill of executive functioning which plays a central role in children's development of cognitive and socio-emotional skills. We also find that the program had persistent effects on both parental time investments and preschool enrolment, with children in the treatment group enrolling earlier and in better quality preschools. Our finding of improved parental preschool selection in treatment villages points to an important intervention-induced persistent shift in parental investment behaviour which might lead to long-term benefits over the life-cycle.

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Dr. Warrinnier is currently a Marie Skłodowska-Curie Research Fellow at the School of Economics and Finance in Queen Mary University of London. Her research is focused on evaluating labor market policies and political economy topics using empirical methods from the field of Applied Micro-Economics and Machine Learning. Her recent research focuses on impact evaluation of human capital policies and the process of cognitive and non-cognitive skill formation. In recent years she has collaborated closely with the Rural Education Action Program (REAP) at Stanford to evaluate randomized controlled early childhood interventions aimed at improving outcomes for China's rural population.



### Arya Gaduh

Associate Professor  
University of  
Arkansas

### Scores, Camera, Action? Incentivizing Teachers in Remote Areas

**Arya Gaduh**, Menno Pradhan, Jan Priebe, Dewi Susanti

(Gaduh: University of Arkansas; Pradhan: University of Amsterdam, Vrije Universiteit Amsterdam, AIGHD, and Tinbergen Institute; Priebe: GIGA Institute Hamburg, University of Gottingen; Susanti: World Bank, Jakarta)

Poor teacher accountability leads to poor education quality, especially in remotely-located schools that are costly to supervise. This paper reports the impacts of three interventions that linked community based monitoring to a government allowance for teachers working in remote areas in Indonesia. In all treatments, the project helped communities to formulate a joint commitment between schools and community members to improve education. Teacher-specific score cards were developed based on this commitment and performance was evaluated and disseminated by a newly-formed user committee. Treatments 2 and 3 added to this a pay-for-performance scheme that relied on the community reports. In Treatment 2 (SAM+Cam), the remote area allowance was made dependent on teacher presence, which was monitored with a camera with a time stamp. In Treatment 3 (SAM+Score), the overall score on the score card determined the allowance. We find improvements in learning outcomes across all treatments; however, the strongest impacts of between 0.17-0.20 standard deviation (s.d.) were observed for SAM+Cam. In this treatment, teachers increased teaching hours and parents increased investments in their children's education. We show evidence that bargaining and the community's propensity to punish free-riders may have a role in affecting treatment effectiveness.

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Arya Gaduh is an Associate Professor of Economics at the Sam M. Walton College of Business, University of Arkansas, Fayetteville. He is also an Abdul Latif Jameel Poverty Action Lab (J-PAL) affiliate and a faculty fellow of the Association for Analytic Learning about Islam and Muslim Societies (AALIMS). His research examines economic development topics related to human/social capital and urban economics in low-middle-income countries and he has worked extensively on Indonesia. Dr. Gaduh has worked as a consultant for the World Bank, RAND Corporation, and the National Team for the Acceleration of Poverty Reduction (TNP2K) of the Indonesian government. His research has been published in *The American Economic Review*, *AJ: Applied Economics*, *Economic Development and Cultural Change*, and *World Development*.



**Aiko Kikkawa  
Takenaka**

Economist  
Asian Development  
Bank

Aiko Kikkawa Takenaka is Economist at the Economic Research and Cooperation Department of the Asian Development Bank. She covers research portfolio of labor migration and remittances, aging and demographic changes, and regional research collaboration. From 2001 to 2010, she was with the International Organization for Migration (IOM), and served as the Head of Labor Migration Unit in Manila, the Philippines, overseeing projects and activities in the area of labor migration and remittances. Ms. Kikkawa Takenaka obtained her Ph.D. in International Development Studies /Development Economics from National Graduate Institute of Policy Studies, Japan, and Master's degree in Forced Migration from University of Oxford, UK.



**Shu Cai**

Associate Professor  
Jinan University

### Microfinance Can Raise Incomes: Evidence from a Randomized Controlled Trial in China

**Shu Cai**, Albert Park, Sangui Wang (Cai: Institute for Economic and Social Research, Jinan University; Park: The Department of Economics, Hong Kong University of Science and Technology; Wang: School of Agricultural Economics and Rural Development, Renmin University of China)

This study investigates the impacts of a government-led microcredit program in China which implemented at scale in its poor rural areas with a randomized controlled trial (RCT). In contrast to recent RCT-based studies that have failed to find evidence of significant increases in income from microcredit interventions, we find that the Chinese program significantly raises household income and reduces poverty. We explore possible explanations as to why the estimated impacts may be greater in China: lump-sum repayments, lower interest rates, less access to formal credit before the program, and greater potential returns from off-farm employment opportunities that are credit-constrained.

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Shu Cai is an Associate Professor in Economics of the Institute for Economic and Social Research at Jinan University (Guangzhou, China). His research areas include Development Economics, Labor Economics, and Applied Microeconomics, with particular interests on investigating migration, poverty alleviation, and subjective well-being. He is currently working on projects to evaluate a government-led microcredit program in poor rural areas of China based on a randomized controlled trial. Shu has published in the Journal of Development Economics, Journal of Economic Behavior and Organization, Oxford Economic Papers, and China Economic Review. Shu received his B.S. and M.A. from Peking University, and his Ph.D. from the Hong Kong University of Science and Technology. He is appointed as a fellow of the Global Labor Organization.



### Tomoki Fujii

Associate Professor  
& Associate Dean  
(Undergraduate  
Curriculum)  
Singapore  
Management  
University

## Conditional Cash Transfer, Loss Framing, and SMS Nudges: Evidence from a Randomised Field Experiment in Bangladesh

Tomoki Fujii, Christine Ho, Rohan Ray, and Abu Shonchoy

(Fujii, Ho, Ray: Singapore Management University, Shonchoy: Florida International University)

Cash transfers conditional on school attendance have gained increasing popularity over the past couple of decades. This study seeks to shed light on two issues that may complement such conditional cash transfers (CCTs): (i) loss framing of awards and (ii) SMS information nudges. SMS information on children's school attendance as well as an endowment effect stemming from loss aversion may help increase the effectiveness of CCT in incentivizing parents to send children to school. We conduct a randomized controlled trial among secondary school students in Bangladesh by assigning them to four treatment arms: a pure control group, an SMS only treatment group, an SMS plus gain framing CCT, and an SMS plus loss framing CCT. While CCT significantly increases school attendance, the loss framing only marginally helps increase attendance over and above the gain framing. Our findings suggest that though SMS information nudges have a more modest impact on school attendance, they are more cost effective than the CCT treatment arms. Variation in treatment amount during the course of our intervention suggests that the intensive margin matters, and CCTs are able to address issues such as absenteeism during harvesting season. We also find evidence of positive peer group effect in attendance, and the treatment effects are quite similar once such social network interactions are controlled for. Finally, though our treatment assignment does not have any impact on incidence of child labour, the loss and SMS treatment arms delay child marriage for girls.

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Tomoki Fujii is Associate Dean (Undergraduate Curriculum) and Associate Professor of Economics at School of Economics, Singapore Management University. His main areas of research include development economics, environmental economics, health economics, and applied statistics. His papers have appeared in leading journals in these fields. His current research projects include several impact evaluation studies in human capital interventions in South and Southeast Asia. He has previously served as a consultant for leading international development agencies, including the Asian Development Bank, World Bank, and World Food Programme, and holds several editorial appointments with international journals. He received Bachelor of Arts and Sciences, Master of Science, and PhD in Multidisciplinary Science from the University of Tokyo, Master of Science in Environmental Change and Management from the University of Oxford, Master of Science and PhD in Agricultural and Resource Economics from the University of California at Berkeley.



**Makiko  
Nakamuro**

Professor  
Keio University

### The Effect of Computer Assisted Learning on Children's Cognitive and Noncognitive Skills: Evidence from a Randomized Experiment in Cambodia

Makiko Nakamuro, Hirotake Ito, Keio University, Japan

This paper examines the causal effects of computer-assisted learning on children's cognitive and noncognitive skills. We ran school-by-grade-level clustered randomized controlled trials at five public elementary schools in Cambodia. After confirming that the IQ scores of treated students significantly improved over just three months, we randomly reassigned those students either into treatment or control groups for an additional seven months comparison. We find that students retain their cognitive skills during the additional seven-month treatment, but the initial gain diminishes for students who leave the program. Conversely, a meaningful effect on noncognitive skills is not detected immediately after the first three-month short-run program, but the effect appears to become significant and persists in the longer run.

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Makiko Nakamuro is currently appointed as a Professor of Faculty of Policy Management, Keio University.

With substantial working experiences at the central bank and the international organizations, Makiko specializes in economics of education and methodologically focuses on the impact evaluation, especially in the field of education. Her academic research is thus related with education policy, resource allocation in education and school financing, etc. She obtained both Master's and Ph.D. degrees from Columbia University in the city of New York.



### Taejun Lee

Associate Professor  
KDI School of  
Public Policy and  
Management

Taejun Lee is an Associate Professor at KDI School of Public Policy and Management. Dr. Lee oversees the Open Government & Innovation Lab at KDI as a Managing Director and is an Adjunct Research Fellow at the Economic Information and Education Center of KDI. He has been an Affiliated Researcher of Open Government Unit at the Directorate for Public Governance of the OECD and the UN ESCAP APCICT. In addition, Dr. Lee has served as an international policy adviser for efficiently combating and recovering from the COVID-19 pandemic in association with the OECD and Open Government Partnership since 2019. He not only serves as a mediator among different government bodies and international organizations for numerous projects but also advises various government ministries and public organizations in the Republic of Korea. His multidisciplinary research focuses on both behavioral experiments and qualitative studies. He conducts empirical research on a wide range of topics and published in scholarly journals and 50 journal articles on recognized academic journals indexed SSCI, SCOPUS, and KCI



### Kazushi Takahashi

Professor  
National Graduate  
Institute for Policy  
Studies

#### Does Commitment Savings Alter Seasonal Poverty Dynamics among the Ultra-poor? Evidence from High-frequency Data

**Kazushi Takahashi**, Takeshi Aida, Jun Goto, Yu Ri Kim, Hisaki Kono, Masamitsu Kurata, Takashi Kurosaki, Abu S. Shonchoy (Takahashi: National Graduate Institute for Policy Studies, Aida: Institute of Developing Economies-JETRO, Goto: Kobe University, Kim: The University of Tokyo, Kono: Kyoto University, Kurata: Sophia University, Kurosaki: Hitotsubashi University, Shonchoy: Florida International University)

While the seasonal dimension of poverty is well discussed, little is known about its degree and counter-measure for the ultra-poor population. Using unique bi-weekly data for 10 months over two years from rural Bangladesh, we first show that consumption of the year round ultra-poor is subject to large seasonal fluctuations, with a significant decline during the agricultural lean period. We then conducted a randomized controlled trial to examine whether time-locked commitment savings schemes can prevent the fall in consumption. We randomly offered households commitment-savings products, either with market (8% per annum) or premium (50%) interest rates. Compared with the control group, we observed that premium-interest account holders increased consumption by 7-12% during the hungry season; its effect, however, did not last long. Typical market-interest account holders did not show any consumption impacts. These findings suggest that access to commitment savings alone is ineffective to smooth consumption of the ultra-poor.

Kazushi Takahashi is a Japanese development economist. He is a Professor at the National Graduate Institute for Policy Studies (GRIPS), and is a director of the Global Governance (G-cube) Program at GRIPS, Japan. Before joining GRIPS, he was an Associate Professor and Professor at Sophia University from 2015 to 2019, a visiting research fellow at the Charles H. Dyson School of Applied Economics and Management of Cornell University from 2010 to 2012, and a research fellow at the Institute of Developing Economies-Japan External Trade Organization (IDE-JETRO) from 2006 to 2015. He received his B.A. in Policy Management from Keio University and both his Master in International Development Studies and Ph.D. in Development Economics from GRIPS. His scholarly interests include agricultural technology adoption, rural poverty dynamics, microfinance, human capital investment, and aid effectiveness in Asia and Sub-Saharan African countries. He has published his research in major agricultural and development economics journals, such as American Journal of Agricultural Economics, Developing Economies, Economic Development and Cultural Change, World Bank Economic Review, and World Development.



### Kazi Iqbal

Senior Research  
Fellow  
Bangladesh Institute  
of Development  
Studies

## Impact of Floods on Education Outcomes: Evidence from Bangladesh Using Satellite and Census Data

Mohammad Mainul Hoque, **Kazi Iqbal**, Paritosh K. Roy

(Hoque, Iqbal: Bangladesh Institute of Development Studies, Roy: University of Dhaka)

We examine the impact of floods on education outcomes in Bangladesh. We combine the census data of all secondary schools with the flood measures constructed from satellite images at the union level (lowest administrative unit) for the years 2011-2018. We find that passing rates of school based exams and public exams of the secondary schools in a union drop significantly if greater areas of that union is flooded, after controlling for school level and year fixed effects. The impact is found to be more pronounced for the female students.

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Dr. Kazi Iqbal is a Senior Research Fellow of Bangladesh Institute of Development Studies (BIDS). He received his Ph.D. in economics from University of Washington, Seattle, USA in 2006. After completion of his Ph.D. he worked for World Bank Institute in Washington DC for three years as a consultant in Poverty Reduction and Economic Management Division. He also taught at University of Washington and Macalester College, Minnesota. His research interest lies in development economics and applied microeconometrics. He has publications in Journal of Public Economic Theory, Review of International Economics, Climate Change Economics, Developing Economies, Journal of Asian Economics, PlosOne, Demographic Research, BMC Public Health, etc. He is a member of the editorial board of the Journal of Bangladesh Studies, Bangladesh Development Studies and Lahore Journal of Economics.



**Elan Satriawan**

Associate Professor  
Universitas Gadjah  
Mada

### **Abstract 1- Cumulative Impacts of Conditional Cash Transfer Programs: Experimental Evidence from Indonesia**

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Conditional cash transfer (CCT) programs have spread worldwide, and are designed to promote comprehensive human capital investments in children, starting from encouraging pre-natal and maternal care and early childhood health interventions and continuing through incentivizing school attendance. Yet evaluating these claims over more than a few years is hard, as most CCT experiments extend the program to the control group after a short experimental period. This paper experimentally estimates the impacts of Indonesia's cash transfer program (PKH) six years after the program launched, using data from about 14,000 households in 360 sub-districts across Indonesia, taking advantage of the fact that treatment and control locations remained largely intact throughout the period. We find that PKH continues to have large static incentive effects on many of the targeted indicators, increasing usage of trained health professionals for childbirth dramatically and halving the share of children age 7-15 who are not enrolled in school. Wage labor for 13-15 year olds was reduced by at least one-third. We also begin to observe impacts on outcomes that may require cumulative investments: for example, six years later, we observe large reductions in stunting and some evidence of increased high school completion rates. The results suggest that CCT investments can have substantial effects on the accumulation of human capital, and that these effects can persist even when programs are operating at large-scale without researcher intervention.

### **Abstract 2- Can Health-information Campaigns Improve CCT Outcomes? Experimental Evidence from SMS-nudges in Indonesia**

Employing a clustered RCT this paper examines the short-term impact of a 12-month text messaging campaign on health knowledge and practices among CCT beneficiaries in Indonesia. Our analysis reveals that a mHealth information campaign can be an inexpensive and effective tool to (further) improve a diverse range of health indicators. Overall, CCT beneficiaries experienced substantial knowledge gains and also showed improved behavior as a result of the intervention. In particular beneficiaries with larger social networks and with low initial levels of health knowledge and practices benefited from the campaign. In contrast, we neither find evidence for an impact on health outcomes, nor for the role of an individual's education, cognitive abilities, personality, and bargaining power in mediating the impact of the intervention.

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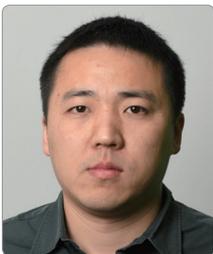
Elan Satriawan is associate professor in the Department of Economics, Universitas Gadjah Mada at Yogyakarta-Indonesia. He is also Chief of Policy Team, a think tank under National Team for the Acceleration of Poverty Reduction (TNP2K), Office of Vice President-Republic of Indonesia. In the past he has been Lead Evaluator in Monitoring and Evaluation Unit of TNP2K, Senior Research Fellow of Jameel Poverty Action Lab (JPAL-MIT), Consultant for World Bank and ADB. He obtained his PhD from Michigan State University in 2009. His research interests cover range of topics in development microeconomics areas particularly in impact evaluation and effectiveness of anti-poverty and social programs, poverty related issues including nutrition/health, education and inter-linkages between the two. Currently he evaluates effectiveness of various social protection programs and, collaborating with JPAL, conducts randomized impact evaluation on shifting the food in-kind to cash/e-voucher transfer for food. His latest publication on evaluation of cumulative impact of Indonesia CCT Program appears in American Economic Journal: Economic Policy in November 2020.



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Hyuncheol Bryant Kim is an Associate Professor in Economics Department at Hong Kong University of Science and Technology, and an Assistant Professor in the Department of Policy Analysis and Management at Cornell University (on leave). He is an applied empirical micro-economist focusing on causal impacts of policy interventions in health and education sectors through large scale data analysis and social experiment. The main goal of his research is to understand the fundamental relationship between human capital investment and individual and societal well being in Africa and Asia, which is insufficiently understood. He received MD from Yonsei University, Korea, and PhD in Economics from Columbia University, USA. His research is published in leading journals such as Science, Review of Economics and Statistics, Journal of Public Economics, Journal of Health Economics, and other international journals.



**Zichen Deng**

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### **A Bit of Salt, A Trace of Life: Gender Norms and The Impact of a Salt Iodization Program on Human Capital Formation of School Aged Children**

**Zichen Deng**, Maarten Lindeboom,

(Deng: Norwegian School of Economics, Lindeboom: Vrije Universiteit Amsterdam, Centre for Health Economics, Monash University, Melbourne, Tinbergen Institute and IZA Bonn)

This paper examines the effects of a massive salt iodization program on human capital formation of school-aged children in China. Exploiting province and time variation, we find a strong positive impact on cognition for girls and no effects for boys. For non-cognitive skills, we find the opposite. We show in a simple model of parental investment that gender preferences can explain our findings. Analyses exploiting within the province, village-level variation in gender attitudes confirm the importance of parental gender preferences. Consequently, large scale programs can have positive (and possibly) unintended effects on gender equality in societies with son preference.

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Zichen Deng is an applied economist working on environmental, health, and development economics. He joined the Department of Economics at NHH in August 2020 and is also affiliated to the Macroeconomics and Natural Resources group.



**Hisaki Kono**

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**Nudging by Beauty: Improving Women’s Health<sup>1</sup> Decisions and Well-being in the Field**

**Hisaki Kono**, Minhaj Mahmud, Nahoko Mitsuyama, Yasuyuki Sawada, Tomomi Tanaka  
(Kono: Kyoto University, Mahmud: Bangladesh Institute of Development Studies, Mitsuyama: International University of Health and Welfare, Sawada: Asian Development Bank and University of Tokyo, Tanaka: World Bank)

Health interventions often show limited effectiveness in influencing behavior as they fail to take into account the choice architecture. To shed light on how to improve health interventions, we evaluate a unique intervention in rural Bangladesh that highlights the importance of health, hygiene, and nutrition for beauty and condition of the skin. The intervention is designed to exploit the fact that women are sensitive to beauty. We find that the intervention has a substantial impact on beauty and health-related outcomes. It also improves the social relationships and subjective well-being of the women receiving the intervention. Compared with existing interventions, emphasizing beauty salience can improve the effectiveness of health and hygiene programs targeted at women.

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Dr. Kono teaches in the Kyoto University Faculty of Economics, Graduate School of Economics, and International Graduate Programme for East Asia Sustainable Economic Development Studies. His work deals with various issues of economic development and poverty based on microeconomic theory, econometrics, and statistical methods including contract design of microcredit and insurance schemes, designing health and education programs for the poor, remittance, intra-household decision making, market frictions in agricultural trade, and misallocation of resources. He was previously research fellow at Institute of Developing Economies and visiting scholar at Harvard University and Institute for Fiscal Studies. He received his B.D. in Regional Studies from Tokyo University of Foreign Studies, and his Ph.D. in Economics from the University of Tokyo.



**Ryotaro Hayashi**

Social Sector  
Economist  
Asian Development  
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**The Female Secondary Stipend and Assistance Program in Bangladesh: What did It Accomplish?**

Shahidur Rahman Khandker, Hussain Akhterus Samad, Nobuhiko Fuwa, and **Ryotaro Hayashi**  
(Khandker: World Bank, Fuwa: University of Tokyo; Samad and Hayashi: Asian Development Bank)

The Government of Bangladesh introduced the Female Secondary Stipend and Assistance Program (FSSAP) in 1994 with the support of development partners, including the Asian Development Bank, to increase female secondary school enrollment and completion, as well as discourage early marriage. The study, using longitudinal data at the household and individual level over 26 years, and based on with-and-without and before-and-after comparison, examines a range of outcomes of interest. Estimates suggest that FSSAP improved education outcomes in the short run, including boys' education outcomes through sibling effects. In the long term, FSSAP was successful in delaying marriage, increasing the probability of self-employment and nonfarm employment among employed women, and increasing the probability of women marrying men who are more educated and employed more in the nonfarm sector, compared to women in the control group. It was also successful in enhancing contraceptive use, reducing fertility, and increasing preference for daughters. A conservative estimate shows that the development benefits of the stipend program outweigh its cost by more than 500%. The estimates of high returns to secondary education of women thus not only justify the investment but also present a win-win situation for families and society at large.

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Ryotaro Hayashi is Social Sector Economist, Human and Social Development Division, South Asia Department, Asian Development Bank (ADB). Ryotaro works on improving the education sector in South Asia, particularly Bangladesh, Bhutan, Sri Lanka, India and Nepal. Before joining ADB as a Young Professional in 2015, he has worked for 10 years in international development organizations such as the World Bank, the Japan International Cooperation Agency (JICA), and Japan Bank for International Cooperation (JBIC).

Ryotaro is preparing impact evaluation in Bangladesh and Bhutan related to education and skills development and has engaged in systematic review of long-term impacts on early childhood development in developing countries. He also has publications related to tracer study of TVET and higher education graduates in South Asia. He obtained his Master of Science in Social Policy and Development from London School of Economics and Political Science (distinction) in UK, and Bachelor degree in Economics from Keio University in Japan.

## Session 6: Impact Evaluation Training Session

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This session provides an overview of impact evaluations, introducing the concept of counterfactual comparison and common methodologies, and demonstrates the importance and role of evidence for decision-making in government policy designs. The session will use case studies to show how evidence can be generated within operational constraints and translated into policy decisions. Participants will be encouraged to consider how impact evaluations can be used to improve program implementation. The training will be conducted by IDinsight.



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Conference on Impact Evaluation**

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