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How to Increase the Uptake of Development Interventions?

Considering the Theory of Planned Behaviour

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Abstract

A crucial prerequisite for the success of development interventions is their uptake by the targeted population. We use the set-up of interventions conducted in Indonesia and Pakistan to investigate dis-/incentivising factors for a programme's uptake and support. Making use of a framework grounded on psychological theory – The Theory of Planned Behaviour – we consider three determinants for intervention uptake: personal attitudes; subjective norms (influenced by important others); and the perceived ease of performing the desired behaviour. As most development interventions are characterised by a cooperation between local and international agents, we investigate a potentially important dis-/incentivising factor further: the salience of the implementer's background.

Our findings show that attitudes, subjective norms, and ease of use are indeed associated with increased uptake in our two culturally different settings. Conducting a framed field experiment in Indonesia, we go on to show that the study population in the Acehnese context exhibits higher levels of support for the project if the participation of international actors is highlighted. We find that previous experience with the respective actor is pivotal. To strengthen supportive behaviour by the target population for locally led projects, it is essential to foster local capabilities to create positive experiences.

Hence, our results encourage development research and cooperation, first, to consider personal attitudes, subjective norms, and the perceived ease of use in the design of interventions in order to increase uptake. Second, and depending on the country context, implementers should consider previous experience with and attitude towards partners – either local or international – when aiming to achieve behavioural change.

Keywords: Theory of Planned Behaviour; Framed Field Experiment; Implementation Research; Public Health

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Abbreviations

IDR	Indonesian rupiah
KP	Khyber Pakhtunkhwa
OLS	ordinary least squares
SCC	Safe Childbirth Checklist
TPB	Theory of Planned Behaviour
USD	US dollar
WHO	World Health Organization

1 Introduction

A large focus in literature studying development cooperation naturally lies on the effectiveness of the latter. At the macroeconomic cross-country level, the effectiveness of aid has been studied to an impressive extent, although results are still inconclusive (Burnside & Dollar, 2000; Easterly, Levine, & Roodman, 2004). Donor (Berthélemy, 2006; Minasyan, Nunnenkamp, & Richert, 2017) and recipient characteristics (for instance, Dollar & Pritchett, 1998; Rajan & Subramanian, 2008) are typically still the main focus of the literature. Much less attention is drawn to specific features during the implementation of development interventions which might likewise – and indeed very likely – predict how successful an intervention is going to be. Take, for instance, two very similar interventions related to HIV/Aids education for young people in Uganda by Kinsman et al. (2001) or Karim et al. (2009). While Karim et al. (2009) identified quite positive effects of the intervention on female participants with regard to increased condom use, Kinsman et al. (2001) saw almost no effect of their large-scale intervention. Can we accordingly assume that HIV/Aids education worked in all eight districts evaluated, with the exception of Masaka, where Kinsman et al. (2001) conducted their study? Or, alternatively, did it work from 2000 to 2005 (Karim et al., 2009) but not from 1994 to 2000 (Kinsman et al., 2001)? That is possible, but unlikely. The probability is higher that the implementation strategy, which Karim et al. (2009) tested, was more successful in achieving behavioural change in the given setting than the approach evaluated by Kinsman et al. (2001). Uptake by the target population is one of the main factors influencing the success of an intervention. However, what influences the uptake of a development intervention? And, under what circumstances is the target population more likely to support the programme? In general, the aim to change human behaviour is central to development interventions. The behavioural intention as a mediator is usually to reach a certain goal (such as the increased use of condoms to reduce sexually transmitted diseases). Limited participation of, or support from, the respective target population is a challenge to these interventions (see, for example, Banerjee, Duflo, Glennerster, & Kothari, 2010; Cole et al., 2013). In this study, we want to address the puzzle of uptake of and support for development interventions and examine "dis-/incentivising factors". A systematic and deep understanding of what drives behavioural change in response to development programmes is critically needed and has been partly acknowledged in the construction of theories of change before implementation (Nayiga et al., 2014; Rogers, 2014). However, the application of a general framework is missing (Duflo, Glennerster, & Kremer, 2007; World Bank, 2015). Most interventions analysed in the field of development economics predominantly rely on monetary incentives to increase uptake, while other important drivers of human behaviour have attracted limited attention (Kettle, Hernandez, Ruda, & Sanders, 2016). This is the case, despite insights from behavioural economics stressing the importance of non-monetary incentives that shape human motivation and behaviour (Gneezy, Meier, & Rey-Biel, 2011; Bowles & Polania-Reyes, 2012) and scholarly work showing that these factors play a role in the successful design of interventions (Banerjee et al., 2010; Cole et al., 2013; Ashraf, Field, & Lee, 2014).[1]

1 These factors which "disturb" rational decision-making are acknowledged by behavioural economists (here often-called "psychological biases" or "cognitive limitations") while insights from behavioural economics are increasingly being applied to public policy (for instance, the Behavioural Insights Team in the United Kingdom; the Mind, Behavior and Development Unit at the World Bank; and Madrian (2014)).

Being confronted with low uptake rates in two comparable interventions, which we conducted in Pakistan and Indonesia, we chose to investigate possible dis-/incentivising factors that could help explain why some people were more engaged while others were not. In order to systematically analyse drivers for non-supportive/supportive behaviour, we made use of a psychological theory called the Theory of Planned Behaviour (TPB). While other theories aiming at explaining behavioural patterns exist, the TPB is the most established one and has been applied to a variety of differing contexts (Blue, 1995; Armitage & Conner, 2001). It provides a straightforward framework to identify and respond to facilitating and hindering factors related to human behaviour. To the best of our knowledge, however, the framework has not yet been used to explain behavioural response to interventions in the field of development economics.

The TPB proposes three determinants that influence human behaviour: the individual's attitude towards the intervention; subjective norms; and the individual's sense of behavioural control. We investigate the potential relationship of these determinants to intended and actual uptake rates within the setting of two real-world interventions. More specifically, we consider the introduction of the World Health Organization (WHO)'s Safe Childbirth Checklist (SCC) in Pakistan's Khyber Pakhtunkhwa province (Kuhnt & Vollmer, 2018) and in Indonesia's Aceh province (Diba et al., 2018). Evidently, the Checklist can only be effective if health personnel comply with the intervention and actually use the SCC. Hence, the behaviour in question is the uptake (use) of the Checklist during childbirth deliveries. One parameter common to almost all development interventions is the nexus between local and international implementers. Also, during our project, we realised that the international or local association of the implementing agents was likely to influence the behaviour of the target group towards the project. This was in line with recent research where implementer's characteristics were found to play a role as a softer precondition for the support of interventions (Cilliers, Dube, & Sidiqqi, 2015; Findley, Harris, Milner, & Nielson, 2017). Accordingly, we deepened our analysis of this behavioural determinant by conducting an additional framed field experiment. Within the context of the Indonesian SCC intervention, we assessed whether health personnel's support of Checklist use changed depending on whether participation in the project by local or international agents was emphasised.[2]

Our results showed that the intended and actual uptake of the SCC in both country settings were indeed positively related to all three TPB determinants. A more positive attitude towards the project, greater behavioural control, as well as supportive subjective norms were all related to increased uptake of the SCC in Indonesia and Pakistan.

Hence, we argue that the TPB can help to disentangle the puzzle of heterogeneous engagement on the part of the target group and can serve as a guideline in determining and shaping factors affecting intervention uptake. Focusing in the implementation design on stimulating these factors is thus likely to increase the success of interventions through increased support and consequently through higher participation rates among the targeted population. Further, our framed field experiment revealed that change in support for the project was due to the salience of international versus local involvement. The population under study showed greater support for interventions with international involvement. Previous exposure to both international and local implementers drove those positive behavioural reactions towards international research projects. Hence, in the Indonesian

2 For a visualisation of our study design, see Figure 2.

context, our findings suggest that it has advantages to stress the international nature of programmes over solely locally organised projects. However, to support local ownership and successful local project implementation, our results underlined the importance of strengthening local capabilities to create positive experience with locally-led projects.

Our paper is structured as follows: Section 2 describes the background of the study. Section 3 introduces dis-/incentivising factors and provides an outline of the Theory of Planned Behaviour. Section 4 links this framework to our interventions and describes the way our research project was designed, along with presenting data. Section 5 elaborates on methods used, while results are provided in Section 6. Section 7 discusses the generalisability and policy relevance of the results and concludes the study.

2 Background

This study systematically considers dis-/incentives shaping behaviour. The analysis considered "light-touch" health interventions, where take-up rates were more likely to be predicted via behavioural factors than due to technical constraints. Motivated by the low uptake by the target groups, we considered potential dis-/incentivising factors in two local contexts: in Indonesia and Pakistan. On the one hand, relying on two distinct samples enabled us to increase the external validity of the factors investigated, which is one main concern of field studies. On the other hand, the comparison contributed to an understanding of heterogeneous effects of those dis-/incentivising factors.

Two-thirds of maternal and new-born deaths globally occur due to causes which could largely be prevented if well-established and essential practices were followed (WHO [World Health Organization], 2018a). The WHO Safe Childbirth Checklist (SCC) initiative aims at providing health personnel with a four-page checklist to be used around the delivery process. The Checklist entails the essential practices addressing the major risk factors for mothers and children in low- and middle-income countries.[3] Experience from other medical fields suggests that checklists are a promising tool to motivate health personnel to follow essential practices and tackle the "know-do" gap. This gap between the knowledge about what *should be done* to ensure safe deliveries and what *is actually done* is large. Insights from the field of behavioural economics suggest that human behaviour is bounded by limitations of the working memory. In situations characterised by high levels of cognitive load – the amount of mental activity imposed – the successful execution of certain tasks may be interrupted or impaired (Croskerry, 2002; Burgess, 2010; Hoffman & al'Absi, 2004; Deck & Jahedi, 2015; Lichand & Mani, 2016). Checklists can be especially helpful to reduce additional cognitive load and allow a reduction of complexity of the situation at hand by reminding the user of the essential steps to follow (Workman, Lesser, & Kim, 2007; Borchard, Schwappach, Barbir, & Bezzola, 2012; Haugen et al., 2015). Our international research teams implemented the Checklist in collaboration with local partners. We used a light-touch approach in both country settings which are described below.[4]

3 The general Checklist is available via the WHO Webpage (last accessed 26 January 2019) and has been adapted to the country contexts.

4 For a detailed description of the interventions, see the evaluation articles of the main evaluation studies (Diba et al., 2018; Kuhnt & Vollmer, 2018).

Indonesia has invested large resources to improve its health care culminating in the introduction of national health insurance (*Jaminan Kesehatan Nasional*) in 2014. Those investments are linked to an increased number of births attended by skilled health care providers (for example, midwives or doctors). We conducted our study in Aceh province, which – after 30 years of civil war and 2004's tsunami – was subject to massive reconstruction efforts by the national government and international donors. More specifically, funds were used to establish an infrastructure of well-equipped health facilities (community health centres as well as hospitals) which complemented the system of village and private midwives. Using a clustered randomised control design, we evaluated the SCC in 16 of those health facilities, while 16 additional facilities served as a control group. We focused our assessment on health facilities (in contrast to individual providers) as we hypothesised that existing quality management systems at institutions would facilitate implementation. Moreover, seniority plays a predominant role in the Indonesian society. Thus, existing hierarchies in health facilities enabled us to use the engagement of supervisors as a leverage to motivate the staff. Engagement was supported via a motivating launch event informing health personnel about the Checklist's benefits for their everyday work, complemented by eleven coaching visits to each facility over the following six months.

In Pakistan, the study was conducted in two districts of the province Khyber Pakhtunkhwa (KP) in the Northwest of Pakistan: Haripur and Nowshera. Improvements in maternal and new-born health are high on the national policy agenda and were endorsed in the "National Vision for Coordinated Priority Actions 2016-2025" (WHO, 2016). To reach this goal, it is essential to improve the quality of skilled providers (including facilities and individuals). In close cooperation with, and with the support of the local authorities, the SCC was evaluated for 17 health facilities (of different size) and 149 individual health care providers (community midwives and lady health visitors)[5] using a cluster randomised control design.[6] The mix of providers was representative of the public health system in the two districts. The individual providers in particular are only loosely attached to the local government structures (for instance, through provision of medication and equipment) and there is de facto very little oversight of their activities. In order to ensure knowledge on the SCC and motivate uptake, we conducted standardised trainings on the Checklist for all health staff and launched it via events at the health facilities. By engaging local political authorities in this process, we ensured their support, which was important for the cooperation of the larger health facilities. The intervention was complemented with on average once-monthly monitoring visits by the local project coordinator.

While implementing the same tool and following similar implementation procedures, the respective context in Indonesia and Pakistan differed. This allowed us to investigate the role of dis-/incentives for intervention uptake in a more heterogeneous manner and thereby to establish the potentially greater external validity of our findings.

5 Community midwives in Pakistan are trained midwives, who operate on their own within local, often rural, communities. Lady (female) Health Visitors are mid-level health care providers with a high-school diploma and a two-year medical training, providing health care to mothers and children under five years of age.

6 According to the evaluation design, the SCC was randomly implemented in roughly half of those providers.

3 Dis-/incentivising factors for uptake and support

Despite a high commitment by health care providers during the launch events of the Safe Childbirth Checklist, uptake was lower than expected. The puzzle that this study tries to solve is, thus, as follows: If health personnel know that the Checklist entails necessary essential practices supporting the safety of deliveries, why would they decide not to use it? According to the ideas of the rational choice theory that describes independent agents striving to maximise their own utility (Simon & Feldman, 1959), the deviation should only be a matter of constraining factors (such as a lack of information, technical know-how or equipment), assuming that incentives that ensure the well-being of patients are functioning.[7] However, it has been shown that behaviour is determined by a complex interplay of various factors. In order to understand the factors that might have constrained the uptake, we hence continue with a more systematic overview of potentially important (dis-)incentivising factors.

In practical terms, a large set of relevant incentives exist. These can often be very context-specific, relating to the peculiarities of organisations. For this reason, we were aiming at a more theory-driven approach in order to allow for insights that would be applicable beyond the two study contexts. More specifically, we based our research on the Theory of Planned Behaviour, which is grounded in social psychology, but is also well-established in other fields due to its high predictive power (Ogden, 2003; Hobbis & Sutton, 2005; McEachan, Conner, Taylor, & Lawton, 2011). The framework seemed particularly suitable to development economics due to its applicability to a wide variety of behaviours (Blue, 1995; Armitage & Conner, 2001; Bilic, 2005; Appleby, Roskell, & Daly, 2016) as well as within different cultural and geographical settings (Protogerou, Flisher, Aar, & Mathews, 2012; Kiene, Hopwood, Lule, & Wanyenze, 2014; Hsu, Chang, & Yansritakul, 2017; Kassim, Arokiasamy, Isa, & Ping, 2017).[8]

The TPB framework rests on three determining factors that influence a person's behaviour (Fishbein & Ajzen, 1980; Ajzen, 1985). The first determinant is the personal "attitude" towards the behaviour, which refers to the degree to which a person has a favourable or unfavourable evaluation of performing the behaviour in question. A certain attitude (for example, dis-/trust) is mostly acquired through knowledge or learning, which can be influenced by various factors, including information or previous experience (Perugini & Bagozzi, 2001; Vogel & Wanke, 2016). The second predictor termed "subjective norm" reflects the social influence felt by the individual. It refers to the perceived social pressure to perform or not to perform the behaviour. The third behavioural determinant is the degree of "perceived behavioural control," which refers to perceived own control over the behaviour, that is: Is it easy or difficult to perform? (Armitage & Conner, 2001). Generally speaking, individuals are more likely to intend to carry out a certain behaviour if they judge it beneficial

7 In both evaluation studies, we assessed whether technical knowledge or resource provision would be a main constraint but this was not the case (Diba et al., 2018; Kuhnt & Vollmer, 2018).

8 It has to be noted that the TPB can be applied in various ways, which is likely to influence its effects (Lugoe & Rise, 1999). In order to increase the TPB's explanatory power and flexibility, several studies extend the original framework by further constructs and components (Conner & Armitage, 1998; Perugini & Bagozzi, 2001; Armitage & Conner, 2001; Cheon, Lee, Crooks, & Song, 2012). We will stick to the original theory when applying it to development economics, while we acknowledge the propositions made to deepen or broaden the TPB. In particular, the consideration of other contextual factors offers interesting routes for further research, for instance, within the framework of the comprehensive action determination model (Klöckner & Blöbaum, 2010).

(attitude toward behaviour); if they think important others want them to do it (subjective norm); and if they feel that they are able to do it (perceived behavioural control). Importantly, the TPB links its three predictors to intended behaviour, which is the immediate antecedent and, thus, a close predictor of an individual's actual behaviour (Ajzen, 1991; Bilic, 2005).

Besides the determinants suggested by the TPB, we identified one key dis-/incentivising factor prevalent in our settings as well as in most interventions in the field of development economics: the salience of the local or international identity of the implementing agent. Higher support for a specific group of implementers could be driven by heuristics or behavioural biases, for instance, stereotypes. However, these are usually based on underlying perceptions regarding the implementers. One might not a priori prefer either international or local implementers, but support those known for higher implementation capacities, for instance. At first sight, more support for foreign implementers might be counter-intuitive as the "home bias"-phenomenon suggests that cultural proximity increases people's trust with regard to their assessment of the context (Fuchs & Gehring, 2017). However, an alternative strand of literature suggests increased support for foreign implementers. One reason might be the fact that international donors strive for high visibility (Vollmer, 2012), the aim of which is ultimately to affect recipients' perceptions. Against this background, Dietrich and Winters (2015), as well as Winters, Dietrich and Mahmud (2017) showed that respondents linked higher perceptions regarding quality to donors than to the national government. In Uganda, Milner, Nielson and Findley (2016) found that the support for foreign-funded as compared to national government-funded programmes was substantially larger, if participants favoured opposition parties and, thus, were not members of the clientelist in-group. Against this background, Findley et al. (2017) stressed the importance of perceptions on funding control as a main channel, based on an experimental sample among Ugandan respondents.[9] Cilliers et al. (2015) showed that the presence of a foreigner versus a local as a third-party bystander affected the contributions of participants in a dictator game in Sierra Leone positively and identified two potential channels: Firstly, an increase in contributions to impress the foreigner; and, secondly, reduced contributions in areas that had previously been exposed to development cooperation projects. In the latter locations, they showed that participants more frequently believed that the game tested their need for aid, and subsequently contributed less. The previous exposure (here to aid) was shown to be an important factor shaping perceptions and attitudes and, hence, subsequent support for projects. Among the more general TPB determinants, we will consider this dis-/incentivising aspect more closely within the broader design of our study.

Based on the TPB we formulate our first three hypotheses:

Hypothesis 1 (H1) *Positive attitudes towards the intervention will lead to a more supportive behaviour and, hence, increase the uptake. As both studies invested intensively in establishing positive attitudes, we did not expect their importance to differ strongly across contexts.*

Hypothesis 2 (H2) *Increased perceived behavioural control will have a positive effect on uptake. Its effect will be dependent on the level of control felt by the individual. We expected*

9 Although not testing it explicitly, Findley et al. (2017) named perceptions of accountability, capacities, and level of control as further potential channels.

it to be more important in less-controlled environments (for example, individual health providers in Pakistan).

Hypothesis 3 (H3) *Supportive subjective norms will lead to higher uptake. We expected subjective norms (in our setting: superiors' support for the SCC) to play a stronger role in an institutionalised context, where regular interaction with superiors took place (for example, in the hierarchical health facilities in Indonesia).*

With respect to the salience of local or international project implementers, we formulated our fourth hypothesis:

Hypothesis 4 (H4) *The salience of local versus international project implementers plays a role for the behaviour towards the intervention. Previous (positive) exposure to these implementing agents increases support for the intervention.*

4 Research design and data collection

This section describes the key measures we adopted and how we conceptualised them within the respective settings. Along with the survey- and observation-based measures, we also describe the experimentally derived data.

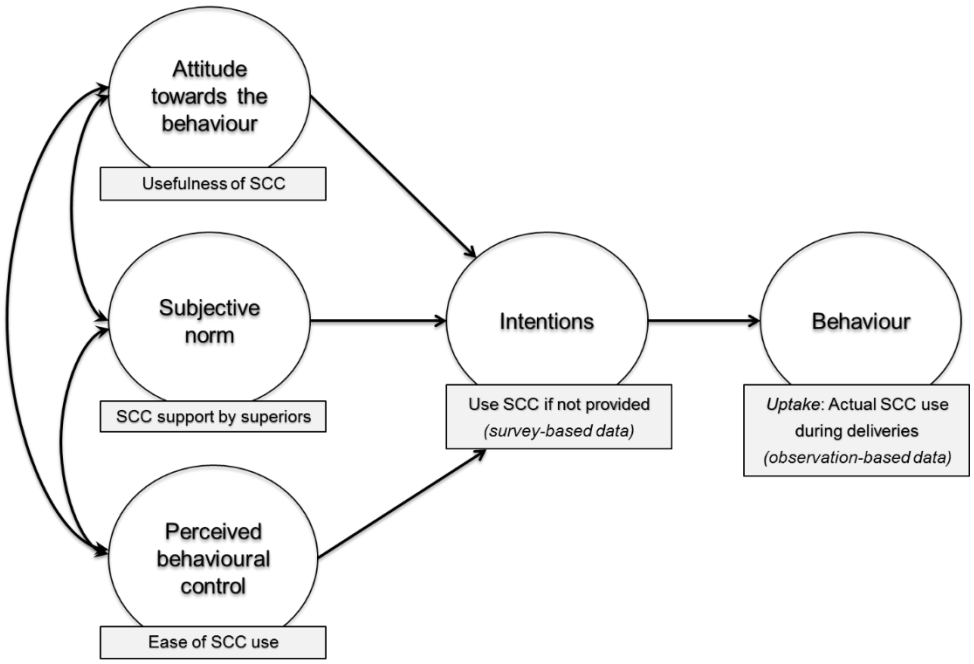
4.1 Measuring the concepts of the Theory of Planned Behaviour

In both countries, we gathered our data through surveys of health personnel and clinical observations of the delivery process at the end of the intervention.

The numerous previous applications of the TPB to a wide array of contexts make it easier to measure its determinants (see, for example, French & Hankins, 2003; McEachan et al., 2011). With regard to the first determinant, "attitude towards the behaviour" – and here towards the use of the SCC – we proxíed by asking the respondents to judge the usefulness of the SCC within their professional context (based on Kam, Knott, Wilson, & Chambers, 2012). "Subjective norms" would be mirrored in the degree of support by the health practitioners' superiors (Sexton et al., 2006). "Perceived behavioural control" took into account how easily the health practitioners judged the Checklist to be applicable to their daily work routine. The judgment of the health practitioners on the three TPB determinants was generally very positive. For all three determinants and in both contexts, the respondents provided a mean rating of five on a scale ranging from one to six, where six corresponded to "fully agree".[10] However, Appendix Tables A1.1 and A1.2 indicate some distinct variations, which we exploit in our analysis. Beyond the main TPB variables, surveys included demographic background information, which served as control variables.

10 As the distribution of the TPB determinants is heavily right-skewed, we assessed robustness using a binary indicator if respondents chose the top category. Results remain robust and are available on request.

Figure 1: Applying the TPB to the SCC intervention



Source: Authors, based on Ajzen, 1991

According to the TPB, the three components then influence whether health staff intends to use the Checklist and, ultimately, if they actually do use it during the childbirth deliveries conducted (see Figure 1). The intention to use the Checklist and actual use of the Checklist represent our outcome measures. We investigated respondents' intended behaviour towards SCC use by asking whether they intended to continue using the SCC after termination of the study and applied a 6-point Likert scale.[11]

To likewise assess the actual use of the SCC, we additionally conducted standardised clinical observations in a subsample of the health facilities in Pakistan and Indonesia. Trained observers documented the delivery processes and marked down whether the attending health staff had used the Checklist or not.[12] This information was collected for 233 deliveries at 15 facilities in Indonesia and 212 deliveries at 9 providers in Pakistan (dominated by health facilities, not individual practices). In Pakistan, we focused our observations on a subset of health providers due to organisational and logistical constraints. This difference between samples (Pakistan versus Indonesia) was taken into account when interpreting results.[13] Due to the limited number of deliveries observed per individual health worker, we chose to aggregate the data to the provider level. Summary statistics for all

11 As an additional outcome measure, we asked participants whether they would recommend the SCC to colleagues. Results are available on request.

12 Checklist use was either defined by whether the practitioners picked up the Checklist during or directly after care, or whether the Checklist poster was observed during the delivery process. Hanging up a Checklist poster in the delivery room for simultaneous consultation formed part of our intervention.

13 In Indonesia, the fraction related to 64 per cent of all deliveries conducted monthly at observed health facilities. In Pakistan, our observations captured 50 per cent of all deliveries conducted monthly at the observed health facilities as well as 94 per cent of all deliveries conducted monthly at observed individual providers.

measures employed can be found in Appendix Tables A1.1a for Indonesia and A1.1b. for Pakistan.[14]

Importantly, the data for the TPB analysis were only collected for the respondents working in treatment facilities as, at the time of the endline survey, health staff in the control facilities had not had any contact with the SCC. Hence, asking about the perceptions of the SCC would not have been possible and our sample was thus limited to those interviewed at treatment facilities. This left us with 79 respondents in Pakistan and 163 health workers in Indonesia.[15] Focusing for practical reasons on the treatment facilities limits causal inference, because we face a non-random sample regarding the "dis-/incentivising" factors suggested by the TPB. However, the setting of our study allows us to evaluate another dis-/incentivising factor more closely.

4.2 The experimental set-up

As pointed out earlier, we noticed that the implementers' identity was a highly salient factor, affecting the attitude towards SCC usage. Stressing certain attributes of a particular situation among otherwise equivalent descriptions can lead to very different perceptions and behavioural reactions (Tversky & Kahneman, 1981; Kahneman, 2003; Johnson & Goldstein, 2003; Hossain & List, 2012; Payne, Sagara, Shu, Appelt, & Johnson, 2013). The result is what is called the "framing effect".[16] Framed field experiments are a valuable tool to generate policy-relevant insights in order to understand the underlying structural mechanisms (Duflo et al., 2007; Viceisza, 2015). We considered the following question: "Everything being equal, how likely are health care providers to support the intervention, given that the research and implementation team is international or local?" Evidently, an effective framing treatment requires that the respondents are not aware of the de facto identity of implementers. Moreover, we wanted to avoid the framing being contaminated by heterogeneous experience with Checklist usage. For this reason, we made use of the treatment-control design of the SCC evaluation in Indonesia. Unfortunately, we were only able to conduct the experiment in the Indonesian sample as the tense security situation in Pakistan did not allow for additional activities.[17] The framing experiment was thus embedded in our study setting in the Indonesian control group as described in Figure 2.

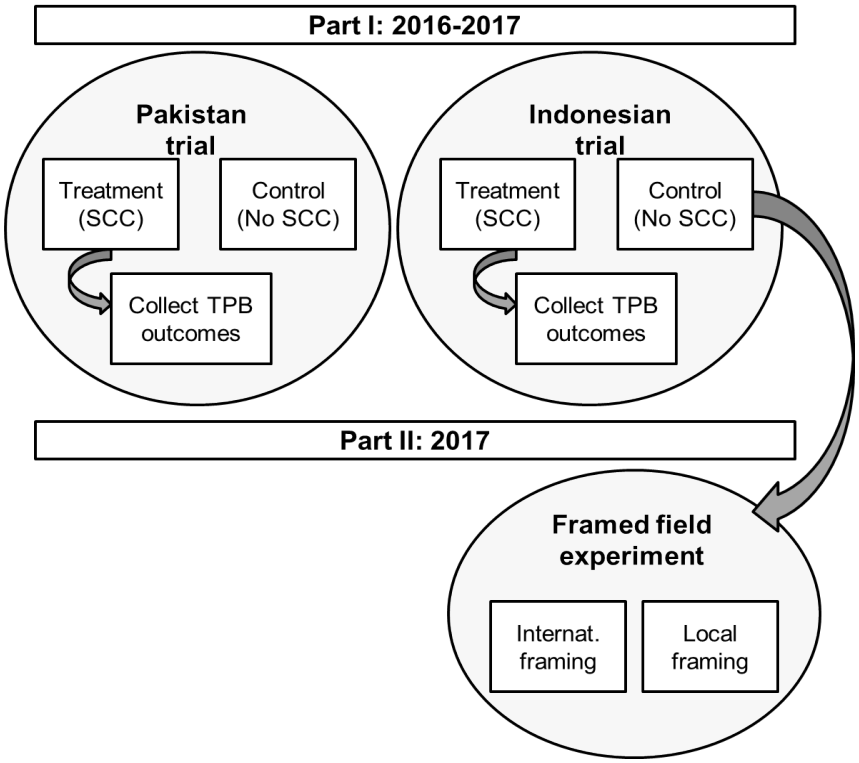
14 More detail on the data collected can be found in Kuhnt and Vollmer (2018) and Diba et al. (2018).

15 The Pakistani health staff worked at 70 different providers (including individual providers but also larger health facilities). While we surveyed every individual provider, we increased the number of interviews at health facilities proportionally to their number of delivery staff to get a more nuanced picture within larger teams. The Indonesian trial involved interviews at 16 health facilities.

16 The framing effect became popular through its essential role in Kahneman and Tversky's (1979) prospect theory in which they describe gambles either by their loss or gain probability. We consider an attribute framing, in distinction to risk or goal framings.

17 Also, due to the sampling of individual midwives in Pakistan, the organisational burden and anonymity concerns additionally prevented us from carrying out the experiment in the Pakistani context.

Figure 2: Study design flow chart



Source: Authors

Within the group of health practitioners working at Indonesian control facilities, we used a "between-subject" design and randomly assigned the study participants to two different framing information sets related to the SCC interventions actually conducted.[18] The first framing information stressed the involvement of international actors in the intervention, while the second accentuated the participation of local counterparts.[19]

We conducted the experiment with 236 female midwives in total. In a short pre-experimental survey, we collected background information of each participant, including socio-economic and contextual work characteristics.[20] In appreciation for their survey participation, each respondent received a voucher for a phone credit top-up worth 25,000 Indonesian rupiah (IDR) (approximately USD 1.75). After their participation in the survey, the enumerators asked the respondents also to participate in the experiment.[21] The "experimental commodity" was derived from the on-going larger SCC intervention. First, the idea and structure of the SCC was explained to the participants. Afterwards, they were presented with one of the two framings that selectively stressed either the involvement of

18 Focusing on control facilities ensured that these midwives had neither received the SCC yet nor had been in contact with the implementation team up to that point.

19 We purposefully did not include a neutrally framed group within the framing experiment as development programmes are always either conducted exclusively locally or have an international component. We believe that it is very unlikely that the implementer's identity is unknown to programme participants, although salience might differ.

20 This survey was included in the endline survey of the larger SCC intervention.

21 All respondents chose to continue and participated in the following framing experiment.

"local" actors or of "international" ones in the SCC intervention. We made use of the fact that the SCC evaluation had been implemented jointly by both international and local actors and merely highlighted different attributes of the project. Lastly, we conducted a short post-experimental survey, including questions capturing potential framing mechanisms and additional control variables, such as the experience of current financial distress.

We then investigated the participants' respective behaviour towards the intervention by assessing the support for the SCC project. We proxied SCC support by asking the respondents whether they would contribute to buying copies of the Checklist, which would support the follow-up implementation of the SCC in further anonymous health facilities within the province.[22] The monetary contribution was deducted directly from the voucher for phone credit top-up which had been allotted in appreciation of their participation in the survey.[23] The contribution was made anonymously. To create transparency on the use of the collected funds, we publicly made information on total amounts available after the end of the study and informed the participants about this procedure. Further, to counter potential bias through speculations on the financial capabilities of different actors, we stressed that funding of the intervention was ensured irrespective of the framing information given to the participant.

In the post-experimental survey, we asked several questions on potential mechanisms to explain differential preferences towards implementers. These questions related to perceived corruption, sufficient funding capabilities, accountability, skills, and the ability to control the implementation of the interventions. All this data was collected after the experiment in order not to affect our main outcome measures. However, this procedure came with the trade-off of a potential justification bias, where individuals would adapt their answers ex-post to justify the support previously indicated. We indeed found that the framing affected some of these variables statistically significant.[24] For this reason, we did not use these channels for further analysis.

In order to get a clearer understanding of how previous experience with local and international project implementers affected perceptions, we conducted a follow-up open-ended qualitative survey. In those surveys, we asked the following: "In your opinion, what are some of the strengths and challenges of international projects?" and "Please describe your experience working with international teams." Answers complement the findings on experience with local and international agents.[25]

22 We focused on the traditionally employed monetary outcome as due to the costs incurred by the respondent this is likely to be the strongest measure. Estimates using the additional outcomes provided qualitatively similar results and are available on request.

23 If respondents wanted to contribute, we offered them five options from IDR 5,000 to 25,000 (equivalent to USD 0.4-1.9) due to pragmatic reasons of specific top-up values.

24 For the correlations, please see Appendix Table A2.7.

25 The detailed experimental protocols, including the specific framing, are available on request.

5 Empirical approach and descriptive data

5.1 Empirical approach

In the first part of our regression analysis, we address the role of the dis-/incentivising factors for intended behaviour with regard to Checklist use. Our regression line for intended behaviour reads as follows:

$$y_i = \propto + \beta_i TPBdeterminant_i + \beta_k \sum_k X_i + \epsilon_i \qquad (1)$$

As throughout the study, we estimate models for Indonesia and Pakistan separately using ordinary least squares (OLS) regressions. Our level of analysis is the individual health worker i (79 respondents for Pakistan and 163 individuals for Indonesia). y_i determines our outcome variable, which measures intended behaviour employing 6-point Likert scales. $\propto$ is a constant, while $TPBdeterminant_i$ captures our variables of interest (also using 6-point Likert scales) via our three perception measures for the three TPB pillars: *attitudes, subjective norms,* and *perceived behavioural control*.

We employed Likert scales to all perception-based survey questions, which are relatively continuous measures. Hence, we consider them as continuous variables in the estimations, which is the preferred method of analysis proposed in the literature (Pasta, 2009).[26] As our sample was restricted to our treatment group and thus included a non-random set of individuals, estimations were not derived within the randomisation framework and did not allow a causal interpretation. Nonetheless, controlling for several potentially confounding variables, we would receive informative correlations about how behavioural processes were associated with intervention uptake. In adjusted regressions we added $\sum_k X_i$, which represented our set of k control variables. These included a binary variable indicating the location of the facility (rural versus urban), a variable capturing the district where the provider was located, the level of service provision, which was proxied by a dummy for 24/7 opening hours, and a variable indicating the type of facility.[27] It could be that those time-invariant facility characteristics are correlated with the drivers of the TPB as well as the outcome and, hence, cause omitted variable bias if not considered. Perceived behavioural control could be affected by staffing and equipment, which was captured by the facility type and geographical remoteness (district dummies and rural/urban distinction) as well as the 24/7 service provision. Remoteness, services and facility type also influence the safety culture, which affects providers' attitudes and the subjective norms of superiors towards the SCC.

The second part of our regressions is equivalent to the first but changes the outcome variable to birth observations i measuring the actual behaviour. Here, y_i is a binary variable equalling 1, if the Checklist was used by the health worker during the delivery. As we could

26 Further, we also estimated regressions with an alternative coding for robustness, where we defined a dummy variable with the value 1 for the highest category and 0 otherwise. Results are robust and available on request. In a pre-test, we also assessed the feasibility of continuous items with a scale from 0 to 100, but learned that those were harder to comprehend for respondents.

27 This latter variable captured the different types of providers (which are more general than facility dummies). Our sample included a wide heterogeneity of facilities from primary to tertiary health providers where this variable captured their specificities, including team size, resource access, and/or delivery load. Research on different facility types indicated a very heterogeneous uptake along with different *attitudes* of the respondents towards the tool (Semrau et al., 2017; Kabongo et al., 2017; WHO, 2018b).

not link each delivery to the specific health worker's responses, we took averages of *attitudes, subjective norms* and *perceived behavioural control* per health facility. Those averages provided us with an intuition of more supportive environments being associated with more or less take-ups.[28] The control variables X_i stay the same as in the regression line (1).

The third part of our regression analysis concerned the experimental data. Our analysis of the framed field experiment aimed to identify the existence of a systematic difference in the support for our intervention by health practitioners, conditional on whether the local or international implementation was more salient. Since we randomised participants into different treatment groups, we were able to make causal inference on how the origin of implementers affected indicated support for the SCC intervention. Our results were based on the following regression equation:

$$y_i = \alpha + \beta_1 framing_i + \beta_2 framing_i * c_i + \beta_3 c_i + \beta_m \sum_m C_i + \vartheta_i \qquad (2)$$

In our most parsimonious model, y_i is the outcome variable, indicating the support of the SCC by health worker i. α is a constant, and $framing_i$ is a binary variable, which equals 1 if the respondent was exposed to an international, and 0 for a local framing. Moreover, heterogeneous effects are assessed by the inclusion of an interaction between the framing and c_i, which was prior participation in international or local projects. We were thus mainly interested in the effect sizes of β_1 and β_2.

While the randomisation ensures the exogeneity of the framing, project participation is potentially endogenous regarding other traits of the surveyed respondent. However, as recent research by Bun and Harrison (2018) and Nizalova and Murtazashvili (2016) indicates, the interaction of an exogenous and an endogenous variable can be considered as exogenous, when controlling for the endogenous variable.[29]

In adjusted regressions, we added $\sum_m C_i$, which was our set of control variables. The controls included a variable indicating the respective facility type, where the participant was employed. Moreover, we added a binary variable marking whether the respondent had experienced financial problems within the past days as this might have affected monetary contributions.[30] Further, to control for a potential social desirability bias, we measured social conformity following the social desirability scale developed by Kemper, Beierlein, Bensch, Kovaleva and Rammstedt (2014). This measure was adopted to the Acehnese

28 As our analysis, thus, involves different aggregation levels and our measures of intention and actual behaviour capture slightly different concepts, we do not estimate a model on the direct link between intentions and behaviour.

29 One needs to be aware that, especially in the case of a limited sample size, omitted variables might not be homogenously distributed and that hence it was not inherently clear which other factors were correlated with our interaction variable of interest. However, balancing tests provided in Appendix Tables A2.2 and A2.3 underscore that previous participation was balanced across both framing treatments.

30 Related research has similarly controlled for a constructed wealth index (see, for instance, Cilliers et al., 2015).

context and we transformed its five items into a composite index.[31] We also controlled for the subjective perception regarding the amount of paperwork that one needed to complete in relation to deliveries, which was motivated by an often-experienced perception during implementation that the new tool added to the already existing paperwork. Finally, ϑ_i describes the residual. Errors were clustered at the facility level to take into account similarities within teams.[32]

5.2 Descriptive data

Descriptive statistics show that, in general, the SCC was valued by the practitioners in Indonesia and Pakistan (see Appendix Figure 1.1). Yet, there was some distinct variation within and across the settings. Additionally, Appendix Figure 1.2 describes the actual SCC use by health practitioners in Indonesia and Pakistan. It indicates a limited uptake and, hence, a potential gap between intended and actual use.

Regarding the data collected in the framed field experiment in Indonesia, individual characteristics and further contextual variables were balanced across framings. The balanced data indicates that the randomisation was successful (Appendix Table A2.2). In our main analysis, we focussed on those participants that had not been in prior contact with the SCC, as 27.92 per cent of the respondents stated that they had previously been exposed to the SCC.[33] As it was not possible to infer how much these latter respondents knew about the SCC intervention and how intense the exposure had been, excluding them was the more conservative choice.[34]

This reduced our sample to 173 participants.[35] Balance on important covariates was also given in this reduced sample (see Appendix Table A2.3). Previous SCC exposure was

31 We adapted the social desirability measures to the respective context in cooperation with Indonesian counterparts. For instance, one of the items initially read "I have occasionally thrown litter away in the countryside or on to the road." As environmental concerns are less salient in the Acehnese context than religious concerns, we changed the item to "When I had the chance to donate for religious purposes, I always contributed a lot."

32 Because our number of clusters are limited, we also present results with wild bootstrapped standard errors according to Cameron, Gelbach and Miller (2008) for all our baseline models in the Appendix. However, this is only possible for the unadjusted regressions (without controls). When bootstrapping standard errors in models with control variables, we faced problems of overfitting. This was the case as our controls mainly consisted of dummy or categorical variables, which reduced variation among our relatively small number of observations too strongly to meaningfully calculate adjusted standard errors. Accordingly, we preferred to present regressions without bootstrapped standard errors in our main models.

33 Although the respective facilities were not exposed to the SCC, reasons for previous exposure might be a second job at another (treatment) facility (11.11 per cent of respondents had a second job) or communication with other health practitioners within the district. Contact to midwives from other facilities is in this regard also significantly correlated with prior checklist contact.

34 As a robustness check, we also reported the full sample results, controlling for an interaction of prior contact with the treatment in Appendix Table A2.5. However, as we assumed a large heterogeneity of exposure – health practitioners with a job at another facility might have worked with the SCC, others might have just heard the name of the SCC from colleagues – we preferred the reduced sample for our main results.

35 Due to two outcome measures that could not be matched to respondents and four respondents that refrained from answering on control questions, the sample was reduced to n=165 in our main specifications.

distributed equally across the framing treatments, ruling out selection concerns and enabling us to interpret the estimates causally.

In the post-experimental survey, we asked participants whether they had previously participated in interventions by international or local experts or researchers, respectively. In the Acehnese health sector, 10 per cent of the providers surveyed had previously participated in research projects involving international actors while 17.5 per cent had participated in projects involving local actors. Those interactions dated back to significantly before our intervention, as only 2.5 per cent of the respondents had encountered international research projects at their facility during the previous two years.

6 Results

6.1 Main results: TPB determinants and SCC uptake

For all three TPB determinants – *attitudes*, *subjective norms*, and *perceived behavioural control* – at both study sites, we found that coefficients consistently pointed in a positive direction.[36] Tables 1 and 2 show the regression results of the intended and actual SCC uptake for the data from Pakistan and Indonesia. While the first column always presents the unadjusted coefficients, the second indicates results adjusted for control variables as described in Section 5. Results show that respondents who expressed a strongly positive attitude towards the SCC were also more likely to intend to use the new tool even if it was not freely provided to them anymore (columns (1a) to (2b)). In Pakistan and Indonesia, the coefficients were positive and statistically significant (ranging from the 1 per cent to 5 per cent level).

This was also supported by the actual SCC use (in Table 2, columns (1a) to (2b)). The stronger the positive stance towards the Checklist, the more often health staff actively used the SCC during the delivery process. If the SCC was perceived to be more useful (*attitude*), its actual use among Indonesian health workers increased by 39.4 percentage points and among Pakistani practitioners by 47.1 percentage points. Furthermore, we found consistently positive coefficients in both countries with respect to the support by superiors for the new tool (*subjective norms*). While this seemed to play an important role for intended and actual SCC uptake in Indonesia, it was less important for intended behaviour as compared to the actual SCC use in the Pakistani setting. Considering the different samples across intentional and behavioural outcome measures in Pakistan helped to interpret those results.

36 In order to get a notion of the explanatory power of each TPB determinant, we introduced the concepts separately. Taking into account the interconnectedness of the three variables, we considered an index based on principal component analysis as a robustness test. Results suggest a robust positive relation of the index both with intentions and behaviour, and are available on request.

Table 1: Theory of Planned Behaviour – intended SCC uptake				
Would use SCC even if copies are not provided				
1 “disagree strongly” – 6 “agree strongly”				
	Pakistan		Indonesia	
	(1a)	(1b)	(2a)	(2b)
Attitudes:				
SCC in professional role: 1 “completely useless” – 6 “completely useful”				
	0.984***	0.818***	0.454***	0.309**
p-value	(0.000)	(0.000)	(0.004)	(0.012)
N	79	79	163	163
Subjective norms:				
SCC is supported by superiors: 1 “not at all” – 6 “completely”				
	0.143	0.164*	0.536***	0.316***
p-value	(0.115)	(0.060)	(0.007)	(0.001)
N	58	58	163	163
Perceived behavioural control:				
Ease of SCC in work environment: 1 “very difficult” – 6 “very easy”				
	0.439***	0.366**	0.261*	0.023
p-value	(0.003)	(0.029)	(0.090)	(0.863)
N	78	78	163	163
Control variables	No	Yes	No	Yes
Mean of dep. var.	4.628	4.628	4.847	4.847
Median of dep. var.	5	5	5	5
SD of dep. var.	1.452	1.452	0.6ö34	0.634

Notes: All regressions are based on the treated providers. Adjusted regressions (b) additionally control for a variable indicating the facility type, a binary variable indicating rural/urban location, a variable indicating the district, and a binary variable indicating whether the facility is open 24/7. Standard errors (SE) are clustered at the facility level. Asterisks indicate p-values according to: * p<0.1, **p<0.05, *** p<0.01.

Source: Authors

Table 2: Theory of Planned Behaviour – actual SCC uptake				
Was SCC actively used or looked at during delivery?				
0 "No" – 1 "Yes"				
	Pakistan		Indonesia	
	(1a)	(1b)	(2a)	(2b)
Attitudes:				
SCC in professional role: 1 "completely useless" – 6 "completely useful"				
	0.655***	0.471**	-0.356	0.394***
p-value	(0.003)	(0.020)	(0.245)	(0.000)
N	212	212	219	219
Subjective norms:				
SCC is supported by superiors: 1 "not at all" – 6 "completely"				
	0.207*	0.078**	0.654*	0.279***
p-value	(0.097)	(0.027)	(0.091)	(0.000)
N	212	212	219	219
Perceived behavioural control:				
Ease of SCC in work environment: 1 "very difficult" – 6 "very easy"				
	0.306***	0.112	0.059	0.015
p-value	(0.000)	(0.169)	(0.423)	(0.979)
N	212	212	219	219
Control variables	No	Yes	No	Yes
Mean of dep. var.	0.344	0.344	0.389	0.389
SD of dep. var.	0.476	0.476	0.489	0.489

Notes: All regressions are based on the treated providers. Adjusted regressions (b) additionally control for a variable indicating the facility type, a binary variable indicating rural/urban location, a variable indicating the district, and a binary variable indicating whether the facility is open 24/7. Standard errors (SE) are clustered at the facility level. Asterisks indicate p-values according to: * p<0.1, **p<0.05, *** p<0.01.

Source: Authors

In both countries, Pakistan and Indonesia, the actual behavioural outcome was mainly collected for health practitioners working in facilities. In these facilities, hierarchical structures were dominant and the stance of the superiors towards the SCC was more critical. While we measured intentions to use the SCC, also mainly in facilities in Indonesia, the majority of respondents in Pakistan on intentions were individual health workers (such as community midwives). They work alone without direct supervision and are not integrated into a hierarchically structured team. Hence, for them, the opinion of superiors is less of a concern but rather the perceived usability (perceived behavioural control). In this regard, we saw that the ease of use is a statistically significant predictor of intended SCC use in Pakistan (at the 5 per cent level in the adjusted regression), while it was positive but not statistically significant in the Indonesian context or for actual SCC uptake in both

countries.[37] These results – though not allowing the establishment of a causal pathway – give a consistent indication: Influencing the TPB determinants in the respective positive direction is associated with increased intended and actual uptake of the SCC.

Differences in the significance across TPB determinants are well in line with qualitative evidence. Indonesian coaches, who assisted health personnel in using the Checklist, were seldom asked for help regarding the content of the SCC, which corresponds to the ease of use of this intervention. In contrast, the assessment of the supervisor seemed to matter a lot in Indonesian society, where workplace position and seniority play a predominant role. This was also borne out by inter-facility staff meetings and midwives' correspondence with coaches in Indonesia, stressing the salience of supervisors and colleagues reminding each other to use the Checklist regularly. In the Pakistani case, we see a stronger relationship with *attitudes* and *control* rather than with *norms*. In line with explanations from above, the effect is likely to be driven by the sample of community midwives, who tend to work self-employed and accordingly do not depend on superiors' norms.[38]

Both sets of results imply that in both countries, specifically, *attitudes* are crucial in shaping intentions and actual behaviour. This is in line with our Hypothesis 1. While *social norms* as well as *control* are both positively related to uptake in both countries, we found that, as expected in Hypotheses 2 and 3, both determinants were more context dependent. Analysing the data from the framed experiment in the next section, we investigate whether the implementer's background acts as another important dis-/incentivising factor for determining support towards an intervention.

6.2 Main results: framing experiment

Table 3 displays the main results of the framing experiment conducted in Indonesia.[39] The first column presents the unadjusted results, whereas the second column gives the results adjusted for additional control variables.[40] We limit our sample to those respondents who were not exposed to the SCC prior to this experiment (see Section 5). As a robustness check, we estimate a regression which controls for an interaction of the framing with the indicator for past contact. Individuals with prior *contact to the Checklist* might not have had *contact with the research team* and could therefore still be receptive to the framing. First, including this group was more conservative as the framing should have a lower effect on the persons

37 As outlined above, we used wild cluster bootstrapped standard errors as robustness tests in samples with a small number of clusters (9 in Pakistan and 15 in Indonesia). Results are displayed in Appendix Table A2.1 showing that results are by and large robust to this standard error adjustment. When we generate a dummy variable as an outcome, equalling one for the highest category only (thus, if respondents "fully agree" to "Would try to use SCC even if copies are not provided"), results are qualitatively unchanged (and available on request).

38 Community midwives in Pakistan are trained midwives, employed by the district governments who operate on their own within local, often rural, communities. They are only loosely attached (for example, through provision of medication and equipment) to the local government structures and there is de facto very little oversight of their activities.

39 Regressions using the alternative outcome measures yielded qualitatively similar results and are available on request.

40 In line with the randomised set-up of the study, results are robust to the inclusion of further covariates, which increases the precision of estimates.

that are acquainted with the SCC and thus induce a downward bias. Second, individuals with prior contact to the Checklist might react heterogeneously due to more comprehensive information. Appendix Table A2.5 depicts the corresponding results. While the framing indicator decreases slightly in size, but stays significant in the adjusted regressions, there is no significantly different treatment effect for those respondents with past contact.[41] [42] In unadjusted regressions, the international framing has a positive but at conventional levels insignificant effect on financial contributions of respondents. Once adjusting for control variables, this coefficient turns significant at the 5 per cent level. Respondents facing an international framing contribute on average more money in support of the SCC project than other midwives confronted with the local framing. In the adjusted specification, their contribution is IDR 1,284 (USD 0.10) higher.

Table 3: Framing experiment – main results

Financial contribution in support of SCC project (in IDR)		
	(a)	(b)
Framing: 1 = "international"	557.6236	1,283.7717**
p-value	(0.396)	(0.021)
RI p-value	(0.450)	(0.057)
N	165	165
Control variables	No	Yes
Mean of dep. var.	4,757.576	4,757.576
SD of dep. var.	4,711.366	4,711.366

Notes: All specifications are based on the sample limited to those respondents without prior SCC contact. Specifications (b) include a variable indicating the facility type, a binary variable indicating if the respondent had financial problems, a composite index of social desirability variables, and a variable indicating the subjective perception of the amount of paperwork. The same regression with wild cluster bootstrapped SE can be found in Appendix Table A2.4, for which significance levels hold. Randomisation inference (RI) p-values are computed with a permutation test based on Hess (2017). Asterisks indicate p-values based on standard errors clustered at the facility level: *p<0.1, **p<0.05, *** p<0.01.

Source: Authors

In order to understand in more detail why respondents show stronger support towards projects implemented by international actors as compared to local implementers, we investigated *previous exposure* as a mechanism that was likely to influence the behaviour of respondents. Previous exposure is one prominent factor shaping ideas and attitudes. Hence, it might play a role whether respondents have been in contact with locally- or internationally-led projects in the past. Their respective experiences are likely to influence their present reactions to the intervention. Investigating the variation in exposure to international and local project implementers allowed us to generate more general insights

41 Full sample regression results controlling for prior contact are comparable to the findings presented in the main part and available on request. As a conservative robustness check, we also present random inference based p-values.

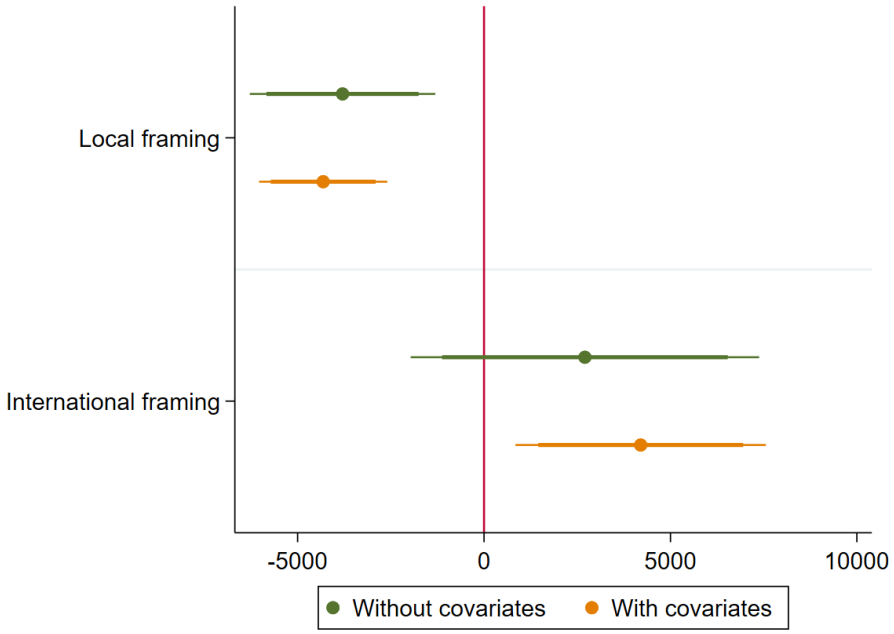
42 Randomisation inference (RI) takes the randomisation explicitly into account and follows R.A. Fisher's idea of statistical inference via permutation tests of treatment allocation (Young, 2017). The idea is to assume uncertainty about the treatment allocation and compare the actual treatment allocation to possible alternative allocations.

for locations with differing presence of the respective actors. Aceh is specific due to the activity of manifold – often international – donors in response to the human tragedy of 2004's tsunami.

Figure 3 displays the point estimates and confidence intervals for the interaction of our experimental framing with the binary variables indicating whether respondents had already participated in international or local research projects. In order to facilitate interpretation, the different options were coded as categories and should be interpreted as the difference from the base category "No Experience with International Experts – No Experience with Local Experts – No International Framing". Respondents, who had worked with both international and local actors were of particular interest due to the comparisons they could draw. For this reason, interpretation focuses on this group, while complete results are presented in Appendix Table A2.8. As above, the framing indicator equals 1 for the international framing treatment and 0 for the local framing treatment.

Green bars in Figure 3 indicate the coefficients of regressions without covariates while orange bars indicate the adjusted point estimates. Regarding confidence intervals, thick bars refer to the 10 per cent and thin bars to the 5 per cent interval.

Figure 3: Framing experiment – previous experience



Notes: This figure depicts coefficients for triple interactions of the local/international framing with indicators of participation in international projects. Covariates include a variable indicating the facility type, a binary variable indicating whether the respondent had financial problems, a composite index of social desirability variables, and a variable indicating the subjective perception of the amount of paperwork. Other interactions for participants who had participated either only in local or in international projects were included in the regression as well. The comparison group had no prior experience with either actor and faced a local framing. The corresponding point estimates are depicted in Appendix Table A2.8. Errors are clustered at the facility level. The thick bars refer to the 10 per cent and the thin bars to the 5 per cent confidence interval.

Source: Authors

Figure 3 indicates a distinct pattern for health workers who have been exposed both to an international and local project in the past. Our results indicate a lower contribution of IDR 6,500-8,500 (namely, USD 0.45-0.65) if those health workers face the local framing (p-value: 0.023 without control variables; p-value: 0.000 with control variables).[43] In contrast, this implies that the attitude towards the intervention is significantly more positive if respondents who knew both international and local actors were framed internationally. For respondents with international and local experience, we found the only significant group-wise difference between individuals with comparable experience.

Thus, in line with our Hypothesis 4, the results from Figure 3 suggest that the positive effects of the international framing were driven by previous experience with the respective implementer. The reduced willingness to contribute to local projects was most pronounced when respondents had participated in both local and international projects.

Qualitative research: Qualitative data based on 66 surveys with health practitioners was collected to provide a clearer understanding of how experience contributes to a higher support of interventions perceived as international. Answers to the question "Please describe your experience working with international teams. What did you find surprising?" suggest that positive attitudes towards international teams were mostly linked to the experience of more structured implementation approaches (13 indications) and a higher perceived level of knowledge (4 indications). Moreover, responding to the question "[W]hat are some of the strengths and challenges of international projects?", knowledge sharing (13 indications) and compliance with international standards (8 indications) were named as the most important advantages. In line with a home-bias argument (Fuchs & Gehring, 2017), health workers indicated language barriers as a relevant issue (3 indications).

This was in line with the positive and significant correlation of the international framing with positive perceptions of international control capabilities and skills of local implementers (see Appendix Table A2.7).[44]

In this way, the additional qualitative evidence underlines that higher support for international projects is based on deeper perceptions of international/local implementation. These can, however, be highly context-specific, which will be discussed among other implications in the following section.

43 Although this amount seems small, it corresponds to one meal or half an hour of work of a health worker in the local context.

44 We asked health practitioners if they attributed certain characteristics rather to local or international researchers (such as skills, corruption, financial capabilities) in order to carve out how those channels might affect support for the intervention. Those questions were asked intentionally after collecting the outcomes in order to not confound the results. However, this comes with the risk of justification bias. In fact, we found significant framing effects in our results, which are available on request. Hence, we did not use those channels for further analysis. Yet, they might still be informative in terms of general attribute ascription.

7 Discussion and conclusions

Many interventions in the field of development economics suffer from low uptake by the target population. Supportive behaviour, however, is a crucial ingredient for a successful intervention. The question is, what factors influence/explain heterogeneous uptake by the target population? Evidence from behavioural economics supports the importance of non-monetary incentives, trust, or peer effects to explain human behaviour. These insights are also of utmost importance to the design of interventions in development economics as the majority of these projects aim at changing human behaviour. Our study focused on investigating dis-/incentivising factors explaining variations in uptake by the target population. Three important mechanisms to explain human behaviour (in reaction to an intervention) are proposed by the Theory of Planned Behaviour – a well-established theory originating from social psychology. The TPB offers a systematic approach to explain and influence supportive human behaviour by considering three determinants: A positive *attitude* towards the behaviour or intervention, supporting *subjective norms*, and a high degree of *perceived behavioural control*.

We studied these determinants within the framework of interventions implemented in Pakistan and Indonesia. Using the introduction of a new tool, the Safe Childbirth Checklist, among health practitioners, we provided evidence of the positive association of all three mechanisms with the intended and actual uptake of the SCC in both country settings. A more positive *attitude* towards the new tool (the SCC) is significantly associated with increased intended and actual use of the SCC in both cultural contexts. While *subjective norms* in favour of the intervention are particularly important in larger health facilities in Indonesia characterised by more pronounced hierarchies, greater *perceived behavioural control* to actively use and implement the Checklist is a more important determinant among health practitioners working individually in Pakistan. It is important to note that this analysis does not allow us to infer causal effects, although we condition our analysis on a broad set of confounding factors. Studying dis-/incentivising factors of similar interventions in two diverse study contexts strengthens the claim of generalisability of the results. Previous studies on the determinants of the TPB also support its broad applicability to explain and influence human behaviour.

Following recent evidence, we were able to study another potentially critical dis-/incentivising factor for human behaviour towards interventions in Indonesia: the implementer's background. More specifically, we investigated how the salience of a local versus an international agent causally influences the participants' support for the project. This aspect is of particular interest as the majority of interventions in the field of development economics are cooperations between local and international agents. The results of the framed field experiment indicated that respondents were more supportive towards interventions (measured through monetary support) implemented by international actors as compared to solely locally-led projects. This finding is in line with previous research on behavioural reactions towards international and multilateral donor agencies (see, for instance, Milner et al., 2016; Winters et al., 2017).

Our results suggest that previous experience is pivotal. Those respondents who had already been exposed to previous internationally-led research interventions took a more positive stance towards future international projects. Such a relationship could not be established for those who had already participated in local research projects. In this respect one had to

consider that the experiment was conducted in a context in which previous exposure to international projects had been high and generally positive. The large exposure to various international as well as local actors in the aftermath of the tsunami in Indonesia in 2004 (Doocy et al., 2007) facilitates the assessment towards the different implementers. However, this context of ultimate human emergency, might have induced a more positive stance towards international assistance and renders the interpretation specific to the context.[45]

Many high-level fora have voiced demands for a higher effectiveness of global development cooperation, including the Paris Declaration (2005), the Accra Agenda for Action (2008), and the Busan Partnership for Effective Development Co-operation (2011). Local uptake is a crucial prerequisite for more effective actions towards sustainable global development. Our study provides evidence of the importance of considering dis-/incentivising factors when aiming at influencing the uptake of interventions. Our results suggest that TPB determinants should be actively considered in the design and implementation of interventions in order to positively affect uptake by the target population. While researchers and practitioners will certainly already have intuitively taken determinants of the TPB into account when designing their intervention, in our study we argue for a *systematic* application of the TPB to increase uptake rates, an important ingredient for the success of a project. A qualitative investigation prior to project implementation and close cooperation with people who are familiar with the local context to identify behavioural, normative, and control beliefs (that underlie the TPB determinants) within the study sample is recommended (Protogerou et al., 2012; Hobbis & Sutton, 2005). Our results regarding the salience of international versus local project implementers have to be considered against the background of the respective local context, which defines the previous exposure to implementing agents. Generally, using framing as a tool to make a well-regarded implementing agent more salient might be a "low-hanging fruit" to increase supportive behaviour of population groups in a cost-effective way (Bertrand, Mullainathan, & Shafir, 2006). In order to increase local ownership, it is of utmost importance to generate positive experiences of the target group with locally-led projects. Here, strengthening capacities of local agencies is necessary, also to foster later scalability of projects led by the local government. Overall, our results underscore the importance of conducting interventions in a responsible way, both by local as well as international agents, as previous experience with the respective agents influences the attitude and support for future interventions.

While this study used the setting of a research project in the field of maternal and child health and this involved specific intervention characteristics, we believe that our results are also likely to be valid for programmes implemented by practical development cooperation and within the context of other areas of development interventions. Further research needs to contribute to a clearer understanding of the potential effects of dis-/incentivising factors – and more specifically of the TPB – on human behaviour by randomly altering these determinants or replicating results in various different settings. In this way, important knowledge can be gained, not only to increase the uptake of research interventions but also of practical development cooperation.

45 Despite the individual tragedies, parts of the population perceived the natural disaster as a chance to restart, as the successful reconstruction efforts coincided with the cessation of the Aceh insurgency after almost 30 years of combat. Moreover, Aceh might also be specific due to its strong Muslim heritage and the introduction of Islamic law in 2006.

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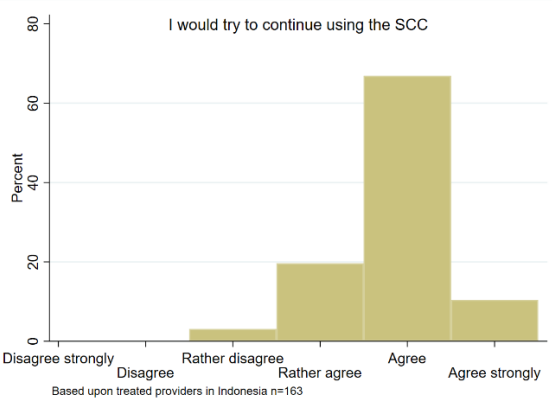
Appendix 1: Descriptive statistics

Corresponding to the high pre-intervention commitment which we observed among midwives, there is a high level of reported intentions. Yet, Appendix Figures A1.1a and A1.1b indicate that there is some distinct variation within and across the settings.

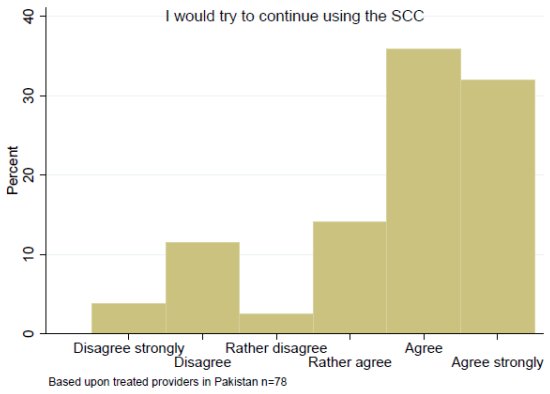
At the same time, Appendix Figures A1.2a and A1.2b suggest a much lower level of actual uptake, which is examined in the regressions. Appendix Tables A1.1 and A1.2 provide a more comprehensive overview of descriptive statistics corresponding to Appendix Figures A1.1a, A1.1b, A1.2a and A1.2b.

Figure A1.1: Intended use of the Safe Childbirth Checklist

a) Intentions – Indonesia



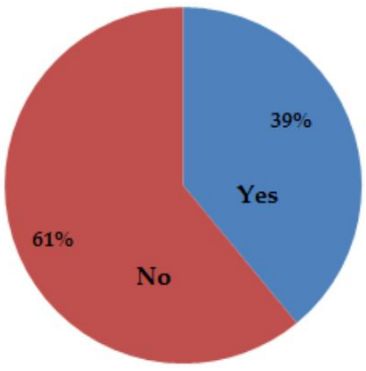
b) Intentions – Pakistan



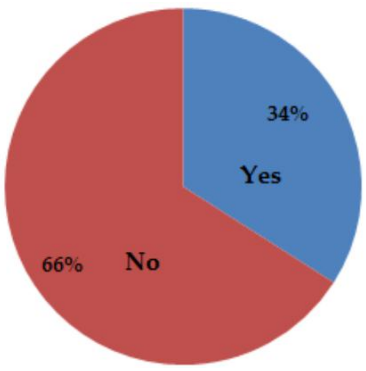
Source: Authors' calculations, based on survey responses

Figure A1.2: Actual use of the Safe Childbirth Checklist

a) Behaviour – Indonesia



b) Behaviour – Pakistan



Source: Authors' calculations, based on clinical observations

Table A1.1: Summary statistics for Indonesian data					
Actual behaviour	N	Max.	Min.	Mean	SD
Active SCC Use	219	1	0	0.389	0.489
Intended behaviour					
Would try to use SCC even if copies not provided	163	6	3	4.847	0.634
Would recommend the SCC to fellow colleagues	163	6	2	5.092	0.495
Usefulness of the SCC	163	6	4	5.325	0.483
Ease of using SCC in work environment	163	6	4	5.141	0.565
SCC supported by superiors	163	6	4	5.828	0.439
Urban (1) — Rural (2)	163	2	1	1.515	0.501
CEmONC Service Provision 24/7	163	1	0	0.178	0.384
Facility Type: Community Health Centre	163	1	0	0.589	0.494
Facility Type: Public Hospital	163	1	0	0.135	0.343
Facility Type: Private Hospital	163	1	0	0.190	0.394
Facility Type: Private Midwife Clinic	163	1	0	0.086	0.281
District: Aceh Besar	163	1	0	0.276	0.448
District: Banda Aceh	163	1	0	0.331	0.472
District: Bireuen	163	1	0	0.393	0.490
Source: Authors					

Table A1.2: Summary statistics for Pakistani data					
Actual behaviour	N	Max.	Min.	Mean	SD
Active SCC Use	212	1	0	0.344	0.476
Intended behaviour					
Would try to use SCC even if copies are not provided	78	6	1	4.628	1.452
Would recommend the SCC to fellow colleagues	78	6	1	5.141	1.090
Usefulness of the SCC	79	6	1	5.380	0.821
Ease of using SCC in work environment	79	6	1	4.962	1.305
SCC is supported by superiors	58	6	1	5.155	1.508
Urban (1) — Rural (2)	80	1	0	0.813	0.393
Open 24/7	80	1	0	0.150	0.359
Facility Type: Health Facility	80	1	0	0.2125	0.412
Facility Type: Community Midwife	80	1	0	0.5625	0.500
Facility Type: Lady Health Visitor	80	1	0	0.225	0.420
District: Haripur	80	1	0	0.450	0.501
District: Nowshera	80	1	0	0.550	0.501
Source: Authors					

Appendix 2: Analytical appendix

Additional results – The Theory of Planned Behaviour

Due to the limited number of clusters considered in the study, we also consider a standard error correction based on the method by Cameron et al. (2008). The results underline the pronounced role of subjective norms in Indonesia and the significant effect of perceived behavioural control in Pakistan. Results for actual SCC use become insignificant in Indonesia.

Table A2.1: TPB intentions and behaviour – wild bootstrapped SE

	Intended SCC use:	Actual SCC use:	Actual SCC use:
	Indonesia	Pakistan	Indonesia
	(1a)	(2a)	(2b)
Attitudes:			
SCC in professional role: 1 “completely useless” – 6 “completely useful”			
	0.454***	0.655***	-0.364
WB p-value	(0.004)	(0.000)	(0.505)
Subjective norms:			
SCC is supported by superiors: 1 “not at all” – 6 “completely”			
	0.536*	0.207	0.642
WB p-value	(0.072)	(0.320)	(0.503)
Perceived behavioural control:			
Ease of SCC in work environment: 1 “very difficult” – 6 “very easy”			
WB p-value	(0.102)	(0.000)	(0.432)
	0.261	0.306***	0.038
N	163	212	218
Control variables	No	No	No
Mean of dep. var.	4.847	0.344	0.389
Median of dep. var.	5	–	–
SD of dep. var.	0.634	0.476	0.489

Notes: Intended SCC use was measured via the question “Would you try to use SCC even if copies are not provided anymore? (1: disagree strongly – 6: agree strongly).” Actual SCC use was measured via trained observers and was coded as a binary outcome variable. All regressions are based on the treated providers. Standard errors (SE) are clustered at the facility level and wild cluster bootstrapped due to the small number of clusters (15 facilities), according to Cameron et al. (2008). No bootstrapping is provided for intended SCC use in Pakistan as a sufficient number of clusters (70) were sampled. Asterisks indicate p-values according to: * p<0.1, **p<0.05, *** p<0.01.

Source: Authors

Additional results – Framing experiment

Table A2.2: Experimental balance – full sample

	Full	Full	Full	Control	Control	Treat	Treat	p-value
	N	Mean	SD	Mean	SD	Mean	SD	difference
Facility type	236	1.538	–	1.690	–	1.433	–	0.021**
Gender (1=m, 2=f)	236	2.000	–	2.000	–	2.000	–	–
Age (Years)	236	– 33.314	7.493	33.650	7.806	33.112	7.316	0.593
Education (Years)	236	15.051	0.527	15.020	0.603	15.067	0.462	0.619
Experience (Years)	236	9.576	7.271	9.690	7.736	9.537	6.979	0.886
Sufficient income	236	3.208	1.008	3.160	1.012	3.246	1.014	0.526
Financial problems	236	1.678	–	1.720	–	1.642	–	0.081*
Strategic donation	236	4.657	1.264	4.710	1.225	4.627	1.296	0.564
Social desirability index	236	3.411	0.838	3.450	0.821	3.381	0.857	0.513
Social desirability no. 1	236	4.966	0.690	5.000	0.778	4.940	0.622	0.480
Social desirability no. 2	236	4.568	1.027	4.600	0.932	4.545	1.101	0.650
Social desirability no. 3	236	5.343	0.558	5.310	0.506	5.366	0.595	0.172
Social desirability no. 4	233	4.644	1.074	4.694	1.069	4.602	1.087	0.475
Social desirability no. 5	236	2.229	1.254	2.250	1.298	2.216	1.235	0.784
Paperwork: too much	236	2.814	1.343	3.000	1.497	2.664	1.195	0.173
Routines ease work	236	5.153	0.734	5.150	0.626	5.179	0.764	0.660
Access to resources	236	3.470	0.517	3.530	0.502	3.425	0.526	0.080*
Team efficacy indicator	236	5.246	0.513	5.220	0.462	5.261	0.547	0.570
Participation in local projects	236	1.831	–	1.870	–	1.806	–	0.235
Part. in international projects	236	1.898	–	1.880	–	1.910	–	0.511
Part. in donor projects	236	1.907	–	1.920	–	1.896	–	0.511

Notes: Based on the full sample with N denoting the number of observations, SD gives the standard deviation. Standard deviations are not depicted for binary outcomes. Proportions in the two groups are significantly different from each other. Asterisks indicate p-values based on standard errors clustered at the facility level: *p<0.1, **p<0.05, *** p<0.01.

Source: Authors

Table A2.3: Experimental balance – reduced sample

	Full	Full	Full	Control	Control	Treat	Treat	p-value
	N	Mean	SD	Mean	SD	Mean	SD	Difference
Facility type	170	1.500	–	1.618	–	1.409	–	0.050*
Gender (1=m, 2=f)	170	2.000	–	2.000	–	2.000	–	–
Age (Years)	170	32.359	6.997	33.118	7.680	31.774	6.395	0.232
Education (Years)	170	14.994	0.516	14.974	0.565	15.011	0.478	0.742
Experience (Years)	170	8.888	7.094	8.974	7.494	8.849	6.824	0.908
Sufficient income	170	3.200	1.069	3.118	1.083	3.269	1.065	0.348
Financial problems	170	1.741	–	1.763	–	1.720	–	0.396
Strategic donation	170	4.606	1.411	4.658	1.381	4.581	1.440	0.613
Social desirability index	170	3.329	0.827	3.316	0.852	3.344	0.814	0.808
Social desirability no. 1	170	5.000	0.738	4.987	0.887	5.011	0.599	0.834
Social desirability no. 2	170	4.459	1.142	4.461	1.026	4.462	1.239	0.991
Social desirability no. 3	170	5.429	0.584	5.408	0.521	5.452	0.634	0.436
Social desirability no. 4	167	4.545	1.063	4.649	1.065	4.457	1.063	0.239
Social desirability no. 5	170	2.118	1.286	2.184	1.334	2.065	1.258	0.375
Paperwork: too much	170	2.906	1.364	3.145	1.547	2.720	1.174	0.150
Routines ease work	170	5.100	0.727	5.079	0.648	5.151	0.722	0.471
Access to resources	170	3.441	0.498	3.513	0.503	3.387	0.490	0.060*
Team efficacy indicator	170	5.200	0.443	5.158	0.434	5.226	0.445	0.459
Participation in local projects	170	1.829	–	1.868	–	1.796	–	0.131
Part. in international projects	170	1.918	–	1.895	–	1.935	–	0.272
Part. in donor projects	170	1.935	–	1.934	–	1.935	–	0.959

Notes: Based on the reduced sample excluding observations with prior contact to the Checklist. N denotes the number of observations, SD gives the standard deviation. Standard deviations are not depicted for binary outcomes. Proportions in the two groups are significantly different from each other. Asterisks indicate p-values based on standard errors clustered at the facility level: *p<0.1, **p<0.05, *** p<0.01.

Source: Authors

For the framing experiment, we found that the groups which were internationally or locally framed were generally balanced (both in the full and reduced sample as depicted in Appendix Tables A2.2 and A2.3). Among the various different variables observed, the minor differences pertaining to access to resources and facility type could be by chance. The average study participant was 33 years old (minimum: 21 years, maximum 50 years); had 10 years of work experience (minimum: 0 years; maximum 28 years); and 15 years of education (minimum: 12 years; maximum 17 years).

Table A2.4: Framing experiment – wild bootstrapped SE		
Financial contribution in support of SCC project (in IDR)		
	(a)	(b)
Framing: 1="international"	557.624	1,283.772**
WB p-value	(0.404)	(0.032)
N	165	165
Control variables	No	Yes
Mean of dep. var.	4,757.576	4,757.576
SD of dep. var.	4,711.366	4,711.366
Notes: See Table 3. Standard errors (SE) are clustered at the facility level and wild bootstrapped due to the limited number of clusters (13) for the specifications indicated as "WB p-values", according to Cameron et al. (2008). Asterisks indicate p-values according to: *p<0.1, **p<0.05, *** p<0.01.		
Source: Authors		

Some of the respondents in the control group reported that they had previously been in contact with the SCC. This does not imply a contamination of our control group per se, as the treatment was delivered on a clustered basis per facility in Indonesia. However, as there was informal exchange between health care personnel and shifts between facilities, midwives from other facilities might have heard about the Checklist. Individuals with *prior contact to the Checklist* might not have had *contact with the research team* and could, hence, still be receptive to the framing. First, including this group was more conservative as the framing should have a lower effect on the persons that were acquainted with the SCC and thus induce a downward bias. Second, individuals with prior contact to the Checklist might react heterogeneously due to more comprehensive information. As a further robustness check, we estimated a regression in Appendix Table A2.5, which controls for an interaction of the framing with the indicator for past contact. Again, the positive and significant framing effect remained robust.

As the experimental outcome variables were all coded in a categorical (non-continuous) way, a probit regression model seemed appropriate. Thus, we re-estimated the model in Appendix Table A2.6. The positive relationship between the framing and support for the intervention remained qualitatively unchanged. However, we preferred to present OLS estimates in the main part for ease of interpretation.

In order to understand the underlying pathways better, which explain the heterogeneous support for international and local actors, we also collected information on previous participation in local/international projects. This involved a trade-off: If we prompted for those perceptions before framing individuals, reported support might be subject to justification of previously stated perceptions. If we framed the respondents before collecting the perception measures, we might contaminate the latter data. We chose the second option to sustain the quality of our outcome measures. And indeed Appendix Table A2.7 indicates that the framing was significantly associated with several channel variables. For this reason, we preferred to rely only on previous project participation for our channel analysis. Although previous participation was self-reported, it was not perception-based and, hence, less likely to be subject to justification bias. Appendix Table A2.7 supports this notion.

Table A2.5: Framing experiment – interaction with prior contact		
Financial contribution in support of SCC project (in IDR)		
	(a)	(b)
Framing: 1="international"	557.624	1,164.830**
p-value	(0.395)	(0.033)
Prior contact × local framing	225.973	627.961
p-value	(0.835)	(0.547)
Prior contact × international framing	706.522	1,955.229
p-value	(0.547)	(0.105)
N	226	226
Control variables	No	Yes
Mean of dep. var.	4,757.576	4,757.576
SD of dep. var.	4,711.366	4,711.366
Notes: See Table 3. The base category is No prior contact and local framing. Asterisks indicate p-values based on standard errors clustered at the facility level: * p<0.1, **p<0.05, *** p<0.01.		
Source: Authors		

Table A2.6: Framing experiment – ordered probit results								
	Recommendation		Time investment		Own contribution		Elicitation	
Framing: 1="internat."	0.191	0.522***	-0.087	0.060	0.081	0.306**	0.129	0.188
p-value	(0.316)	(0.010)	(0.239)	(0.647)	(0.600)	(0.017)	(0.535)	(0.341)
N	167	167	167	167	165	165	167	167
Control variables	No	Yes	No	Yes	No	Yes	No	Yes
Notes: See Table 3. Reported coefficients are not transformed and represent ordered probit coefficients. Standard errors (SE) are clustered at the facility level. Asterisks indicate p-values according to: *p<0.1, **p<0.05, *** p<0.01.								
Source: Authors								

Table A2.7: Framing experiment – association with potential channel variables

	Control capabilities	Implementation skills	Funding capabilities	Accountability	Trust foreign countries	Participation int. project	Participation loc. project
Framing: 1="internat."	0.802***	0.774***	0.604***	0.445*	0.045	0.023	-0.065
SE	(0.214)	(0.210)	(0.188)	(0.243)	(0.051)	(0.047)	(0.055)
p-value	(0.002)	(0.003)	(0.007)	(0.090)	(0.393)	(0.638)	(0.257)
WB p-value	(0.004)	(0.008)	(0.008)	(0.118)	(0.374)	(0.719)	(0.224)
N	230	230	230	230	230	230	230

Notes: All specifications are based on the full sample. All specifications include a variable indicating the facility type, a binary variable indicating whether the respondent had financial problems, a composite index of social desirability variables, and a variable indicating the subjective perception of the amount of paperwork. Standard errors (SE) are clustered at the facility level. We present results based on clustered SE indicated as "p-values" and wild bootstrapped due to the limited number of clusters (13) for the specifications indicated as "WB p-values," according to Cameron et al. (2008). Asterisks indicate p-values according to: *p<0.1, **p<0.05, *** p<0.01.

Source: Authors

Point estimates – Previous experience Appendix Table A2.8 shows the results for the interaction of our experimental framing with the binary variables indicating whether respondents had already participated in international or local research projects. The results in columns 1(a) and (b) were structured to compare respondents with similar previous experience (participation in international/local projects) across framings. The corresponding comparison group were locally framed respondents, who neither participated in a local project nor in an international one. Row I and II show that if a person had been exposed both to an international *and* local research project in the past, their contribution was approximately IDR 6,500-8,500 (namely, USD 0.45-0.65) higher if framed under "international". Thus, the effect of the *attitude* towards the intervention in the unadjusted and adjusted specification was significantly higher if respondents knowing both implementers were framed internationally (p-value: 0.025 and 0.000, respectively). Moreover, if respondents who faced the local framing were only exposed to international and not to local projects, they contributed significantly less if locally framed, significant both with and without adjusting for controls (p-value: 0.012 and 0.052, respectively). Those estimates suggest that the positive effects of the international framing were driven by previous experience with the respective implementer. The reduced willingness to contribute to local projects was most pronounced if respondents had participated in both local and international projects.

Table A2.8: Framing experiment – previous experience (point estimates)		
	Outcome: Financial contribution in support of SCC (in IDR)	
	(a)	(b)
(I.) International framing (1) × international participation (1) × local participation (1)		
	2,708.333	4,202.892**
p-value	(0.237)	(0.019)
(II.) International framing (0) × international participation (1) × local participation (1)		
	-3,791.667***	-4,313.226***
p-value	(0.007)	(0.000)
Coefficient equality row (I) & (II)	0.025	0.001
(III.) International framing (1) × international participation (0) × local participation (1)		
	-2,291.667*	-1,196.631
p-value	(0.068)	(0.287)
(IV.) International framing (0) × international participation (0) × local participation (1)		
	-148.810	-537.176
p-value	(0.918)	(0.762)
Coefficient equality row (III) & (IV)	0.186	0.660
(V.) International framing (1) × international participation (1) × local participation (0)		
	-625.000	1,433.060
p-value	(0.710)	(0.507)
(IV.) International framing (0) × international participation (1) × local participation (0)		
	-4,791.667***	-4,184.609
p-value	(0.000)	(0.130)
Coefficient equality row (V) & (VI)	0.012	0.052
(VII.) International framing (1) × international participation (0) × local participation (0)		
	646.930	1,009.864
p-value	(0.463)	(0.200)
N	165	165
Control variables	No	Yes
Notes: See Table 3. Standard errors (SE) are clustered at the facility level. Asterisks indicate p-values according to: *p<0.1, **p<0.05, *** p<0.01.		
Source: Authors		

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