## COMMENTARY

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# Comment to Koning et al.: implementation of the Icelandic prevention model: a critical discussion of its worldwide transferability

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The authors thank Koning et al. for their critical review of the lcelandic Prevention Model (IPM) and for highlighting its strengths. We would, however, like to respond to their criticisms.

First, Koning et al. conclude that: ' ... it remains empirically unclear what the core components of the IPM are. Additionally, the guiding principles of Kristjansson, et al. (2020a) do not include specific intervention components ... ' (Koning et al., 2021, p. 3). The guiding principles (Kristjansson et al., 2020a) and implementation steps of the IPM (Kristjansson et al., 2020b) have been described in detail; but Koning et al. appear to have ignored these descriptions. They assume that the IPM is an intervention program, which it is not. Similar to SAMHSA's Strategic Prevention Framework (SAMHSA, 2019), the IPM is a Process-Structure designed to facilitate long-term community empowerment and systems change. The IPM points toward potential intervention areas within the four priority domains of parents/caregivers, peer group, school community, and leisure time (e.g. Kristjansson et al., 2020b, Table 2); however, no specific interventions are prescribed by the model.

Second, Koning et al. claim that supervised-leisure activities (including a voucher system) and curfew hours are part of the model. Again, this is incorrect. These are specific interventions that were enacted in many lcelandic communities in response to practice-based evidence. The IPM employs a rigorous system of diagnostic assessment to understand both the global and local issues that may require and be responsive to various interventions at different levels, including change in national laws, local rules, improved parent-toschool collaborations, funding local prevention specialists, access, and opportunity for increased formal leisure time activities, etc. (Kristjansson et al., 2020b); however, none of these are prescribed components of the model. The proponents of the model fully realize that interventions need to be selected and tailored based on environmental circumstances.

Third, Koning et al. state that curfew hours and supervised leisure time offer '... the most important components of the IPM ... embedded in strong national alcohol policy' (Koning et al., 2021, p. 4). This is factually incorrect. Age- and periodspecific rules about children's outside hours were enacted in Iceland over the course of implementing the IPM but these have never been prescribed intervention components. Rather, they are data-driven strategies selected and enacted by national and/or local authorities in response to defined needs and the available evidence about the role of unsupervised outside hours. Moreover, the IPM can be employed in different environmental settings - with or without strong alcohol policy - to inform evidence-based decisions and actions by grassroots groups, local authorities, and prevention practitioners. For instance, in Australia which has a much weaker alcohol control policy than Iceland, the IPM is now being employed by several Local Drug Action Teams via supervision and funding from the Alcohol and Drug Foundation. Regular access to both the raw data, for further analyses, and data reports on risk and protective factors and outcomes, will also work proactively to support practitioners and authorities as they seek resources to meet defined needs. In this way, sustained annual or semi-annual access to comparative local data on both risk and protective factors and outcomes serves to empower local communities to take ownership of their most pressing issues that have been determined by community stakeholders, rather than solely relying on outside experts and prescribed programs. For example in the State of West Virginia in the USA, local data reports by the IPM have helped numerous counties and schools acquire funding and other recourses to improve access to leisure time programs for children and youth in rural areas.

Fourth, Koning et al. state that a description of the Icelandic context is an important, but largely missing, prerequisite to any evaluation study undertaken in Iceland. They describe cherry-picked Icelandic population characteristics and compare these to countries that clearly are different. This comparison is unfair because most, if not all, program evaluation studies, systems, and interventions are undertaken in specific ecologic contexts. What constitutes 'evidence-based' at any given time in the scientific literature can only be based on the available evidence, which is based on tests in various contexts. In other words, most, if not all, evidence-based interventions have not been tested in all contexts to which they might be applied. In fact, interventions and programs are frequently tested in only one or two sites, then evaluations are published, and then the interventions are implemented in various settings that may be similar to, or different from, the original evaluative context. Ongoing studies are then conducted to improve the potential for transferability. This sequence is no different with the IPM. To assume that the Icelandic context requires more elaborate description than other contexts is prejudicial. Iceland has its own unique social norms, laws, and administrative systems, but that does not render studies generated from Icelandic data any less valid than other peer-reviewed evidence.

Fifth, regarding high implementation costs, Koning et al. again appear to assume that certain interventions are prescribed as part of the model, including leisure activity vouchers that have been implemented in Reykjavik City and other municipalities in Iceland. Again, this is incorrect. Surely, conducting surveys among youth and quickly processing, disseminating, and translating large amounts of data generate substantial costs, but collaborators using the IPM via the Planet Youth platform are not charged more for such services than one would expect. In addition, Koning et al.'s calculations regarding potential individual costs for participation in organized leisure activities is uninformed. Claiming that implementing the leisure vouchers costs US\$430 per year per child without any relevance to country, context, purchasing power, or time period simply falls short of understanding. Of course, participation in organized leisure-time activities will vary widely between places, and so will any implementation of improved opportunities. Further, the criticism that it is unethical to conduct surveys among youth to inform policy and practice without first securing funding for increased leisure time activities is completely without foundation and we strongly reject this characterization of our work.

Sixth, we agree with Koning et al. that any interventions should be tailored to cultural differences and that 'such adaptation can increase the effectiveness of an intervention' (p. 5). This is precisely the proposition of the IPM. As a process-structure to strengthen and maintain collaborative partnerships and inform evidence-based decision making, the IPM assumes that long-term impact will only be achieved with a systematic collaboration between researchers, policy makers, and practitioners (Kristjansson et al., 2020a; Sigfusdottir et al., 2009, 2020).

Seventh, Koning et al.'s discussion about potential reasons for the decline in substance use (e.g. alcohol use) in Iceland is selective at best. Other substance use has also decreased greatly in Iceland and so have subsequent risk factors and the increase in protective factors that have been systematically targeted at the national, municipal, and local community levels (Kristjansson et al., 2010; Kristjansson et al., 2016). The literature (e.g. EMCDDA & ESPAD, 2016; Levy et al., 2018), including sources that Koning et al. cite (e.g. De Witte & Mitchell, 2012), clearly shows that the change in substance use in Iceland has been steeper than in most other places. Iceland is frequently cited as a particularly impressive case because of the steep decline in youth substance use coinciding with the buildup of a robust primary prevention infrastructure. We agree, however, with Koning et al. that the change in substance use and simultaneous change in risk and protective factors in Iceland over the last two decades cannot solely be attributed causally to the implementation of the IPM. This problem of causality, however, represents a wider challenge for primary prevention focused on holistic ecologic approaches that do not easily lend themselves to RCTs or other classic experimental designs. Despite this challenge, we have now published several studies, including a guasi-experimental group-based study published in 2010 and three trend analyses, two from Iceland (Sigfusdottir et al., 2008; Kristjansson et al., 2016), one from Lithuania (Asgeirsdottir et al., 2021) and a longitudinal test of risk and protective factor assumptions in Iceland (Kristjansson et al., 2021), to further inform the transferability of the IPM. But more evidence is needed. As Koning et al. rightfully observe, and with which we agree, more systematic process evaluation should be conducted. Presently, evaluation studies of the process, impact, and/or outcomes are being conducted in Iceland, in at least two sites in the United States, in the Netherlands, and in Australia, with plans to undertake such tests in Canada and Chile and other Latin American countries. Some of these evaluations are being conducted by external evaluators without affiliation with the IPM (for example see De Wilde et al., 2020).

Eighth, Koning et al.'s criticism regarding measures employed by the Icelandic Center for Social Research and Analysis (ICSRA) when conducting IPM surveys is not accurate. Most measures on youth substance use are universal and largely drawn from the Monitoring the Future survey (Miech et al., 2020). These measures were utilized in the original Youth in Iceland studies (Sigfusdottir et al., 2020) and later became part of the Pan-European ESPAD studies. The measures are all comparable between countries and commonly used in community reports by the IPM. Some risk and protective factors typically assessed by ICSRA, however, are not. By far most of the measures employed by ICSRA have been validated in previous studies. But we agree that use of comparable measures for use across countries would be an improvement. Koning et al.'s assertion that all data collected by ICSRA for the IPM are owned by ICSRA, however, is not correct. All collaborators are co-owners of their own data and encouraged to use both for practical and scientific purposes (for example Bowe et al., 2021).

Finally, as a collective response to Koning et al; it is precisely the main goal of the IPM to change ecologic contexts and norms to primary substance use prevention. This has been achieved in Iceland and we remain hopeful that such an achievement may also be realized elsewhere.

## **Disclosure statement**

No potential conflict of interest was reported by the author(s).

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