Promoting psychosocial risk management in organizations
Using Intervention Mapping to close the policy-practice gap

Robert R. A. van Doorn
Maastricht University
Gerjo Kok
Maastricht University
Robert A. C. Ruiter
Maastricht University

Within the European Union legislation, mutual agreements and good intentions have often failed to support the implementation of psychosocial risk management in their organizations (Ertel et al., 2010). This is still the case after two decades during which the European Commission and the World Health Organization have made publically available a number of research-based documents to inform local policy makers and employers on the need for psychosocial risk management in their organizations (Ertel, et al., 2010; Leka, Jain, Widerszal-Bazyl, Żołnierczyk-Zreda, & Zwetsloot, 2011). The recent Publically Available Specification 1010 (PAS 1010: Leka, et al., 2011) describes the potential psychosocial health problems in organizations related to harassment and aggression (e.g., bullying), and job stress. The document outlines the need for risk management and targets influential stakeholders including employers, employee representatives and labor inspectorates. The document informs these stakeholders on the human and economic consequences of these problems and how to tackle them. But information provision in combination with European legislation and good intentions has not resulted in the use of systematic and effective use of risk management interventions in many organizations.

One important reason is that this information provision does not turn decision makers into experts on the knowledge and tools to identify potential risks and to accept, implement and maintain the necessary organizational interventions to manage psychosocial risks (Leka, Van Wassenhove, & Jain, 2015). We currently reason that a fine-tuned translation of the PAS 1010 contents into a working risk management system will be most effective via a well-planned intervention that is under the supervision of experienced interventionists. A promising protocol to develop interventions for effective risk management is Intervention Mapping (IM: Bartholomew, Parcel, Kok, Gottlieb, & Fernández, 2011).

The proposed IM approach is suited to develop and maintain risk management in organizations, because it proactively accounts for a number of important barriers that weaken the effectiveness of interventions in organizations (Biron, Gatrell, & Cooper, 2010; Nielsen, 2013). Organizational interventions often lack theoretical foundation and intervention methods are frequently chosen on the basis of intuition and popularity and may therefore be based on incorrect assumptions about causal relationships between methods of change and the required outcome (Briner & Reynolds, 1999). The intervention should instead match the organization’s need for risk management and this may require changes on several levels within an organization. The intervention program must therefore aim for the full support and commitment of the target group, influential stakeholders, and implementers (Durlak, 1998). The participatory intervention process should be documented in detail, and account for what will be changed and how it will be accomplished.
(Schaalma & Kok, 2009). Finally, the evaluation plan must comprise both the process of how the intervention was developed and designed, and the intended effect of the intervention (Biron, et al., 2010).

It is shown that IM accounts for these barriers as the intervention development process is instigated and supervised by expert interventionists who are required to pursue a systematic, theory- and evidence-based protocol to develop, implement, evaluate and maintain a risk management system that is tailored to the needs of the organization’s context (Bartholomew, et al., 2011).

Develop Fitting Risk Management via Intervention Mapping (IM)

IM maintains a problem-driven viewpoint to develop tailored behavior change programs. During the development process choices must be made, and theories are viewed as tools to make better choices (Bartholomew, et al., 2011). Interventionists should collect essential evidence from the PAS 1010 (Leka, et al., 2011) and from other studies on psychosocial risks in organizations (Leka, Griffiths, & Cox, 2003; Leka, et al., 2015), but program planners must also value opinions on potential solutions by the organization management, policy makers or community members as important bases of evidence (Kok, Gurabardhi, Gottlieb, & Zijlstra, 2015).

Effective behavior change interventions must ensure that individuals with a potential psychosocial health risk will adopt healthy practices and attitudes as they interact with the environment in which they live and work (Bartholomew, et al., 2011; Schaalma & Kok, 2009). Interventionists must change the behavioral intentions of employees or other influential individuals for healthy behaviors to occur (Fishbein & Ajzen, 2010). IM propagates an ecological view and perceives individuals that require health promotion as embedded in a number of levels. Changing behavior at the individual level may be facilitated or hampered by individuals on higher levels. It is the task of the interventionists to identify the individuals on these alternate levels, termed environmental ‘agents’. For example, a change in job structures or procedures to enhance social support or promote employee autonomy requires the commitment and possibly altered skill sets of individuals on more than one level. Decision and policy makers must first endorse these organization changes, but also line-managers and employees must be informed to accept and possibly be trained to work in the changed context. Individuals on higher levels may thus be activated as facilitators or must first be targeted to stimulate their commitment and/or to improve their skills as facilitators (Kok, Gottlieb, Commers, & Smerecnik, 2008; Leka, et al., 2011). Higher influential levels may also be located outside the organization in the form of labor inspectorates or other institutes that propagate heath improvement. See Figure 1 for a schematic representation of the ecological view.

IM’s ecological approach also prescribes to first gather a multidisciplinary design team comprising interventionists, managers and other policy and decision makers, but also representatives from the primary group at risk (Bartholomew, et al., 2011). The composition of the design team and the commitment of its members should account for the political boundaries and barriers of the intervention design and implementation.

IM Interventionists accomplish a change program via a rigorous, step-wise development process that prescribes specific written products for each required step (Kok, 2014). Table 2 provides an excerpt of a written and often
tabulated product. In this case the product represents decisions that are somewhat further along the development process. It also shows that behavioral changes are often targeted at several levels of the environment.

An initial development step requires a needs assessment that is based on literature study and data gathering in the organization and fully describes the identified health risks, the individuals and organizational levels involved and the available resources for intervention development and implementation. The needs assessment may specify context-specific risk reduction objectives to develop sensitive and responsive psychosocial risk management via employee and management education and may also conclude that work redesign is an immediate and realistic change objective (Leka, et al., 2003). The first step’s intervention objectives are still formulated in general terms and subsequent steps translate these objectives into more specific performance and change objectives, which is in turn followed by the design of theory-based change applications that are sufficiently concrete and tailored to the context to be effective. See Table 1 for an overview of all development steps.

IM Interventionists identify the behavioral determinants that must be targeted to reach the specific performance objectives. Examples of determinants are attitudes, outcome expectations, self-efficacy, motivation and skills, but determinants may also be environmental and pertain to job resources or social norms (Michie, Johnston, Francis, Hardeman, & Eccles, 2008). These determinants are described in social cognitive theories and it is essential that interventionists understand the theoretical background of how these determinants can be changed (see Table 2).

Interventionists subsequently identify theoretical methods to change determinants per organizational level (Kok, et al., 2008) and transform these theoretical change methods into
Table 1. *Intervention Mapping steps in terms of required activities and products. The arrows signify the linear and iterative nature of the design process.*

<table>
<thead>
<tr>
<th>Title</th>
<th>Activities</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Needs assessment</td>
<td>Establish the planning group. Identify health problem, target population(s) and resources.</td>
<td>Formulate intervention Goals for health and quality of life per identified ecological level.</td>
</tr>
<tr>
<td>2. Matrices with objectives</td>
<td>Specify outcomes for behavioral and environmental change. Determine per level outcomes, performance objectives and change objectives</td>
<td>Overview per level of determinants, their theoretical background and their estimated potential change effect. Matrices that combine per outcome (and level) the performance objectives, and the determinants to specify the change objectives.</td>
</tr>
<tr>
<td>3. Theoretical change methods and practical applications</td>
<td>Per determinant select theoretical change methods. Identify parameters to translate method into application.</td>
<td>Lists per level and change objective, the determinants, methods, their parameters and concrete applications.</td>
</tr>
<tr>
<td>4. Intervention program design</td>
<td>Specify and consult all individuals involved in the implementation. Create and review design documents that include themes scope and sequence and available materials. Draft, pretest and produce materials and protocols.</td>
<td>Initial and final plan of the time path, materials and protocols, and all the individuals involved.</td>
</tr>
<tr>
<td>5. Adoption and implementation plan</td>
<td>Identify and train or support implementers and review and re-evaluate all products of the previous steps and adopt the program.</td>
<td>Have all adopted materials, scheduled, and committed and prepared individuals (planning team, implementers, target groups) positioned to implement the program.</td>
</tr>
<tr>
<td>6. Evaluation plan</td>
<td>Review the program logic and identify criteria for process and effect evaluation. Translate criteria into measurable questions. Operationalize these questions and develop a research design and concrete measures.</td>
<td>Per evaluation type a detailed written plan is produced, including questions, design and measures.</td>
</tr>
</tbody>
</table>
### Table 2
**Intervention Mapping procedure and required ingredients to translate change objectives into theory-based and tailored and effective change applications.** The ingredient contents depend on the level and on the context.

<table>
<thead>
<tr>
<th>Change objectives</th>
<th>Determinants</th>
<th>Theoretical Change Method</th>
<th>Facilitating or hampering Change application conditions (parameters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper management is informed about and will endorse the need for a risk management system and that its implementation and management can be done effectively and has benefits in the long run.</td>
<td>Beliefs, Outcome expectations</td>
<td>Persuasive communication (Elaboration Likelihood Model)</td>
<td>Presentation by interventionists and health promotion organizations with information on the importance of risk management and the advantage of the IM protocol to implement and maintain it effectively. Show, explain and discuss past and potential IM success.</td>
</tr>
<tr>
<td>Line managers are Beliefs being convinced that feedback provision helps employees to form and maintain confidence in asking for support.</td>
<td>Beliefs (Theory of Planned Behavior)</td>
<td>Requires investigation of the current beliefs of the line managers. Resulting action plans must have reachable goals and time schedules and must be tailored to the target group.</td>
<td>Managers discuss under supervision how feedback can be given. The goal is to come to a concrete action plan to: Train feedback provision, implement, and evaluate.</td>
</tr>
<tr>
<td>Employees (are stimulated to) express confidence in asking their colleagues for support.</td>
<td>Self-efficacy</td>
<td>Modeling (Social cognitive theory)</td>
<td>Employees watch a video in which model employees ask for support and are adequately helped by a co-worker or supervisor. The portrayed situation must contain recognizable individuals and situations and emphasize the commitment of the upper management.</td>
</tr>
</tbody>
</table>

**Note.** Change objectives often comprise more than one performance objective. For clarity, the first column of the table mentions one objective per organizational level. To effectively tailor a change application to the specific context, the intervention team must identify both potential facilitators and barriers (parameters in IM terms), and must exclude those conditions that may hinder application effectiveness. If these parameters are not identified and positioned, even a powerful theory-based change technique that represents a strong cause-effect relationship, may translate into an ineffective change application. This again emphasizes that interventionists must be experts versed in selecting and translating suited theoretical change methods into practical and tailored applications. The prescribed subsequent steps are meant to develop knowledge from general goals to concrete change applications. But IM interventionists also work iteratively and often return to earlier steps to consult documentation and decisions. It is not uncommon that incremental knowledge urges interventionists to re-evaluate or even alter earlier decisions and update the documentation. This means that IM prescribes an inherent evaluation of the intervention development process.
concrete and tailored applications for behavioral change in the local context (Kok, et al., 2015).

The fully documented development process results in two plans. The first is a change program plan that specifies all objectives, methods, applications, resources and individuals involved and the second pertains to a plan for program implementation and process and effect evaluation. The development process’s written documentation provides the criteria for process and effect evaluation (see figure 2).

**Concluding Remarks**

The ecological approach makes IM suited for evidence- and theory-based (Briner & Reynolds, 1999) development and implementation of a risk management system in an organization’s context (Bartholomew, et al., 2011; Kok, 2014; Kok, et al., 2008). This approach ensures that experienced interventionists view the group at risk in its wider influential environment that may even extend to outside the organization (See figure 1; Bartholomew, et al., 2011). Incremental knowledge gathering during the prescribed subsequent steps guide the development process and should lead to fitting, concrete, tailored and effective change applications that should adhere to both the recommendations of the European Union and the World Health Organization (Leka, et al., 2011; Leka, et al., 2015) and to the identified local need and potential for risk management in the organization.

**References**


doi:10.1037/a0018772


Robert R. A. van Doorn
Department of Work and Social Psychology, Faculty of Psychology and Neuroscience, Maastricht University, The Netherlands
r.vandoorn@maastrichtuniversity.nl

Gerjo Kok
Department of Work and Social Psychology, Faculty of Psychology and Neuroscience, Maastricht University, The Netherlands
g.kok@maastrichtuniversity.nl

Robert A. C. Ruiter
Department of Work and Social Psychology, Faculty of Psychology and Neuroscience, Maastricht University, The Netherlands
r.ruiter@maastrichtuniversity.nl