1 A Multi-motive Risk Communication Model for "Making" Crisis Preparedness

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Several countries in Europe today, as well as the United States, are highly committed to creating a "culture of preparedness" and/or "culture of resilience," which includes making individuals and communities well prepared to cope with future risks, crises, and catastrophes (Kapucu, 2008). The high political priority of civil preparedness and resilience issues is presently visible in the European Union's substantial investments in disaster risk reduction and in its disaster education guidelines (Benadusi, 2014). In the wake of the political precedence of crisis preparedness, several risk communication initiatives are ongoing in European municipalities (Appleby-Arnold et al., 2021; Cornia et al., 2016; Petridou et al., 2019). Nevertheless, the research community does not fully agree on how practitioners working in public authorities and local municipalities can best use risk communication to contribute to citizen and community preparedness.

This chapter combines existing theories and knowledge from several and sometimes competing fields of risk communication and preparedness research (e.g., within psychology, sociology, political science, health science, communication and public relations, social marketing, and other areas) into a basic risk communication model for crisis preparedness. The primary aim of the model is to support practitioners, such as communication managers/officers, risk, and safety managers and crisis managers, who need to "understand" and "use" multidisciplinary risk communication, public relations, and preparedness and disaster research and theory in a pragmatic way to create a reflective and holistic understanding of their own ongoing or future "practice." The proposed model especially aims to support reflections on possible multi-motive path choices in risk communication work for crisis preparedness. From a pragmatic and practitioner-oriented viewpoint, multiple paths, or a combination of individual paths, can potentially lead to the same final goal (for instance, a higher level of crisis preparedness and readiness). The word "model" is used here in the scientific sense, as referring to a simplified representation of reality. All models are "false" in so far as no representation can capture reality perfectly, but without pragmatic models of this kind, it is hard to develop a reflexive understanding of possible choices in a complex risk and preparedness communication practice.

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The "Core" of the Model: Five Path Choices and Basic Motives Underlying Risk Communication for Crisis Preparedness

Five tentative basic motives and path choices concerning risk communication for "making" crisis preparedness are briefly presented in the following. All of them have been carefully chiseled out from the extensive body of communication-related research in different disciplines concerning the "making" of preparedness through communication, under the influence of cognitive, social, or cultural theory. The paths, in turn, represent different basic motives, practices and techniques applied to risk communication for preparedness, which are also briefly presented (Figure 1.1).

The communication practices and techniques associated with the different suggested paths can be characterized as more or less monologic or dialogic, a classical distinction that is common in both international risk communication and public relations research (Fisher, 1991; Grunig, 1984). The monologic landscape, briefly put, involves one-way linear transmission of risk information to raise awareness, educate, and persuade the public concerning preparedness behavior. The dialogic two-way landscape is more about deliberation and fostering exchange, mutual understanding and citizen-driven activities that can lead to preparedness. However, the two communication forms are not mutually exclusive, and they can even complement each other (see also Rice & Robinson, 2013).

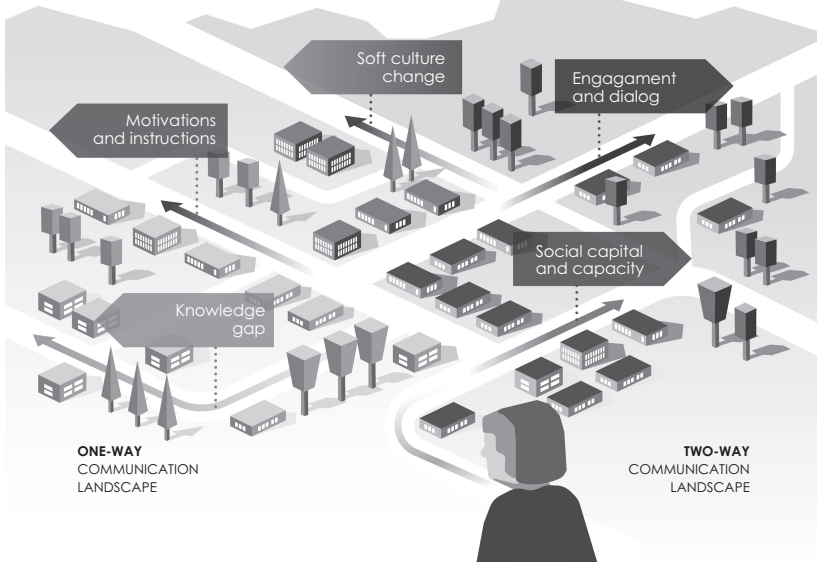

Figure 1.1 The importance of path choice.

Path 1: Knowledge Gap

The knowledge-gap path argues, in short, that lay people lack knowledge about risk, and that by giving more risk information to people ("the public") one can induce them to act more rationally in relation to risks and threats. The basis of this is the "gap" identified between how technical/scientific/health experts and laypeople/the public perceive and rank different risks. The aim of risk communication is then to design, package and transfer scientific risk assessments in a way that bridges the knowledge gap between experts' assessments and perceptions of risk (currently concerning the potential consequences of storms, floods, power outages, IT crashes, etc.) and so-called lay assessments (Renn, 2008). By closing the "gap" through successful dissemination of information, one can theoretically fulfill the universal right to access risk information in a liberal democratic society (Wardman, 2008).

Several studies, however, do not find a significant correlation between dissemination of risk information, risk knowledge, risk perception, willingness to act, and levels of risk preparedness. Instead, they identify paradox related to risk information/knowledge and risk perception (see, e.g., Wachinger et al., 2012). Studies show, for example, that well-informed individuals with high-risk knowledge often still accept risks and dangers in their neighborhoods because some perceived personal benefits (such as status, a beautiful landscape, economic gain, tradition) outweigh the negative impacts/consequences (see, e.g., Cornia et al., 2016; Lakew & Olausson, 2023). Even if individuals perceive high levels of risk, they frequently shift the responsibility for risk reduction and preparedness measures onto someone else, often municipal settings, highly trusted authorities and/or experts. Having a high level of trust in flood-protection measures seems—as a concrete example of the paradox—to reduce people's perceptions of the probability and consequences of flooding, thereby reducing high-trust individuals' willingness to prepare for floods (Terpstra et al., 2009). In practical terms, the risk-perception paradox essentially means that high levels of risk perception and knowledge rarely enhance individuals' preparedness efforts.

It is difficult, however, to begin communicating about risks and preparedness without those involved having a certain amount of basic knowledge. Therefore, purely educational risk communication activities and home preparedness campaigns are still common, and some studies still show positive effects of these (see, e.g., Maidl & Buchecker, 2015). An example is larger media attention campaigns—with clear start and stop times—conveying broad risk messages such as "watch out for disinformation" or "prepare for extreme weather" to large groups of citizens. Historically, such educational messages have been delivered through one-way channels such as advertising space in the mass media, outdoor advertising, bulletin boards and billboards, but also by personally addressed letters. Special attention is given to defining the target audience, trusted sources, and most suitable channels of communication.

Table 1.1 Summary of basic characteristics of the different path choices

Path choice	*Knowledge gap*	*Motivation and instructions*	*Soft Cultural Change*	*Community Engagement/ Empowerment*	*Social Capital and Capacity*
Basic logic	Education	Persuasion and instructions	Subtle persuasion and changes in the physical environment	Activation, involvement, and dialog	Community and trust-building support
Main type of communication	One-way	One-way	One-way	Two-way	Two-way
Main view of citizens	Passive	Passive	Passive	Active	Active
The emphasis of risk and threat messages	Central	Central	Peripheral	Peripheral	Peripheral
Time frames	Short-term	Short-term	Long-term	Long-term	Long-term
Visibility	Noticeable	Noticeable	Insidious	Fuzzy	Invisible
Evaluation	Easy	Easy	Complicated	Complicated	Complicated
Examples of risk communication activities	Educational Campaigns delivered by mass media, outdoor advertising, billboards, etc.	Campaigns with a combination of "alarming" motivational risk messages and messages highlighting what the individual can easily do to protect herself.	Short messages "sneaked into" citizens' everyday routines, but also changes in the physical environment.	Developing systems for interaction between authorities and citizens. Organizing discussion and study groups.	Developing communication efforts that activate, invite, and enable citizens, and ensure constant open risk communication.

Choosing this path of communication to "make" crisis preparedness often offers several advantages to communication, risk, and/or crisis managers. The managers can control the campaign, and it often generates public attention, thus validating the efforts. Measures of campaign impact such as "attention" or "views" are easy to assess and visualize, and it is simple to show decision makers, politicians, and colleagues media-attention effects that can legitimize the risk communication work (Wardman, 2008). However, the behavioral effect achieved by one-way mass campaigns is often limited, according to critics. One reason for this is that a wider range of psychological factors than just lack of awareness and knowledge seem to influence whether and how individuals respond to preparedness issues (Adams et al., 2017; Aitken et al., 2011).

Path 2: Motivation and Instructions

The next possible path to choose states that many individuals already have high knowledge about relevant risks, but still do not take protective actions (see, e.g., Poussin et al., 2014). Instead, the risk communication behavior problem has to do with attitude and individuals lacking motivation and confidence in their own ability to behave in an appropriate and risk-preventing manner. The influential Canadian American social cognitive theorist Albert Bandura (1982) defines the latter phenomenon in terms of the individual's level of self-efficacy, which refers to a person's level of self-confidence when it comes to carrying out things desired by the social environment, as well as achieving one's own individual desirable goals. A low level of perceived capability/self-efficacy in the preparedness context is, in turn—like in most countries—often associated with personal life experiences, financial conditions, and other socio-economic factors (Shapira et al., 2018).

The idea of a need to provide motivation and instructions stems from health behavior change models and socio-cognitive fear-appeal theory. Here, protection motivation theories (see, e.g., Rogers, 1975) argue, in short, that successful risk messages should both (1) create awareness of neglected risks and (2) motivate protective actions by generating intimidation and/or fear ("fear appeal"). In addition, successful risk messages must also (3) provide information about what the individual can easily do to protect herself and "cope" with the risk. Extended theories (Witte, 1992) based on protective motivation reasoning further claim that individuals who face dangers/risks will either try to control the dangers or try to control their own fear of the dangers. If an individual prioritizes preparing for the danger, she becomes more inclined both to take in risk messages and to protect herself, according to the theories. But if the individual is too terrified by the risk messages, she instead tries to control her own fear of the dangers and thus often rejects the essence of the messaging.

Selecting the motivation and instructions path means choosing a practice that shares social marketing's focus on the process of design, messaging strategies and

implementation, as well as on the evaluation and testing of campaign messages and communication activities for the "good" of society (Okazaki et al., 2015). Therefore, like the knowledge-gap path, this path is first and foremost linked to time-limited, easily observable, classical, one-way mass-communication campaigns. These often target groups of citizens with measured low levels of perceived motivation and self-efficacy. The sole use of fear-inducing risk communication messages is said not to be a suitable messaging strategy in motivation-and-instructions preparedness campaigns. Instead, a combination of "alarming" motivational risk messages and messages highlighting what the individual can easily do to protect herself is recommended (Johansson et al., 2021). However, the appropriateness of fear appeal approaches and their behavioral effects in risk and preparedness contexts are partly disputed (Ruiter et al., 2014). The long-term effects on behavior are also uncertain (Peters et al., 2013). Several studies from different parts of the world find, for example, that it is often the "wrong" people, i.e., wealthier and already information-rich citizen groups, who above all take up and engage in educational and campaign initiatives aiming to create increased self-preparedness through fear appeal (see, e.g., Abunyewah et al., 2020).

Path 3: Soft Cultural Change

This next path highlights the need for "soft" cultural change to develop and maintain disaster preparedness behavior and culture in communities (see, e.g., Appleby-Arnold et al., 2021). The idea of soft culture partially originates from the concept of "soft power" (used in international relations studies), which refers to the use of instruments in a nation-state's arsenal that do not punish or threaten other international actors to bring about desired behavior. Soft power instead relies on soft cultural exchanges and public diplomacy activities—often taken step by step, using popular culture and mass media discourses—to help shape the desired behavior (Nye, 1990). The path of soft cultural change also bears similarities with what is popularly defined as "nudging" in, for example, economic behavior psychology and interventive health science:

> A nudge /…/ is any aspect of the choice architecture that alters people's behavior in a predictable way without forbidding any options or significantly changing their economic incentives. To count as a mere nudge, the intervention must be easy and cheap to avoid.
>
> (Thaler & Sunstein, 2009, p. 6)

In risk communication and crisis preparedness work, it can be a matter of using "sticks and carrots" instead of instruments of hard power such as education, rules, and reprimands by authorities to foster preparedness behavior (Appleby-Arnold et al., 2021). Risk communication for preparedness applying this path thus strives to align with cultural factors such as people's prevailing worldviews, values and

norms, to make sustained behavioral and "soft" cultural change possible in the long term. Research within public relations and strategic communication sometimes defines all kinds of public relations and communication management activities (campaigns, media relations, publicity, citizen dialogs, meetings, etc.) as instruments of soft power, in contrast to hard power forms of governance (see, e.g., Verčič, 2008). Studies of disaster reduction recommend following more explicit communication strategies to foster "soft" cultural change in the direction of disaster preparedness over time. These include (1) using measures that build upon existing values and daily routines; (2) establishing risk communication activities that are a part of citizens' everyday-life events; and (3) emphasizing self-efficacy by showing how citizens' already existing everyday skills can be harnessed in crisis situations (Appleby-Arnold et al., 2021).

However, soft cultural change (or "nudging") as a global practice is seen as a behavioral change technology that can still contain a traditional one-way campaign design and messages, but here the campaign is explicitly designed to fit everyday habits and be "sneaked into" citizens' everyday routines, and to help them to make "easy decisions" concerning risk issues (Heath et al., 2019). This can take the form of signs, colors, and physical markings/stickers that remind people of emergency preparedness issues and changes and reminders in the environment in digital games. The biggest difference is possibly that the activities also often include making unnoticed changes in physical and digital environments to covertly create more preparedness-friendly behavior overall. So, this third path often includes both communicational activities and changes in urban planning, etc. (Thaler & Sunstein, 2009). In practice, however, the path typically includes several concrete messages using logics and techniques from the knowledge and motivation paths, but the activities/techniques are not time limited and are not always easy to observe and evaluate, because a nudge often lies "outside of conscious awareness" (Marchiori et al., 2017, p. 2).

Path 4: Community Engagement and Dialog

The fourth path does not see low levels of crisis preparedness by citizens as caused by lack of information/knowledge or of motivation/instructions. This path argues instead that the more opportunities community members have to think and talk about potential disasters and crises, the greater their sense of empowerment and intention to engage in hazard preparedness. The acronym RCCE (risk communication and community engagement), for example, has been used extensively in global Covid policy documents during the management of the pandemic (see, e.g., WHO, 2020a, 2020b). The RCCE path/perspective here includes, briefly put, an ideological turn away from a megaphone and one-way knowledge-gap approach, and toward a deliberative, participatory, and dialogic risk communication perspective where both sender and receiver are argued to be more active (see, e.g., Abunyewah et al., 2020).

Calls for community engagement (CE) in various societal processes have long been an important theme in both normative and descriptive liberal-democratic political science theory (see, e.g., Head, 2007). For several decades political scientists have also promoted the concept of active citizens in political and institutional contexts (see, e.g., Fung, 2003). However, in a crisis-preparedness context, the movement toward community engagement, empowerment and dialog also includes the sharing of responsibility, including the transfer of responsibility for preparedness issues from governments to individual citizens. This is something that is strongly requested (Abunyewah et al., 2020; Houston, 2018) but also sometimes problematized (Baker & Grant Ludwig, 2016; Hobbins, 2017).

In practice, the classic one-way preparedness campaign plays a minor role in this community engagement and empowerment path. From a public relations point of view, this path is more about having a risk communication practice that is organized and designed primarily for "the management of potential and existing communication interactive networks /…/ for the benefits of both groups" (Neff, 2005, p. 174). This preparedness-building communication path therefore blends two key themes that early became noticeable in the risk communication and public relations literature, because it features both one-way and two-way communication (see, e.g., Fisher, 1991; Grunig, 1984). The important two-way communication characteristics here are the use, in risk communication activities for preparedness, of techniques/channels/activities that support interpersonal communication, engagement, and shared actions. The procedures are considered to involve and activate the public, but also to maintain and strengthen long-term trust and confidence in the authorities and in society at large (Johnston et al., 2020). Citizens' subjective needs are central, and instead of changing citizens' behavior with the help of information, the practice is directed toward developing and changing the systems and forms of communication that facilitate the interaction between authorities and citizens. It can also be about concrete measures such as organizing discussion and study groups.

Even this choice of path is subject to criticism, a recurring example of which is that the dialog methods tend mainly to involve and activate groups of citizens who are already committed, well-educated, and engaged (Miller et al., 2012). It is also less easy to measure and demonstrate behavioral change linked to dialogical communication than in traditional one-way oriented risk communication campaigns. This path is also one that normally involves communication with relatively few individuals instead of the "masses."

Path 5: Social Capital and Capacity

Perceived self-efficacy and motivation have only limited influence on the degree to which individuals take up preparedness activities, according to this fifth path. Instead, its proponents argue for a stronger impact of knowing and trusting others (see, e.g., Bihari & Ryan, 2012; Haer et al., 2016). Supporting social capital and/or

social capacity in a society is therefore seen as the core of crisis-preparedness work (Kuhlicke, et al., 2011; Meyer, 2018). Already during the 1960s, social capital was described as a network of "strong, cross-cutting personal relationships that develop over time and that create a basis for trust, cooperation and collective actions among community members" (Jacobs, cited in Ostrom, 2010, p. 19). Today, social capital is often globally associated with Putnam's (1995) ideas about the importance of human interaction and strong everyday social life in maintaining a functioning democracy.

According to several studies, aspects of social capital, such as access to social networks and group membership, have led community residents to engage in various preparedness efforts (Bihari & Ryan, 2012; Höppner et al., 2012). In the risk communication and emergency preparedness context, the closely related concept of social capacity is also connected to the abilities, skills, and competences of individuals, groups, and/or organizations when it comes to anticipating and handling crises and disasters (Kuhlicke et al., 2011). This important social capacity, in turn, depends somewhat on citizens' knowledge, attitudes, motivations, capabilities, and social and organizational capabilities regarding risks, as well as on individuals' emotional and psychological capabilities. The perspective is thus partly based on "knowledge gap" and "motivation" logics, but also on a strong and central idea about risk communication as a tool to create trusting relationships between individuals, and trust in society at large in line with the "community engagement" path/logic. In addition, the social capacity path adds the need to support positive emotions and psychological skills such as a sense of freedom of action, hope, optimism, resistance to stress, and the ability to regulate emotions through communication activities (Höppner et al., 2012).

Both theory and experience show that social capital/capacity is important for creating preparedness, but the concrete communicational processes that potentially lead to social capital are less understood and discussed. Even if in practice the social capital and capacity path partly includes classical one-way preparedness campaigns, it is more about making communication infrastructure in the municipality serve the needs of everyday risk communication efforts that run without a specific time limit. The inclusion of explicit risk messages is less central; instead, it is important to provide citizens with communication opportunities, to activate, invite, and enable them, and to ensure constant open communication. According to some preparedness literature and guidelines, a communication practice that strongly supports social capital and "community development" in the local community is the use and inclusion of social media in public administration communication. This is argued to both strengthen existing ties and create new contacts (Procopio & Procopio, 2007).

However, building social capital can also be supported by messages that highlight positive opportunities and promote an optimistic spirit in the local community by fostering neighborhood cooperation and stimulating local meeting places. Prioritizing so-called "place branding" and "citizens' innovations"

as an implicit part of risk communication could then be a communication practice that potentially contributes to social capital. A dilemma for those responsible for risk communication issues is that such overall communication activities are not often associated with municipalities' preparedness levels. Public authorities that choose solely this "invisible" fifth path can then potentially be perceived as neglecting important emergency preparedness issues and responsibilities.

Summary and Final Reflections for Communication Practitioners

Even if the suggested multi-motive model for "making" crisis preparedness through risk communication contains several simplifications, it can hopefully help present and future practitioners to start reflecting about the theoretical and disciplinary roots and related philosophical and political commitments in their risk communication practice. This includes engaging in important reflections about things like basic purposes and goals, practitioners' views of citizens, the level of emphasis on risk and threats in communicated messages and time scales, as well as reflections on appropriate concrete communication practices and activities in risk communication for preparedness (see Table 1.1).

However, the basic choice of a path or combination of paths is not made in a societal or organizational vacuum or by itself. The path choices are always strongly dependent on several contextual factors, paradoxes, and/or dilemmas, which are also important for practitioners to reflect on and manage (see also Boholm, 2019b; Demeritt & Nobert, 2014; Johnston et al., 2020). Some of these are briefly highlighted and discussed in the following:

1 *The path choices concerning how to "make" preparedness through risk communication are always made in relation to governing regulations, political discourses, and commitments*. Crisis management and emergency preparedness policies in several European countries have for some time been characterized by a general shift of preparedness responsibility from the state to the regional/local municipality level, and further to households and citizens, according to several researchers. One reason for this interpretation is the increased number of government-initiated and distributed "one-way" persuasive home-preparedness campaigns that tell citizens they must prepare to manage for several days on their own in a crisis (see, e.g., Benadusi, 2014; Bergström 2018). However, the preventive risk communication work, at regional and local community level, is often highly influenced by national authorities' guidelines concerning choice of design, channels, risk messages, etc. One reason for this is that the national guidelines simplify and minimize costs at the local level. A challenge, however, is how to adapt national campaigns and other communication efforts to local risk assessments and prevailing social and cultural contextual norms (see, e.g., Sataoen & Eriksson, 2023).

2 *Multiple public administration professions are always involved in the path choices about risk communication and preparedness activities.* Communication for preparedness is not a "one man show." Studies show that the views of risks, and of citizens as active or passive recipients of risk messages, vary between the professions involved in preparedness work (Boholm, 2019a). On the one hand, this creates pluralism in internal risk communication decisions, but on the other hand it also creates potential cultural clashes between the professional groups about how to perceive local risks and if and how to persuade or involve citizens in risk decisions (Lidskog & Rabe, 2022). This means that different professional commitments always must be negotiated and adjusted as a part of the decisions about appropriate path choices concerning risk communication (Boholm, 2019b).
3 *Involved professionals' perceptions of their own roles tend to influence how risk communication for preparedness is ultimately practiced.* Professionals managing and designing strategic communication and public relations activities, like risk communication for preparedness, have historically been metaphorically described as "informers" or "propagandists," but also as "diplomats" and "agents of change". The information and propaganda roles indicate, in short, that they are devoted to one-way communication, which includes packaging and disseminating knowledge and motivating behavioral change through information and communication. The diplomat and change agent metaphors include, on the other hand, higher levels of two-way communication for dialog, symmetry, and negotiation (Dozier & Broom, 2006). Finally, radical, and postmodern ideas about the role position argue that risk communication practitioners (or "communication officers") should only represent the "audience," taking on the role of an "activist" in relation to the governing organization (Holtzhausen & Voto, 2002). The postmodern practitioner helps citizens question authorities' decisions and expert assessments regarding risk and preparedness. Obviously, the overall perception of the communication practitioner's role position, as well as the practitioners' perceptions of their own professional role in relation to citizens, is related to the possible path choices.

The main argument in the pragmatic multi-motive model is that the practitioner often needs to combine several paths, or at least elements of them, to potentially succeed in "making" preparedness through risk communication (see also Abunyewah et al., 2018; Johnston et al., 2020; Rice & Robinson, 2013). In addition, practitioners also need to make this path choice carefully in relation to their own perceived professional role positions. These ideas are supported by increasingly strong arguments in the literature stating that public agencies' risk communication efforts to create a preparedness culture should "include a wide range of techniques that work together to change behavior, including face-to-face community engagement that triggers and supports community-led preparedness activity" (Ryan et al., 2020, p. 101655). Obviously, the different paths entail different

costs, comprise different time frames, and involve different types of challenges and internal and external effects that are important for the practitioner to reflect on before making decisions about the multi-motive risk communication for preparedness. Different paths and combinations of paths can also be necessary, depending on the prevailing views of democracy that characterize the national and local European communities (Lidskog, 2017).

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