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Risk communication to vulnerable populations on crimes in the Economic Community of West Africa: case-study of Ghana

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This research study examines how risk communications on personal and societal security are conducted within the Economic Community of West African States, using Ghana as a case study. The research focused on Ghana due to its status and ranking as a leading democratic and peaceful nation within a turbulent region, in comparison to Kenya, a member of the East African Community and the Southern African Development Community. In addition to field data, a literature review was conducted to examine whether Ghana's national security agencies apply key risk communication components, such as risk identification, population impact assessment, communication effectiveness, mitigation strategies, and feedback mechanisms. Findings indicate that both national and regional frameworks for risk communication are largely absent, with existing protocols being mostly *ad hoc* and confined to health emergencies. Although the states and citizens in the West African region are aware of crimes, these states often employ *ad hoc* risk communication strategies to address interpersonal crimes. The analysis used data to assess individuals' self-efficacy in taking personal preventive measures in relation to their perceived ontological security over the same crimes. Age-based differences in perceived crime threats were statistically significant for rape, kidnapping, defilement, and murder (Kruskal–Wallis $p < 0.01$). The study concludes that there are few or no national or regional risk communication modalities to prepare both the capable and vulnerable populations against interpersonal crimes, terrorism, or insurgency. The study recommends that the Joint Security Committee of Ghana and other nations in the region develop an All-Risk Communication protocol for national application to improve safety and national response capabilities. The research contributes to knowledge on systems risk communication and creates awareness of the need for nations to develop national protocols for risk communication to assist first responders in their performative service deliveries.

KEYWORDS

risk communication, health communication, community relations, communication goals, crime

1 Introduction

The populations of West Africa appear vulnerable in the face of incessant central government abuse of civil liberties, official corruption, military takeovers, ISIS and Boko Haram terrorist activities in the Sahel and the Islamic Maghreb, insurgency and banditry, and organised criminal conducts in the region. In addition to these, citizens have to contend with interpersonal crimes in their various communities, as well as inadequate or poor community policing strategies and insufficient resources to secure their residences and neighbourhoods against encroachment.

Vulnerable populations often live in neglected communities with many public health and criminal issues. These issues threaten the safety of the populations due to poor deployment of community police and the lack of general risk communication on crimes and other emergencies that threaten these communities (Alloush and Bloem, 2022; O'Brien et al., 2021; Casey, 2010; Bowen and Bowen, 1999). Insights from studies reveal that these challenges have profound consequences on human development. For instance, O'Brien et al. (2021) found that exposure to community violence negatively affects students' educational achievements, which further impacts their development and wellbeing. Bando et al. (2022) similarly reported that secondary school pupils in Nigeria who are exposed to community violence and trauma performed much worse academically. A Sonsteng-Person et al. (2023) study also revealed that students living in high-violence neighbourhoods had significantly low grade point averages, poor school attendance, weaker standardised test scores, and overall school engagement, highlighting the negative impact of violence on students' development and well-being. Consistent with these findings, Hardaway et al. (2014) underlined the psychological implications of violence in low-income areas, emphasising the negative impact on adolescent growth and development.

In addressing these concerns, risk communication plays a vital role. It aimed at understanding public perceptions, developing event-specific messages to address public concerns, and providing information on how to respond to a crisis or emergency to minimise morbidity and mortality (Svendsen, 2018). Even though the traditional application of risk communication has been in the domain of health crisis and emergency communication (Bailey et al., 2021; Eisenman et al., 2007; Finucane and Holup, 2006; Khan et al., 2022), risk communication is an understudied area (Heath and O'Hair, 2020). Heath and O'Hair (2020) further suggested that findings on how risk communication concerning security and police practices across the Economic Community of West Africa States (ECOWAS) is conducted suggest considerable idiosyncratic variation in goals, priorities, working methods, means, and requirements.

The motivation for this study is to help fill the gap in the literature about crime risk communication. More importantly, it is to help fill the gaps in security and police practice across the ECOWAS region. ECOWAS, established in 1975, is a regional bloc of 15 West African countries committed to economic integration, peace, and regional stability. Despite its efforts in regional security coordination, there is still a major need for more localized and effective strategies in crime prevention and communication. This study aims to contribute to that need by developing and deploying risk communication as an active and dynamic crime-fighting tool to enhance the populations' self-efficacies and make their respective

nations more resilient. Studies concerning crime and violence against vulnerable populations are essential in public health, just as diseases of the body and soul. However, risk communication is often not applied to, for example, terrorism, school shootings, serial and mass murders, sexual violence such as rape and defilement, young people and violence, deviance and other types of personal crimes as it is applied to health issues (Bailey et al., 2021; Boase et al., 2017; Eisenman et al., 2007; Finucane and Holup, 2006; Khan et al., 2022).

The paper uses Ghana as a case study to look at this gap. Ghana is a strategically good choice because it is one of the most politically stable and democratically governed countries in West Africa. It has constantly played a leadership role in regional peacekeeping and security initiatives under ECOWAS. Ghana, like other ECOWAS member states, is confronted with numerous security challenges, including urban crime, youth vulnerability, and transnational threats—making it both representative and instructive (Addo, 2008).

1.1 The practice of security related risk communication in ECOWAS

In the paper, Disaster Planning and Risk Communication with Vulnerable Communities: Lessons from Hurricane Katrina, Eisenman et al. (2007) reported that, "The vulnerability of communities affected by Hurricane Katrina appeared to be caused by economic status and resources. However, culture, ignorance, ethnic insensitivity, racial isolation, and racial bias potentially also contributed to lower levels of preparedness, (...) disparities in access to relief and recovery." It is fair to assume that the exact situation applies in the case of Ghana and other ECOWAS nations. Researchers such as Bodemer and Gaissmaier (2012) identified some challenges in the risk communication chain. This is captured in their paper, Risk Communication in Health. They argued that "(...) health messages often follow a persuasive rather than an informative approach and undermine the idea of informed decision-making. The current practice of health risk communication is often biased because risks are communicated in one-sided and non-transparent formats. Thereby, patients are misinformed and misled." The allegation by Bodemer and Gaissmaier (2012) relates only to risk communication in health, the conservative approximation of wellbeing with deep reliance on clinical health, as the rest of their paper suggests.

Other researchers, such as Rogers and Pearce (2013), in their work titled Risk Communication, Risk Perception and Behaviour as Foundations of Effective National Security Practices, reported communication bias as a challenge in risk communication. They noted, "Any event that disrupts the ability of individuals, communities, organisations, and nations to carry on normal activities constitutes a threat to national security. As a result, managing risk is a central role of governments around the world (...). Risk communication is a primary tool for achieving understanding and cooperation in society. Therefore, risk communication is an essential part of risk management and forms an important cornerstone of the foundation of effective national security practices" (ibid, p. 66). Public health aims to prevent diseases, prolong life, and promote health through organised efforts of society and organisations (Winslow, 1920). For this reason, there is the need to have the right balance between the traditional disease profile of a nation or an entire region, such as ECOWAS and emerging

health threats that impinge on wellbeing and the prolongation of health concerning risk communication.

Lerøy Sataøen and Eriksson (2023), in their paper, provide a lead into the need to strike the right balance in managing risk communication among stakeholders and the public: Striking the right balance: tensions in municipal risk communication management for preparedness. Their study centred on all-risk communication approaches at the municipal government level since they did not situate the study to any specific public health threat. The study claimed to “challenge the existing and dominant risk communication research and offer a more contextual and reflexive understanding of actual risk communication processes in municipalities.” Nonetheless, they failed to pinpoint what emergency or threat their study’s claim of “actual risk communication processes” was to address. The study does not appear to have provided the anticipated response to ‘the existing and dominant risk communication research’ (Lerøy Sataøen and Eriksson, 2023). From the practitioners’ point of view, tensions in risk communication, as defined by Stohl and Cheney (2001), refer to “the clash of ideas, principles, or actions and the discomfort that may arise as a result.” These tensions could be “paradoxes,” “contradictions,” “dialectics and ironies,” citing (Trethewey and Ashcraft, 2004). The question is, are tensions in the delivery of public health services necessarily bad or even contentious? In any organised society, tensions between the constitutional and legal frameworks on one side and those between the legal and cultural ethos or technology and organisational set-ups, on the other hand, are natural structural and functional artefacts of complex systems and should not be ignored in favour of tensionless risk communication in a dynamic system.

In Ghana and the ECOWAS region, risk communication as an important public health tool is about 90% of the time applied to diseases such as Malaria, Ebola, Polio, HIV/AIDS, Tuberculosis, COVID-19, sexual and reproductive health, maternal health care, malnutrition and poverty, vaccinations, and mental issues. Diseases such as Cutaneous Leishmaniasis hardly ever are mentioned in the public media space. “Leishmaniasis is one of the major infectious diseases affecting the poorest regions of the world and afflicts the world’s poorest and most vulnerable populations. Leishmaniasis threaten 350 million women, men, and children in 88 countries around the world, 72 of which are developing countries. Leishmaniasis is described as a polymorphic protozoan disease of the skin caused by a number of species of the genus *Leishmania*. The disease is transmitted by the bite of an infected female phlebotomine sandfly. Animal reservoir hosts primarily infect sandflies. The life cycle starts when a parasitised female sandfly takes a blood meal from a human host. As the sandfly feeds, promastigote forms of the leishmanial parasite enter the human host via the proboscis. Although people are often bitten by sandflies infected with leishmania protozoa, most do not develop the disease; those who are immune-suppressed quickly evolve to full clinical presentation of severe Leishmaniasis” (Kweku et al., 2016). Considering the seriousness of Leishmaniasis, as explained by Kweku et al. (2016), it is therefore surprising that government institutions rarely focus on it, failing to engage the vulnerable public in awareness-preparedness against the disease.

Even within the disease profile of Ghana and other ECOWAS nations, it is only in about the last 15 years that risk communication has been extended to breast cancer, pediatric cancer, prostate cancer, and other diseases. Previously, private individuals primarily made such advocacies by creating awareness with little or no terminal

knowledge and expertise of the disease. With little or no contribution from government institutions. It is important to note that a few other advocates have access to reliable information and data about the diseases for which they promote public awareness. It is also interesting to note that registries where cancer information was to be acquired were not available. It was not until Stanford University and the African Cancer Registry Network provided seed money for the establishment of Ghana’s Cancer Registry. Thus, in 2016, efforts to create a national cancer registry commenced with failed earlier attempts due to budgetary problems of the Ghana Health Service (Yarney et al., 2020).

In all fairness, money and human resource personnel were not the major reasons why the creation of the national cancer registry had to be financed by external entities, but the uneven application of available resources to the nation’s disease burden (Kweku et al., 2016). Malaria cases comprise about 70% of the health budget in Ghana, followed by maternal/child focus programs (Kweku et al., 2016). The management and care of HIV/AIDS sufferers on antiretroviral treatment, together with cases of tuberculosis and drug-resistant tuberculosis cases, also received a great deal of attention. Not out of neglect or wanton disregard for proper disease outbreak and investigation, but diseases that receive on-the-clock monitoring and surveillance were the ones whose protocols were well established (Ghana Statistical Service, 2009). There were other reasons why the registry was not established until external funding arrived. For example, access to honorarium as a general and persistent phenomenon, was present in the programs initiated by the healthcare delivery system of Ghana in line with establishing the registry. For instance, whether the actors must be paid like the medical officers of the Ghana Health Service or as administrative staff.

The Ministry of Health, Ghana Health Service, and similar health institutions in the ECOWAS region were traditionally not involved in risk communication on public threats, such as the occurrence of a terrorist act, until cases of morbidity and mortality occurred. The main security institutions, such as the Ministry of Interior, Ghana Police Service, Ministry of National Security, Ministry of Defence, Economic and Organised Crime Office, Narcotics Control Commission, and many other public institutions in the case of Ghana, occasionally issue short bursts of risk communication. Such communications about critical national threats or upticks in crime do not permeate the consciousness of the population due to the insufficiency of these messages, which are rarely disseminated. In some cases, these insignificant communications fail to reach vulnerable members of society due to language barriers or a lack of access to technological tools, such as television or radio sets, to hear the warning or the risk communication (Norman et al., 2015).

Additionally, in security risk communications in Ghana and ECOWAS in general, the delivery of the message is mainly undertaken by government security operatives against whom there may be political bias, hatred, and dislike, making their ability to render credible communication a non-starter. Such a situation defeats the sender-receiver linkage due to preexisting political barriers to communication. The communication regarding the uptick of terrorism in the region is mostly delivered using a top-down approach with attributes of command and control, which ends up being alienating and less appealing to populations for whom the communication was meant to protect or even inform. Although the risk communication message may outline the risk to which the community is potentially exposed, the justification for their

partnership and cooperation in reporting suspicious activities appears compelled rather than appealing to act. For instance, Ghana's government has announced citizens' participation in the surveillance of potential terrorists and their cells in communities. Thirty-three (33) individuals with suspected terrorist ties were arrested in the Savelugu Municipality of the Northern region, believed to have migrated from Burkina Faso after soldiers' deaths in that country. Twenty-seven (27) were granted bail, while the rest were held in custody, including the owner of an Islamic learning centre. The Minister of National Security launched a slogan, "See Something, Say Something," urging citizens to report any perceived security threats they may see without any parameter as to what the nation deems as a threat to security and for which the citizens are admonished to report. The promotion of Ghana's brand of McCarthyism, or, in this case, "Kan-Dapaahism" (euphemism after the name of the Minister of National Security from 2017 to the time of writing in 2024, Mr. Albert Kan-Dapaah), has not so far yielded any alleged culprits or suspects. However, it has the tendency to lead to the blacklisting of innocent persons, who may be mislabeled by government action as "terrorists" and potential denial of due process and civil liberties.

On August 18, 2023, it was reported that some \$4 million worth of onions to be transported from Niger to Ghana was locked in trucks at the border between Benin and Niger, most of which had rotten. Some four long-haul trucks were burnt by the people of Niger (Gyimah, 2023). The attack on Ghana trucks may have been a precaution against a potential Trojan horse situation, as ECOWAS threatened military intervention in Niger to restore President Mohammed Bazoum after a coup d'état. General Abdourahmane Tchiani, the coup leader, gained legitimacy from the Niger public and his supporters became vigilantes to protect him. The truck burning incident could have been avoided with a more people-centred risk communication message from the ECOWAS emphasising that the planned intervention was not going to harm the citizens of Niger and that it was an operation to restore hope. It is difficult to predict what the outcome would have been with such a risk communication message yet it could have offered alternative cognitive choices to a significant portion of the Niger public.

1.2 The concept of vulnerability Vis-à-Vis personal security

From the personal security point of view, vulnerability concerns the state of being exposed to potential harm or attack that may result in physical or emotional injury to a person and deny the individual 'freedom from fear, from want, from disease and discrimination' (United Nations Development Programme, 1994). A vulnerable population may be defined as a group of people who lack the financial, economic, social and other resources or agency to be able to exercise control over their sovereign space against external threats of violence and crime and the ability to enhance their capabilities and functioning. Vulnerability is a measure of the risk associated with physical, social, and economic implications resulting from the ability of a system, community, or persons to cope with a given event or emergency. Vulnerability is a vector of resilience or the ability of a system, community, or person to bounce back after exposure to adverse events or conditions. The conceptualisation of security in ECOWAS governments, whether they operate under the Napoleonic Code or

Common Law system, is a borrowed concept or practice from the Western industrialized nations in line with just pragmatic intellectual thoughts in operations in these nations. It is accepted that the security designation of an emerging or existing matter of national importance is simply a political speech act (Buzan and Wæver, 1997; Eroukhmanoff, 2018). Part of the reason for such designation is that the state is the primary provider of security, with a performative obligation to ensure that the citizens are free from the fear of personal security breaches by third parties or government agents (United Nations Development Programme, 1994; Vileikienė and Janušauskienė, 2016). Secondly, the state has jurisdictional powers over the prosecution of criminal cases, which makes crime a state or municipal matter. Whether one speaks of personal security or overall societal ontological security, "objective security" means more or less the same thing as "being safe." "Subjective security," however, means "feeling safe" (Vileikienė and Janušauskienė, 2016). As has been argued by Eroukhmanoff (2018), in the way security is perceived in any system, some people may feel safe while others may feel unsafe irrespective of where they may be at any given time. Buzan's (1991) position is that the images of security in people's minds may not be consistent with objective security. It is possible for a section of the population to feel insecure in an objectively secure space but feel secure in an objectively insecure place. In line with this thought, Csépe (2004) offered that the conception of security has changed in modern times since the Cold War. She offers that society sees security threats as a "social value" and thus cloaks security with normative criterion subject to applied ethical or professional considerations and analysis. In simple terms, society views security on a contextual basis by evaluating a set of facts or a given narrative.

Fjäder (2014) offered that the issue of national resilience continues to bedevil states because "the provisioning of security has become increasingly difficult for the nation-state, as its span of control does not efficiently correspond with the transnational threats at the heart of emerging uncertainty". Considering Ghana, although the securitising actor has the immense power to label a phenomenon as a national security issue, there is hardly any community educational programme on personal safety and security either by state agents such as the Ghana Police Service and the Ministry of Interior with all the agencies and departments under its mandate such as Fire Service, Commission of Small Arms, National Security, National Disaster Management Organisation, and the rest. In spite of the expansive reach of such organizations, they do not engage the citizens on how the citizens can improve their awareness-preparedness status against, for example, inter-personal violence, intimate partner abuse, and kidnapping during armed robberies. However, public awareness of the existence of crimes such as rape, murder, armed robberies, and kidnapping is high due to information availability on social media platforms and private media houses.

1.3 Conclusion to the literature review and the lack of security risk communication

Given the weaknesses identified in this section concerning the practice of risk communication within ECOWAS nations, it is fair to assume that if the states, the larger provider of security, do not have control over security events due to their unexpected occurrences (such as the lack of competent personnel to manage the eruption of

insecurity events when they occur; the lack of intellectual capacity and preparedness to conduct a meaningful review of the security situation; and the consequential implications of such eruptions despite the massive number of personnel in the combined security forces), it is even harder for the states or governments and its agencies to design risk communication messages based on objective fact; devoid of fear-mongering; exaggeration, and highfalutin brouhaha and political shenanigans.

This section concludes that public education has not mainly improved considering the dangers of objective and subjective security threats, even though there is a surge in crimes and the myriad threat exigencies faced by the various communities in the country. The vulnerable populations' preparedness for safety and crime emergencies remains largely inadequate. The next section of the article analyses the awareness-preparedness gap in populations' survival plans in relation to perceived threats such as murder, rape, defilement, and robberies.

2 Materials and methods

This study is a component of a broader research endeavour investigating Ghanaians' perceptions of societal and personal security, where security is widely defined as "freedom from threats." The emphasis is on how subjective security, particularly with personal threats like murder, rape, defilement, and robbery, affects the population's readiness and self-efficacy in addressing these risks. A structured 104-item questionnaire was developed to evaluate awareness and preparedness levels within the general populace. The study targeted citizens of Ghana from all 16 administrative regions, seeking to obtain a nationally representative insight into security perception. The target population comprised adult residents (aged 18 and older), both male and female, residing in rural as well as urban areas. A sample size of 1,000 was determined, out of which 960 valid responses were obtained (471 females and 489 males). In each of the 16 regions, a district was picked at random to provide representation of both urban and rural areas. Enumeration areas were identified from each selected district, and families were subsequently chosen at random for participation.

Data collection was done by three trained research assistants, who covered the whole country under the supervision of the lead authors. The fieldwork was collaboratively funded by the Faculty Research Program of the Institute for Security, Disaster and Emergency Studies and the authors. In addition to the random sampling, a snowball sampling method was used to access difficult-to-reach or low-response locations, particularly in situations where formal enumeration data was scarce or obsolete. This approach effectively augmented the sample size, particularly in areas with scattered populations. All replies were inputted and analysed using SPSS (IBM Statistics 23). Frequencies and descriptive statistics were calculated for each variable. The Kruskal–Wallis test was applied to assess variations in subjective threat perception across demographic characteristics, particularly age, with particular attention to perceptions of murder, rape, defilement, robbery, and overarching concepts of human and national security. Ethical approval for the study was obtained from the Institutional Review Board of the Institute for Security, Disaster and Emergency Studies, and all participants provided informed consent before engaging in the study.

3 Results and discussion

3.1 Demographics of respondents

The average age of the respondents was 42 years, with a minimum age of 18 years, a maximum age of 90 years, and a standard deviation of 14.02, indicating that the respondents clustered closely around the mean given the sample of 960 respondents. The data revealed that the majority of the respondents, 61.35%, indicated they were married, with 6.04% cohabiting and 18.85% of the respondents not ever marrying. A good number of the respondents, 13.78%, indicated either divorced, separated, or widowed. The survey revealed that most respondents have some level of education, consisting of JHS/Middle School (29.15%). This was followed by SHS, O'/A' level, Sec Tech (21.32%), and Primary (14.21%), while undergraduates and postgraduates were cumulatively made up of 10.03% of the respondents. Nevertheless, nearly one-quarter of the respondents reported having no formal schooling whatsoever (25.29%). In terms of respondents' occupation, the results revealed that the majority who indicated to be working were engaged in the sales and service industry, which registered 33.05%. This was followed by 26.56%, who were engaged in agriculture (farming and fishing). The remaining respondents were involved in skilled manual craftsmanship, 20.31%. The professional/technical/managerial groups were 12.02%, with unskilled manual labourers being 7.09%. Less than 1 % of the respondents (0.97%) were engaged in clerical and secretarial work.

3.2 Assessing security and safety of children as part of personal security: kidnapping, rape, defilement and murder

Individual's self-interests and protection for their offspring could influence the degree or extent of receptivity of risk communications and warnings within a given time–space continuum. The study did not consider the barriers to communication but presumed that there are obvious barriers to risk communications by the state or any of its agencies irrespective of the threat. Risk communication does help vulnerable persons in the preparedness-response status towards the initiation of credible action to either mitigate or avoid a hazard with a high probability of occurrence. As explained by Ipingbemi and Aiwooro in their article "Journey to school, safety and security of school children in Benin City, Nigeria," the daily commute of children to school, whether by foot or public transit, exposes them to the potential for anti-social behaviour and criminal activity, resulting in a general sense of anxiety and fear. They observed that individuals who utilised public transportation and non-motorized transportation were more susceptible to the repercussions of antisocial behaviour and criminality than those who operated automobiles. They contended that the likelihood of victimisation while walking or using public transportation is elevated by the substantial amount of time required to travel to locations that are further away from one's residence (Ipingbemi and Aiwooro, 2013). According to Godfrey et al.'s article published in 1998 and cited in Ipingbemi and Aiwooro (2013), parents perceive the consequences of abduction (kidnapping) or assault as significantly more gruesome than those of more prevalent road incidents.

The analysis revealed that the average number of children per household is four (4), of whom three (3) attend school daily, commuting to and from their residences. Among the three students that attended school regularly, their ages ranged from 2 years (being the youngest) to 17 years. The proximity of the schools from their houses was between 1 km and 5 km. About 50.00% travelled this distance 5 days a week. The study also revealed that 84.00% of children who went to school daily did not have chaperons to or from school to the house. Children travelling 1–5 km to school without an older person or chaperon indicate poor security or low-risk perception of the parents or guardians (Ipingbemi and Aiworo, 2013). The Ministries of Education or Women and Children could address this situation. Of the 84.00% that went to school unaccompanied, 62.77% walked alone or with their peers over a distance of 1 km to 5 km, followed by those travelling by commercial car 16.88%. The group that used private household vehicles for school transportation was only 1.88% of the children who attended school in all 16 administrative regions. Viewed from a risk communication perspective, this is not a promising picture for the safety of the children in Ghana at school-going age. The findings on the degree of worry of the parents and guardians about kidnapping as a daily national matter are shown in Table 1. Here, 49.30% of females and 50.70% of males were ‘Highly Worried’ about the possibility of kidnapping in their daily lives. In terms of rape, 50.40% of females and 49.60% of males were also ‘Highly Worried’ about rape occurring in their lives daily.

According to the Ghana Public Safety and Crime Report for 2021 and 2022, Accra City recorded 72 and 58 armed robberies for both years, with robbery/burglary registering only 34 and 29, respectively. Rape/sexual abuse was 9 and 6 in those years, while actual cases of kidnapping/abduction for 2021 through 2022 were 11 and 6, respectively (Bureau of Public Safety, 2022). Similarly, the Ghana Police Crime Statistics Research Monitoring Unit’s report for May 2018 revealed only national robbery statistics, with a total of 484, with the highest being 121 in January 2018 (Criminal Investigation Department, 2018). Most of the regions in Ghana experienced a decline in robbery cases during the 2018–2021 period. Despite the comparatively low crime rate, there exists a pervasive concern among the populace regarding the potential for robbery, rape, and defilement, attributable to the evident psychological ramifications. The research findings presented in Table 1 indicate that an overwhelming majority of respondents, specifically 960 or 96.00% of the 1,000 surveyed, expressed being “Highly worried” about armed robbery.

Between 2020 and 2021, the Crime League Chart showed 108 and 86 cases of murder/manslaughter (Bureau of Public Safety, 2022). Concerning murder, though the actual incidence is relatively low, the concern of the public about any incidence of murder garners massive public outrage against the Ghana Police Service and other security agencies, even if they did not contribute to the event.

3.3 Personal and residential security

The data analysis revealed that 54.00% of the respondents had burglar-proof windows installed in their homes, but 46.00% did not. That is to say, nearly half of the residences are not well secured. Similarly, the data show that about 50.00% of the households in urban communities had burglar-proof guards on their windows, while 41.67% in the rural communities did. In terms of the

location of the respective residences, only 14.48% reported living in gated communities overall. Those in gated communities in urban areas accounted for 18.54%, and another 10.42% in rural areas reported residing in gated communities. Regarding using technology to enhance security, 0.31% of the respondents used Closed-Circuit Television (CCTV) to harden their residences. An overwhelming number (99.69%) of the residents in Ghana do not rely on technology to stop intrusion into the residences, making the realization of ‘freedom from fear’ an important value in human security unrealizable in both the short and long run. With this limited penetration of CCTV technology, it appears Ghana does not seem to have embraced technological innovation when it comes to enhancing personal and community security. However, the government of Ghana has and continues to install powerful CCTV cameras at major road intersections and neighbourhoods as crime-fighting, evidence-gathering, and behaviour-modification devices. The caveat is that most of these public CCTVs do not work due to poor maintenance culture, power outages, and the lack of discipline on the part of the personnel manning the CCTVs. The interesting observation is that, although most of the households in Ghana being vulnerable to invasion or encroachment by criminal elements, the respective communities have not established neighbourhood Watch Dogs, with only 2.30% of the neighbourhoods having.

3.4 Risk communication to enhance personal safety precautions

When it comes to risk communication in Ghana against personal safety, it appears the concept has been turned upside down by the security agencies, who do not routinely engage in such practices. At the community level, the incidence of armed robberies was 34.29% of all other crimes, followed by 11.30% of murders, 10.70% of domestic violence, 5.01% of defilement, 19.85% of fire arson in domestic or businesses, and 2.94% altercations with members of security agencies, mainly the police. Despite the disturbing incidence of criminal activities and the fear among the population, police patrols were observed only 15.91% of the time. For this reason, some 90.00% of victims of crimes do not bother to report the event to the police. Some reasons for not reporting the incidence of crime to the police were attributable to slow police response. 44.78% agreed that it was slow, but 6.46% said it was ‘somewhat quick’, with only 7.92% agreeing that it was ‘quick’. However, 40.83% of the respondents were ambivalent about police incident response time, and 40.83% admitted that they ‘do not know’ the response time. This may suggest that the police did not respond when either called or gave the excuse that they had no vehicle to attend to the crisis. Either way, it does not justify the rationale of Charrett (2009), Csépe (2004) and Eroukhanoff (2018) that both citizens and the state are important in the conceptualisation of security, since security, at either the national or the local level, is a shared responsibility. When citizens are involved in altercations with a section of police personnel, this defeats the purpose of policing, risks communication and undermines the concept of the state as the provider of security. The final assessment concerns state efficacy on national security matters and general preparedness for resolution, intervention, mitigation, and suppression of security threats to the state and its citizens.

TABLE 1 Cross-tabulation of data set.

Crime type	Response category	Count within crime type	Sex		Total
			Female	Male	
Kidnapping	Do not know	Count	7	6	13
		% within kidnapping	53.80%	46.20%	100.00%
	Not at all	Count	58	61	119
		% within kidnapping	48.70%	51.30%	100.00%
	Somewhat worried	Count	8	12	20
		% within kidnapping	40.00%	60.00%	100.00%
	Highly worried	Count	398	410	808
		% within kidnapping	49.30%	50.70%	100.00%
Total		Count	471	489	960
		% within kidnapping	49.10%	50.90%	100.00%
Rape	Do not know	Count	6	6	12
		% within Rape	50.00%	50.00%	100.00%
	Not at all	Count	45	65	110
		% within rape	40.90%	59.10%	100.00%
	Somewhat worried	Count	3	11	14
		% within rape	21.40%	78.60%	100.00%
	Highly worried	Count	417	407	824
		% within rape	50.60%	49.40%	100.00%
Total		Count	471	489	960
		% within rape	49.10%	50.90%	100.00%
Defilement	Do not know	Count	4	3	7
		% within defilement	57.10%	42.90%	100.00%
	Not at all	Count	41	45	86
		% within defilement	47.70%	52.30%	100.00%
	Somewhat worried	Count	7	16	23
		% within defilement	30.40%	69.60%	100.00%
	Highly worried	Count	419	425	844
		% within defilement	49.60%	50.40%	100.00%
Total		Count	471	489	960
		% within defilement	49.10%	50.90%	100.00%
Armed robberies	Do not know	Count	5	2	7
		% within armed robberies	71.40%	28.60%	100.00%
	Not at all	Count	12	13	25
		% within armed robberies	48.00%	52.00%	100.00%
	Somewhat worried	Count	1	1	2
		% within armed robberies	50.00%	50.00%	100.00%
	Highly worried	Count	453	473	926
		% within armed robberies	48.90%	51.10%	100.00%
Total		Count	471	489	960
		% within armed robberies	49.10%	50.90%	100.00%

(Continued)

TABLE 1 (Continued)

Crime type	Response category	Count within crime type	Sex		Total
			Female	Male	
Murder	Do not know	Count	5	6	11
		% within murder	45.50%	54.50%	100.00%
	Not at all	Count	39	42	81
		% within murder	48.10%	51.90%	100.00%
	Somewhat worried	Count	6	10	16
		% within murder	37.50%	62.50%	100.00%
	Highly worried	Count	421	431	852
		% within murder	49.40%	50.60%	100.00%
Total		Count	471	489	960
		% within murder	49.10%	50.90%	100.00%

TABLE 2 Kruskal–Wallis analysis on the distribution of crime across categories of age.

Survey questions	Chi-square	df	Asymp. sig.
How worried are you about armed robbery in your daily life?	6.929	3	0.074
How worried are you about rape in your daily life?	11.858	3	0.008
How worried are you about kidnapping in your daily life?	12.740	3	0.005
How worried are you about defilement in your daily life?	22.331	3	0.000
How worried are you about murder in your daily life?	30.568	3	0.000

3.5 Citizens' perception of the government's provision of performative security services and risk communication

This paper established that the government provides the majority of security services. This compelled the assessment of how the citizens perceive the government's readiness, abilities, skills, and capabilities in providing security and safety services to the citizens. Analysis revealed that 29.70% of respondents aged 18–30, 40.20% aged 31–50, 23.10% aged 51–70, and 6.10% aged 71–90 believe the government of Ghana is incapable of protecting them from criminal and other threats. The majority of the respondents agreed that the government does not have a credible intelligence-gathering structure to render appropriate risk communication, among other duties. In modern intelligence work, it is not only boots on the ground that do the work, but technology as well. There appears to be minimal expenditure in the procurement of surveillance equipment and adequately qualified staff that citizens expect their government to possess. It is observed that, typically, in developing countries, there exists a demand for a robust central government capable of providing security services. This is the conventional view of security, which is still valid in the case of Ghana.

Table 2 below illustrates the perception of the respondents who assessed the government as the sole provider of security. The Kruskal–Wallis test was used, as detailed in Table 2, to assess the equality of the distribution of respondents' concerns regarding armed robbery, rape, kidnapping, defilement, and murder across different age categories. While the incidence of armed robbery ($p = 0.074$) remains consistent across age categories, suggesting a uniformly perceived threat, there exists a notable disparity across age groups

concerning rape ($p = 0.008$), kidnapping ($p = 0.005$), defilement ($p = 0.000$), and murder ($p = 0.000$). This outcome is clear, as various age cohorts may evaluate risk differently according to their individual vulnerabilities. Older persons may fear violent crimes such as murder more than younger individuals, who may perceive themselves as more invulnerable or less likely to be victims. These results highlight the need for age-specific risk communication. One method of capturing public restlessness, discussed in this section, is to analyse the trend in pertinent keywords across the country. This can be advantageous in directing risk communication to address the needs and interests of the population, and, most importantly, to motivate the necessary actions in response to emergencies (Lawal, 2022).

Geurts et al. (2023) investigated emergency risk communication during COVID-19 in Germany, Guinea, Nigeria, and Singapore, emphasising the influence of government, infrastructure, and public trust on communication efficacy. Their findings, which indicate limited engagement and weak systems impede risk response, align with this study's results from Ghana, where many citizens view the government as lacking the necessary tools and capacity to ensure security. In both studies, the findings revealed that inadequate communication frameworks erode public trust, highlighting the necessity for credible, inclusive, and well-resourced risk communication initiatives.

4 Conclusion

Risk Communication is lacking in major public health and ontological security events in Ghana and the rest of the ECOWAS

region. Government operatives tend to assume that the overwhelming illiterates, together with a large segment of functional illiterates do not register on the security barometer of Ghana or ECOWAS and tend to ignore their needs or their role in ensuring a reasonable level of security for all. In the case of Ghana, the Ghana Police Service, Ghana Fire Service, Ghana Armed Forces, and most significantly, the National Commission on Civic Education are the primary institutions that fulfil this function. The Police Service adopts a very capitalistic approach to personal security. Security details can be swiftly allocated to individuals capable of employing their services; but they are seldom accessible to offer police protection during the ordinary activities of communal life. The Ghana Police Service conducts occasional people-centered risk communication so infrequently that the public often perceives it as regime propaganda intended to advance the ruling government's interests. One way the police could effectively engage in risk communication and intervention is through the established *ad hoc* roadblocks. However, these imprudent roadblocks significantly assist the Ghana Police in extracting funds from drivers or imposing fines on individuals across several categories. Additionally, The Ghana Police Service does not facilitate the establishment of Neighbourhood Crime Watch programs and fails to provide training for the volunteers active in a limited number of neighbourhoods associated with this initiative.

The study concludes that there are little or no national or regional risk communication modalities to prepare both the capable and vulnerable populations against interpersonal crimes and terrorism or insurgency. The study recommends that the Joint-Security Committee of Ghana and other nations in the Economic Community of West Africa, (ECOWAS), may design All-Risk Communication protocol for national application to improve safety and national response capabilities. The research contributes to knowledge on systems risk communication and creates the awareness of the need for nations to develop national protocols for risk communication to assist first responders in their performative service deliveries. It is suggested that a model All-Risk Communication protocol could be developed by researchers in the West Africa sub-region for potential adoption by the respective governments and agencies, to improve human security. Further study to assess the effectiveness of risk communication, once the national protocols are developed is suggested for future research.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

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Ethics statement

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. Written informed consent from the [patients/ participants OR patients/participants legal guardian/next of kin] was not required to participate in this study in accordance with the national legislation and the institutional requirements.

Author contributions

IN: Conceptualization, Investigation, Resources, Supervision, Validation, Writing – original draft, Writing – review & editing. EK: Conceptualization, Data curation, Methodology, Software, Validation, Visualization, Writing – original draft, Writing – review & editing. SN: Data curation, Formal analysis, Resources, Validation, Writing – review & editing. BA-N: Conceptualization, Project administration, Validation, Writing – review & editing.

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