



Four Articles Unrelated to the Project Funded by the Natural Science Foundation of Hunan Province Acknowledge Its Funding

Recent investigation reveals that four articles published by an author group led by SHI Zeya (石泽亚) with University of South China acknowledge unrelated funding from Natural Science Foundation of Hunan Province.

DOI	Title	Abstract	Year	Type	Journal	Funding Title	Grant Number
10.3389/fpubh.2026.1932962	Occupational injuries and health risks among food delivery riders in China: research progress and prevention strategies	Background: Platform-based on-demand food delivery has expanded rapidly in China, reshaping delivery work through strict deadlines, piece-rate pay, algorithmic management, long working hours, and intensive road exposure. These conditions may increase occupational injuries and broader health risks among food delivery riders.Objectives: This narrative review synthesizes evidence on occupational injuries and health risks among food delivery riders in China and identifies potential mechanisms and prevention strategies.Methods: We searched PubMed, Web of Science Core Collection, and CMOI for Chinese- and English-language literature published from January 1, 2015 to March 31, 2026. Search concepts included food delivery riders, platform work, occupational injuries, road traffic injuries, musculoskeletal disorders, fatigue, sleep, mental health, algorithmic management, and occupational health protection. Titles, abstracts, and full texts were screened for relevance, and 47 eligible sources were included.Results: Existing evidence indicates that riders face interrelated risks, including road traffic injuries, work-related musculoskeletal disorders, fatigue, sleep disturbance, occupational stress, anxiety and depressive symptoms, and chronic risks related to irregular eating and limited health management. Risk riding should be understood not only as an individual behavior, but also as a response to delivery deadlines, income pressure, algorithmic control, fatigue, road conditions, and inadequate protection. Key gaps include the predominance of cross-sectional studies, limited longitudinal and intervention evidence, insufficient subgroup analyses of full-time, crowdfunded, and part-time riders, and heavy reliance on self-reported exposure measures.Discussion: Occupational injuries and health risks among food delivery riders should be viewed as occupational and public health issues embedded in platform-based work organization. Prevention should move beyond individual safety education and post-accident compensation to include upstream governance of algorithms, delivery deadlines and working hours, fatigue and sleep management, traffic and ergonomic protection, accessible occupational health services, privacy-preserving monitoring, and multi-stakeholder support. Longitudinal and intervention studies are needed to clarify causal pathways and evaluate prevention strategies. Background Under the Healthy China strategy, occupational health support for frontline police officers is a growing public health concern. Highway traffic police work in open road settings involving night shifts, continuous standstill, and occupational exposure. This study assessed occupational health support needs, barriers to service need fit, and conditions for integrating wearable devices into health management among highway traffic police in Hunan Province, China. Methods An explanatory sequential mixed-methods design was used. In the quantitative phase, 296 active-duty police officers completed a questionnaire on occupational health support needs and willingness to use wearable devices. In the qualitative phase, semi-structured interviews were conducted with 20 police officers and analyzed thematically. Findings were integrated to explore the contexts in which needs arise, service need fit barriers, and conditions for wearable-device-supported health management. Results Respondents reported multiple needs, especially occupational disease prevention training, targeted screening for major disease risks, dynamic health record management, and mental health support. Overall, 263 police officers were willing to accept individualized wearable-device-supported health management if privacy was protected. Four qualitative themes were generated: occupational workload and health depletion; insufficient existing support and difficulties in fitting services to work settings; expectations for precise and continuous health management; and needs for person-oriented care and psychosocial support. Wearable-device acceptance depended mainly on privacy protection, low user burden, professional interpretation, abnormality feedback, and a closed-loop service pathway. Conclusions Occupational health support for highway traffic police should move beyond one-time physical examinations and general health education toward context-adapted continuous management with closed-loop feedback. Promotes include occupational exposure protection, night shift recovery, post-examination follow-up, psychosocial support, and individualized health feedback. Wearable devices may be useful auxiliary tools, but sustained implementation requires privacy protection, low burden use, professional interpretation, and police-medical collaboration. Background: Effective evaluation of public first aid education and training remain limited by the lack of standardized and comprehensive frameworks. This study aimed to develop a theoretical evaluation framework for public first aid education and training based on the Kirkpatrick evaluation model. Methods: This methodological study was conducted in three stages: a systematic literature review, a qualitative phenomenological study, and expert panel consultation. A literature review was performed using 9 databases to identify candidate indicators. Subsequently, 16 emergency and critical care professionals from a tertiary hospital in Hunan Province were recruited through purposive sampling for semi-structured interviews. Interview data were analyzed using Colaizzi's seven-step phenomenological method to develop the initial framework, which was further refined through consultation with 14 experts. Results: The final evaluation indicator system comprises 4 primary indicators, 32 secondary indicators, and 45 tertiary indicators, encompassing the reaction, learning, behavior, and outcome dimensions of public first aid training. The expert authority coefficients for the expert panel meeting ranged from 0.85 to 0.95. Conclusions: The proposed evaluation framework provides a theoretically grounded and structured basis for the future evaluation of public first aid education and training. Further validation is warranted to assess its applicability across different training settings. Background: Out-of-hospital cardiac arrest (OHCA) is a global health issue with low survival rates, for which bystander cardiopulmonary resuscitation (CPR) is crucial. In China, bystander CPR rates and public proficiency remain low. Children – an important future first-responder group – also lack adequate training. Gamification and virtual reality (VR) technologies show potential in enhancing training effectiveness, but research on the needs, acceptability, and functional requirements of gamified CPR training kits from children's and parents' dual perspectives is insufficient, providing a realistic basis for this study. Objective: This study aimed to investigate children's and parents' needs, acceptability, and functional requirements for the development of gamified CPR training kits. Methods: A cross-sectional qualitative design was adopted. Inclusion criteria were children aged 6 to 12 years, their parents, adequate communication skills, and voluntary informed consent, with purposive sampling to recruit 14 parent-child dyads from a primary school in Changsha, Hunan Province. The participants included children aged 6 to 12 years (average age 5.50, SD 1.50 y, 6 boys and 7 girls) and their parents (average age 38.50, SD 2.50 y, 6 female and 7 male individuals). Semistructured interviews were conducted separately for children and parents, with audio recording and verbatim transcription. The Nvivo 12.0 (QSR International Pty Ltd) software was used for thematic coding and analysis, and dual independent coding (by 2 researchers) was performed to ensure rigor, with discrepancies resolved through team discussion. Thematic saturation, defined as a codebook stabilization and no new themes across 3 consecutive interviews, was achieved after 13 dyads. The study followed the COREQ (Consolidated Criteria for Reporting Qualitative Research) guidelines, and all procedures were approved by the ethics committee. Results: Four main themes and 9 subthemes emerged from the data: (1) children's approaches to acquiring CPR-related knowledge and skills (through school-organized first aid activities, family members, or social media platforms), (2) attitudes toward gamified training kits (children's receptiveness and parental preferences regarding such tools), (3) expectations for gamified CPR training kits (child-friendly design, effective skill training, personalized feedback, and scientifically grounded contents), and (4) challenges in gamified science education (ensuring product safety and professionalism and contextualizing game scenarios to everyday life).	2026	Journal Article	Front. Public Health.	基于智能预警的职业人群急性心血管事件应急响应模式与联动机制研究	2025080776
10.21202/hc.3.rs-10212900/v1	Occupational Health Support Needs and Barriers to Aligning Services With Needs Among Highway Traffic Police in Hunan Province, China An Explanatory Sequential Mixed-Methods Study	Background: Under the Healthy China strategy, occupational health support for frontline police officers is a growing public health concern. Highway traffic police work in open road settings involving night shifts, continuous standstill, and occupational exposure. This study assessed occupational health support needs, barriers to service need fit, and conditions for integrating wearable devices into health management among highway traffic police in Hunan Province, China. Methods An explanatory sequential mixed-methods design was used. In the quantitative phase, 296 active-duty police officers completed a questionnaire on occupational health support needs and willingness to use wearable devices. 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10.21037/phe-2026-0033	Construction of an evaluation system for public first aid education and training based on the Kirkpatrick model	Background: Effective evaluation of public first aid education and training remain limited by the lack of standardized and comprehensive frameworks. This study aimed to develop a theoretical evaluation framework for public first aid education and training based on the Kirkpatrick evaluation model. Methods: This methodological study was conducted in three stages: a systematic literature review, a qualitative phenomenological study, and expert panel consultation. A literature review was performed using 9 databases to identify candidate indicators. Subsequently, 16 emergency and critical care professionals from a tertiary hospital in Hunan Province were recruited through purposive sampling for semi-structured interviews. Interview data were analyzed using Colaizzi's seven-step phenomenological method to develop the initial framework, which was further refined through consultation with 14 experts. Results: The final evaluation indicator system comprises 4 primary indicators, 32 secondary indicators, and 45 tertiary indicators, encompassing the reaction, learning, behavior, and outcome dimensions of public first aid training. The expert authority coefficients for the expert panel meeting ranged from 0.85 to 0.95. Conclusions: The proposed evaluation framework provides a theoretically grounded and structured basis for the future evaluation of public first aid education and training. Further validation is warranted to assess its applicability across different training settings. Background: Out-of-hospital cardiac arrest (OHCA) is a global health issue with low survival rates, for which bystander cardiopulmonary resuscitation (CPR) is crucial. In China, bystander CPR rates and public proficiency remain low. Children – an important future first-responder group – also lack adequate training. Gamification and virtual reality (VR) technologies show potential in enhancing training effectiveness, but research on the needs, acceptability, and functional requirements of gamified CPR training kits from children's and parents' dual perspectives is insufficient, providing a realistic basis for this study. Objective: This study aimed to investigate children's and parents' needs, acceptability, and functional requirements for the development of gamified CPR training kits. Methods: A cross-sectional qualitative design was adopted. Inclusion criteria were children aged 6 to 12 years, their parents, adequate communication skills, and voluntary informed consent, with purposive sampling to recruit 14 parent-child dyads from a primary school in Changsha, Hunan Province. The participants included children aged 6 to 12 years (average age 5.50, SD 1.50 y, 6 boys and 7 girls) and their parents (average age 38.50, SD 2.50 y, 6 female and 7 male individuals). Semistructured interviews were conducted separately for children and parents, with audio recording and verbatim transcription. The Nvivo 12.0 (QSR International Pty Ltd) software was used for thematic coding and analysis, and dual independent coding (by 2 researchers) was performed to ensure rigor, with discrepancies resolved through team discussion. Thematic saturation, defined as a codebook stabilization and no new themes across 3 consecutive interviews, was achieved after 13 dyads. The study followed the COREQ (Consolidated Criteria for Reporting Qualitative Research) guidelines, and all procedures were approved by the ethics committee. Results: Four main themes and 9 subthemes emerged from the data: (1) children's approaches to acquiring CPR-related knowledge and skills (through school-organized first aid activities, family members, or social media platforms), (2) attitudes toward gamified training kits (children's receptiveness and parental preferences regarding such tools), (3) expectations for gamified CPR training kits (child-friendly design, effective skill training, personalized feedback, and scientifically grounded contents), and (4) challenges in gamified science education (ensuring product safety and professionalism and contextualizing game scenarios to everyday life).	2026	Journal Article	Journal of Public Health and Emergency	基于智能预警的职业人群急性心血管事件应急响应模式与联动机制研究	2025080776
10.2196/88145	Needs, Acceptability, and Functional Requirements of Gamified Cardiopulmonary Resuscitation Training Kits Among Children and Their Parents in China Cross-Sectional Qualitative Study	Background: Out-of-hospital cardiac arrest (OHCA) is a global health issue with low survival rates, for which bystander cardiopulmonary resuscitation (CPR) is crucial. In China, bystander CPR rates and public proficiency remain low. Children – an important future first-responder group – also lack adequate training. Gamification and virtual reality (VR) technologies show potential in enhancing training effectiveness, but research on the needs, acceptability, and functional requirements of gamified CPR training kits from children's and parents' dual perspectives is insufficient, providing a realistic basis for this study. Objective: This study aimed to investigate children's and parents' needs, acceptability, and functional requirements for the development of gamified CPR training kits. Methods: A cross-sectional qualitative design was adopted. Inclusion criteria were children aged 6 to 12 years, their parents, adequate communication skills, and voluntary informed consent, with purposive sampling to recruit 14 parent-child dyads from a primary school in Changsha, Hunan Province. The participants included children aged 6 to 12 years (average age 5.50, SD 1.50 y, 6 boys and 7 girls) and their parents (average age 38.50, SD 2.50 y, 6 female and 7 male individuals). Semistructured interviews were conducted separately for children and parents, with audio recording and verbatim transcription. The Nvivo 12.0 (QSR International Pty Ltd) software was used for thematic coding and analysis, and dual independent coding (by 2 researchers) was performed to ensure rigor, with discrepancies resolved through team discussion. Thematic saturation, defined as a codebook stabilization and no new themes across 3 consecutive interviews, was achieved after 13 dyads. The study followed the COREQ (Consolidated Criteria for Reporting Qualitative Research) guidelines, and all procedures were approved by the ethics committee. Results: Four main themes and 9 subthemes emerged from the data: (1) children's approaches to acquiring CPR-related knowledge and skills (through school-organized first aid activities, family members, or social media platforms), (2) attitudes toward gamified training kits (children's receptiveness and parental preferences regarding such tools), (3) expectations for gamified CPR training kits (child-friendly design, effective skill training, personalized feedback, and scientifically grounded contents), and (4) challenges in gamified science education (ensuring product safety and professionalism and contextualizing game scenarios to everyday life).	2026	Journal Article	JMIR Serious Games	基于智能预警的职业人群急性心血管事件应急响应模式与联动机制研究	2025080776

The funding titled "基于智能预警的职业人群急性心血管事件应急响应模式与联动机制研究" (Emergency Response Model and Linkage Mechanism for Acute Cardiovascular Events in Occupational Populations Based on Intelligent Early Warning) was awarded to SHI Zeya in 2024, and is scheduled to be implemented from 2025 to 2027.

An investigation by the 5GH Team finds that the funding was acknowledged in four articles [1-4] published in 2026, comprising three journal articles and one preprint. However, these studies have weak linkage to the funding. Specifically, studies [3-4] do not focus on occupational populations, and studies [1-2] do not address acute cardiovascular events. Such weak linkage indicates a violation of the provisions of the Administrative Measures for the Management of Project Funds of the Hunan Provincial Natural Science Foundation.

[1] 10.3389/fpubh.2026.1932962

[2] 10.21203/rs.3.rs-10212900/v1

[3] 10.21037/jphe-2026-0033

[4] 10.2196/88145

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