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Safety on Track – Prioritization and Awareness among German Railway Companies

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Rail transport is considered one of the safest modes of transportation, nevertheless, the number of signals passed at danger has been rising throughout Europe in recent years (European Union Agency for Railways [ERA], 2023). To understand such safety-related incidents, it is crucial to consider the cultural context in which employees operate (Schein, 1990).

An organization's safety culture can be described as shared safety-related values, attitudes and behavioral expectations, which are manifested in safety-related behaviors (Cox & Cox, 1991; Bisbey et al., 2019). The encouragement of incident and near miss reporting has been identified as a central aspect of safety culture, providing invaluable insight to companies to prevent future accidents (Reason, 1997).

To strengthen the safety culture and thus safety within the German railway sector, it is essential to understand first how the concept of safety culture and the practice of incident reporting are perceived across railway companies. Thus, this study aims to provide an insight into leaders' and stakeholders' perception of the importance of safety and incident reporting in their own as well as other railway companies.

To this end, a survey was developed to evaluate the perceived safety prioritization and reporting culture of one's own and other companies, as well as individual knowledge about safety culture and the perception of a common understanding of safety culture in the German railway sector. Data was collected at the symposium "Safety Culture Day" in October 2024, hosted by the German National Safety Authority (EBA) and the German Centre for Rail Traffic Research (DZSF). Managers and employees from different rail transport companies and organizations participated in the survey (n = 70). This provides a valuable opportunity to gather insights from experts and stakeholders across the sector who are actively engaged with safety-related topics.

As expected, the findings showed that perceived encouragement to report incidents and near misses was positively related to the perception of a high prioritization of safety in one's own company. This relation was also evident between participants' evaluation of incident reporting and safety prioritization in other railway companies. The evaluation of safety prioritization in participants' own company correlated weakly with their perception of other companies. Open questions regarding challenges and needs revealed insufficient leadership role modeling as a key obstacle to fostering a positive safety culture. More trainings and workshops on safety culture were identified as key drivers for further strengthening a positive organizational safety culture.

The findings support existing research and models, provide valuable insights into the specific challenges and needs of the German railway sector and provide starting points for the development of initiatives to further strengthen the safety culture. This study contributes to the understanding of how safety is prioritized among the German railway sector across various companies. Additionally, it hints to the influence of incident reporting on perceived safety prioritization.