

## Shaping Safer City

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### ABSTRACT

This study examines how governance practices, behavioral factors, and socio-cultural dynamics shape road safety culture in Marawi City. Anchored in the Theory of Planned Behavior (TPB), the research explores how attitudes, subjective norms, and perceived behavioral control influence compliance with traffic regulations in a complex urban context. A qualitative case study design was employed, utilizing in-depth interviews and focus group discussions with key informants from local government units, traffic enforcement agencies, and community leadership sectors. Data triangulation was achieved through document analysis and field narratives.

Findings reveal that road safety culture is not solely dependent on regulatory frameworks but is strongly influenced by community-based education, institutional coordination, and culturally embedded values such as maratabat (honor and dignity). Persistent challenges include weak traffic education, less multi-sectoral participation, cultural sensitivity, and behavioral resistance shaped by socio-cultural norms. The study highlights the importance of continuous capacity-building for traffic enforcers, grassroots-level engagement through barangays, and culturally sensitive policy implementation.

The study concludes that sustainable road safety in Marawi City requires an integrated approach combining governance reform, behavioral change strategies, and culturally responsive interventions. These findings contribute to the growing literature on urban safety governance in developing and post-conflict cities.

**Keywords:** road safety culture, governance practices, traffic management, maratabat, behavioral compliance

### INTRODUCTION

Traffic safety is influenced by a number of factors, including road users, cars, and the physical environment. The road environment and automobiles have surely undergone substantial safety improvements. However, other road users' driving behaviors are important (Elander et al., 1993; Parker et al., 1995). Urban traffic congestion is increasingly recognized as both a mobility challenge and a reflection of governance effectiveness and societal behavior. In developing cities, particularly those undergoing rapid urbanization, traffic systems are shaped not only by infrastructure but also by institutional capacity and prevailing socio-cultural norms. Finding the key factors impacting road users' driving behaviors and attitudes is an important part of traffic accident study (de Oña et al., 2013).

Marawi City faces persistent traffic management challenges due to weak enforcement mechanisms, limited road infrastructure, and complex cultural dynamics. While prior research emphasizes regulatory compliance and engineering solutions, there is limited attention to how local culture interacts with governance to influence road user behavior in post-conflict, culturally diverse urban environments.

Safety culture is defined as the collective values, attitudes, and practices influencing how individuals and organizations prioritize and maintain safety (Wiegmann et al., 2002). Within urban transportation, it

encompasses both formal compliance with traffic regulations and informal behavioral norms, often termed “driving culture” (Lonerio, 1998).

In Marawi City, socio-cultural constructs such as *maratabat* which emphasizes honor and social dignity affect interactions with authority and compliance with rules. The Meranaw concept of “*maratabat*,” which refers to pride, honor, and dignity- according to the study of Galban (2017), every Maranao is motivated to defend every member of their clan, uphold family honor, or shield them from danger, whether physical or mental. While these values foster cohesion, they may also complicate enforcement when regulatory actions are perceived as threats to personal or familial honor. The city is the outcome of interactions between tangible elements (the physical and urban aspect) and immaterial or invisible influences (the social, cultural, and political aspects). According to Al-Khafaji and Al-Ghiyadh (2021), city planning and design contribute to enhancing people's sense of safety, strengthening social ties, and reducing the probability of crime. While *maratabat* is a significant cultural value that preserves identity and respect, but it may also unintentionally fuel opposition to authority and law enforcement. Confrontations, a reluctance to comply, or selective adherence to laws may result from certain road users viewing traffic apprehensions or corrections as challenges to their pride. This dynamic is a problem for traffic management since enforcement actions must cross deeply ingrained cultural sensitivities that influence public behavior and reactions to authority in addition to being technical and legal in character.

This study examine how governance, socio-cultural values, and behavioral intentions collectively shape road safety culture and traffic management outcomes in Marawi City.

## THEORETICAL FRAMEWORK

This study is anchored in the Theory of Planned Behavior (TPB) proposed by Ajzen (1988), which explains how human actions are guided by behavioral intentions. According to the theory, intention is the most immediate predictor of behavior and is influenced by attitudes, subjective norms, and perceived behavioral control. For accurate prediction, the measurement of intention must correspond closely with the specific behavior being examined (Ajzen & Fishbein, 1977).

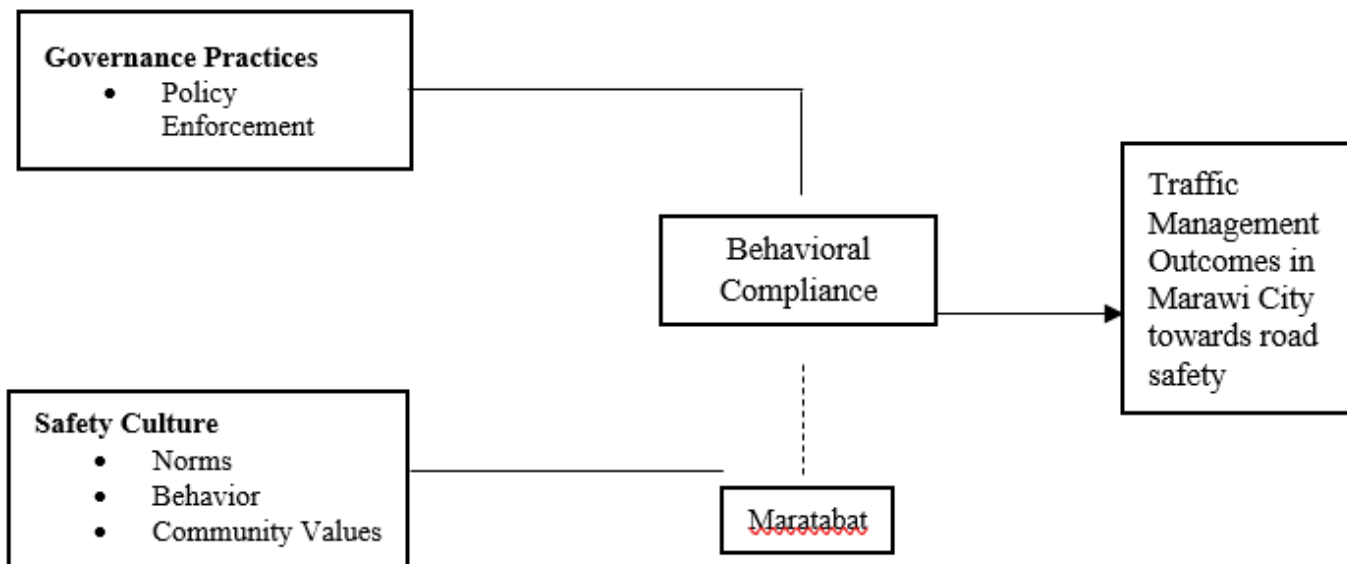
The TPB evolved from the Theory of Reasoned Action (Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1980) to address behaviors that are not entirely under voluntary control. By incorporating perceived behavioral control, the model accounts for external constraints that may affect an individual’s ability to perform a given behavior. In the context of traffic management, this is particularly relevant, as compliance with traffic laws is influenced not only by personal attitudes but also by environmental and institutional factors.

Intentions are understood as indicators of an individual’s readiness to perform a behavior, reflecting the level of effort one is willing to exert. Stronger intentions generally increase the likelihood of actual behavior. However, scholars have noted limitations of the TPB, particularly its emphasis on rational decision-making while overlooking emotional and habitual influences (Sniehotta et al., 2014). Emotions such as anticipated regret or pride can significantly affect behavioral choices, motivating individuals either to comply with or deviate from expected norms (Baumeister et al., 2007; O’Keefe, Year).

In the context of this study, the TPB provides a useful framework for understanding how attitudes, social norms, and perceived control influence road user behavior in Marawi City. It helps explain how governance practices and safety culture interact to shape compliance with traffic regulations and, ultimately, the effectiveness of traffic management strategies.

The framework for this study also integrates socio-cultural factors such as *maratabat*, recognizing that cultural norms and emotional responses may influence behavioral intentions beyond rational decision-making.

## CONCEPTUAL FRAMEWORK



This study establishes a dynamic relationship between governance, culture, behavior, and traffic outcomes in Marawi City, emphasizing that road safety is not solely a technical issue but a socio-cultural and governance-driven phenomenon.

At the core of the framework are governance practices, particularly policy enforcement, which serve as the primary driving force influencing traffic management outcomes. Effective enforcement of traffic laws, regulations, and ordinances creates a structured environment where compliance is expected and violations are minimized. However, enforcement alone is insufficient without considering the socio-cultural context in which these policies operate.

This leads to the role of safety culture, which encompasses norms, behavior, community values, and *maratabat* a culturally embedded concept referring to honor, pride, and social dignity among the Maranao people. Safety culture acts as a mediating variable, translating governance efforts into socially accepted practices. For instance, when traffic rules align with community values and respect *maratabat*, individuals are more likely to internalize and voluntarily adhere to them. Conversely, if enforcement is perceived as inconsistent or culturally insensitive, it may lead to resistance or non-compliance.

The interaction between governance practices and safety culture shapes behavioral compliance, which represents the observable actions of road users, such as obeying traffic rules, respecting road signs, and cooperating with authorities. Behavioral compliance is a critical proximal outcome, as it directly reflects whether policies and cultural influences successfully influence individual conduct.

Ultimately, behavioral compliance leads to improved traffic management outcomes toward road safety. These outcomes include reduced traffic violations, fewer road accidents, smoother traffic flow, and enhanced public trust in governance systems. In this framework, traffic management outcomes serve as the dependent variable, representing the culmination of effective governance and culturally grounded behavioral change.

## MATERIALS AND METHODS

The qualitative method more especially, the case study design is used in this investigation. The respondents were chosen using nonprobability sampling. Data was gathered using key informant interviews and an unobtrusive research strategy. To guarantee the validity of the research, triangulation was used. In order to collect data from public documents, laws, communications, newspapers, promotional videos, and photographs, a non-intrusive research method called content analysis was also used in conjunction with multiple data triangulation. The respondents are approached by the researchers and asked to sign an informed consent form attesting to their willingness to participate in the interview. Focus groups and in-depth interviews were used in this study. This

design enables an in-depth understanding of governance, behavior, and socio-cultural influences within a specific urban context.

## Respondents and Sampling

The study employed a purposive sampling approach to select key informants who possess direct experience and involvement in traffic management and urban governance. Participants included are the major implementers from the Marawi City Traffic Management Group such as the government officials from different sectors, the patrol highway officer, traffic enforcer, city planning official, city engineering official, and consultant of the mayor's office. The respondents were chosen from using purposeful sampling. a total of ten (10) respondents involved in this study. Data collection was carried out using qualitative methods, namely in-depth interviews, focus group discussions, and document analysis of relevant local ordinances, policy reports, and media sources. Ethical standards were strictly observed throughout the research process, particularly in securing informed consent and ensuring the confidentiality of participants. Collected data, including interview transcripts, focus group discussion notes, and documentary materials, were analyzed using thematic analysis. To enhance the credibility and trustworthiness of the findings, triangulation across various data sources was conducted. Emerging themes were then systematically organized into key categories, including governance practices, behavioral factors, and socio-cultural influences related to road safety.

## RESULTS AND DISCUSSIONS

This section presents the key findings of the study, organized into major themes that influence urban traffic management and road safety in Marawi City. Drawing from the perspectives of key informants, the results highlight critical issues related to weak traffic education and public awareness, limited multi-sectoral participation, cultural sensitivity, behavioral non-compliance, and socio-cultural influences such as *maratabat*. These interconnected factors provide a comprehensive understanding of the challenges affecting traffic systems in the city. The subsequent discussion contextualizes these findings, emphasizing the interplay between governance practices, behavioral patterns, and cultural values in shaping traffic management outcomes and overall road safety. The following are cultural influences that affect traffic management:

**Weak Traffic Education and Public Awareness.** One of the respondents consistently highlighted insufficient and inconsistent training programs for traffic enforcers and the general public. Continuous education campaigns were deemed essential to enhance compliance and traffic knowledge at both community and city levels. Many of the drivers also in Marawi City are lack of traffic education and awareness. In the study of Kum and Chung (2014), before operating a commercial vehicle, a minimum of 20 hours of safety training must be completed. The main teaching content is on traffic safety, pertinent laws, and how to use emergency equipment. Since 2001, when the Ministry of Land, Infrastructure, and Transport decided that it would be appropriate to enhance managerial comprehension and knowledge of safety in order to prevent traffic safety accidents related to commercial vehicles, safety education for top managers has also been implemented.

**The Multi-Sectoral Participation** which requires collaboration among Local Government Unit (LGUs), barangays, the Department of Public Works and Highways (DPWH), and the Land Transportation Office (LTO) are essential to ensures that policies are not only enacted but also supported at the grassroots level. One of the respondents, a city engineer, emphasized that despite the government's efforts to install traffic signage's and enforce restrictions on drivers and vendors from occupying prohibited areas, violations continue to persist among the public. This finding is supported to the study of Bello and Opene (2012) that given the government's limited resources, the risks of traffic accidents cannot be completely eliminated by enforcing traffic laws. The only practical and long-term approach to creating a society that prioritizes safety is through a public partnership model.

**Cultural sensitivity**, particularly regarding *maratabat*, is critical; enforcement strategies that disregard local values risk community resistance. Moreover, the Local Government Unit faces additional challenges in enforcing traffic rules due to deeply rooted socio-cultural factors, particularly the Meranaw concept of "maratabat," which refers to pride, honor, and dignity. This *maratabat* according to the study of Galban (2017), every Maranao is motivated to defend very member of their clan, uphold family honor, or shield them from

danger, whether physical or mental. According to a patrol highway respondent, some road users’ exhibit resistance to traffic enforcement, including threatening traffic enforcers or invoking family names associated with royal lineage, prominent clans, or political influence to evade accountability. These findings conform to the study of Cooper (2002) that in actuality, creating a safety culture requires purposefully altering a number of organizational traits in order to impact safety (e.g., performing risk assessment). Such manipulations must be goal-directed just by virtue of the conduct. This perspective is supported by looking at the particular goals of safety culture.

**Behavioral Non-Compliance.** Disregard for traffic regulations, illegal parking, and defiance of authority were commonly reported. These behaviors reflect both individual risk-taking and broader cultural attitudes. Behavioral interventions addressing discipline and responsibility can complement infrastructural and regulatory measures. According to one of the respondents, some drivers are overtaking on a road that is already narrow, even when there is heavy traffic; some motorcycle riders are not loading and unloading passengers in the correct area; and other drivers are also breaking the overloading policy. This information is consistent with a study by Jeepara et al. (2011), which found that driving-related behavior (drinking and driving, speeding, and breaking traffic laws) and impaired skills (lack of focus, fatigue, and physical disabilities) are the primary human factors that contribute to traffic accidents. Behavioral interventions addressing discipline and responsibility can complement infrastructural and regulatory measures.

The **thematic analysis** of the study revealed several interconnected issues that still impede efficient traffic control and road safety results. These difficulties have profound roots in social and behavioral dynamics in addition to being institutional. Weak traffic education and public awareness, low multi-sectoral participation, problems with cultural sensitivity, and chronic behavioral non-compliance among road users are some of the major themes that surfaced. In order to improve traffic governance and compliance, these elements collectively point to the need for a more comprehensive and integrated strategy that incorporates stakeholder collaboration, policy enforcement, culturally sensitive tactics, and ongoing public education.

Theme	Sub Theme Focus	Key Insights from Respondents
Weak Traffic Education and Public Awareness	Training and Knowledge Gaps	Insufficient and inconsistent training for traffic enforcers and the public; lack of continuous education campaigns reduces compliance and understanding of traffic rules.
	Community and City Awareness	Ongoing public awareness initiatives are needed to enhance knowledge at both local and city-wide levels.
Multi-Sectoral Participation	Institutional Collaboration	Effective traffic management depends on coordination among LGU’s, barangays, DPWH, and LTO, enforcement alone is insufficient.
	Coordinated Strategies	Success requires joint planning, monitoring, and resource sharing across agencies.
Socio-Cultural Influences	Cultural Norms and Values	Concepts like <i>maratabat</i> influence compliance; protecting personal or family honor may lead to resistance to regulations.
	Social Cohesion vs Regulation	While cultural norms foster community dignity, they can conflict with enforcement measures.
Behavioral Non-Compliance	Rules Violations	Common behaviors include illegal parking, disregard for traffic rules, and defiance of authority.
	Individual & Cultural Risk Taking	Non-compliance reflects both personal risk-taking and societal tolerance for bending rules.

## CONCLUSION

Sustainable road safety in Marawi City requires a holistic approach integrating governance, behavior, and socio-cultural awareness. While regulations and infrastructure are essential, behavioral interventions and culturally informed policies are critical to fostering a robust safety culture to achieve safer city. This study contributes to the literature by highlighting the interplay of governance and culture in shaping urban road safety in a post-conflict, culturally distinct city.

## RECOMMENDATIONS

1. Drivers must strictly adhere to traffic laws, practice road courtesy, and prioritize safety over convenience. Participation in traffic education seminars, respect for traffic enforcers, and compliance with parking, speed, and right-of-way rules are critical in reducing accidents and congestion.
2. Residents are urged to actively participate in traffic discipline and community-based traffic management efforts. This includes respecting traffic rules, avoiding illegal parking, reporting violations, supporting barangay-level initiatives, and cooperating with traffic enforcers. A culture of shared responsibility is essential to improve safety, reduce congestion, and enhance the quality of urban life.
3. The Marawi City government should adopt an integrated and regional approach to traffic management by strengthening coordination with the provincial government and neighboring local government units. This approach will ensure coherence in road network operations, traffic enforcement, and infrastructure development beyond administrative boundaries.
4. Integrate cultural sensitivity into policy enforcement, considering values such as *maratabat*. Enforce traffic regulations consistently, particularly regarding underage driving and illegal vehicles and Promote behavioral change initiatives targeting discipline, responsibility, and respect for traffic laws.
5. Mechanisms to protect traffic personnel from intimidation and harassment should be enforced, alongside performance monitoring and accountability systems. This is support likewise under Marawi City Ordinance No. 21-01 series of 2024, Section 9, that the City Government in coordination with the Land Transportation Office (LTO) shall hire any train city traffic enforcers and deputize MCIPT Personnel and other qualified city employees.
6. The City Government is strongly urged to prioritized traffic management as a core urban governance issue by ensuring sustained political commitment and strict policy enforcement. There must be a clear shift from short-term, reactive measures to a long-term, comprehensive traffic management framework that integrates enforcement, education, and community participation.

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