



Exploring the Influence of Transport Accessibility on Safety Dynamics in Informal Urban Communities



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- Transport-related issues intensify **safety** perceptions, **health** outcomes, and **accessibility** experiences
- **Disparities in urban mobility** regarding safety, inclusivity, and affordability remain underexplored
- **Informal Urban Communities (IUCs): 72%** of the urban population lives in IUCs in Sub-Saharan Africa (SSA)
- Most impacted by **unequal** accessibility and safety
- Limited **facilities & limited capacity**



- Examines strategies to enhance transport-related **safety** and **accessibility** in IUCs in Kumasi-Ghana and Dar es Salaam (DAR)-Tanzania



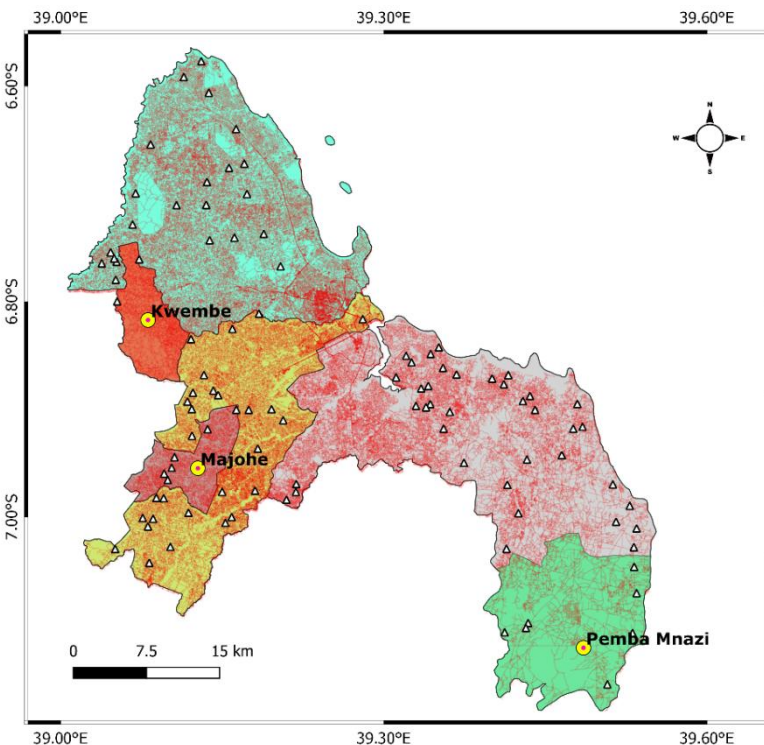
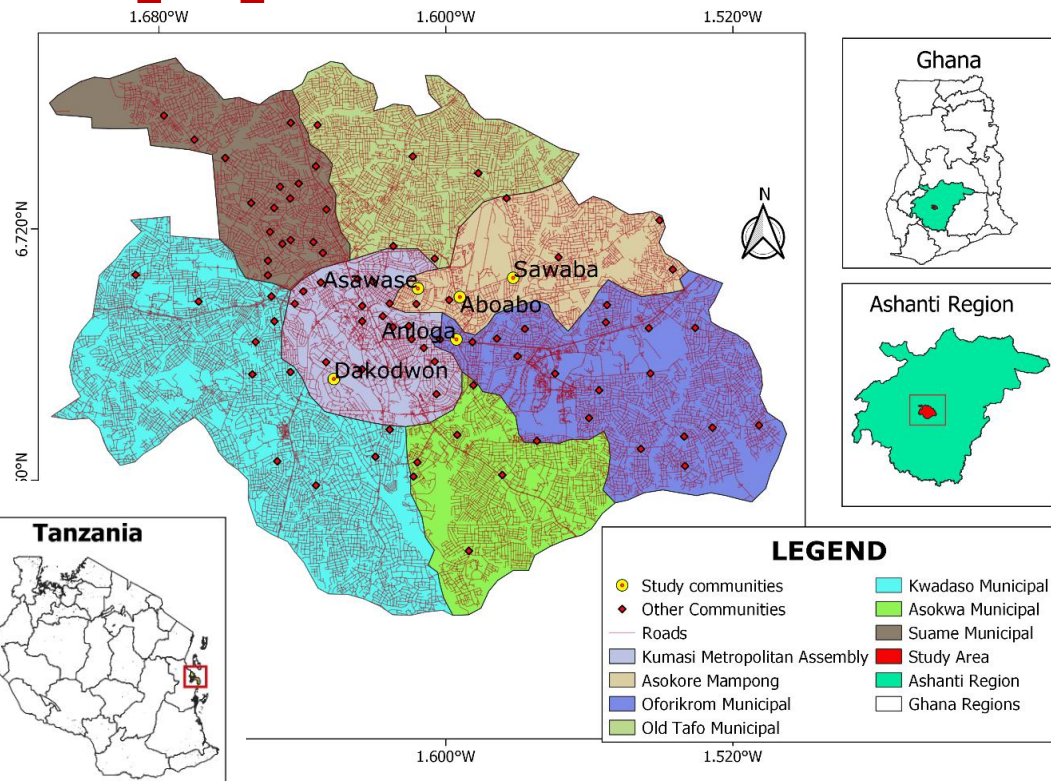
- Key interlinked **conceptual frameworks**:
 - social equity, mobility justice, public health and transport safety, urban transport informality

Study Approach



Kumasi

Sample size - 600



Dar es Salaam
Sample size - 1189

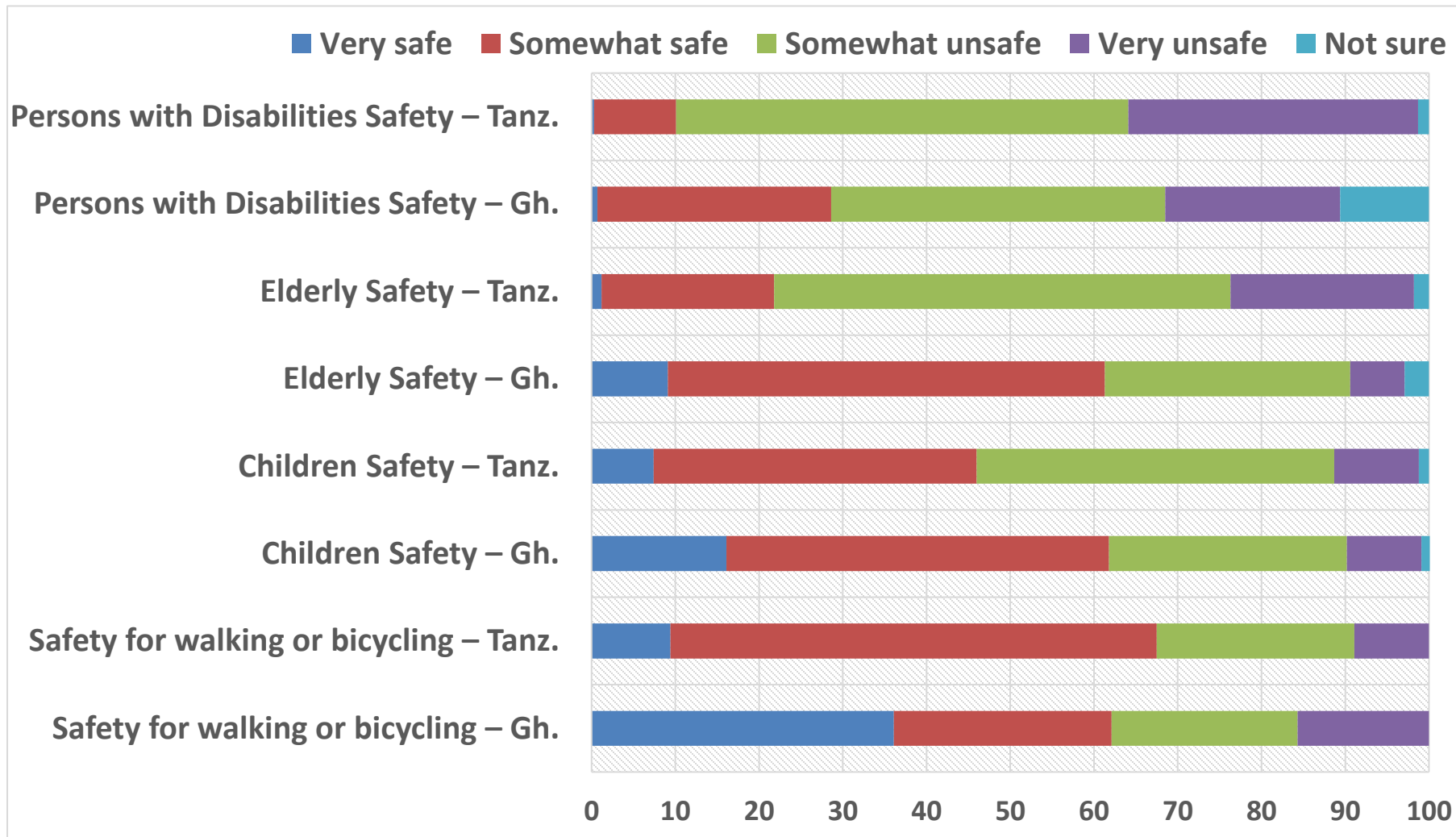
- Demographics, community traits, transport services traits, transport safety-related traits, and travel to workplace
- **Perceived Accessibility Scale (PAC):** Ease of Access, Comfort, Success, & Satisfaction

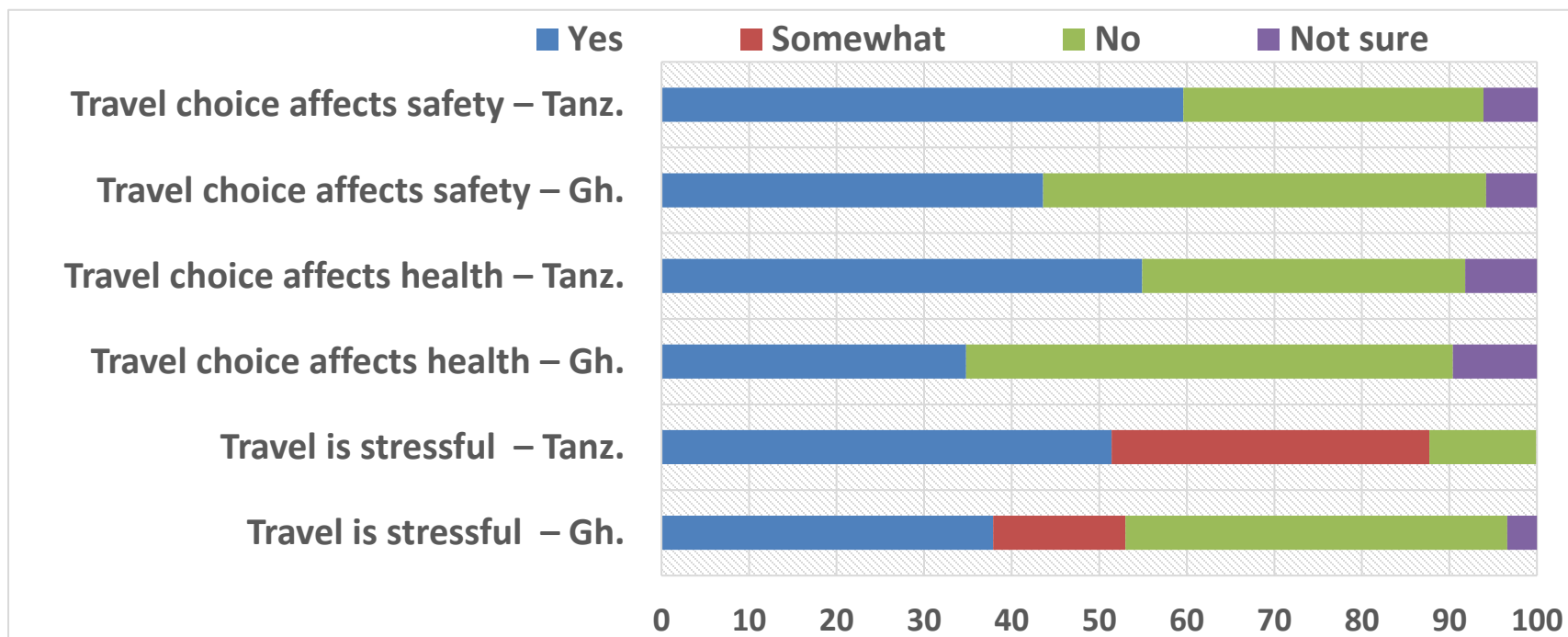
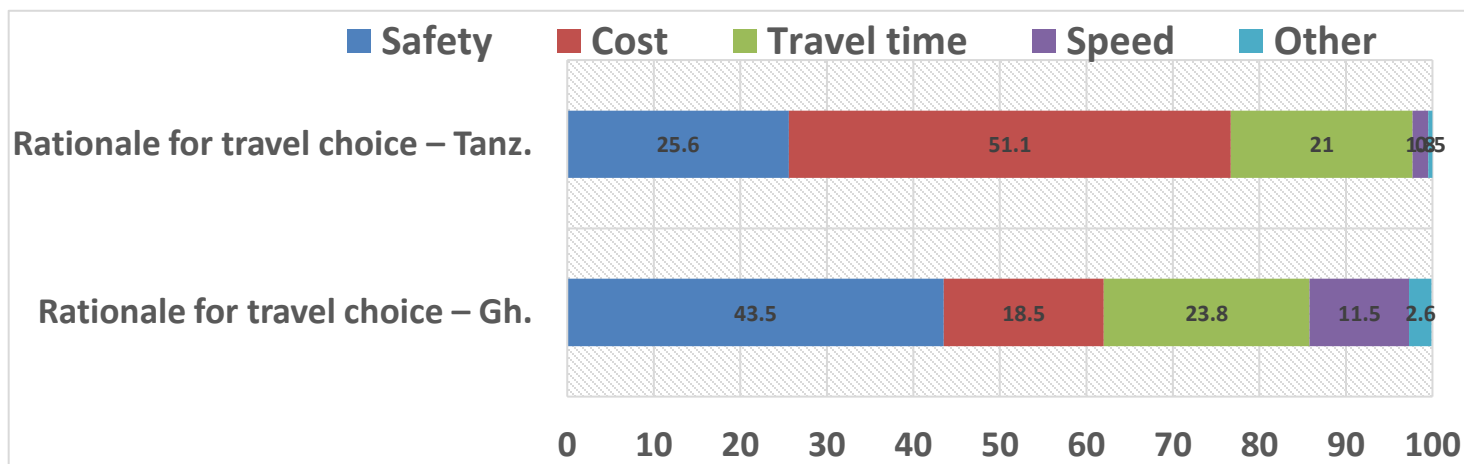


Transport safety-related variables:

- **Community transport-related safety:** perception of walking or using a bicycle
- **Inclusivity of transport-related safety:** safety perception of access for children, the elderly, and persons with disabilities
- **Health & safety of travel:** perceptions of travel-related stress, and the extent to which travel affects their health & safety

Perceptions of community safety





Safety perception of community walking or bicycling

Kumasi-Ghana	closeness of buildings; walking access to major roads; frequency of walking or using bicycle; likelihood of walking or using bicycle; community safety for children; community safety for the elderly; community safety for persons with disabilities; preferred automobile; level of local traffic; community affect travel; travel choice affects income; travel choice affects health; extent travel affects health; and travel affordability
DAR-Tanzania	education; monthly income; travel cost; ease of access; travel success; travel satisfaction; community planning; closeness of buildings; walking access to major roads; frequency of walking or using bicycle; rationale for walking or using bicycle; community safety for children; community safety for the elderly; community safety for persons with disabilities; preferred automobile; level of local traffic; rationale for travel choice; travel is stressful; community travel is inclusive; travel choice affects income; travel choice affects your health; travel choice affects safety; extent travel choice affects safety; and travel affordability

Perception of travel choice on safety

Kumasi-Ghana	travel frequency; ease of travel; travel comfort; travel success; travel satisfaction; road condition; closeness of buildings ; travel is stressful; community affects travel; travel choice affects income; travel choice affects health; extent travel choice affects health; extent travel choice affects safety; and travel affordability
DAR-Tanzania	gender; monthly income; travel time; travel cost; ease of travel; travel comfort; travel success; travel satisfaction ; road condition; closeness of buildings; walking access to major roads; frequency of walking or using bicycle; safety of walking or using a bicycle; likelihood of walking or using a bicycle; community safety for children; community safety for the elderly; community safety for persons with disabilities ; level of local traffic; travel is stressful; community affects travel; community travel is inclusive; travel choice affects income; travel choice affects health; extent travel choice affects health; and extent travel choice affects safety

Perception of travel choice on health

Kumasi-Ghana	gender; ease of access; travel comfort; travel success; travel satisfaction; road condition; community safety for walking or using bicycle; travel is stressful; community affects travel; extent travel choice affects health; and travel choice affects safety
DAR-Tanzania	education; monthly income; travel time; travel cost; ease of access; travel comfort; travel success; travel satisfaction; walking access to major roads; frequency of walking or using bicycle; community safety for walking or using bicycle; likelihood of walking or using a bicycle; community safety for children; community safety for the elderly; community safety for persons with disabilities; level of local traffic; rationale for travel choice; travel is stressful; community affects travel; community travel is inclusive; travel choice affects income; extent travel choice affects health; travel choice affects safety; and extent travel choice affects safety

- Kumasi-Ghana: stronger **safety perceptions**
- DAR-Tanzania: **accessibility issues**, travel cost, travel stress
- **Policy:** targeted mobility infrastructure investments [roads, pedestrian and cycling], inclusive transport design, and affordability measures
- **Action:** integrate health-conscious mobility strategies, e.g., air quality improvements and active transport promotion



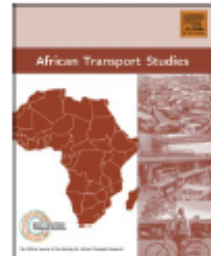


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Transport-related health, safety and accessibility in sub-Saharan Africa: Comparative insights from Kumasi-Ghana and Dar es Salaam-Tanzania

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