

Cycling & Staying on Track: An Evaluation of Toronto's Cycling Initiatives through a Social Practice Theory

Jeanny Do | MSc, Sustainability Management | SSM1100
 Supervised by Dr. John Robinson



Introduction

- Buildings and transportation sector are the largest contributors of GHG emissions in the City of Toronto, at 57% and 36%, respectively. Of transportation emissions, 73% of emissions come from use of personal vehicles (City of Toronto, 2021), triggering the need to reduce their usage as much as possible
- City of Toronto released its climate action strategy, TransformTO, setting low-carbon goals & net-zero strategies to reduce local GHG emissions & improve the City's health, grow the economy & improve social equity
- One TransformTO goal is to have "75% of school / work trips under 5 km be walked, biked or by transit by 2030"
- Across Canada cycling rates have been steadily increasing in the last two decades as cycling becomes more popular & widely accepted as a sustainable mode of transportation (Verlinden et al., 2019; Pucher et al., 2011)
- Research uses a qualitative approach & draws upon social practice theory to explore Toronto's cycling initiatives to evaluate how they increase cycling rates

Results and Discussion

Materials



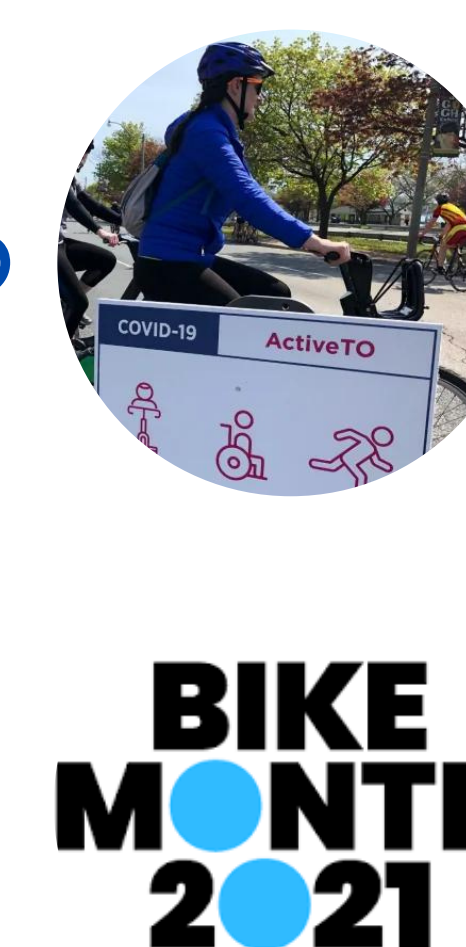
- Cycling Network Plan (CNP) serves as comprehensive roadmap & work plan of the City's planned infrastructure investments & developments
- As of January 2022, 367 km of on-street bike lanes & 386 km of off-road trails available throughout the City
- BikeShare Toronto provides 24/7 temporary access to bicycles & e-bikes (6,850 bikes at 625 stations)
- Limited information on parking facilities, bike repair shops, public transit integration

Competences

- City's website provides cycling tips & guides, covering topics on safety, riding around streetcars, riding in different seasons & weather, cycling related by-laws & more
- Offers free cycling handbooks in 14 different languages in print & digital format
- StreetSmartsTO helps support the City's growing community of cyclist (i.e., running workshops, producing training videos)
- Limited information on participation & engagement with workshops or educational materials



Meanings



- City's partnership with Cycle Toronto helps support community-based programs & events on regular basis
- ActiveTO allowed community-wide engagement in cycling as it closed major roads to vehicles
- 10+ cycling advocacy organizations & clubs helping sustain cycling culture
- City regularly holds public consultation session & welcomes feedback regarding plans around new cycling infrastructure & design

Research Objectives

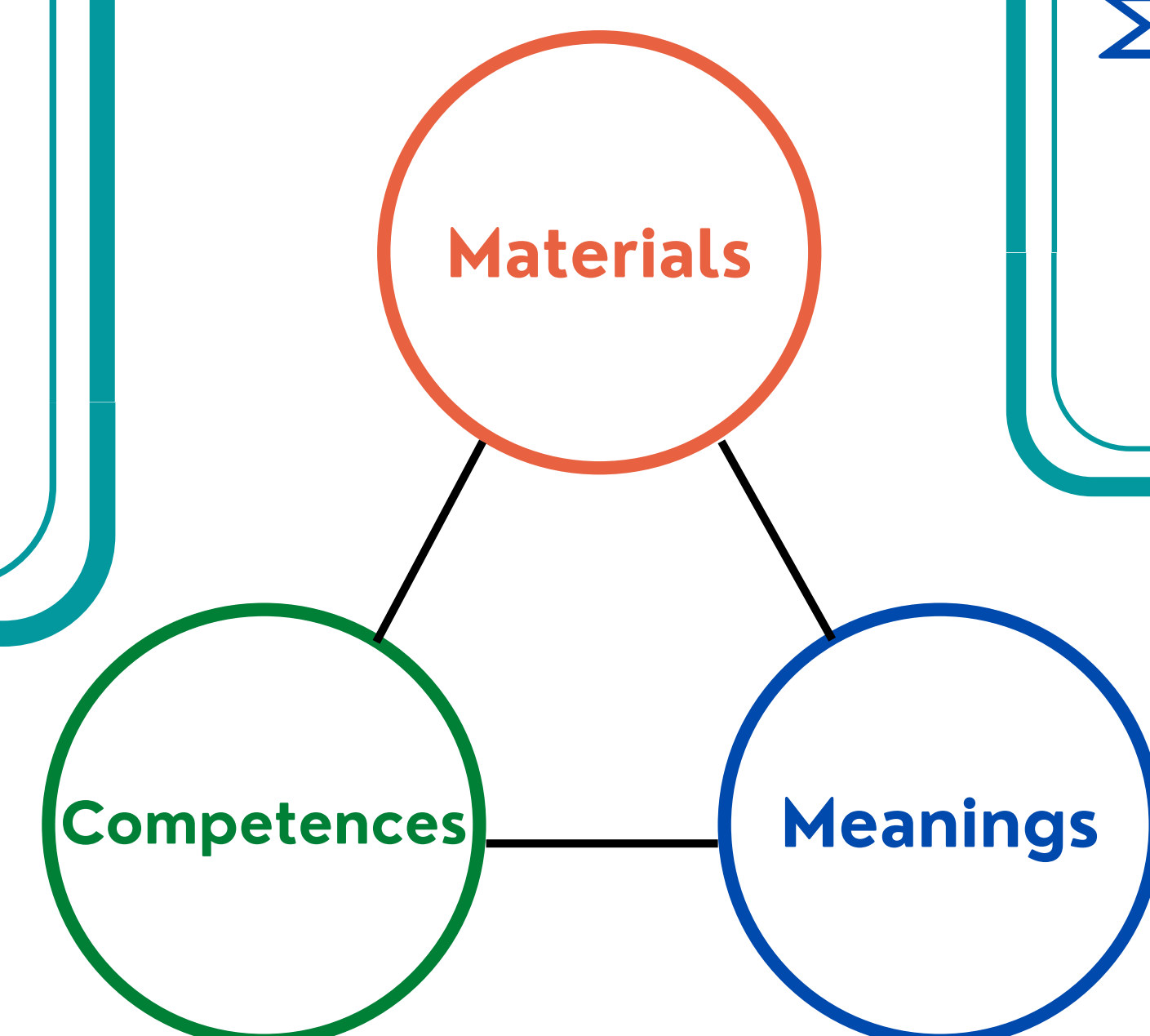
- Examine whether existing cycling initiatives are sufficient enough for Toronto to reach TransformTO goal by 2030
- Evaluate Toronto's cycling initiatives through social practice theory framework to understand ways cycling as a normalized social behaviour could be induced
- Provide overall judgements on current efforts & areas to focus on (if any)

Conclusions

- Toronto's set of holistic cycling initiatives & programs aligns with social practice theory elements needed to foster behavioural changes that would normalize cycling as an everyday mode of transport, & steadily increase cycling rates
- Toronto could focus on rapidly developing other cycling infrastructures (i.e., parking facilities, repair shops) and increasing greater participation & engagement in cycling education to meet ambitious TransformTO goal by 2030

Social Practice Theory

- Social practice theory seeks to understand a practice through examining the surrounding social context and conventions embedded in the practice
- Concerned with the tangible & intangible factors that compel or rejects participation in a practice, made up of interdependent & dynamic relations between 'materials', 'competences' & 'meanings' (Shove et al., 2012)
- 'Materials' could entail physical objects, infrastructure, tools, hardware, physical resources
- 'Competences' refers to skills, technique, know-how, knowledge
- 'Meanings' entails values, ideas, aspirations, sociocultural significance
- The 3 elements have to be routinely, consistently & actively engaged with to normalize & sustain a social behaviour



Recommendations

Materials

- Invest in Scarborough: maintains characteristics & qualities that could allow cycling to thrive with proper investments & promotion (Sorensen et al., 2021)
- Create more & make secured parking facilities widely available throughout the city (i.e., at schools, work places, retail areas, transit hubs)

Competences

- Incorporate mandatory cycling education & training within educational systems & licensing processes (i.e., Drivers's License)

Meanings

- Promote the associated net benefits of a robust cycling economy to local businesses and residents through advocacy groups (Arancibia, 2013; Ledsham & Savan, 2017)
- Develop financial incentives to encourage cycling while minimizing barriers to access

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