Promoting customer advocacy in the ride-hailing sector: 
A generational cohort perspective

Background: Growth in the ride-hailing sector has contributed to intense competition among Transportation Network Companies (TNCs), with many new platforms entering the market and TNC brands aiming to achieve market dominance. In this turbulent business environment, advocacy presents a viable tool for attracting customers and maintaining market share.

Aim: This research provides insight into the interrelationships between affective commitment, service quality, and perceived justice, their influence on advocacy in the ride-hailing sector, and the extent to which two viable generational cohorts (baby boomers and Generation Y), guided by different life perspectives, moderate the magnitude of the relationships established.

Setting: A self-administered survey was conducted among ride-hailing customers of a specific TNC brand in South Africa.

Method: The survey included previously validated measurement scales to assess the constructs of the study. The final sample comprised 150 baby boomers and 309 Generation Y individuals. Data analysis included multi-group structural equation modelling, bootstrapping, and the Wald test.

Results: Affective commitment positively influences perceived justice and service quality, with customer advocacy intention as the end result. Generational cohorts moderated most of the direct effects and the indirect effect between perceived justice and customer advocacy intention through service quality.

Conclusion: Overall, the study contributes to the conversation regarding affective states influencing cognition and provides a fresh perspective on the affect-cognition-behaviour relationship in a ride-hailing service context.

Introduction and background

The days of the sharing economy being considered a niche market have long passed, as the sharing economy has become a profitable and budding market, attracting large investments and a multitude of customers (Mühlmann 2015:193). Since their rapid growth in popularity following the 2008 financial crisis (Kuswanto et al. 2020:76), the sharing economy and platform business models have become part of many consumers’ daily existence in terms of accommodation-, entertainment- and transportation-related services (Lee et al. 2018:829; Wang et al. 2022:197). Of particular interest to this study are Transportation Network Companies (TNCs) and their ride-hailing platform business models. Typically, TNCs use smartphone application platforms to link drivers and customers requiring ride-hailing services. Drivers (fellow community members) cooperating with TNCs transfer customers (service recipients), using their own cars, receive payment by card or in cash, as is the case in some developing countries (Wadud 2020).

The long-term survival of TNC brands is important. In addition to stimulating economic development (Gao, Wang & Yao 2022), these companies may contribute to reducing road traffic and subsequently car pollution (Wang et al. 2022:198). Customers sharing rides may also benefit from greater flexibility, compared to public alternatives (Guan et al. 2022), and save on travel expenses. Nevertheless, in recent years, growth in the ride-hailing sector has contributed to intense competition among TNCs, with many new platforms entering the market and TNC
brands aiming to achieve market dominance (Guo, Li & Zeng 2019:1044). Moreover, switching between ride-hailing companies does not require much effort, which poses a threat to the sustainability of TNC brands (Cohen, Fiszer & Kim 2021:2432).

In this turbulent business environment, advocacy presents a viable tool for attracting customers and maintaining market share. Advocacy behaviours are perceived by customers as more credible than commercial media, may enhance a firm’s reputation, and contribute to growth in market share (Iyer, Yazdanparast & Strutton 2017:647; Yi & Gong 2013:1280). Therefore, customers viewing the TNC brand positively, sharing their thoughts with other customers (fellow service recipients), and recommending the service of the TNC brand to them, may contribute to more customers hailing rides from the TNC brand and remaining loyal to it.

Of further interest is that particularly strong support has been found for the notion that customers experiencing service quality and relationship quality benefits, such as affective commitment, may be motivated to engage in favourable advocacy behaviours (Ahmadi 2019:51; Bendapudi & Berry 1997; De Matos & Rossi 2008:581; Nguyen-Phuoc et al. 2020:96; Ok et al. 2020:132; Yavas, Benkenstein & Stuhldreier 2004:144–145). Recent research in the ride-hailing industry has further elucidated the matter by indicating that affective commitment towards the TNC brand may influence advocacy behaviours, but is more likely to be fully mediated by service quality in a ride-hailing context. The authors claimed that, supported by the defensive motivation theory (Chen, Duckworth & Chaiken 1999), ride-hailing customers’ strong emotional bonds with the TNC brand may favourably affect their judgements of the service provided, which could stimulate further advocacy behaviours (Van Tonder & Petzer 2021).

The perspective of affective states influencing cognition also seems to be acknowledged within the broader research domain. For example, according to Kühn and Petzer (2018:262), the ‘affect-cognition link’ denotes a relationship between customers’ affective states and the assessment of their surroundings. Clore and Schnall (2005:439) affirmed that affective states may impact attitude formation. Additionally, in her widely cited experimental research, Edwards (1990:203) acknowledged the possibility that cognition may follow affect. However, still absent from the affect-cognition-behaviour relationship identified in the ride-hailing service context, is an understanding of the role of customers’ perceptions of perceived service justice received. Along with investigations of service quality, it seems necessary to account for the influencing effect of customers’ perceived justice (service fairness) experienced from the TNC brand. Fundamentally, customers are keen on not only favourable, but also equitable treatment from their providers (Chen et al. 2012:400). Subsequently, their reactions to services are dependent on judgements of both service quality (favourableness) and perceived justice experienced (Carr 2007:108). Previous research further denotes that perceived justice may positively influence customer satisfaction levels and behavioural intentions of loyalty towards the service provider, such as advocacy (Carr 2007:115; Chi, Wen & Ouyang 2020:1029) and service quality (Kwortnik & Han 2011). Moreover, considering the premises of the defensive motivation theory (Chen et al. 1999) and other scholarly findings in the field (Clore & Schnall 2005:439; Edwards 1990:203; Kühn & Petzer 2018:262; Van Tonder & Petzer 2021), it is plausible that perceived justice experienced may similarly be influenced by customers’ strong emotional bonds with the TNC brand.

A further related concern is the extent to which the potential interplay between affective commitment, service quality, and perceived justice motivates the baby boomer (born between 1943 and 1970) and the Generation Y (born between 1980 and 2000) cohorts to become involved in the promotional activities of TNC brands in the sharing economy. These cohorts were significant to this study, given that they appeared to have a vested interest in ride-hailing services. Ride-hailing services are beneficial to older adults who cannot drive anymore and may not want to rely on friends and family for transportation. It has also been noted that Generation Y consumers are less inclined to travel by private car and are open to alternative modes of transport, including ride-hailing services (Alemi et al. 2018:49, 60; Gurau 2012:103; Hole, Zhong & Schwartz 2010:88; Mitra, Bae & Ritchie 2019:700; Winter et al. 2020:5). However, the likelihood of the two cohorts to perform the role of a ‘marketing agent’ and advocate on behalf of the TNC brand, and the extent to which their emotions and service perceptions may stimulate these behaviours, is still poorly understood. Extant literature denotes that older customers may be more easily satisfied and more faithful towards their service provider (Trabelsi-Zoghlami, Berriaes & Yahia 2020:1642). Generation Y consumers seem to be more doubtful, expecting high levels of service (Kueh & Voon 2007:656; Valentine & Powers 2013:598). Further investigation of the above matters would allow for greater understanding of the interrelationships between affective commitment, service quality, and perceived justice influencing advocacy behaviours of valuable baby boomers and Generation Y cohorts, and thus the extent to which they may act as marketing agents for the TNC brand.

Against this background, the objective of the current research was to explore the relationships between affective commitment, service quality, and perceived justice, their influence on customer advocacy intentions, and the extent to which the generational cohorts (i.e. baby boomers and Generation Y) moderate the magnitude of the relationships established. Subsequently, this research makes three important contributions to marketing and quality literature. Firstly, the study contributes to the conversation regarding affective states influencing cognition (perceived justice and service quality) and provides a fresh perspective of the affect-cognition-behaviour relationship within a ride-hailing service context. Secondly, the study advances knowledge of
customer advocacy in relation to TNC brands. The proposed model provides a more comprehensive perspective of the extent to which customers’ overall service perceptions, as balanced by service quality and perceived justice, may impact advocacy in the sharing economy, as well as the mediating role that service quality and the moderating role that generational cohorts may play in influencing these behaviours. Third, the proposed model paves the way for further research on generational cohorts’ potential to perform a ‘marketing agent’ role in the sharing economy and to aid TNC brands in managing a competitive advantage amidst fierce competition.

A theoretical framework is presented next, providing more insight into perceived justice, affective commitment, service quality, and customer advocacy, as well as the theories grounding these constructs. Moreover, the hypotheses of the study are formulated for empirical testing. Subsequent to an outline of the research methodology, the research findings are addressed. Thereafter, theoretical and practical implications are highlighted and guidelines are provided for further research on this topic.

**Theoretical framework**

**Customer citizenship and advocacy behaviour**

Advocacy is perceived as a symbol of customer loyalty and a dimension of customer citizenship behaviour that is rooted in the social exchange theory (Yi & Gong 2013:1280). The principles of customer citizenship behaviour evolved from the theory of organisational citizenship behaviour (Choi & Lotz 2016:540; Fowler 2013:1–2). It is argued that customers could, similarly to full-time employees of a firm, voluntarily engage in citizenship behaviours that may benefit the firm to reciprocate the favourable treatment received (Blau 1964; Deckop, Cirka & Andersson 2003:104; Fowler 2013:1, 5; Kim & Choi 2016:387). Multiple studies have been undertaken to understand the factors that influence customers’ citizenship behaviours (Gong & Yi 2021:173–175). Moreover, several dimensions of customer citizenship behaviours have been previously identified that may benefit the firm, including customers helping other customers, customers giving feedback to the firm, and advocacy behaviours (Yi & Gong 2013).

Advocacy is perceived as the positive references that customers provide about service providers (Fullerton 2003:339). Customers engage in advocacy voluntarily and out of obligation to be good to the firm that benefitted them (Blau 1964; Kim & Choi 2016:387). Advocacy could assist in promoting the service provider to the advocating customer’s friends, family, and other contacts, including social media contacts (Arguello, Monferrer Tirado & Estrada Guillén 2020:192). In a sharing economy context, advocacy behaviours additionally involve customers writing positive online reviews about the service provider on independent websites (Zhang 2019:657). In this study, customer advocacy intention was considered (and measured) as the extent to which customers would speak positive words about the TNC brand and recommend it to fellow customers (Yi & Gong 2013).

**Service perceptions**

As noted earlier, customers’ reactions to services are dependent on judgements of both service quality, as well as perceived justice experienced.

**Service quality**

Service quality is grounded in services marketing (Fullerton 2005:1373) and is well-studied across various contexts (Izogo & Ogba 2015; Lepmets et al. 2012; Narteh 2018; Sadeh 2017). Previous research has provided extensive insight into dimensions of service quality (Izogo 2017:21).

The most ground-breaking research was presented by Parasuraman, Zeithaml and Berry (1988:16), who defined perceived service quality as ‘a global judgment, or attitude, relating to the superiority of the service’. Five dimensions were proposed for assessing service quality: reliability, assurance, tangibles, empathy, and responsiveness (Izogo 2017:21; Parasuraman et al. 1988:29). Subsequently, many studies have pinpointed different operationalisations of service quality across varying countries and contexts (Izogo 2017:22; Prakash 2019). Most notable are the studies by Cronin and Taylor (1992) (five dimensions), Rust and Oliver (1994) (three dimensions), and Brady and Cronin (2001) (three dimensions). Additionally, Dagger, Sweeney and Johnson (2007:137) proposed that service quality should be examined at overall, dimensional, and sub-dimensional levels. The authors opine that the customers’ perceptions of service quality at a particular level influence perceptions on a subsequent level, and they measure service quality in their study on an overall level (Dagger et al. 2007:137).

This research was interested in an overall assessment of service quality that would aid in obtaining a holistic perspective of customers’ beliefs regarding the level of service experienced from the TNC brand. Subsequently, the scale developed by Dagger et al. (2007) for measuring overall service quality was selected for further investigation in the study. More specifically, the construct was assessed by measuring the degree to which the respondents found the TNC brand to be superior, excellent, impressive, and of a high standard (Dagger et al. 2007:137).

**Perceived justice**

The concept of justice or fairness is rooted in the equity theory (Adams 1965), and has been widely applied in various fields to explain social interaction between human beings and their interaction during transactions (Xing et al. 2020:198). In a social exchange relationship, perceived justice is experienced when the level of input provided is in balance with the outcome received (Adams 1965; Kau & Loh 2006:102). Accordingly, marketing scholars view service fairness (justice) as ‘customers’ perceptions of the degree of justice in the service firm’s behaviour’ (Seiders &
Berry 1998:9), in relation to their social exchange relationship with the firm.

Typically, perceived justice is measured in three dimensions: interactional justice, procedural justice, and distributive justice (Mohd-Any et al. 2019:664). Interactional justice refers to the outcomes of the communication between the customer and the firm providing the service. Justice perceived, depends on the extent to which customers having social exchanges with the firm experience empathy, politeness, and courtesy (La & Choi 2019:208). Procedural justice is experienced when the affected customer’s complaint is dealt with by the service provider through means, procedures, and policies (Ortiz et al. 2017:439–440), and consumers perceive the procedures followed by the service provider to be fair (Aurier & Siadou-Martin 2007:452). Blodgett, Hill and Tax (1997:188) opine that distributive justice refers to the sense of justice the customer experiences based on the outcome received from the firm providing the service. Therefore, the customer believes the treatment received from the firm is fair (Voorhees & Brady 2005:194).

The current research was interested in customers’ overall perceptions of service justice received from the TNC brand. Perceived justice was accordingly measured as the extent to which customers believe they receive fair treatment from the TNC brand overall and can count on them to be fair (Choi & Lotz 2018:628).

The relationship between service perceptions and customer advocacy

Previous research has confirmed positive relationships between service quality and positive customer recommendations (Chenet, Dagger & O’Sullivan 2010:340). Zeithaml, Berry and Parasuraman (1996:34) explain that customers praising the firm is a sign of them bonding with the firm and that these behaviours may be triggered by customers experiencing service quality. Customers’ relationships with service providers are improved when service quality is experienced, which may contribute to them saying positive things about the service provider to friends and peers (Roy et al. 2018:295). Additionally, grounded in the principles of customers’ citizenship behaviour and the social exchange theory (Blau 1964), it is plausible that customers of ride-hailing services will voluntarily engage in customer advocacy behaviours to reciprocate favourable treatment of service quality experienced.

Moreover, prior research has established positive relationships between customer perceptions of perceived justice (service fairness) and customers’ positive recommendations of the firm (Choi, Lotz & Kim 2014:15; Roy et al. 2018). Grounded in the principles of customers’ citizenship behaviour and the social exchange theory (Blau 1964), it is plausible that customers of ride-hailing services may also voluntarily engage in customer advocacy behaviours to reciprocate favourable treatment of service justice experienced. As per Van Tonder and Petzer (2021:1272), service quality influences customer advocacy intention in the ride-hailing sector. Furthermore, a conceptual model proposed by Bai and Li (2021:225) indirectly links justice to helping behaviour in a study on strategic alliances, while Bizri and Hamieh (2020:705) and Jnaneswar and Ranjit (2022:5) proposed that justice directly impacts citizenship behaviour in an organisational context. Consequently, it was hypothesised that in the context of TNC brands:

H1: Service quality positively and significantly predicts customer advocacy intention.
H2: Perceived justice positively and significantly predicts customer advocacy intention.

The relationship between individual service perceptions

Perceived justice (service fairness) and service quality are described as ‘inseparable’ (Berry 1995; Chi et al. 2020:1033), with a positive relationship between perceived justice and service quality having been identified (Kwortnik & Han 2011). Consumers may reflect on fairness when evaluating overall service quality (Chen et al. 2012:405). When individuals or groups are not favoured above others, customers may perceive this approach of fairness as a sign of good service quality (Carr 2007; Giovanis, Athanasopoulou & Tsoukatos 2015:749). Xing et al. (2020:206) found that perceived justice influences service quality in a study of patients concerning doctor-patient interaction. Accordingly, it was further proposed that customers perceiving the service provided by the TNC brand as fair, will also conclude that good service quality was achieved. Hence, perceived justice may be a signal of good service quality. Accordingly, it was hypothesised that in the context of TNC brands:

H3: Perceived justice positively and significantly predicts service quality.

Affective commitment

Customer commitment is rooted in the relationship marketing theory. Dwyer, Schurr and Oh (1987:19) define commitment as an implied and overt undertaking between a buyer (customer) and a seller (service provider) to continue their business relationship. This view is echoed by other key scholars in the field. Moorman, Zaltman and Deshpande (1992:316) consider commitment to be the lasting aspiration to continue a relationship that is valuable to both parties concerned. Morgan and Hunt (1994:23) perceive commitment as ‘an exchange partner believing that an ongoing relationship with another is so important as to warrant maximum efforts at maintaining it’.

Fullerton (2003:334) noted that commitment is frequently operationalised as affective commitment by marketing scholars and is considered important when building long-term relationships with customers (Panchapakesan, Amin & Herjanto 2022:315). Someone who is attached to an organisation (e.g. employees and customers) can be considered affectively committed (Al-Samman & Mohammed 2021:850). Customers can be considered to be affectively committed when they have an affinity towards the firm providing the service, regardless of the type of service being provided (Fullerton 2005:1375). Furthermore, a customer...
who is affectively committed to a service provider has the propensity to exhibit emotions towards the service provider (Izogo 2017:20–21). In the context of this study, affective commitment related to customers’ feeling of belonging and attachment to the TNC brand (Choi & Lotz 2018:628).

The relationship between affective commitment and service perceptions

It is possible that both customers’ views of service quality and perceived justice are born out of their affective commitment to the TNC brand. According to Chen et al. (1999) and the defensive motivation theory, consumers with a particular level of commitment towards an object could want to guard their current beliefs and the attitudes they have developed towards this object in instances where novel information may be discovered. Given this state of affairs, also described as their ‘defense motivation’, consumers committed to the TNC brand could employ cognitive processing that is selective in nature when they are exposed to information contrary to their beliefs and attitudes of the brand, irrespective of whether these indeed align with reality (Ahuwalia, Unnava & Burnkrant 2001:460; Chen et al. 1999:45; Van Tonder, De Beer & Kuypers 2020:549). Van Tonder and Petzer (2021:1272) also found that affective commitment influences service quality in the ride-hailing sector. Thus, it was hypothesised that in the context of TNC brands:

H4: Affective commitment positively and significantly predicts service quality.

H5: Affective commitment positively and significantly predicts perceived justice.

The mediating effect of service quality

Considering the possibility that customers’ perceptions of service quality come from their views of perceived justice (Kwortnik & Han 2011:323) and the service quality which customers experience may voluntarily advocate the brand to reward the firm for the high service standard (Blau 1964), it is likely that service quality could provide an indirect path to connect perceived justice and customer advocacy behaviours. Customers perceiving the service provided by the TNC brand as fair, subsequently believing the service received from the TNC brand is of a superior standard, may want to engage in behaviours that would be advantageous to the TNC brand in return, such as advocating it to other customers. Therefore, it was hypothesised that with respect to TNC brands:

H6: Perceived justice has a significant positive indirect effect on customer advocacy intention as mediated by service quality.

The moderating effect of generational cohort

According to Koksal (2019), the generational cohort theory first introduced by Karl Mannheim in 1952 is premised on the fact that individuals born during the same time period, and so morphing into adulthood simultaneously, are exposed to equivalent economic, social, political, and cultural experiences that result in similar preferences, behaviours, and values throughout their lifetimes. Several generations have been identified based upon this premise. In this section, the focus is on baby boomers and Generation Y, as these consumers are of interest in this study.

In contrast, Generation Y exhibits significant differences from earlier generations with respect to how the gender roles in the workplace and family are defined (Melancon, Forbes & Fugate 2015). As stated by Melancon et al. (2015), numerous millennials (i.e. Generation Y) have been raised in non-traditional households, with many experiencing their parents playing non-traditional roles. In addition, they have experienced women entering the workforce in roles traditionally reserved for males (Melancon et al. 2015). Generation Y consumers are technologically literate and have media knowledge as a result of growing up in technology-enabled environments; are willing to take risks; and are sociable, fun-loving, and carefree (Farris, Chong & Dunning 2002; Naim & Lenkla 2016).

Concerning the relationships proposed in this study, it is plausible that age may affect perceptions of services. Almutawa, Muenjohn and Zhang (2018:657) opined that customers’ differences impact service quality. It seems easier to please older customers who have a greater tendency to be loyal to a service provider (Trabelsi-Zoghliami et al. 2020:1642). In contrast, Generation Y has been described as having a ‘strong sense of fairness and ethics’ (Hernaus & Vokic 2014:619). This generation tends to be sceptical (Valentine & Powers 2013:598) and has high service standards (Kueh & Voon 2007:656). Members are also characterised by their willingness to complain when service failures occur (Soares et al. 2017). Therefore, compared to older baby boomers, Generation Y may be less likely to develop views of service quality as a result of perceived justice experienced. Additionally, being more sceptical, Generation Y consumers may be less motivated to advocate in favour of the TNC brand when experiencing perceived justice and quality service. Hence, it was hypothesised that with respect to TNC brands:

H7: Generational cohort moderates the direct effect of service quality on customer advocacy intention.

H8: Generational cohort moderates the direct effect of perceived justice on (a) customer advocacy intention and (b) service quality.

In view of the above, it was expected that the indirect effect of perceived justice on customer advocacy intention through...
service quality would be weaker among ride-hailing customers of the Generation Y cohort. Consequently, it was also hypothesised that:

**H9:** The indirect effect of perceived justice on customer advocacy intention through service quality is moderated by generational cohort.

Finally, it is plausible that the relationships between affective commitment and service perceptions may also vary from cohort to cohort. Besides having higher service expectations and being more sceptical, Generation Y customers tend to be less loyal to service providers than other cohorts and are more willing to revert to another service provider if dissatisfaction is experienced (Soares et al. 2017:523). Similar behaviour has been observed in the workplace, where Generation Y employees tend to be less committed than the older generation and are more willing to revert to another employer if their expectations have not been met (Rani & Samuel 2016:1702). Subsequently, it is plausible to argue that ride-hailing customers from the Generation Y cohort are less likely to judge the service of the TNC brand favourably when they are affectively committed to it. Given their tendency to be more sceptical and keep their options of an alternative service provider open, Generation Y customers are less likely to employ selective cognitive processing when being affectively committed and having to judge the service of the TNC brand (Ahluwalia et al. 2001:460; Chen et al. 1999:45; Van Tonder et al. 2020:549). Hence, the impact of affective commitment on perceived justice and service quality may be lower among Generation Y ride-hailing customers, considering that they tend to be less loyal to service providers (Soares et al. 2017:523). Thus, it was hypothesised that with respect to TNC brands:

**H10:** Generational cohort moderates the direct effect of affective commitment on (a) service quality and (b) perceived justice.

Figure 1 depicts the conceptual model of this study.

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**Research methodology**

**Questionnaire and measurements**

A self-administered survey was conducted to obtain more insight into ride-hailing customers’ affective commitment to the TNC brand, their perceptions of the service provided, and their intentions to advocate the brand. The survey included four measurement scales that were validated previously to assess affective commitment and perceived justice (Choi & Lotz 2018), service quality (Dagger et al. 2007), and customer advocacy intention (Yi & Gong 2013). The statement measuring pride was excluded from the affective commitment scale, as it did not fit appropriately with the other scale items. Appendix 1 contains the items used to measure the constructs and also cites the authors from whom the abovementioned authors either adopted or adapted the scales used in their respective studies. The responses were captured on a seven-point Likert-type scale that assessed the level of agreement, ranging from 1 (‘strongly disagree’) to 7 (‘strongly agree’).

**Sample procedure, data collection, and analysis**

The population included ride-hailing customers of a specific TNC brand in South Africa. Participation criteria included individuals older than 18 years who had ordered a ride at least once during the last year using the TNC brand’s mobile app. Since a sample frame did not exist, trained fieldworkers handed surveys to qualifying respondents for completion in public places, such as shopping malls. The survey included three screening questions aligned to the definition of the target population. Fieldworkers were instructed to fill age and gender quotas, and employed purposive sampling. The respondents voluntarily participated in the study and did not receive any form of remuneration for completing the printed survey. The fieldwork was supervised by an accredited research agency in South Africa. Data were collected over 3 months in 2018.
Gender representation was almost equal among the final realised samples, which consisted of 150 baby boomers (49% male and 51% female) and 309 Generation Y respondents (50.8% male and 48.9% female). In each cohort, one respondent did not reveal their gender. Most of the respondents from the baby boomer cohort were older than 55 (60.7%). Almost two thirds of the Generation Y cohort were older than 20 (65.4%). In both cohorts, the majority of the respondents have been hailing rides from the TNC brand for at least 2 years (baby boomers: 60.4%; and Generation Y: 72.2%), book a ride with the TNC brand at least twice a month (baby boomers: 64.7%; and Generation: Y 83.2%), and reported their main reason for booking rides with the TNC brand as needing a transfer for social- and not work-related visits (baby boomers: 72%; and Generation: Y: 78.6%). Overall, these findings demonstrate that the respondents have utilised the services of the TNC brand and were in a position to relate to their own experiences in completing the survey.

The results were analysed using Mplus version 8.4. Confirmatory factor analysis (CFA) and multi-group structural equation modelling (SEM) using maximum likelihood estimation with robust standard errors and a mean- and variance-adjusted test statistic were applied to test the research hypotheses. The \( \chi^2 \) difference test, bootstrapping (95% confidence interval and 5000 replications), and the Wald test were employed to assess the extent to which generational cohorts moderate the direct and indirect effects between perceived justice and customer advocacy intention through service quality (Wang & Wang 2012:278).

Ethical considerations
Ethical clearance was obtained from the University of Pretoria’s Gordon Institute of Business Science (GIBS) Ethics Committee chaired by Prof Gavin Price (04 June 2018).

Results

Individual measurement model results
Following the procedure prescribed by Wang and Wang (2012), individual measurement models were assessed. Table 1 denotes that adequate CFA fit statistics were obtained for the individual measurement models based on the cohorts (Hair et al. 2014).

As further denoted by Table 2 and Table 3, for each measurement model, all standardised factor loadings were more than 0.7 and statistically significant \((p < 0.001)\), all average variance extracted (AVE) values exceeded 0.5, and all composite reliability (CR) values were larger than 0.7, thereby evidencing convergent validity and reliability (Hair et al. 2014).

No discriminant validity problems were identified either. As shown in Table 3, in all instances, the AVE values of the respective latent variables exceeded the shared variance among them (Fornell & Larcker 1981; Hair et al. 2014).

Common method bias assessment
Harman’s single-factor test (Podsakoff et al. 2003) was applied to assess common method bias. In both cohorts, the total variance explained by a single factor was less than 70% (baby boomers \(= 63.52\% \); Generation Y \(= 54.73\% \)). Previous investigations in business research denoted that significant potential for common-method bias only exists in the event of the common method variance bordering 70% or higher (Fuller et al. 2016:3196). Accordingly, common method bias was not a concern in this study.

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby boomers</td>
<td>(0.86)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Generation Y</td>
<td>(0.76)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: All correlations are statistically significant at \( p < 0.001 \).

CR, composite reliability; PJUST, perceived justice; AC, affective commitment; SQ, service quality; CCBA, customer advocacy intention.

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby boomers</td>
<td>0.69</td>
<td>0.55</td>
<td>(0.89)</td>
<td>-</td>
</tr>
<tr>
<td>Generation Y</td>
<td>0.66</td>
<td>0.55</td>
<td>(0.82)</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: All correlations are statistically significant at \( p < 0.001 \).

PJUST, perceived justice; AC, affective commitment; SQ, service quality; CCBA, customer advocacy intention.

**Table 1:** Confirmatory factor analysis fit statistics for individual measurement models based on the cohorts.

<table>
<thead>
<tr>
<th>Grouping</th>
<th>( \chi^2 )</th>
<th>df</th>
<th>( \chi^2/df )</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby boomers</td>
<td>154.55</td>
<td>84</td>
<td>1.84</td>
<td>0.98</td>
<td>0.97</td>
<td>0.075</td>
</tr>
<tr>
<td>Generation Y</td>
<td>235.96</td>
<td>84</td>
<td>2.81</td>
<td>0.97</td>
<td>0.96</td>
<td>0.077</td>
</tr>
</tbody>
</table>

\( \chi^2 \), chi-square; df, degrees of freedom; CFI, comparative fit index; TLI, Tucker-Lewis index; RMSEA, root mean square error of approximation.
Measurement invariance and multi-group measurement model results

Table 4 presents the fit statistics of the measurement invariance test. With respect to all models examined, the $\chi^2$/df values never exceeded 5, the CFI and TLI values were not lower than 0.90, all RMSEA values met the 0.08 cut-off criteria, and all three $p$-values were more than 0.05 (Hair et al. 2014). Accordingly, evidence was provided of strong measurement invariance.

The multi-group measurement model, based on the cohorts, also presented acceptable fit statistics: $\chi^2 = 419.83; df = 190; \chi^2$/df = 2.21; CFI = 0.97; TLI = 0.97; RMSEA = 0.073. The $\chi^2$ contribution was 171.17 for the baby boomer cohort and 248.66 for the Generation Y cohort. All standardised factor loadings were more than 0.7, statistically significant ($p < 0.001$), and ranged between 0.90 and 0.98 for the baby boomer cohort, as well as between 0.82 and 0.96 for the Generation Y cohort. Regarding both cohorts, all AVE values exceeded 0.5 and all CR values were larger than 0.7, thereby evidencing convergent validity and reliability (Hair et al. 2014). In all instances, the AVE values of the respective latent variables exceeded the shared variance among them, subsequently evidencing discriminant validity (Fornell & Larcker 1981; Hair et al. 2014).

Multi-group structural equation modelling results

Adequate fit indices were obtained for the multi-group SEM model, as depicted in Figure 1: $\chi^2 = 247.28; df = 192; \chi^2$/df = 1.29; CFI = 0.98; TLI = 0.98; RMSEA = 0.035. The $\chi^2$ contribution for the baby boomer cohort was 100.83, and 146.45 for the Generation Y cohort.

A competing model was additionally assessed. Supported by the work of Choi and Lotz (2018), and Engizek and Yasin (2017), the effect of perceived justice and service quality on affective commitment with customer advocacy intention was measured. The impact of perceived justice on service quality remained intact. Compared to the initial model, the competing model presented inferior model fit statistics: $\chi^2 = 310.34; df = 194; \chi^2$/df = 1.60; CFI = 0.96; TLI = 0.96; RMSEA = 0.051. Subsequently, the initial model was retained for further investigation.

Table 5 further evidences that all standardised regression weights of the multi-group SEM model depicted in Figure 1, were positive and significant ($p < 0.001$), except for the relationship between perceived justice and customer advocacy intention in the baby boomer cohort. Therefore, $H1$ and $H3$ to $H5$ were supported in both cohorts, and $H2$ was supported in the Generation Y cohort (Hair et al. 2014).

Moderation and mediation tests

The $\chi^2$ difference test was conducted next to determine if generational cohorts moderate the relationships established (Wang & Wang 2012:275). Each individual path examined, was first constrained to be equal among the different cohorts and subsequently compared against the unconstrained path. Statistically significant differences ($p < 0.05$) between the constrained and unconstrained paths were found concerning the first three relationships denoted in Table 6, but not the last two relationships. Therefore, only $H7$, $H8a$, and $H8b$ were supported, indicating that generational cohorts moderate these relationships (Wang & Wang 2012:276).
Indirect effects were assessed, using the model constraint command in Mplus (Wang & Wang 2012). Regarding H6, the percentile bootstrapping results indicated that the indirect effect between perceived justice and customer advocacy intention through service quality was supported in both samples. Specifically, the indirect effect established in the baby boomer cohort (Estimate = 0.41, 95% CI [0.24, 0.63]) seems to be higher than the indirect effect noted in the Generation Y cohort (Estimate = 0.11, 95% CI [0.05, 0.20]). Therefore, H6 was supported in both cohorts. The Wald test further showed that the indirect effects established in each cohort are significantly different ($\chi^2 = 10.96; df = 1; p < 0.05$). Consequently, H9 was supported (Wang & Wang 2012:278). Considering that the direct relationship between perceived justice and customer citizenship advocacy intention (H2) is not significant when accounting for service quality in group one (baby boomers), indirect-only mediation is evident (Zhao, Lynch & Chen 2010:201). In contrast, as all three relationships (H1 to H3) remain significant when accounting for service quality in group two (Generation Y), the findings support complementary mediation (Zhao et al. 2010:201). Figure 2 provides a graphical depiction of the research findings.

**Discussion and research implications**

As positioned earlier, competition in the ride-hailing industry is fierce, with many TNC brands offering ride-hailing services. In this turbulent environment, customer advocacy behaviour presents a cost-effective and credible solution for enhancing TNC brand credibility and to grow market share (Iyer et al. 2017:647; Yi & Gong 2013:1280).

Consequently, the current investigation helps to explain the matter by providing novel insight into the extent to which overall assessment of service quality and perceived justice (service fairness) may be interrelated and impact on customer advocacy intentions and the magnitude to which customers' emotional bonds with the TNC brand may be responsible for this development. The findings further indicate the degree to which generational cohorts moderate the direct and indirect relationships investigated. The investigation of the individual direct, indirect, and moderating effects further contributed to several theoretical and managerial implications.

Confirmation of affective commitment as an antecedent of service quality (H4) and perceived justice (H5) supports the argument that customers' emotional bonds with the TNC brand may influence service perceptions (Chen et al. 1999; Van Tonder et al. 2020). It seems that affective commitment does not only impact service quality in a ride-hailing context (Van Tonder & Petzer 2021), but could also influence customers' views of perceived justice experienced. Another interesting observation is that the relationships between affective commitment and the individual service perceptions do not seem to be moderated by generational cohorts (H10a and H10b). Hence, even though Generation Y may be less loyal to service providers than baby boomers (Soares et al. 2017:523), it seems that once they have established emotional bonds with the brand, they are, similar to baby boomers, likely to develop favourable perceptions of the service levels experienced. Furthermore, the impact appears to be strong in both cohorts, considering the large effect sizes that were obtained (H4 and H5). The implication of these findings is that, in the sharing economy, the value of affective commitment extends beyond mere relationship building with customers (Fullerton 2005) and behavioural consequences. Furthermore, affective commitment may strongly affect service perceptions, and thus the study’s findings offer further validation for the application of the defensive motivation theory (Chen et al. 1999) in an informal service context and within diverse age cohorts.
Grounded in social exchange theory (Blau 1964), it was expected that views of service quality and perceived justice would contribute to customers of ride-hailing services voluntarily engaging in customer advocacy behaviours to reciprocate favourable treatment experienced. Yet, the current findings evidence that only H1 was supported in both cohorts, while H2 was significant in the Generation Y cohort. Hence, it appears that at face value and considering H8a, views of perceived justice may not contribute to customer advocacy in the baby boomer cohort. However, further insight into the matter is obtained by also considering H6 and H9. It seems that service quality provides an indirect path for connecting perceived justice with customer advocacy intention and this indirect effect is significantly different and much stronger in the baby boomer cohort (β = 0.41) than in the Generation Y cohort (β = 0.11). Moreover, considering H7 and H8b, denoting significant differences between generational cohorts, it seems that as proposed, Generation Y (characterised by being sceptical with a strong sense of fairness and expectations of high service quality) may be less likely than older baby boomers to develop perceptions of service quality as a result of service justice experienced, and may also be less likely to be motivated to act as ‘partial employees’ of the TNC brand and engage in customer advocacy behaviours to reward the TNC brand for the service quality experienced.

Nevertheless, a further interesting observation is that, while a relatively low indirect effect was established in the Generation Y cohort, the direct effect between perceived justice and customer advocacy intention was still relatively large (H2). These findings are significant, as it seems that although the high service standards of Generation Y may contribute to them being more reluctant to develop perceptions of service quality when perceived justice is experienced, their ‘strong sense of fairness and ethics’ (Hernaus & Vokic 2014:619) may motivate them to reward the TNC brand with advocacy behaviours when service fairness is experienced. Perceived justice may not strongly convince Generation Y that a high service standard was experienced. However, their perceptions of perceived justice as informed by emotional bonds (affective commitment) with the TNC brand are significant, and could motivate them to still perform their ‘marketing agent’ role and engage in customer advocacy behaviours to reward the TNC brand for the service fairness experienced.

The implications of these findings are that, while it is important to focus on service quality as a key antecedent of customer advocacy (Ahmadi 2019:51; De Matos & Rossi 2008:581; Van Tonder & Petzer 2021; Yavas et al. 2004:144–145), perceived justice is also relevant and seems to directly or indirectly influence customer advocacy behaviours. In a sharing economy context, the service standards of the generational cohorts may further affect the magnitude of the indirect effect between perceived justice and customer advocacy intentions through service quality.

From a managerial perspective, the relationship between service quality and advocacy has been verified multiple times in the formal service environment (Ahmadi 2019:51; De Matos & Rossi 2008:581; Yavas et al. 2004:144–145) and appears to be relevant also in a ride-hailing context, as noted previously (Van Tonder & Petzer 2021) and confirmed in this study. Hence, TNC brands aiming to obtain a competitive advantage through customer advocacy may be doing well by focusing on service quality. It is especially important for baby boomers to perceive service quality, as they are most prone to show advocacy behaviours when high service standards are experienced. Service quality may be enhanced by, for example, ensuring drivers are always on time for scheduled appointments, the vehicle is always neat and clean, and driving rules are kept. Additional indicators of service quality may include the driver’s friendliness, playing the radio station requested by the customer, and providing occasional discounts, which demonstrate care towards the customer.

Furthermore, it could be useful for TNC brands to recognise the importance of fostering affective commitment between them and customers, and to build strong emotional bonds with customers to improve their perceptions of service quality. Based on the research findings, both the baby boomer and Generation Y cohorts may benefit from this strategy. In developing emotional bonds with customers, TNC brands could demonstrate care by ensuring that the interaction between drivers and customers is professional and the atmosphere inside the vehicles is pleasant and relaxing. Smartphone application platforms connecting customers and drivers also serve as a viable tool for obtaining constructive feedback from customers and strengthening emotional relationships with them. Transportation Network Companies brands should harness these big data opportunities to take advantage of customer feedback to foster affective commitment. Additionally, customers must be treated as individuals and feel recognised by the brands. Online chatbots assisting with booking services or dealing with customer questions could aid in personalising the service, while incentives to regular customers may further promote bonding.

However, TNC brands also need to concentrate on perceived justice (service fairness) to further enhance customer advocacy intentions. This is especially essential in motivating advocacy behaviours of Generation Y consumers, who have high service standards, but strongly value fair behaviour. Transportation Network Company brands are expected to focus on clearly defined service standards and staff training to ensure fair service is provided. Potential problems must be anticipated and problem-solving policies must be designed to ensure service failures are dealt with fairly. Fair service treatment could also include ensuring customers are appropriately informed about travel and service arrangements; customers are not confronted with unreasonable barriers when, for example, requesting refunds; and protection of consumer privacy.
Perceptions of perceived justice could be enhanced further by focusing on affective commitment and developing strong bonds with customers. By following this approach, customers who are emotionally attached to the TNC brand may develop heightened perceptions of fair treatment and perceived justice, as denoted by views of empathy, politeness, and courtesy experienced (La & Choi 2019:208; Ortiz et al. 2017:439–440; Voorhees & Brady 2005:194).

Finally, opportunities must be provided for the baby boomer and Generation Y cohorts to engage in customer advocacy behaviours through social-media platforms and online reviews. For instance, hashtags could generate interesting conversations among customers experiencing a sense of community and wanting to endorse the TNC brands. Key questions may prompt conversations and steer customer endorsements in the desired direction. Moreover, TNC brands could ask customers for testimonials and encourage them to share inspiring stories with other customers on online review platforms.

Conclusions, limitations and directions for further research

The current research provides more insight into the affect-cognition-behaviour relationship in a ride-hailing service context. Specifically, this study verified the extent to which ride-hailing customers’ views of service quality and perceived justice, as informed by affective commitment towards the TNC brand, may impact advocacy intentions, as well as the mediating role that service quality and the moderating role that generational cohort may play in influencing these behaviours. The research findings further advance the understanding of differences between baby boomers and Generation Y and their potential to aid brands in the sharing economy to manage a competitive advantage amidst fierce competition.

Future research could validate the model among other generational cohorts, including Generation X and Generation Z, and verify the extent to which the emotional bonds of these customers influence their service perceptions and customer advocacy behaviours. Most of the respondents in the current study indicated their main reason for booking rides with the TNC brand as needing a transfer for social visits. It would be interesting to draw comparisons between the perceptions and behaviour of the current sample and those of respondents who book rides with TNC brands for work-related purposes. The current study measured overall views of service quality and perceived justice. Greater insight is needed to the extent to which affective commitment may impact interactional, procedural, and distributive justice at an individual level (Blodgett et al. 1997:188; La & Choi 2019:208; Ortiz et al. 2017:439–440), as well as the various sub-levels of service quality (Dagger et al. 2007). The survey was conducted in South Africa, a developing country with a sub-standard public transportation system. It may be worthwhile to test the same model in a more developed country, considering that respondents with access to advanced public transportation systems may be less committed to TNC brands and less inclined to judge the services of a TNC brand favourably. Further research could explore the extent to which the intended levels of customer advocacy may vary if the communication is directed towards customers belonging to the same cohort as the respondent, or another cohort (Mazzarol, Sweeney & Soutar 2007:1488). Finally, the confounding effect of brand familiarity within the proposed model was not assessed and future research may want to further investigate this matter.

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Competing interests

The author(s) declare that they have no financial or personal relationship(s) that may have inappropriately influenced them in writing this article.

Authors’ contributions

The research model was conceptualised by E.v.T. who was also responsible for the introduction, methodology, statistical analysis and theoretical implications section. D.P. contributed to the literature review, managerial implications and conclusions, as well as the reviewing and editing of the article.

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Data availability

The authors confirm that the data supporting the findings of this study are available within the article.

Disclaimer

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References

Appendix 1

Items used to measure the constructs of the study

**Perceived justice** (Items from Ambrose & Schminke 2009 validated in Choi & Lotz 2018)
PIJUST1: I am treated fairly by X.
PIJUST2: I can count on X to be fair.
PIJUST3: The treatment I receive from X is fair.
PIJUST4: X treats its customers fairly.

**Affective commitment** (Items from Meyer, Allen & Smith (1993) and Huang and You (2011) validated in Choi & Lotz 2018)
AC1: I feel a strong sense of belonging to X.
AC2: X has a great deal of personal meaning for me.
AC3: I feel emotionally attached to X.
AC4: I feel like part of the family at X.

**Service quality** (Items from Brady & Cronin 2001 and Parasuraman, Zeithaml, & Berry 1988 validated in Dagger et al. 2007)
SQ1: The quality of the service provided by X is excellent.
SQ2: The quality of the service provided by X is impressive.
SQ3: The service provided by X is of a high standard.
SQ4: I believe X offers services that are superior in every way.

**Customer advocacy intention** (Yi & Gong 2013)
CCBA1: Say positive things about X to others.
CCBA2: Recommend X to others.
CCBA3: Encourage friends and relatives to use X.