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Public transport users' WOM: an integration model of the theory of planned behavior, customer satisfaction theory, and personal norm theory

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Abstract

Research on public transport passengers' perception and behavior has been performed extensively by many researchers. However, there is a lack of research on public transport passengers' WOM. In order to fulfill the gaps in the literature, this research aims to develop and test a WOM model for public transport passengers in Indonesia. Our research model integrates the theory of planned behavior, the customer satisfaction theory, and the personal norm theory. This study used a quantitative research methodology. A survey was used to collect data. The survey was conducted in three cities – Bogor, Bekasi, Depok- in West Java, Indonesia. 844 respondents are involved in the survey. The research results showed that our proposed model has good goodness of fit. More specifically, our research results revealed that WOM is influenced directly and significantly by attitude, subjective norm, moral norm, and environmental norm. Furthermore, WOM is also influenced by perceived quality indirectly through attitude. In the other hand, this research also revealed that satisfaction, perceived behavioral control, and perceived service quality don't affect WOM directly and significantly.

Keywords: WOM; TPB; satisfaction; personal norm

1. Introduction

Congestion is a serious problem that is faced by many big cities. Furthermore, congestion causes economic and non-economic losses (Cox, 2010). One of the efforts on overcoming congestion is to increase the amount of public transport user. Hence, it is important to study concepts that can be used to increase the amount of public transport user.

In marketing and consumer behavior literature, it is well known that conventional marketing strategies that rely on advertising are not optimal for attracting new customer (Shimp, 2010). In other words, positive promotions that come from the product provider (self-promotions) are less convincing for potential customers (Murray, 1991; Shimp, 2010; Widianti et al., 2015). The potential customers may question the credibility of the message that is conveyed by self-promotions (Shimp, 2010; Widianti et al., 2015). Therefore, marketing researchers have emphasized the important role of positive promotions that are performed by customers on a voluntary basis (Shimp, 2010; Widianti et al., 2015). In marketing and consumer behavior literature, the positive promotion that is performed by customers on a voluntary basis is called word of mouth communication (WOM). Other researchers called it willingness to recommend (Diab et al., 2017). Furthermore, researchers have argued that WOM is better than other marketing communication methods (Trusov et al. 2009, Buttle, 1998).

In the service context, marketing literature has also identified the important role of Marketing. It is believed that WOM has a more important role in service marketing than goods marketing (Berry and Parasuraman's 1991; Haywood, 1989). This is because of the unique characteristics of service. Service has four characteristics, namely intangibility, heterogeneity (non-standardization), inseparability, and perishability (Zeithaml et al., 1985). This condition makes the customer more focuses on the risk of service consumption (File et al., 1992). Furthermore, the credibility of service promotion becomes more important (Mayzlin, 2016). In the other hand, WOM is more credible than other communication marketing methods (Trusov et al. 2009, Buttle, 1998).

Empirically, in the service context, Nusair et al. (2011) have found that WOM has a positive effect on consumer attitude and behavior. Prendergast et al. (2010) revealed that WOM influences purchase intention positively. The research of Hervas-Drane (2015) showed that WOM affects consumer search costs, sales, market share, and profit. Furthermore, the positive impacts of WOM on service marketing are revealed by Chevalier and Mayzlin (2006), Huang et al. (2014), and Trusov et al. (2009).

In the context of public transport services, Diab et al. (2017) argued that public transport managers and operators have to use WOM for attracting new public transport users. Given this, it is important to study factors influencing WOM and the psychological process that performed by public transport passengers so that they perform WOM.

1.1. Research Gap

In order to attract new public transport user and to retain existing public transport users, public transport managers and operators should develop a user-oriented strategy (Lai and Chen, 2011; Sumaedi et al., 2012). This condition makes the knowledge on passengers' psychological, perception and behavior aspect become important. Public transport researchers generally focus on studying perceived quality, satisfaction, and behavior intention to use public transport (Diab et al., 2017). Meanwhile, research that relates to public transport passengers' WOM is still limited and need to be performed (Diab et al., 2017).

Research on public transport passengers' perceived quality has been performed by many researchers. They generally agreed that public transport passengers' perceived quality is a multidimensional construct (see de Ona and de Ona, 2014). However, they have different findings on the number and type of the dimension of perceived service quality. This may be caused by the differences in research location and the public transport types that are studied.

Study on public transport passengers' satisfaction has been conducted by many researchers. For example, Mouwen (2015) investigates public transport passengers' satisfaction in Netherlands. Park et al. (2004) measured public transport passengers' satisfaction in Korea. Furthermore, Indian Railway passengers' satisfaction was researched by Agarwal (2008). Other public transport passengers' satisfaction research was performed by Saha and Theingi, (2009) and Liu and Lee (2016).

Behavior intention to use public transport is also investigated by many researchers. Generally, research on behavior intention to use public transport can be categorized into three streams, namely research that uses satisfaction and/or value theory for explaining behavior intention (e.g. Wen et al., 2005; Lai and Chen, 2011; Sumaedi et al., 2012; 2014), research that uses TPB and personal norm for explaining behavior intention (e.g. Fu and Juan, 2016; Liu et al. 2017), and research that involves switching barrier theory for explaining behavior intention (e.g. Jen et al., 2011, Tung et al., 2011).

Research on behavior intention to use public transport is not enough for understanding the phenomenon of WOM. This is because WOM is not identically similar to behavior intention to use. Research has found that a similar antecedent variable has a different effect on WOM and behavior intention to use (e.g. Widianti et al., 2015). Furthermore, research has also revealed that there is no significant correlation between WOM and behavior intention to use public transport (Diab et al., 2017). Furthermore, theoretically, WOM represents customers' attitudinal loyalty that shows customer commitment for developing long term relationship with service provider due to positive feeling and emotions (Gremler and Brown, 21996; Ranaweera and Prabhu, 2003). Meanwhile, behavior intention to use represents customers' behavioral loyalty that may be caused by the unavailability of other alternatives (Nordman, 2004).

As far as researchers know, research on public transport passengers' WOM was performed by Diab et al. (2017). They found that WOM is influenced by waiting time satisfaction, travel time satisfaction, and experience on board satisfaction. However, Diab et al. (2017)'s research needs to be further developed. This is due to at least two reasons. First, the antecedent variables are only passengers' satisfaction on public transport service components. In fact, a satisfied customer does not necessarily recommend service providers or spread WOM to other potential customers (Anderson 1998). Second, Diab et al. (2017) used a single indicator with binary scale for measuring WOM. They explained that it is needed to perform future research by using different measurement scale of WOM. Therefore, referring to previous explanations, research on public transport passengers' WOM is important to be performed.

1.2. Research Objectives

In order to fulfill the gaps in the literature, this research aims to develop and test a WOM model for public transport passengers in Indonesia. This research is different from the previous research since the research model integrates the theory of planned behavior, the customer satisfaction theory, and the personal norm theory.

2. Conceptual model and hypotheses

WOM can be also called willingness to recommend. WOM is "one of a variety of consumers' post-purchase communications" (file et al., 1992). WOM is also a dimension of loyalty (Carl, 2006).

Several researchers have defined WOM. According to the study of Buttle (1998), WOM is defined as "face-to-face communication about a brand, product, or service between people who are perceived as not having connections to a commercial entity (Arndt, 1967)". Based on Helm and Schlei (1998), Chaniotakis and Lymperopoulos (2009) defined WOM as "verbal communications between the actual or potential consumer and other people, such as the product or service provider, independent experts, family, and friends". Andersen (1998) explained that WOM is "informal communications between private parties concerning evaluations of goods and service rather than formal complaints to firms and/or personnel". Liu and Lee (2016) viewed WOM as "the sharing of information or experience of service among senders and receivers that influence the decision-making process in purchasing (Lerrthaitrakul and Panjakajornsak, 2014)".

Based on the definitions, we can conclude that WOM is communication between a consumer and other people regarding his/her evaluation on a brand, product, or service. Therefore, in the context of public transport service, WOM is communication between a public transport user and other people regarding his/her evaluation on public transport service.

WOM can be influenced by various factors. This research integrates the theory of planned behavior, the customer satisfaction theory, and the personal norm theory for explaining public transport passengers' WOM. Figure 1 shows the conceptual model of this research.
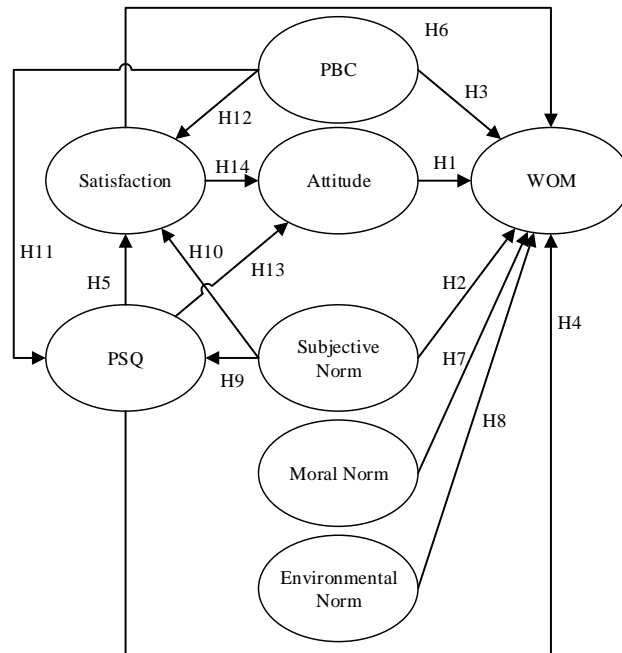
Figure 1. The conceptual model of this research

2.1. Theory of planned behavior

Theory of planned behavior was popularized by Ajzen (1991). According to this theory, three main predictors of someone's intention to perform certain behavior are (1) attitude, (2) subjective norm, and (3) perceived behavior control (PBC). According to Ajzen (1991), attitude is "the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question" (Ajzen 1991). More specifically, Fu and Juan (2017) stated that attitude is "a reflection of a person's evaluative reaction towards performing a particular behavior, e.g., happy or sad, favorable or unfavorable, useless or useful". In the context of public transport service, we defined attitude as the degree to which a person has a favorable or unfavorable evaluation or appraisal of using public transport services.

Subjective norm related to "the perceived social pressure to perform or not to perform the behavior" (Ajzen, 1991). More clearly, Fu and Juan (2017) argued that "[the pressure] related to the perception of the expectations from important others". Therefore, in the context of public transport services, subjective norm related to the perceived social pressure to use public transport services.

PBC is defined as "the perceived ease or difficulty of performing the behavior and it is assumed to reflect past experience as well as anticipated impediments and obstacles" (Ajzen, 1991). In other words, PBC related to the easiness to overcome the constraints to perform behavior (Venkatesh et al., 2003). The constraints that are faced may be required skills, financial and non-financial resources (Ajzen, 1985; Harland et al., 1999). In our study, we defined PBC as public transport users' perception of the easiness to use public transport services.

WOM is a dimension of loyalty (Carl, 2006). Many studies have revealed that loyalty is influenced by attitude (e.g., Lee et al., 2009; Pai and Yeh, 2015), subjective norm (e.g. Yarmen et al., 2016; Pai and Yeh, 2015), and PBC (e.g., Sumaedi et al., 2015; Pai and Yeh, 2015). More specifically, several researchers have investigated the relationship between WOM and the three TPB constructs. They revealed that attitude, subjective norm, and PBC influence WOM positively (e.g., Tih and Zainol, 2012, Quintal et al., 2015, Cheng et al., 2006; Loda and Backman, 2007). Thus, we proposed hypotheses as follows:

H1: Attitude influences WOM positively
H2: Subjective norm influences WOM positively
H3: PBC influences WOM positively

2.2. Customer satisfaction theory

As previously mentioned, WOM is a dimension of loyalty. In marketing and consumer behavior literature, there are many researchers that applied perceived service quality – satisfaction - loyalty structure in various sector (e.g. Bakti and Sumaedi 2013; Widianti et al., 2015; Kondasani and Panda, 2015; Tsoukatos and Rand, 2006), including in public transport (Wen et al., 2005; van Lierop and El-Geneidy, 2016). In fact, perceived service quality and satisfaction are two constructs that are widely discussed in service and marketing literature (Yusoff and Ismail, 2008; Gallo, 2011).

Perceived service quality is defined as "consumer's judgment about a [service]'s overall excellence and superiority" (Zeithaml, 1988). Perceived service quality relates to consumers' evaluation of service components, which are called service quality dimensions (Haywood-Farmer, 1988). In other words, perceived service quality is the results of consumer evaluation on intrinsic aspect of service (Zeithaml, 1988). In the context of public transport services, therefore, perceived service quality can be defined as public transport user's judgment about a public transport service's overall excellence and superiority.

Satisfaction is defined as consumers' emotional (feeling) state that results from their evaluation on the discrepancy between their expectations with service provider's performance (Sumaedi et al., 2016). Satisfaction is different with perceived service quality since satisfaction is the results of holistic and accumulative evaluation on not only intrinsic aspect of service but also extrinsic aspect of service, such as image, price, and other variables. In the context public transport services, we defined satisfaction as emotional (feeling) state that results from their evaluation on the discrepancy between their expectations with service provider's performance.

In the existing literature, the relationship between perceived service quality, satisfaction, and WOM has been well investigated. Previous studies have found that perceived service quality influence WOM positively (e.g., Chaniotakis and Lymperopoulos, 2009, Li, 2013; Choudhury 2014; Rahayu, 2011), including in public transport service (Liu and Lee, 2016). Furthermore, previous studies have also revealed the positive impact of satisfaction on WOM (Kitapci et al., 2014; Chaniotakis and Lymperopoulos, 2009), including in public transport service (Saha and Theingi, 2009). Several public transport researchers have examined the effect of perceived service quality on satisfaction (e.g., Sumaedi et al., 2013; Wen et al., 2005; Lai and Chen, 2011). They found that perceived service quality influences satisfaction positively. Accordingly, the causal relationship between perceived service quality, satisfaction, and WOM are hypothesized as:

H4: Perceived service quality influences WOM positively
H5: Perceived service quality influences satisfaction positively
H6: Satisfaction influences WOM positively

2.3. Personal norm theory

In the existing literature, several researchers proposed that someone's intention to perform certain behavior is influenced by personal norm (Parker et al., 1995; Poskus, 2015; Nigbur et al., 2010; Doran and Larsen, 2015). Schwartz (1968, 1977) defined personal norm as "self-expectations that are based on internalized values to engage in a certain behavior". Huang et al. (2015) argued that personal norm is similar to "consumer's core self".

Moral norm is a personal norm. According to Ajzen (1991), moral norm is "perception of the degree of moral correctness of a behavior". Huang et al. (2015) argued that moral norm is reflected as intrinsic components of motivation and subjective describe extrinsic components. Some researchers have studied that someone's intention to perform certain behavior is influenced by moral norm (Parker et al., 1995; Poskus, 2015; Nigbur et al., 2010; Doran and Larsen, 2015). In public transport sector, Huang et al. (2015) investigated that the effect of moral norm towards behavioral intention is better than the effect of subjective norm. Huang et al. (2015) indicated that moral norm may drive public transport passengers to perform WOM.

Environmental norm reflects right or wrong behavior about environmentally in society (Harland et al., 1999). Abrahamse et al. (2009) suggested that pro-environmental behavior is a form of personal norm because it is associated with personal benefits for the sake of the environment. In public transportation context, pro-environmental behavior is necessary to consider the behavioral antecedents of public transport use (Abrahamse et al.,

2009). Further, Garvill (1999) found that environmental concern is the determinant of intention to reduce car use in Sweden. Those findings indicated that environmental norm may drive public transport passengers to perform WOM. Accordingly, we hypothesize the following:

H7: moral norm influences WOM positively
H8: environmental norm influences WOM positively

2.4. Theory of planned behavior and customer satisfaction theory

Fu and Juan (2017) have integrated theory of planned behavior and customer satisfaction theory in order to understand public transit behavior. They found that satisfaction and perceived quality are influenced by subjective norm and PBC. Furthermore, they also revealed that service quality and satisfaction affect attitude. Therefore, following hypotheses are proposed:

H9: subjective norm influences perceived service quality positively
H10: subjective norm influences satisfaction positively
H11: perceived behavioral influences perceived service quality positively
H12: perceived behavioral control influences satisfaction positively
H13: service quality influences attitude positively
H14: satisfaction influences attitude positively

3. Research methodology

This study used quantitative research methodology. We conducted a survey to collect data. A self-administered questionnaire is utilized in this survey. The survey was conducted in three cities – Bogor, Bekasi, Depok- in West Java, Indonesia. We selected the cities due to several reasons. First, the cities are near from the capital of Indonesia, which are Jakarta. Second, some people that work in Jakarta also live in those cities. Third, the cities can be categorized as cities with high mobility in West Java.

3.1. Research object

The object of this research is paratransit service. According to Joewono and Kubota (2007), paratransit is "modes owned and operated by private companies and individuals… unlike in the US context, where the term tends to refer to government-subsidized transport for the elderly or handicapped". In Indonesia, paratransit can be defined as "a urban transportation mode in particular area or region" (the Decree of Minister of Transportation of Indonesian No. 35/2003). We selected paratransit as research object because (1) paratransit has an important role as feeder of mass transport and (2) the number of paratransit is the biggest among public transport in Bogor, Depok, and Bekasi.

3.2. Sample

Unit analysis of this study is paratransit passengers. However, there is a lack of information on the population data of paratransit passenger. Therefore, based on previous studies (e.g. Wen et al., 2005; Lai and Chen, 2011). convenience sampling was performed in this study.

The survey was performed in public transport terminal and/or shelter. The respondents were asked to join the survey voluntarily. A total of 855 respondents were obtained in this collecting data. After we checked the questionnaires, 11 questionnaires were incomplete. Thus, the total samples that we used are 844 respondents. The demographic profile of the respondents can be seen in Table 1.

Table 1. The Demographic Profile of Respondents

Characteristic	Category	Percentage
Sex	Man	50.5
	Women	49.5
Age	≤ 20 years old	35.2
	21 – 30 years old	35.3
	31 – 40 years old	16.1
	41 – 50 years old	8.0
	51 years old	5.5
Education	Never attending school	0.2
	Not graduated from elementary school	0.5
	elementary school	6.1
	junior high school	12.5
	senior high school	61.8
	Diploma	7.2
	Bachelor	11.3
	Post graduate	0.5
Occupation	Unemployment	15.0
	Labor	3.3
	Students	43.7
	Government employee	2.3
	Army member/police	0.4
	Private employee	17.9
	Entrepreneur	17.5
Income	≤ IDR. 600.000	59.7
	IDR. 600.000 - IDR. 1.199.999	12.2
	IDR. 1.200.000 - IDR. 1.799.999	9.4
	IDR. 1.800.000 - IDR. 2.399.999	7.2
	IDR. 2.400.000 - IDR. 2.999.999	5.4
	IDR. 3.000.000 - IDR. 3.599.999	2.5
	IDR. 3.600.000 - IDR. 4.199.999	1.4
	IDR. 4.200.000 - IDR. 4.799.999	0.6
	IDR. 4.800.000 - IDR. 5.399.999	0.6
	IDR. 5.400.000 - IDR. 5.999.999	0.4
	≥ Rp. 6.000.000	0.6
The purpose of public transport use	Going to work	30.3
	Going to school	14.8
	Going to shop	20.6
	Going to social activities	4.9
	Recreation	14.8
	Others	14.6
Average travelling distance	≤ 1 Km	17.2
	1 - 4,999 Km	12.8
	5 - 9,999 Km	42.8
	10 - 14.999 Km	14.4
	≥ 15.000 Km	12.8

(continued)

Table 1. The demographic profile of respondents

Characteristic	Category	Percentage
Average travelling time	≤ 15 minutes	24.1
	16-30 minutes	14.2
	31-45 minutes	33.7
	46 – 60 minutes	13.8
	> 60 minutes	14.2

3.3. Variable and measures

We involved eight variables, namely service quality, satisfaction, attitude, subjective norm, perceived behavioral control, moral norm, environmental norm, and WOM. These variables are latent variables that are needed to be measured using multiple indicators (Wen et al., 2005). In order to ensure content validity, we obtained the indicators from the existing literature (Buil et al., 2012; Sekaran and Bougie, 2010). Table 2 shows the indicators for each variable and the source. In addition, a seven-point Likert scale was utilized to measure the indicators.

Table 2. The Variables and Indicators

Variable	Indicator		Source
Service Quality	SQ1	Safety on board	Wen et al. (2005), Transportation Research Board, (1999), Sumaedi et al. (2014)
	SQ2	The public transport obedience to traffic regulations	
	SQ3	Safety from crime while riding	
	SQ4	Safety related to behavior of other passengers	
	SQ5	Comfortable temperatures on the public transport	
	SQ6	The degree of crowding on the public transport	
	SQ7	The public transport engine is still powerful	
	SQ8	The comfort of the seats	
	SQ9	Cleanliness of the public transport interior	
	SQ10	Cleanliness of the public transport exterior	
	SQ11	The driver/conductor are courteous	
	SQ12	The driver/conductor is understanding your needs when you make inquiries	
	SQ13	The driver/conductor is willing to help passenger	
	SQ14	The driver/conductor willing to respond to passenger request	
	SQ15	Delivery to the destination	
	SQ16	Adequacy of public transport	
	SQ17	Waiting time of public transport	
	SQ18	Travel time of public transport	
Satisfaction	SAT1	The perceived service was equivalent to ideal service	Wen et al. (2005)
	SAT2	Delighted to take public transport service	
	SAT3	Overall, I was satisfied with public transport service	
	SAT4	The perceived service performance was higher than the expectation	
Attitude	ATT1	Using public transport services is good	Bamberg et al. (2003)
	ATT2	Using public transport services is enjoyable	
	ATT3	Using public transport services is satisfying	

(continued)

Table 2. The Variables and Indicators

Variable		Indicator	Source
Subjective Norm	SN1	The existence of important people around the passengers/ peers suggesting to use public transport services	Bamberg et al. (2003)
	SN2	The existence of important people around the passengers/ peers suggesting to use public transport services in the future	
	SN3	The existence of social pressures to use public transport service	
PBC	PBC1	My money allows me to use public transport	Bamberg et al. (2003)
	PBC2	My physical condition allows me to use public transport	
		My time allows me to use public transport	
	PBC3		
Moral Norm	MN1	prioritizing the public transport service than private vehicle	Tonglet et al. (2004)
	MN2	feeling guilty if I don't use the public transport service	
		Using the public transport service shows my life principle	
	MN3		
		Society needs to prioritize using the public transport service than private vehicle	
	MN4		
Environmental norm	EO1	Using public transport service protect the environment.	Modified from the measures of "Pro-Environmental Attitudes" Félonneau (2008)
	EO2	Using public transport service reduces air pollution	
	EO3	Using public transport service reduces traffic congestion	
WOM	WOM1	Uttering positive things to others about public transport service	Zeithaml et al. (1996)
	WOM2	Recommending public transport service to people who need my advice	
	WOW3	Recommending public transport service to friends and relatives	

3.4. Data analysis

This research used various analyses techniques, namely exploratory factor analysis (EFA), Cronbach alpha analysis and structural equation modeling (SEM). We used EFA to explore public transport service quality dimension. This is because it is well accepted that perceived service quality is a multidimensional construct (Parasuraman et al., 1988). Furthermore, Cronbach alpha analysis is performed to test the reliability of the constructs. Meanwhile, SEM is conducted to test the model goodness of fit, the validity of the construct, and the hypothesis. All data analyses were supported by statistical software of SPSS and Lisrel

4. Result and discussion

4.1. Service Quality Exploratory

The results of the exploratory factor analysis found that there are two dimensions of public transport service, namely tangible quality and intangible quality. The results found that this public transport service has an appropriate model for factor analysis. This is due to: Kaiser Meyer Olkin (KMO) value $\geqslant$ 0.5 (KMO = 0.954); p-value of Bartlett test of sphericity $\leqslant$ 0.05 (p-value = 0.000); Measure of Sampling Adequacy (MSA) for each indicator $\geq$ 0.5

(see Table 3) and factor loading value for each indicator $\geqslant$ 0.5 (see Table 3) (Gupta & Bansal, 2012; Hair et al., 2006; Malhotra, 2007). The dimensions also fulfill the construct reliability because the value of Cronbach α for each dimension is higher than 0.6.

Table 3. The results of exploratory factor analysis and Cronbach alpha analysis

Indicator	MSA	Communalities	Factor loading	Dimension	Cronbach Alpha
SQ1	0.962	0.743	0.784	Tangible quality	0.952
SQ2	0.955	0.700	0.786		
SQ3	0.949	0.752	0.818		
SQ4	0.961	0.703	0.775		
SQ5	0.965	0.667	0.766		
SQ6	0.963	0.698	0.776		
SQ7	0.971	0.690	0.745		
SQ8	0.944	0.719	0.754		
SQ9	0.939	0.691	0.739		
SQ10	0.959	0.645	0.710		
SQ11	0.966	0.678	0.700	Intangible quality	0.921
SQ12	0.938	0.740	0.759		
SQ13	0.951	0.726	0.775		
SQ14	0.951	0.725	0.777		
SQ15	0.959	0.631	0.724		
SQ16	0.934	0.454	0.653		
SQ17	0.945	0.638	0.746		
SQ18	0.945	0.667	0.728		

4.2. Measurement model analysis result

The measurement model analysis consisted of goodness of fit, validity analysis, and reliability analysis. The results of goodness of fit model testing are shown in table 4 and validity as well as reliability testing are shown in table 5. Based on the result of goodness of fit testing shown in table 4, the measurement model meets all goodness of fit criteria. This is indicated by the measurement results that are below the threshold. Thus the measurement model proposed in this study is good. The measurement model is also said to meet construct validity due to factor loading values for each indicator of the variables ≥ 0.5 and statistically significant as well as the composite reliability (CR) value for each variable > 0.6 (table 5).

Table 4. The Results of Goodness of Fit Testing

Criteria	Threshold	Result	Source
RMSA	≤ 0.08	0.067	MacCallum et al. (1996); Hooper et al. (2008)
NFI	> 0.9	0.97	Hair et al., 2006
NNFI	> 0.9	0.97	Hair et al., 2006
CFI	> 0.9	0.98	Hair et al., 2006
IFI	> 0.9	0.98	Hair et al., 2006
RFI	> 0.9	0.96	Hair et al., 2006

Table 5. The Results of Validity and Reliability Testing

Variable	Indicator	Factor loading	Composite Reliability	AVE	Cronbach Alpha
Service Quality	DSQ1	0.84	0.94	0.74	
	DSQ2	0.88			
Satisfaction	SAT1	0.86	0.99	0.76	0.925
	SAT2	0.85			
	SAT3	0.89			
	SAT4	0.88			
Attitude	ATT1	0.93	0.99	0.89	0.960
	ATT2	0.96			
	ATT3	0.94			
Subjective Norm	SN1	0.93	0.98	0.69	0.853
	SN2	0.89			
	SN3	0.64			
Perceived Behavioral Control	PBC1	0.85	0.98	0.74	0.892
	PBC2	0.91			
	PBC3	0.83			
Moral Norm	MN1	0.79	0.98	0.57	0.838
	MN2	0.76			
	MN3	0.80			
	MN4	0.67			
Environmental Norm	EO1	0.89	0.99	0.77	0.902
	EO2	0.95			
	EO3	0.79			
WOM	WOM1	0.53	0.95	0.58	0.760
	WOM2	0.87			
	WOM3	0.83			

4.3. Structural model analysis and hypotheses result

The structural model analysis included goodness of fit and hypotheses testing. The results of the goodness of fit and hypotheses testing are shown in table 6 and table 7 respectively. Similar to the measurement model, the structural model in this study is also good. This is indicated by the measurement results that are below the threshold of all goodness of fit criteria (table 6). Further, the results of the hypotheses testing in table 7 showed that there are eight accepted hypotheses (H1, H2, H5, H7, H8, H9, H11, H13,) and six rejected hypotheses (H3, H4, H6, H10, H12, H14).

Table 6. The Results of Goodness of Fit Testing

Criteria	Threshold	Result	Source
RMSA	≤ 0.08	0.072	MacCallum et al. (1996); Hooper et al. (2008)
NFI	> 0.9	0.96	Hair et al., 2006
NNFI	> 0.9	0.97	Hair et al., 2006
CFI	> 0.9	0.97	Hair et al., 2006
IFI	> 0.9	0.97	Hair et al., 2006
RFI	> 0.9	0.96	Hair et al., 2006

Table 7. The Results of Hypotheses Testing

Hypothesis	Beta	t-value	Result
H1	0.14	2.94	Accepted
H2	0.27	5.96	Accepted
H3	0.00	-0.02	Rejected
H4	0.19	1.39	Rejected
H5	0.96	20.37	Accepted
H6	0.00	-0.02	Rejected
H7	0.16	3.33	Accepted
H8	0.25	5.97	Accepted
H9	0.26	7.66	Accepted
H10	-0.03	-1.08	Rejected
H11	0.53	14.45	Accepted
H12	-0.07	-2.21	Rejected
H13	0.61	6.20	Accepted
H14	0.11	1.20	Rejected

4.4. Theoretical implications

Research on public transport passengers' perception and behavior has been performed extensively by many researchers. However, most of the researchers focus on public transport passengers' perceived quality, satisfaction, or behavior intention. Furthermore, there is a lack of research on public transport passengers' WOM. Therefore, the first theoretical contribution of this research is providing a model for understanding public transport passengers' WOM.

WOM may be influenced by various factors. Our WOM model was developed by integrating the theory of planned behavior, the customer satisfaction theory, and the personal norm theory. This research showed that the model has good goodness of fit. Therefore, our WOM model can be used to understand public transport passengers' WOM.

Our research results showed that WOM is influenced directly by attitude, subjective norm, moral norm, and environmental norm. Furthermore, WOM is also influenced by perceived quality indirectly through attitude. In the other hand, this research also revealed that satisfaction, perceived behavioral control, and perceived service quality don't affect WOM directly and significantly.

The combined findings of the significant effect of attitude on WOM and the non-significant direct effect of satisfaction, PBC and perceived service quality indicated that public transport passengers tend to perform WOM after a comprehensive and overall evaluation of public transport service. The evaluation includes not only the quality of public transport service or the performance of public transport service in matching public transport passengers' expectation but also the extrinsic aspect of public transport services, such as image or reputation and relationship quality. Theoretically, multiattribute attitude models have shown that attitude is formed based on the evaluation of more than one attribute (Solomon, 2013).

The non-significant direct effect of perceived quality and satisfaction on WOM is not a new finding in marketing literature. Some researchers have also revealed that WOM is not influenced by perceived service quality (e.g., Sanayei and Jokar, 2013) and satisfaction (e.g., Rahayu, 2011; Anderson, 1998). Furthermore, as previously mentioned, WOM is a dimension of loyalty. Previous researches have also found that perceived quality and satisfaction is not enough for creating loyalty. These findings did not indicate that perceived service quality and satisfaction is not important. In a competitive service industry, perceived service quality and satisfaction serve as prerequisite/basic condition or hygiene factor in which a dissatisfied customer and/or a customer with negative perceived service quality is very likely to become disloyal (Berry, 1995; Chang et al., 2013; Sumaedi et al., 2013; 2014). A disloyal customer will not perform WOM. In the other hand, a satisfied customer and/or a customer with positive perceived service quality is not guaranteed to be loyal and performing WOM (Sumaedi et al., 2013; 2014).

Meanwhile, in the context of public transport service in Indonesia, there is a tight competition between public transport and private vehicle.

This research results showed that subjective norm, moral norm, and environmental norm have a direct impact on WOM. This indicated the important role of social factor as well as the individual factor in creating public transport passengers' WOM. The important role of subjective norm in creating public transport passengers' WOM in this research may be caused the context of Indonesian society culture, which are collectivism (Purba and Seniati, 2004; Sumaedi et al., 2012). Furthermore, previous researches have shown that subjective norm influences loyalty (e.g., Sumaedi et al., 2015). Meanwhile, a loyal customer tends to perform WOM (Nordman, 2004).

4.5. Managerial implications

This research results showed that attitude influences WOM while satisfaction and perceived service quality do not affect WOM. This finding indicated that public transport service operator and manager should understand that in order to create public transport passengers' WOM, it is not enough by providing good service quality and satisfying their passengers. Furthermore, they should ensure that their public transport passengers have a positive attitude on public transport service. Attitude may be influenced by not only perceived service quality but also other factors, including the extrinsic aspects of service. An effort that can be performed by a public transport operator and manager in order to increase the positive attitude of public transport passengers is implementing relationship marketing (RM) program. RM may increase public transport brand image and customer emotional attachment. In the other hand, scholars have emphasized the important role of creating a good brand image and customer emotional attachment in forming a positive attitude.

This research results revealed that moral norm and environmental norm positively influence WOM. These findings implied that public transport operator and manager should develop an integrated marketing communication program that stressed moral and environmental obligation on using public transport service. The message should be communicated clearly and consistently through various credible marketing channels.

Another finding of this research is subjective norm influences WOM. Based on this finding, the public transport operator and manager should identify important public figures that can influence potential public transport users. The public figures may include sportsman, artist, politician, and others. Public transport operator and manager should involve them in convincing society to use public transport services.

5. Conclusion and limitation

This research aims to develop and test a WOM model for public transport passengers in Indonesia. This research is different from the previous research since the research model integrates the theory of planned behavior, the customer satisfaction theory, and the personal norm theory. This research proposed that WOM is influenced by attitude, subjective norm, PBC, satisfaction, perceived service quality, moral norm, and environmental norm.

Our research results showed that our proposed model has good goodness of fit. Thus, it can be used to understand the phenomenon of public transport passengers' WOM. More specifically, our research results revealed that WOM is influenced directly and significantly by attitude, subjective norm, moral norm, and environmental norm. Furthermore, WOM is also influenced by perceived quality indirectly through attitude. In the other hand, this research also revealed that satisfaction, perceived behavioral control, and perceived service quality do not affect WOM directly and significantly.

Even though we have found several important findings, we admitted several limitations to our research. First, this research only involved paratransit users. Second, this research only performed in three cities in West Java, Indonesia. Third, due to the lack of information on the real characteristics of public transport passengers in Indonesia, this research applied convenience sampling. Thus, the findings of this research need to be tested by involving other public transport service passengers and research locations in order to examine the generalization and the stabilization of the findings.

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