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Multivariate Analysis of User Intentions and Actions Towards Acceptance of Tourism Related Technology

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Article Information

Abstract

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consuming activities. Nowadays, most of the industries make use of innovative technologies to uplift the services whilst improving the profitability, simultaneously. Acceptance of tourism related technology (AoTT) advancements, is dependent on the particular context. Hence, this research addresses the significance of types of subjective norms (SN) towards intentions and actions on AoTT in the context of Sri Lanka. Sample was drawn from the tourists boarded in the hotels of three reputed hotel chains. Selfadministered questionnaires were used for data collection (unit of analysis of the study were the individual tourists those who are using tourism related technology). Questionnaires totalling to 400 were distributed initially and 279 duly completed questionnaires were considered for the final data analysis. Theory of reasoned action (TRA) has been adapted for the study and dimensions of the variables were measured by five-point Likert scale. Enabling to test the hypotheses, MANOVA, ANOVA with contrast tests and discriminant function analysis (DFA) were applied. Empirical evidence supported both the hypotheses indicating the significance of type of SN towards intentions and actions on AoTT, specifying the importance of friends' SN than that of SN driven by family. Empirical evidences contribute to theoretical and practice perspectives, the same. Finally, researcher has postulated suggestions for future researches in the area of AoTT..

Technological advancements assist to simplify and considerably ease most of the time-

Introduction

Domestic turbulences amidst adverse economic conditions resulted in experiencing a setback in performance of Sri Lanka. Economy was grown by 1.6 per cent (year-on-year), in real terms, during the second quarter of 2019, in comparison to the growth of 3.7 per cent recorded in the first quarter of the year (Monetary policy review-MPR, 2019). A noteworthy slowdown was observed in the performance of the services activities, which were impacted drastically by the Easter Sunday attacks. Agriculture and industry activities are also estimated to have grown moderately during the second quarter of 2019. Consequently, economic growth is likely to remain subdued during the rest of the year and a gradual recovery is expected over the medium term. Trade performance during the first eight months of the current year recorded a development against the previous year, supported by a notable contraction in import-export variance. Outflows of foreign investment were ceased, whilst the equity market recorded a modest net inflow. Sri Lankan rupee depreciation trend reversed in October with continued inflows to the foreign exchange market while workers' remittances were moderated. In the meantime, tourist arrivals were continual, recovering gradually from the effects of the Easter Sunday attacks (MPR, 2019). Present government has introduced a new trade policy (NTP), a national export strategy (NES) and a tourism strategic plan (TSP) towards economic reforms which were long due for the country. Strengthened by these measures tourism industry could accommodate techadvancements such as online ticket ticketing, ease overcrowding at congested tourist locations, providing self-guiding multi lingual devices with GPS to facilitate industry growth considerably (CBSL, 2019).

Researchers have identified the significance of subjective norms (SN) in different research contexts (Albarracin & Ajzen, 2007; Doswell et al., 2011; Nayanajith & Damunupola, 2019). Causal effect of perceived risk and subjective norms on users' trust intention to adopt cloud technology has been noted and suggested that a user's perceived risk and subjective norms have a significant effect on their trust intention vis-a-vis cloud technology adoption, which leads to their decision on whether to adopt such technology (Ho et al., 2017). SN has been used to explain acceptance of tourism related technology by the researchers, in particular (Al Ziadat, 2015; Han et al., 2017; Kaushik et al., 2015). Researchers have analysed the factors that affect consumer adoption of new ways of sharing accommodation services in relation to home-sharing platforms as a cross-cultural study and found that that subjective norms and ease of use exert an effect on perceived usefulness and that intention to use affects actual use in all the groups analysed (Muñoz-Leiva et al., 2018).

A systematic review of academic journal articles investigating the theoretical models and determinants of the acceptance and adoption of ICTs within the etourism framework has identified SN as a determinant towards adoption of technology related to tourism (Pourfakhimi et al., 2018). Study on users' perception of knowledge-sharing in travel-related online social networks identified that SN is significant towards intention to share knowledge in travelrelated online social networks (Bilgihan et al., 2016). Study conducted in Indonesia on user acceptance of tourism and hospitality mobile applications found that SN is one of the significant determinants of behavioural intention to use and actual system sage of Agoda mobile applications in the Indonesian context (Irwansyah & Triputra, 2016). Several researchers examined on the travellers' intention to adopt mobile applications (m-apps) as another mean in purchasing tourism-related product and services via their mobile devices and noted that SN is a significant determinant towards user intention to adopt innovative technology related to tourism (Tan et al., 2017).

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Research problem

How do different subjective norm types affect tourists' intentions and actions on acceptance of tourism related technology?

Research questions

What is the impact of type of SN towards user intentions and actions on AoTT?

Are there any differences in between Friends-SN and Family-SN groups (in comparison to control group of No SN) towards intentions and actions on AoTT?

Research objectives

Accordingly, primary objective of this study is to identify the significance of type of SN towards user intentions and actions on AoTT. Secondly, determined to identify the differences in between the SN groups (in comparison to control group-No SN) towards intentions and actions on AoTT.

Literature Review

TRA expounds the affiliation between attitudes and behaviours within human actions. Theory is primarily used to envisage the way, how the people will behave reliant on their pre-existing attitudes and the behavioural intentions. An individual's decision to involve in a certain behaviour is based on the outcomes, the individual expects will come because of performing the particular behaviour. TRA has been derived with the findings of the previous researches in the fields of <u>social-psychology</u>, persuasion models and attitude related theories by Fishbein and <u>Ajzen</u> (Fishbein, 1967; Fishbein & Ajzen, 1975).

Prime objective of the TRA is to comprehend an individual's voluntary behaviour by examining the underlying basic motivation to perform an action. TRA suggested that a person's intention to perform a behaviour is the main predictor of whether or not people actually perform that behaviour. Furthermore, the normative component which is the social norms surrounding the act, also contributes to whether or not the person will actually perform such behaviour (Doswell et al., 2011; Fishbein, 1967; Montano & Kasprzyk, 2015).

Consistent with TRA, behavioural intention is the main motivator of behaviour, while the two key determinants on behavioural intention are people's *attitudes* and *norms*. By means of examining attitudes and subjective norms, researchers can gain an understanding as to whether or not a person will perform the intended action (Fishbein & Ajzen, 1975).

Subjective norms are also one of the key determinants of behavioural intention and refers to the way perceptions of relevant groups or individuals such as family members, friends and peers may affect individual's performance of the behaviour. Ajzen defines subjective norms as the "perceived social pressure to perform or not perform the behaviour". In line with TRA, people develop certain beliefs or normative beliefs as to whether or not certain behaviours are acceptable. These beliefs shape individual's perception of the behaviour and determine one's intention to perform or not to execute the behaviour. (Albarracin & Ajzen, 2007; Fishbein, 1967; Fishbein & Ajzen, 1975).

Similarly, the theory of reasoned action has been used in many studies as a framework for examining specific kinds of behaviour such as communication behaviour, consumer behaviour and health behaviour and technology acceptance behaviour in the field of tourism as well (Ho et al., 2017; Montano & Kasprzyk, 2015; Pourfakhimi, et al., 2018).

Research on adopting self-service hotel technologies (SSHTs) indicated that trust has a significant impact on tourists' attitude, through both trust and subjective norm that considerably affect tourists' behavioural intention towards adopting new technologies (Kaushik et al., 2015). SN has been used in attracting Japanese tourists for medical tourism experience (Lee et al., 2012). SN has been discussed in relation to tourism destination selection as well (Jalilvand & Samiei, 2012). Relationship between tourist attitude and SN are significant and positive on revisit intention (Al Ziadat, 2015). SN has been researched in tourism industry with regard to different perspectives such as tourism shopping behaviour, travel search engines and different tourism product aspects (MacKay & Campbell, 2004; Fowler et al., 2012; Park & Gretzel, 2006). Effect of SN towards user intention has been supported empirically (Han et al., 2017).

In explaining variation in tourist environmental behaviour, SN has been used in conjunction with TRA, among other factors. (Poudel & Nyaupane, 2017). Explanation of culturally significant tourist behaviour was researched using TRA with special reference to SN (Brown, 1999). Attitude, subjective norm and benefits have a positive relationship with the visit intention (Ngah et al., 2018). Accordingly, following hypothesis is postulated,

 $\mathrm{H_{l}1}\text{-}\mathrm{Type}$ of SN is a significant determinant of intentions and actions towards AoTT

Indeed, referent others and recommendation from family and friends are important since it could influence tourists' attitudes on heritage food consumption (Omar et al., 2015). Satisfied tourists are inclined to show a higher level of loyalty through revisits, positive word of mouth and their recommendation of destinations to friends and relatives, which can further increase tourist numbers, tourism expenditures and the economic growth of the destination (Cang et al., 2017). Advice and recommendations from close friends (SN) can also positively influence the attitude of an individual towards the usage of social networking sites for trip organizing and the effect of SN on attitude is moderate (Matikiti et al., 2017). Tourists' level of loyalty can be reflected through behavioural intention of revisiting the destination and recommend those experiences to friends and relatives (Omar et al., 2015). Hence, following hypothesis is proposed,

 H_1 2- There are significant differences in SN driven by friends as against the SN driven by family (in comparison to control group)

Subjective norm aspect has been used, along with other factors, in conjunction with TRA, in explaining variation in tourist environmental behaviour (Poudel & Nyaupane, 2017). Similarly, some researchers have identified significant relationship between SN and tourists' intentions and adoption behaviours related to technology on tourism (Brown, 1999; Ho et al., 2017; Ngah et al., 2018).

Significant effects of SN towards acceptance of innovative tourism related technology such as online travel booking facilities, mobile technology connected to tourism, mobile apps providing numerous services related to tourism and hospitality fields, were noted by researchers in different country contexts (Conyette, 2011; Dickinson et al., 2016; Liu et al., 2019; Nunkoo & Ramkissoon, 2010).

Correspondingly, numerous studies have noted the significance of subjective norm derived from various social groups/ social pressure influenced by family members, friends, peers and etc. towards acceptance of technology based tourism facilities with reference to tourists' behavioural intentions and actions (adoption behaviour) in relation to e-tourism, eco-tourism and related other tourism sub-sectors across countries (Amaro & Duarte, 2015; Anggraeni & Wijaya, 2019; Lai, 2015; Parsaei et al., 2014; Ruiz-Mafe et al., 2016).

Aforementioned discussions were formulated to attain the primary objective of identifying the significance of type of SN and to, evaluate the differences in between SN groups (compared to control group), towards user intentions and actions on AoTT.

As a research framework enabling for examining various kinds of user/individual behaviours such as communication behaviour, consumers' purchasing behaviours and teenagers' reproductive health behaviours and technology acceptance behaviour in the field of tourism, all were researched upon following the theory of reasoned action by the researchers in different subject areas (Ho et al., 2017; Montano & Kasprzyk, 2015; Gayan Nayanajith et al., 2019; Pourfakhimi, et al., 2018).

With special reference to tourism, some research studies have used adapted conceptual models derived from TRA along with variables postulated by TRA instead of applying/adopting the original model as it is. Correspondingly, in some occasions, researchers have modified TRA by incorporating variables from related models and by introducing moderators, enabling to explain the innovative tourism technology acceptance (Amaro & Duarte, 2015; Liu et al., 2019; Nunkoo & Ramkissoon, 2010; Poudel & Nyaupane, 2017).

Conceptual Frame Work



Source: Designed by the author

Research Methodology

Deductive methodology and quantitative methods have been followed as per the pertinent ontological and epistemological stances.

The full set of cases from which a sample is taken is called the population. In the present study, population parameter refers to all the tourists attached to the hotels pertaining to three leading hotel chains in Sri Lanka, whom are in possession of tourism related technology. However, most of the instance researchers are unable to access entire population of interest considering the time constraints, budget constraints and practical difficulties. Hence, researchers use sampling methods to select a sample that represents the population. Barnett (2002) argues that sampling makes possible a higher overall accuracy than a census. The smaller number of cases for which researchers need to collect data means that more time can be spent designing and piloting the means of collecting, analysing data. This means it is possible to answer research questions and to achieve objectives that require researchers to estimate statistically the characteristics of the population from the sample. Consequently, probability sampling is often associated with survey and experiment research strategies (Saunders & Lewis, 2012).

In the present study respondents were selected on random sampling method as per hotel registration numbers and questionnaire survey was conducted where responses for the statements were measured using 5-point Likert scale instrument in this study. Furthermore, there are previous researches which supports even non-availability of sampling frame and usage of simple random sampling method in literature with regard to various research contexts, as well (Agarwal & Gupta, 2008; West, 2016).

Subsequently, questionnaire survey was executed in which the respondents were the tourists attached to hotels pertaining to three leading hotel chains in Sri Lanka. Respondents were selected on random sampling method as per hotel registration numbers. Overall, 400 questionnaires were distributed and 279 duly completed questionnaires were considered for the final data analysis.

Upon collection of data at the initial stage of analysis, a reliability analysis was conducted to measure internal consistencies of the total scores for each scale through Cronbach's alpha coefficients. As per the calculation of reliability measurements, all the reliabilities for both independent and dependent variables are found to be adequate since Cronbach's alpha values are higher than 0.7 (George & Mallery, 2003; Blomberg et al., 2008; Field, 2017).

With regard to the validity aspect, Construct validity is an important characteristic which is concerned with the extent to which a particular measure relates to other measures consistent with theoretically derived hypotheses concerning the concepts that are being measured (Cronbach & Meehl, 1955; Wieland et al., 2017). In simple terms, it examines whether a scale measures what it is supposed to measure. Three distinct steps involved in construct validity, firstly, the relationships between the concepts must be theoretically specified. Secondly, the relationship between measures of concepts must be empirically examined and thirdly, the empirical evidence must be interpreted in relation to how it clarifies the construct validity of the specific measure. Convergent and discriminant validity are the two subtypes of validity that constitutes construct validity. Convergent validity denotes to the degree to which two measures of constructs that theoretically should be related, are actually related. In contrast, discriminant validity tests whether concepts/measurements that are supposed to be unrelated are, indeed, unrelated.

Construct validity concerned could be addressed by way of several measures. However, in the present study researcher has formulated the framework only upon establishing the relationship of variables empirically and theoretically. Further, researcher has conducted a preliminary pilot study aiming at testing the feasibility of the full-scale test and subsequently, made some adjustments strengthening the final study.

Likewise, content validity has been addressed by integrating concerns raised by the tourism experts in the three leading hotel chains, into designing the questionnaire. Moreover, criterion validity was addressed by thorough perusal of previous studies and incorporating similar questions in the process of formation of the questionnaire for the present study (Blomberg et al., 2008; Corbetta, 2003; De Vaus & De Vaus, 2013; Saunders & Lewis, 2012; Thornhill et al., 2009).

Finally, data analysis of the study was performed by using IBM SPSS version 20 package wile utilizing primarily multivariate/ MANOVA analysis tool alongside a discriminant function analysis enabling to identify how the dependent variables discriminate the different SN groups.

It is known that the general linear model (GLM) could be used to detect group differences on a single dependent variable. Nevertheless, there may be circumstances in which the researchers are interested in several dependent variables and in these situations the simple ANOVA (univariate test) model is inadequate. As a substitute, an extension of this technique known as multivariate analysis of variance (MANOVA) could be used (Field, 2017). MANOVA could be utilized for research contexts in which there are several dependent variables (in this context, tourists' intentions and actions on acceptance of tourism related technology). Researchers may follow MANOVA test particularly when there are several dependent variables, where it is possible to analyse interactions between dependent variables, and possible to analyse contrasts to see which groups differ from each other (to identify any differences in between family and friends SN groups in comparison to control group). Hence, it is obvious that research objectives and research specific research method used in the study is consistent.

Results and Interpretations

Data analysis completed by using IBM SPSS version 20 package. Sociodemographic characteristics of the sample is in line to examine the research issue in the specified context as most of the demographic features of the population are being represented by the designated sample of the research study.

Following table 1 shows that respondents had comparatively more intentions than actions towards AoTT.

Table 1: Descriptive Statistics

| | SN | Mean | Std. Deviation | Ν |
|-----------|---------|--------|----------------|-----|
| Action | Family | 3.2860 | .27715 | 81 |
| | Friends | 3.9483 | .62791 | 141 |
| | No SN | 3.6849 | .58498 | 57 |
| | Total | 3.7022 | .60896 | 279 |
| Intention | Family | 3.9679 | .60432 | 81 |
| | Friends | 4.5220 | .43311 | 141 |
| | No SN | 4.1035 | .46559 | 57 |
| | Total | 4.2756 | .55469 | 279 |

Table 2 shows, Pillai's trace (p < .05), Wilks's lambda (p < .05), Hotelling's trace (p < .05) and Roy's largest root (p < .05), all reach the criterion for significance of .05. As per the results it could be noted that the type of SN had a significant effect on AoTT.

Table 2: Multivariate Tests^a

| Effect | | Valu e | F | Hyp . df | Err . df | Sig. | Partial Eta Square d |
|----------|------------|-----------|--------|-------------|-------------|------|-------------------------------|
| Intercep | Pillai's | .985 | 8778.7 | 2 | 275 | .00 | .985 |
| t | Trace | | b | | | 0 | |
| | Wilks' | .015 | 8778.7 | 2 | 275 | .00 | .985 |
| | Lambda | | b | | | 0 | |
| | Hotelling' | 63.8 | 8778.7 | 2 | 275 | .00 | .985 |
| | s Trace | | b | | | 0 | |
| | Roy's | 63.8 | 8778.7 | 2 | 275 | .00 | .985 |
| | Largest | | b | | | 0 | |

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| | Root | | | | | | | _ |
|--|----------------|------|--------|---|-----|-----|------|---|
| SN | Pillai's | .285 | 22.924 | 4 | 552 | .00 | .142 | |
| | Trace | | | | | 0 | | |
| | Wilks' | .727 | 23.769 | 4 | 550 | .00 | .147 | |
| | Lambda | | b | | | 0 | | |
| | Hotelling' | .359 | 24.613 | 4 | 548 | .00 | .152 | |
| | s Trace | | | | | 0 | | |
| | Roy's | .306 | 42.237 | 2 | 276 | .00 | .234 | |
| | Largest | | с | | | 0 | | |
| | Root | | | | | | | |
| a. Design: | Intercept + SI | N | | | | | | |
| b. Exact statistic | | | | | | | | |
| c. The statistic is an upper bound on F that yields a lower bound on the | | | | | | | | |

significance level.

Table 3 contains the ANOVA summary table for the dependent variables. The values of p indicate that there is a significant difference between SN groups in terms of both AoTT-related thoughts (p < .05) and AoTT-related behaviours (p < .05). Both the multivariate and univariate results indicate that SN has been successful.

Table 3: Tests of Between-Subjects Effects

| Source | Dependent | Type III | df | Mean | F | Sig. |
|-----------|-----------|---------------------|-----|----------|---------|------|
| | Variable | Sum of Squares | | Square | | |
| Corrected | Action | 22.586 ^a | 2 | 11.293 | 38.716 | .000 |
| Model | Intention | 17.917 ^b | 2 | 8.958 | 36.566 | .000 |
| Intercept | Action | 3224.016 | 1 | 3224.016 | 11052.9 | .000 |
| | Intention | 4288.431 | 1 | 4288.431 | 17504.3 | .000 |
| SN | Action | 22.586 | 2 | 11.293 | 38.716 | .000 |
| | Intention | 17.917 | 2 | 8.958 | 36.566 | .000 |
| Error | Action | 80.506 | 276 | .292 | | |
| | Intention | 67.618 | 276 | .245 | | |
| Total | Action | 3927.167 | 279 | | | |
| | Intention | 5185.930 | 279 | | | |
| Corrected | Action | 103.092 | 278 | | | |
| Total | Intention | 85.534 | 278 | | | |

Table 4 indicates that as the MANOVA is significant, it might be the relationship between dependent variables that is important rather than the individual dependent variables themselves.

Table 4: Between-Subjects SSCP Matrix

| | | | Action | Intention | |
|----------------------------------|-----------|-----------|----------|-----------|--|
| Hypothesis | Intercept | Action | 3224.016 | 3718.329 | |
| | _ | Intention | 3718.329 | 4288.431 | |
| | SN | Action | 22.586 | 19.091 | |
| | | Intention | 19.091 | 17.917 | |
| Error | | Action | 80.506 | 54.571 | |
| | | Intention | 54.571 | 67.618 | |
| Based on Type III Sum of Squares | | | | | |

As shown in table 5, these contrasts represent family SN vs. No SN and friends SN vs. No SN, respectively. Each contrast is performed on both dependent variables separately and so they are identical to the contrasts that would be obtained from a univariate ANOVA. The first thing to notice (from the values of Sig.) is that, when it compares friends SN to No SN (latter part of the table) there are significant differences in intentions (p = .000) or actions (p = .002) because both values are below the .05 threshold. Nevertheless, comparing family SN to No SN, there is no significant difference in thoughts (p = .114) but there is a significant difference in behaviours between the groups (p = .000, which is less than .05).

Table 5: Contrast Results (K Matrix)

| SN Simple Contrast ^a | | | | Dependent Variable | | |
|---------------------------------|-------------------|-----------|---|-----------------------|-----------|--|
| | | | | Action | Intention | |
| Level 1 vs. Level | Contrast Estimate | | | 399 | 136 | |
| 3 | Hypothesized V | alue | | 0 | 0 | |
| | Difference | (Estimate | - | 399 | 136 | |
| | Hypothesized) | | | | | |
| | Std. Error | | | .093 | .086 | |
| | Sig. | | | .000 | .114 | |

| | 95% Confidence | Lower | 583 | 304 | | |
|---------------------------|--------------------|-------------|------|------|--|--|
| | Interval for | Bound | | | | |
| | Difference | Upper Bound | 215 | .033 | | |
| Level 2 vs. Level | Contrast Estimate | | .263 | .418 | | |
| 3 | Hypothesized Value | | 0 | 0 | | |
| | Difference (Es | stimate - | .263 | .418 | | |
| | Hypothesized) | | | | | |
| | Std. Error | | .085 | .078 | | |
| | Sig. | | .002 | .000 | | |
| | 95% Confidence | Lower | .096 | .266 | | |
| | Interval for | Bound | | | | |
| | Difference | Upper Bound | .430 | .571 | | |
| a. Reference category = 3 | | | | | | |

At the same time, A discriminant function analysis (DFA) was conducted to identify how the dependent variables discriminate the groups. DFA identified variates and both the two variates were significant as per Wilks's Lambda. Then standardized canonical discriminant function coefficients were used to find out how the dependent variables contribute to the variates (High scores indicate that a dependent variable is important for a variate and variables with positive and negative coefficients are contributing to the variate in opposite ways). Finally, in order to find out which groups are discriminated by a variate, checked the functions at group centroids table (For a given variate, groups with values opposite in sign are being discriminated by that variate).

Conclusion and Recommendation

As the main objective of this study researcher has postulated to identify the significance of type of SN towards user intentions and actions on acceptance of tourism related technology. Therefore, multivariate test was used. MANOVA test analysed the difference between groups across several dependent variables simultaneously (in this research, tourists' intentions and actions on acceptance of tourism related technology). As shown in the table 2, There were four multivariate test statistics (Pillai's Trace, Wilks's Lambda, Hotelling's Trace and Roy's Largest Root) and all the p statistics are less than 0.5 threshold indicating the significance of same. Similarly, as demonstrated in table 3, the ANOVA summary statistics output for the dependent variables (AoTT behavioural intention and the action/behaviour) depicts as per the p values that there is a significant difference between SN groups in terms of both AoTTrelated intentions (p < .05) and AoTT-related actions (p < .05). Accordingly, the multivariate and univariate test results indicated that type of SN significantly affects user intentions and actions on AoTT. Hence, it could be noted that the first hypothesis is supported by the empirical evidence of the study.

Secondary objective was to identify the differences in between the SN groups (in comparison to control group-No SN) towards AoTT related intentions and actions. Hence, contrast test was performed to analyse the same. As depicted in table 5, these contrasts represented family SN vs. No SN (Level 1 vs. Level 3) and friends SN vs. No SN (Level 2 vs. Level 3), respectively. Each of the contrast is conducted on both dependent variables separately (AoTT related intentions and actions) and so they are identical to the contrasts that would be obtained from a univariate ANOVA. Referring to the significance values, the first thing to notice is that, when it compares friends SN to No SN (Level 2 vs. Level 3; latter part of the table) there are significant differences in both the AoTT related intentions and actions because both values are below the .05 threshold. Nonetheless, comparing family SN to No SN (Level 1 vs. Level 3), there is no significant difference in AoTT related thoughts as the p value is considerably greater than 0.5, although there is a significant difference in AoTT related behaviours between the groups in which the p value is less than .05, while supporting the second hypothesis of the study.

MANOVA test indicated that type of SN can have a significant effect on AoTT and the significant univariate ANOVAs proposed that this may be in terms of either a combination or individual thoughts/behaviours. As per the analysis, concluded that friends SN is better at changing both actions and intentions on AoTT. Thus, both the hypotheses have been supported by the empirical evidence of the study. Accordingly, further analyses have demonstrated that No SN group can be distinguished from the two groups using the variate that has opposite effects on intentions and actions on AoTT. Also, the friends SN

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and family SN groups can be distinguished by the variate that has similar effects on intentions and actions. So, friends SN is better than both No SN and family SN, regardless of whether it's more important to focus on intentions or actions.

Tourism related technology that is used and developed within the travel and tourism industry is revolutionizing the way how the tourists used the tourism related facilities and services. Range of facilities from using mobile phone to check-in at the airport to usage of biometrics, tourism related technology developing companies are striving to make travelling frictionless. These technological innovations have been resulted owing to R&D: big data, mobile technology, cloud technology and the Internet of Things among others (da Costa Liberato et al., 2018; Law et al., 2018).

Although advances and technological developments in travel and tourism are being made, there are still many challenges and uncertainties that need to be addressed in relation to acceptance of such services. In this instance, enabling to overcome such challenges tourism related technology application developers, promoters and related parties could make use of the subjective norm aspect by way of patronizing positive social pressure towards adoption of tourism related technology via family members, peers and particularly the positive influences of the friends as revealed by this study which also has been supported by the previous studies in the same way (Gupta et al., 2018; Pierdicca et al., 2019).

Influence of friends is especially important as they influence each other's personal preferences and as well as lifestyles. Technology continues to change how travellers gain access to and use travel-related information. For many businesses and locations, the experience starts long before a traveller arrives. Pre-travel planning is a fundamental step in trip planning and helps the traveller obtaining knowledge about their upcoming trip alongside the positive influences of friends in particular. The internet is one of the top sources for trip planning information. Users are able to search for videos, social media posts, customer reviews, places for shopping and dining, events going on, all in one place. However, specially the friends are making influence over behavioural intention and the behaviour /action towards acceptance of tourism related technology in relation to forming positive attitude on selecting and proceeding with booking engines allowing easy access for consumers and travel professionals enabling individuals to make reservations and compare prices and engage in sites such as TripAdvisor which lets the travellers read, post, and interact with reviews of travel experiences and attractions others have had. Similarly, friends' social media posts allow users to gather general information of tourism related technology, free of marketing bias (De Pelsmacker, et al., 2018; Huertas, 2018). Therefore, in line with empirical findings, travellers' intentions and usage behaviour towards acceptance of tourism related technology could be influenced particularly in association with friends' motives enabling to achieve a higher degree of adoption of tourism technology in Sri Lankan context.

As the respondent were the tourists boarded only in the reputed hotel chains, different outcome is possible, had the research been conducted including the backpackers, homestayers and etc. Since there were restrictions due to time and other resources, future researches could be executed with improved representation to validate the research findings in diverse contexts by incorporating different models, perspectives and variables (Gayan Nayanajith et al., 2019). Empirical evidences will make a contribution towards theory and practice perspectives in relation to AoTT. Marketers of tourism related technology service providers could capitalize on recommendations from friends, family and related other stakeholders enabling to promote technology advancements across eco-tourism, sustainable tourism, wellness tourism, experiential tourism and other sub sectors. Policy makers, tourism application/web site developing companies could make use of findings to formulate strategies for the betterment of the Sri Lankan tourism given the prevalent domestic disturbances.

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