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SOCIALIZATION AGENTS ON ADOLESCENT CONSUMER VULNERABILITY WITH THE MODERATING EFFECT OF FAMILY INCOME: EVIDENCE FROM FRANCHISED FAST-FOOD INDUSTRY IN SRI LANKA

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ABSTRACT

Adolescents are considered a highly vulnerable customer group owing to their overconsumption of fast food, and existing scholars suggest that socialization agents play a prominent role in adolescent nutritional knowledge and purchasing preferences. Additionally, the current literature highlights that the consumption of fast food varies with family income. Within this backdrop, the study aimed to analyze the moderating role of family income on socialization agents and adolescent consumer vulnerability, due to the scarcity of existing studies relevant to the field. Primary data were collected from 910 adolescents studying in national government schools in Sri Lanka based on a stratified random sampling method through a 69-item self-administered questionnaire. Results indicated that the five socialization agents; Peers, Parents, TV advertisements, the Internet, and Retailers—have a positive influence on adolescent consumer vulnerability in the Sri Lankan franchised fast-food industry, proving the first five hypotheses. Further, hypothesis six was also proved, revealing that family income significantly moderates the relationship between Peer pressure, TV advertising, and retailers' influence on adolescent consumer vulnerability. Finally, the present study provides profound insights for both practitioners and theoreticians who wish to study the consumption behavior of adolescent consumers.

Keywords: Socialization Agents, Adolescent Consumer Vulnerability, Family Income, Franchised Fast-food Industry

1. Introduction

Adolescents are more interested in eating junk food, and most of the time they have no desire to eat homemade food (Mohammadbeigi et al., 2019; Damari et al., 2016). Thus, consumption of fast food is getting more popular among young consumers (Chowdhury et al., 2018; Nirmani et al., 2017; Majabadhi et al., 2016), and adolescents are typically fond of eating fast food not only for its taste but also for socialization group habits (Yekbun & Piumi,

2021; Saranya et al., 2016). When it comes to the Sri Lankan context, Sri Lanka is a country where rice and curry are the major food items among Sri Lankans (Weerasekara et al., 2018). The traditional meals of Sri Lanka had been there for many years until people met foreign fast food (Priyanath & Dasanayaka, 2022). Nevertheless, due to changes and transitions in the lifestyle and dietary habits of people, there is an increasing trend of consuming fast food among adolescents within the country (Nirmani et al., 2017; Majabadhi et al., 2016).

As far as the influences of fast-food consumption are concerned, socialization agents play a role in impacting nutrition knowledge, preferences, and purchasing preferences associated with food (Padeniya et al., 2019; Scully et al., 2012). As such, adolescents' views about fast food consumption are influenced by socialization agents including peers, parents, food advertisers, the internet, retailers, schools, and governments (Kennedy et al., 2019; Padeniya et al., 2019; Truman and Elliott, 2019; Harari and Eyal, 2019; Somasiri & Chandralal, 2018; Chan et al., 2009). Although adolescents are seen as vulnerable consumers, little research has considered why they are more vulnerable than adults (Kennedy et al., 2019; Harari & Eyal, 2019). When it comes to the Sri Lankan context, desired research findings are not enough to figure out the role of socialization agents on adolescent consumption (Padeniya et al., 2019).

Additionally, the existing scholars revealed that adolescents' vulnerability to fast food consumption is highly determined by family income (Li et al., 2020; Block, 2015; Fowles et al., 2011). Moreover, the importance of studying the moderating role of family income in future research was also highlighted within the literature (Li et al., 2020; Block, 2015). Accordingly, the present study contributes to existing consumer vulnerability knowledge in three aspects. Firstly, the impact of customer transition as an element of consumer vulnerability was not adequately discussed within the existing set of research findings. Secondly, the study analyzes the impact of five socialization agents together on adolescent consumer vulnerability, which has rarely been touched upon so far within the current literature. Thirdly, the study measures the moderating role of family income on adolescent consumer vulnerability, which was also suggested by the scholars (Li et al., 2020; Block, 2015).

2. Literature review

2.1 Adolescent Consumer Vulnerability

The term Adolescent Consumer Vulnerability is derived from the concept of Consumer Vulnerability. According to Baker et al. (2005), Consumer Vulnerability is a state of powerlessness that arises from an imbalance in marketplace interactions or from the consumption of marketing messages and products. As far as the recent research findings on consumer vulnerability are concerned, the majority of the existing studies are available on Consumer Demographics; Low-literacy (Stewart & Yap , 2020; Jayasundara et al., 2020; Nishadi, 2020; Crowell, 2014), Gender (Lacoba et al., 2020; Li et al., 2020; Fox & Hoy, 2019;

McCoy et al., 2017; Nora et al., 2015; Barber, 2013). Lack of resources (FCA, 2014; Canhotoa & Dibb, 2016), Income (Powell & Binh, 2013; Li et al., 2020; Khan et al., 2012), social Class (Paniagua et al., 2014; Ranjith et al., 2015; Skårdal et al., 2014; Svastisalee et al., 2012; Wills et al., 2009), and Older age (Melnikas & Smaliukiene, 2007; Moschis et al., 2011; Silvera, Meyer & Laufer; Berg, 2015). As such, the existing consumer vulnerability research suggests concentrating more on young consumers by moving the focus away from an adult perspective to an adolescent perspective shaped by the norms of the youth's consumption subcultures (Niankara et al., 2020; Batat & Tanner, 2019; Kennedy et al., 2019; Mason et al., 2013; Batat, 2012; Pechmann et al., 2011).

2.2 Socialization Agents

The concept of Consumer Socialization has a direct link with Adolescent research (Batat & Tanner, 2019). However, the desired research findings are not enough to figure out the vulnerability of adolescents to various socialization agents (Batat & Tanner, 2019; Kennedy et al., 2019). While explaining the importance of Peer, Parents and TV advertising as traditional agents of socialization (Ubayachandra & Eldeniya, 2017; Jain & Sharma, 2016; Lenka & Vandana, 2015; Barber, 2013; Abbas et al., 2013), the extant literature highlighted the importance of studying the influence of the Internet (Batat and Jfner, 2019; Barber, 2013), Social Media (Niankara et al., 2020; Kennedy et al., 2019; Somasiri and Chandralal, 2018), and Retailers (Thyne et al., 2019; Grier and Davis, 2013) on Adolescent Consumer Vulnerability.

2.3 Moderating role of Family Income

According to the existing scholars, family income is a major determinant of fast food consumption among families in Sri Lanka (Saraniya and Thevaranjan, 2015; Aruppilli and Phillip, 2015; Rathnayaka et al., 2014). When it comes to the Sri Lankan context, it is a country with average household income per month of Rs. 76,414 and a median household income of Rs. 53,333 by 2019 (Department of Census and Statistics, 2019). Although average monthly income is lower in Sri Lanka, average monthly expenditure for food items has increased from 2016 to 2019 (Department of Census and Statistics, 2019). Although, it is hypothesized that family income could have a greater impact on adolescents' fast-food consumption, there is less evidence on the moderating role of Family Income on the relationship between Socialization Agents and Adolescent Consumer Vulnerability (Li et al, 2020; Jovanovic, 2016; Block 2015).

Table 01: Socialization Agents on Adolescent Consumer Vulnerability (Research Gaps)

Area of Vulnerability	Author/s and Year	Empirical Findings
Peer Pressure on Adolescent Consumer Vulnerability	Crosnoe and McNeely (2008)	Findings of the study suggest that future researches should be taken place giving more focus to peer oriented public health research.
	McCoy et al (2017)	Future researchers in this area can expand the existing findings, giving more attention to study income and gender differences in susceptibility to peer influence.
Parents' Influence on Adolescent Consumer Vulnerability	Chan et al, (2010)	The study investigated the underrepresented adolescent consumer group and provide suggestions for future researches to expand the study into other cultural contexts
	Fox and Hoy (2019)	Future researches in this area are required to highlight the role of new fathers, single parent family and grandparents on vulnerability of adolescent consumers.
	Gilmour et al (2020)	The determinants of adolescents' attitudes towards consumption of food should be further studied by considering both intra personal and extra personal factors.
Impact of TV Advertising on Adolescent Consumer Vulnerability	Elliot,C. (2017)	The difference between the impact of regulation on adolescents and adult consumers is not clear within the current literature. So, future researches in this area can expand the above finding.
	Harris et al (2020)	Future researchers can expand the study findings to understand the impact of harmful food marketing messages on adolescent consumers.
	Lapierre and Rozendaal (2019)	Due to the fact that the study is a cross sectional one, the real impact at different time periods cannot be known. So, future researchers can expand the findings through longitudinal researches.
	Lapierre et al (2017)	Longitudinal research which explains the changes of promotional impact should be discussed within the future endeavours.
	Nairn and Berthon (2005)	Future research should pay attention to study the underrepresented early adolescent consumer group.
	Pechmann et al (2005)	The impact of Dopamine system on adolescent consumer decision making should be studied further in upcoming researches with special reference to food advertising.
Adolescent Consumer Vulnerability in Online Context	Barber, N.A. (2013)	The purchasing patterns of baby boomers across different segments should be studied further in upcoming researches.
	Hill et al (2013)	Findings of the present study should be expanded to other cultures with different socio-economic backgrounds, such as adolescents living in other geographic regions and income levels.
	Josephine et al (2006)	Net benefits for the consumer and society should be studied further in upcoming researches. For instance, reduced prices for gambling products, greater convenience, greater entertainment choices.
	Kenneday et al (2019)	Specific uses of online and social media and their involvement with online brands should be studied more in upcoming researches.
	Kuss and Griffiths (2012)	Gaming addiction of adolescent consumers across cultures should be studied more within the future researches.
	Montgomery and Chester (2009)	Increasing threats of adolescent consumers facing in digital marketplace should be studied more and necessary actions should be taken to mitigate that dangerous situation.

	Niankara et al (2020)	Future researches in this area should further elaborate the impact of other digital media comprising social media to have a more clear explanation of digital media on adolescents' health interests.
Retailers' influence on Adolescent Consumer Vulnerability	Grier and Davis (2013)	The impact of location proximity on adolescent consumer obesity should be studied further, with reference to consumers of diverse ethnic groups, Income groups and geographical areas.
	Lueg et al (2006)	The possibility of adding new variables, for instance, socio-economic status (income, areas of living,) should be investigated within the future researches in this area.
	Thyne et al (2019)	Future research should indeed consider empowering children more in the whole research process
More than one socialization agents	Dotson and Hyatt (2005)	The contribution of internet as a socialization agent should be further studied within the future research endeavours.
	Lenka and Vandana (2015)	Impact of age cohort and income differences should be studied further in upcoming researches.
	Mason et al (2013)	The associations between uncertainties, locations and freedom of selection should be thoroughly examined in future studies.
	Ozdogan and Atlantis (2010)	The existing findings can be expanded more by considering the effect of gender differences, income differences and age cohorts.
	Roberts et al (2008)	The changing impact of personal interaction on consumer defenselessness should be further explained in future researches.
	Shin et al (2019)	The role of socio-economic status, culture and communication patterns on the association between parent and adolescent relationship should be explained more in future researches.

2.4 Conceptual Framework and Hypotheses Development

Through careful examination of the above literature, the conceptual framework of the present study was developed as follows.

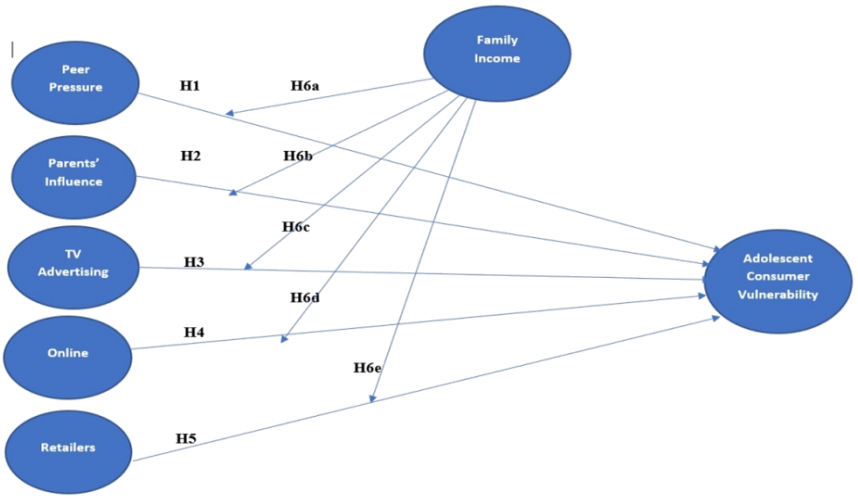

Figure 01: Conceptual framwork

As mentioned in the Conceptual Framework, it was hypothesized that there is a positive influence from socialization agents on adolescent consumer vulnerability in franchised fast-food industry in Sri Lanka. As such, the first five hypotheses were derived to measure the impact of independent variable (socialization agents) on dependent variable. Additionally, the next hypothesis was developed to measure the moderating effect of Family Income on the direct relationship between the independent and the dependent variable. Thus, the impact of each of the five socialization agents and the moderating effect on the direct relationship can be explained in detail as follows.

2.4.1 Peer Pressure on Adolescent Consumer Vulnerability

At present, socially-oriented consumption of fast-food among adolescence is determined by the Peers (Harari and Eyal, 2019). Naturally, adolescents alter their consumption behaviors by comparing the behaviour patterns of their peers. (Fortin and Yazbeck, 2011). As mentioned in the literature, for many beverages and fast-food restaurant types, friends' behaviors are associated, especially fast-food visits for older adolescents (Bruening et al, 2014). That is increasing fast food consumption of peers induce adolescents to increase their own consumption of fast foods (Fortin and Yazbeck, 2011). When it comes to Sri Lankan context, existing findings revealed that peer influence through social media determines the conformity behavior of adolescents and young consumers (Yekbun & Piumi, 2021; Piumali and Rathnayaka (2017). However, the impact of peer pressure on adolescent consumer vulnerability has not been discussed so far within the current body of knowledge. Thus, the study aimed to analyze how peers influence on consumption of fast food among adolescents in Sri Lanka. Within this backdrop, the first hypothesis of the study was derived as follows.
H1: Peer Pressure positively influence on Adolescent Consumer Vulnerability in franchised fast-food industry in Sri Lanka.

2.4.2 Parents Influence on Adolescent Consumer Vulnerability

In the case of children and adolescents, the most central socializing agents are usually the parents, who from an early age make food-related decisions in the household and who serve as primary role models (Harari and Eyal, 2019). Parents emerged as positive role models for nutritional health (Harari and Eyal, 2019) while parental intervention in children's food preferences has been studied extensively (Benton 2004). Parents' role seems to be more important for the variables associated with adolescents' well-being and health (Camacho et al., 2010; Newman, Harrison & Dashiff, 2008). Further, it was revealed that the impact of parents on adolescents' meal selection followed by adolescent consumer vulnerability should be studied in upcoming researches (Harari and Eyal, 2019; Saranya et al, 2016). As far the Sri Lankan context is concerned, recent researchers highlighted that parent are the main agent of socialization who first teach their children to consume products since birth (Senevirathna et al, 2021; Yekbun & Piumi, 2021). Based on the above literature, the second hypothesis was derived as follows.

H2: Parents positively influence on Adolescent Consumer Vulnerability in franchised fast-food industry in Sri Lanka.

2.4.3 Impact of TV Advertising on Adolescent Consumer Vulnerability

Adolescents are vulnerable to food advertising due to its complex and contrasting messages communicated through thin models (Eyal & Te'eni-Harari, 2016). The possibility of deceiving by advertising is problematic especially when it results in unhealthy food choices (Effertz., 2013). Advertising to children and adolescents is regarded as a source of misleading information that distracts children's attention from possible health hazards, especially for unhealthy food products like snacks, sweets, or fast-food (Effertz et al, 2013). Fast food advertisements, restaurants and menus all provide environmental cues that may trigger addictive overeating (Damari et al, 2016; Garber and Lustig, 2011). Despite the fact that many advertised foods are not of high nutritional quality, many such ads include health claims and persuasive techniques to convince children to purchase the food items (e.g., Vilaro, Barnett, Watson, Merten, & Mathews, 2017). When it comes to Asian counties, most of the television programs have started occupying the leisure time of adolescents (Mistry & Puthussery, 2015; Samanthi, 2010). Although, adolescents express greater uncertainty towards advertising than younger children, they remain highly vulnerable to influence from food-related advertising (Brownell, Schwartz, Puhl, Henderson, & Harris, 2009; Harris & Fleming-Milici, 2019).
H3: TV Advertising positively influence on Adolescent Consumer Vulnerability in franchised fast-food industry in Sri Lanka.

2.4.4 Impact of Internet on Adolescent Consumer Vulnerability

Children and adolescents are exposed to various forms of food marketing while using social media applications, most of which promotes unhealthy foods. (Kent et al, 2018). At present, Adolescents' media usage has changed substantially (Milici & Harris (2019), with higher use of social media (Kent et al, 2018) while lower exposure to TV (Friedman, 2017). Further, it is revealed that, hours spent on digital media, including computers, tablets, and smartphones, have increased drastically by 2018. (Twenge, Martin, & Spitzberg, 2018; Anderson & Jiang, 2018). According to Holmberg et al (2016), young people share food marketing information through online social networks like Instagram. Additionally, food and sugary drink brands maintain millions of adolescent followers on social media (Rummo et al, 2020; Freeman et al, 2015; Kim et al, 2010). However, there is less evidence on the impacts of new media food marketing, although it is hypothesized that new media could have a greater impact on children (Kelly et al, 2015). While, it is known that food marketers target young people on social media, no study has yet quantified children's exposure on these platforms. (Kent et al, 2018). Through careful examination of above literature, the fourth hypothesis of the current study was derived as follows.
H4: Internet positively influence on Adolescent Consumer Vulnerability in franchised fast-food industry in Sri Lanka.

2.4.5 Fast-food retailers' Pressure on Adolescent Consumer Vulnerability

Consumption of fast food among adolescents is higher due to its easy availability and ready-to-use package (Bohara et al, 2021). Adolescents' incapacity for making independent and confident decisions has direct consequences for the way they deal with market actors, especially salespeople. (Batat, 2010). As far as Fast-food promotions are concerned, advertising and in-store promotions, are important components of fast-food marketing (Grier et al, 2007). Fast food retailers heavily target their marketing strategies to adolescents (Nestle, 2002). According to Hastings et al (2003), fast food marketing influences children food preferences and what they repeatedly ask their parents to buy for them. Consumption of fast food in a restaurant is dependent on the length of time adolescents are spending with friends and the environmental cues (Bruening et al, 2014). However, it was highlighted that the impact of retail store on customer behavior should be discussed in upcoming researches, conducted in other settings, because cultural differences may produce different results (Bruening et al, 2014). Therefore, the fifth hypothesis of the present study was derived as follows.

H5: Retailers positively influence on Adolescent Consumer Vulnerability in franchised fast-food industry in Sri Lanka.

2.4.6 Moderating Effect of Family Income

At present, food consumption expenditure structure has shown a diversified trend and all kinds of food in the proportion of total expenditures have changed over time (Jovanovic, 2016). As far as fast-food industry is concerned, family income is a major determinant of consumption of fast-food followed by higher rate of obesity (Brakkeli 2021; Ren et al 2019; Tafreschi 2015). According to Department of Census and Statistics (2020), Sri Lanka has a lower median family income of Rs. 53,333 in 2019 and average household income of Rs. 76,414 per month. However, from 2016 to 2019, Sri Lanka's average monthly food expenditure increased, with more money being sent home for fast food from foreign nations (Department of Census and Statistics, 2020).

In addition to that, existing scholars highlighted that family income is a major determinant of fast-food consumption among families in Sri Lanka (Saraniya and Thevaranjan, 2015; Aruppilli and Phillip, 2015; Rathnayaka et al, 2014). Within this backdrop, it was hypothesized that household income structure may influence on fast food consumption of adolescents.

H6: Family Income moderates the relationship between Socialization Agents and Adolescent Consumer Vulnerability

3. Methodology

3.1 Sampling Design and Data Collection

Based on a pre-determined structured questionnaire, data were collected from a sample of 1000 respondents studying in government schools located in 08 Districts; Colombo, Kandy, Gampaha, Kaluthara, Jaffna, Anuradhapura, Galle and Matara. As shown in Table 02, Stratified Random Sampling was used to collect data in each of the 08 districts. Further, sample was drawn from the list of relief periods where students are free from the fixed class schedule. Out of the collected 965 questionnaires, 55 were excluded on the grounds that they had more than 10% missing values (Hair et al, 2010). Ultimately, researcher obtained a usable sample of 910 cases.

Based on the findings of existing scholars (Agresti, 1990; Gonick, 1993; Vogt, 2005), the current study used the below formula to calculate the sample of Adolescent consumers through Stratified Random Sampling method as follows.

$$\text{Sample size of the strata} = \frac{\text{Size of the entire sample} \times \text{Layer Size}}{\text{Population size}}$$

Table 02: Calculation of Sample size

Name of the strata	Size of the entire sample	Layer Size (No: of adolescents studying in government national schools in the district)	Selected Sample size	National schools selected from a district
Colombo	1000	93543	281	06
Gampaha	1000	45594	137	03
Kaluthara	1000	35325	106	02
Kandy	1000	48997	147	03
Jaffna	1000	10509	32	01
Anuradhapura	1000	14894	45	01
Galle	1000	55958	168	02
Matara	1000	41867	126	02
Total		333,239		20 Government National Schools

Source: Survey data

3.2 Model Specification and Data Analysis

For the purpose of measuring both reflective and formative constructs, present study used Smart Pls as a standard PLS-SEM software due to several reasons. First, the model of the present study is multi-dimensional comprising both Reflective and Categorical constructs. For multi-dimensional constructs, PLS-SEM over CB SEM is the best approach (Hair et al, 2016; Henseler, 2016). Second, the conceptual model of the present study comprises a categorical

moderator with three groups. For more complex models with more than two group comparisons, Multi-Group Analysis (MGA) in smart PLS is the best approach (Sarstedt and Cheah, 2020; Henseler, 2016; Ringle et al., 2015).

4. Analysis

4.1 Assessment of Measurement Model

Within the measurement model, statistics relevant to Factor loadings, Reliability, Validity and Multicollinearity were determined as follows.

4.1.1 Factor Loadings

Based on the recommendations of Hair et al (2016) factor loading is considered as the extent to which each of the items in the correlation matrix correlates with the given principal component. Further, the range of factor loadings lies in between -1.0 to +1.0 with higher absolute values demonstrating a higher correlation of the items under each construct. As shown in Table 04 below, it was revealed that all the items under each construct had factor loadings above the recommended level of 0.7. Thus, none of the items were removed from the existing list of questions.

4.1.2 Reliability

Within the present study, Cronbach's Alpha and Composite Reliability were used as the measurements for the purpose of measuring the Reliability, taking the recommended value of 0.700 as the threshold level (Wasko & Faraj, 2005).

Table 03: Reliability Statistics

	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	AVE
Peer Pressure	0.984	0.985	0.986	0.888
Parents Influence	0.985	0.988	0.987	0.907
TV Advertising Influence	0.978	0.978	0.982	0.902
Online Influence	0.982	0.983	0.984	0.862
Retailers' Influence	0.978	0.979	0.982	0.869
Lack of Product Knowledge	0.978	0.979	0.983	0.919
Higher Dependency on promotion	0.980	0.980	0.983	0.908
Social Pressure	0.978	0.980	0.984	0.939
Replacement Policy	0.979	0.979	0.986	0.960
Marketing Pressure	0.975	0.975	0.981	0.929
Fraudulent Message	0.978	0.979	0.989	0.979
Inability to Purchase	0.984	0.989	0.988	0.955

Source: Survey data

As far as the data on Table 03 is concerned, it is depicted that all the Cronbach's alpha values for both Socialization Agents and Adolescent Consumer Vulnerability lie in between 0.975 and 0.985 exceeding the threshold level of 0.7. In addition to that, the statistics for

composite reliability fallen between 0.975 and 0.989, further proved that the items used to measure the dimensions are good enough to measure that particular dimension.

Table 04: Factor Loadings

Variable	Factor Loading	Variable	Factor Loading	Variable	Factor Loading	Variable	Factor Loading
Peer Pressure		Online Influence		Lack Knowledge		Marketing Pressure	
PEER 1	0.956	ONLINE 1	0.940	Lack Knowledge 1	0.712	Marketing Pressure 1	0.774
PEER 2	0.965	ONLINE 2	0.949	Lack Knowledge 1	0.714	Marketing Pressure 2	0.754
PEER 3	0.967	ONLINE 3	0.925	Lack Knowledge 1	0.725	Marketing Pressure 3	0.770
PEER 4	0.964	ONLINE 4	0.909	Lack Knowledge 1	0.728	Marketing Pressure 4	0.783
PEER 5	0.943	ONLINE 5	0.947	Lack Knowledge 1	0.732		
PEER 6	0.946	ONLINE 6	0.935				
PEER 7	0.938	ONLINE 7	0.934				
PEER 8	0.902	ONLINE 8	0.937	Promotion Dependency		Fraudulent Message	
PEER 9	0.929	ONLINE 9	0.927	Promotion Dependency 1	0.708	Fraudulent Message	0.704
		ONLINE 10	0.900	Promotion Dependency 2	0.704	Fraudulent Message	0.702
Parents Influence		Retailers' Influence		Promotion Dependency 3	0.702		
PARENT 1	0.941	RETAILERS 1	0.928	Promotion Dependency 4	0.715	Inability to Purchase	
PARENT 2	0.947	RETAILERS 2	0.953	Promotion Dependency 5	0.718	Inability to Purchase	0.706
PARENT 3	0.945	RETAILERS 3	0.938	Promotion Dependency 6	0.712	Inability to Purchase	0.708
PARENT 4	0.955	RETAILERS 4	0.939			Inability to Purchase	0.702
PARENT 5	0.953	RETAILERS 5	0.926	Social Pressure		Inability to Purchase	0.711
PARENT 6	0.948	RETAILERS 6	0.931	Social Pressure 1	0.762		
PARENT 7	0.949	RETAILERS 7	0.928	Social Pressure 2	0.745		
PARENT 8	0.953	RETAILERS 8	0.891	Social Pressure 3	0.771		
TV Advertising Influence				Social Pressure 4	0.755		
TV 1	0.960						
TV 2	0.969			Replacement Policy			
TV 3	0.956			Replacement Policy 1	0.701		
TV 4	0.947			Replacement Policy 2	0.703		
TV 5	0.953			Replacement Policy 3	0.711		
TV 6	0.911			Replacement Policy 3			

Source: Survey data

4.1.4 Indicator Multi-collinearity

Based on the findings of Hair et al (2016), multicollinearity problem is not occurred, when the VIF value for the indicators are below 5. As per the data on Table 05, it was proved that there is no issue of multicollinearity having the VIF values lower than the threshold level 5. This is true for all 05 dimensions come under Socialization Agents and the 07 dimensions derived from Adolescent Consumer Vulnerability.

Table 05: Multi-collinearity Statistics

Socialization Agents	**VIF**	**Adolescent Consumer Vulnerability**	**VIF**
Peer Pressure	1.178	Lack of Product Knowledge	1.131
Parents Influence	1.029	Product Promotion	1.109
TV Advertising	1.112	Social Pressure	1.180
Online	1.181	Replacement Policy	1.166
Retailers	1.077	Marketing Pressure	1.380
		Fraudulent Message	1.588
		Inability to Purchase	1.193

Source: Survey data

4.1.3 Validity

According to the findings of existing studies, validity of the present study was determined considering the Convergent and Discriminant validity statistics as follows.

i. Convergent Validity

In here, it was revealed that all the dimensions except ACV (0.480) have higher Average Variance Extracted values, proving the items used to measure the dimensions are converged together.

ii. Discriminant Validity

In Smart PLS, we can have multiple ways of establishing Discriminant Validity. Among them, Fornell and Larcker (1981) criterion is one of the frequently used methods of determining Discriminant Validity.

Fornell and Larcker Criterion

Following the data shown in Table 06, it is clear that all the square root of AVE values across the diagonal are greater than its correlation with all other constructs. So, establishment of the Discriminant Validity of the present study was determined based on the higher square root of AVE values across the diagonal.

Table 06: Fornell-Larcker criterion

	1	2	3	4	5	6	7	8	9	10	11	12
1. DEPENDANCY ON PROMOTIO	0.953											
2. EMOTIONAL PRESSURE	0.171	0.964										
3. INABILITY TO DITINGHISH	0.171	0.179	0.989									
4. INABILITY TO PURCHASE	0.167	0.135	0.400	0.977								
5. LACK OF KNOWLEDGE	0.225	0.247	0.275	0.133	0.959							
6. ONLINE	0.249	0.179	0.075	-0.002	0.095	0.929						
7. PARENTS	0.050	0.090	-0.017	0.035	0.192	0.008	0.952					
8. PEER	0.257	0.264	0.039	0.047	0.200	0.291	0.148	0.943				
9. REPLACEMENT POLICY	0.177	0.287	0.261	0.233	0.162	0.167	0.057	0.169	0.980			
10. RETAILERS	0.225	0.279	0.078	0.153	0.115	0.182	0.027	0.247	0.221	0.932		
11. SOCIAL PRESSURE	0.234	0.356	0.175	0.163	0.192	0.163	-0.009	0.311	0.299	0.199	0.969	
12. TV ADVERTISING	0.450	0.057	0.060	-0.013	0.044	0.292	-0.052	0.179	0.060	0.096	0.072	0.950

Source: Survey data

4.2. Assessment of Structural Model

After establishing the measurement model's validity and reliability, we moved on to the analysis of structural model. The paths hypothesized in the research framework are reflected by the structural model and it is assessed based on the path coefficients, T values and significance of the paths (Latiff et al, 2020). Further, for both reflective and formative measurement models, performance was measured based on the loadings and weights of path coefficients (Garson, 2016). Thus, the path analysis of the current study can be illustrated as follows.

Table 07: Path Coefficients and Hypotheses test results

Hypothesis		Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Results
H1	PEER -> ACV	0.491	0.492	0.031	16.024	0.000	Supported
H2	PARENTS -> ACV	0.142	0.142	0.027	5.369	0.000	Supported
H3	TV ADVERTISING -> ACV	0.113	0.112	0.031	3.626	0.000	Supported
H4	ONLINE -> ACV	0.082	0.083	0.029	2.870	0.004	Supported
H5	RETAILERS -> ACV	0.126	0.128	0.030	4.206	0.000	Supported
H6a	FAMILY INCOME x PEER -> ACV	0.044	0.042	0.041	2.070	0.038	Supported
H6b	FAMILY INCOME x PARENTS -> ACV	0.051	0.049	0.040	1.270	0.204	Not Supported
H6c	FAMILY INCOME x TV ADVERTISING -> ACV	0.090	0.091	0.042	2.146	0.032	Supported
H6d	FAMILY INCOME x ONLINE -> ACV	-0.040	-0.047	0.042	0.959	0.337	Not Supported
H6e	FAMILY INCOME x RETAILERS -> ACV	-0.083	-0.084	0.043	1.987	0.047	Supported

Source: Survey data

As per the data on Table 07, all five socialization agents are significantly influencing on Adolescent Consumer Vulnerability having the T values greater than 1.96 with p values less than 0.05. Among them, Peer Pressure is the most important socialization agent which possess the highest impact on Adolescent consumption behavior having t= 16.024 with p= 0.000. Secondly, Parents as the first agent of socialization play a major role on changing the behavior pattern of Adolescents possessing the t=5.369 having the p=0.000. The next, highest significant influence represents the pressure of franchised fast-food retailers through their attractive promotional campaigns. The resulting t value 4.206 with the p value 0.000 proved the above idea in more detail. Fourth, it was the view of majority of the adolescents that TV advertisements of franchised fast-food products persuaded them to go for fast-food consumption. This is also suggested by both t=3.626 while p=0.000. Finally, relatively lower percentage of adolescents highlighted that Internet as a socialization agent significantly influence their franchised fast-food buyer behavior giving the t=2.870 with the p value 0.004.

When it comes to the moderating role of Family Income, the data on Table 07 proved that Family Income significantly moderates the relationship between Three Socialization Agents (Peers, TV Advertising and Retailers) and Adolescent Consumer Vulnerability. This idea was proved by the statistics relevant to three socialization agents namely; Peer Pressure (t=2.070, p=0.038) TV Advertising (t=2.146, p=0.032) and Retailers (t=1.987, p=0.047).

4.3 Group-wise comparison of Categorical Moderator Variables

Multi-group Analysis in smart pls was run within this study, as it is the best approach to measure multidimensional models comprising categorical moderator variables (Ringle al., 2015; Sarstedt and Cheah, 2020).

Table 08: Multi-group Analysis for assessing the Moderation Effect of Family Income

	Difference High income vs Low income	Difference High income vs Middle income	Difference Low income vs Middle income	1 tailed High income vs Low income (P value)	1 tailed High income vs Middle income(P value)	1 tailed Low income vs Middle income (P value)	2 tailed High income vs Low income (P value)	2 tailed High income vs Middle income (P value)	2 tailed Low income vs Middle income (P value)
PEER -> ACV	0.107	-0.054	-0.160	0.104	0.812	0.980	0.209	0.376	0.041
PARENTS->ACV	0.170	0.075	-0.095	0.044	0.125	0.823	0.089	0.249	0.354
TV -> ACV	0.102	0.223	0.121	0.142	0.000	0.107	0.284	0.000	0.215
ONLINE -> ACV	-0.007	-0.039	-0.031	0.536	0.725	0.648	0.928	0.550	0.703
RETAILER>ACV	-0.224	-0.151	0.073	0.994	0.991	0.215	0.013	0.018	0.430

Source: Survey data

The data on Table 08 visually display the results of Multi-group Analysis for the three groups of Household Income. According to the results, the difference between Low Income and Middle-income group relevant to Peer Pressure on Adolescent Consumer Vulnerability is -0.160. This is highlighted that the impact of Peer Pressure is higher in Middle-income group in comparison to the Low-Income group. Additionally, the relevant P value (0.041) less than 0.05 suggested that the difference between the above two group is significant. Further, it can be concluded that Family Income significantly moderates the relationship between Peer Pressure and Adolescent Consumer Vulnerability accepting H6a.

Next significant difference is related to the impact of TV Advertising between High income and Middle income group. Thus, the positive value of 0.223 between the two groups highlighted that the impact of TV Advertising on Adolescent Consumer Vulnerability is higher in High Income group in comparison to Middle Income group. Additionally, the p value (0.000) which is less than 0.05 further, proved that the above difference is significant accepting H6c.

The third substantial difference pertaining to Retailers highlighted that there are significant differences between High Income and Middle-Income group and also High Income and Low-Income groups. When it comes to the first one, the negative coefficient value of -0.224 revealed that the impact of Retailer's Pressure on Adolescent Consumer Vulnerability is higher in Low-Income group in comparison to the High- Income group. The relevant P value (0.013) less than the threshold level 0.05 suggested that the above

difference is significant. At the same time, the second significant moderation effect related to Retailer's influence revealed that the difference between High Income and Middle-Income group is -0.151. This is also proved that the impact of Retailers on Adolescent Consumer Vulnerability is higher in Middle Income group in comparison to High Income group. Even here the P value (0.018) less than 0.05 proved the significant moderation effect of Family Income on Retailer's Influence and Adolescent Consumer Vulnerability. Accordingly, it is obvious that Family Income significantly moderates the relationship between three Socialization Agents (Peer, TV Advertising, Retailers) and Adolescent Consumer Vulnerability.

Finally, the results of Multi-group analysis, further, proved that the hypotheses 6a, 6c and 6e were accepted while hypotheses 6b and 6d were rejected.

5. Conclusion

5.1 Discussion

The aim of this study was to analyze the impact of socialization agents on adolescent consumer vulnerability with the moderating effect of family income. Through deductive approach, the study strived to measure the impact of five socialization agents; Peers, Parents, TV Advertising, Internet and Retailers on Adolescent Consumer Vulnerability under different income levels. Based on the analysis results generated through smart pls 4.0, it was revealed that all five socialization agents positively influence on adolescent consumer vulnerability in Sri Lankan franchised fast-food industry. Among the five agents, Peer Pressure has the strongest impact with higher t value greater than 1.96 (β = .461, t = 16.024, p = 0.000). Next, Parents have the second highest impact obtaining the values (t=5.369, p = 0.000). Thirdly, it was highlighted that Fast food retailers have a significant influence on Adolescent Consumer Vulnerability with the values (t=4.206, p = 0.000). The fourth highest impact comes from TV advertisements of fast-food having (t=3.626, p=0.000) values. Finally, Internet as a Socialization agent has relatively lower significant impact (t = 2.870, p = 0.000) compared with other four socialization agents. In addition to the direct impact, the results of multigroup analysis revealed that Family Income significantly moderates the relationship between three Socialization Agents' influence (Peer Pressure, TV Advertising and Retaiers) on Adolescent Consumer Vulnerability.

5.2 Practical Implications

The results of this study offer useful information in the following areas. The study meets the need of concentrating on the underrepresented adolescent consumer group and is the first in Sri Lanka to examine the influence of socialization agents on adolescents' consumer vulnerability. Second, the study offers useful insights showing that a larger consumption of franchised fast food is the cause of the higher rates of overweight and obesity in Sri Lanka. Furthermore, the study's findings offer the government of Sri Lanka sound advice on how to handle the country's rising obesity epidemic. Third, the current study's findings offer helpful guidance on how to slow down the fast-food chains' explosive growth and lessen the amount of money that is being repatriated to other nations.

This will be a useful tactic to get over the nation's current flawed economic structure. Fourth, the results will be helpful to parents in Sri Lanka, as fast food exposure was found to be the second most important socialization factor influencing teenage customer vulnerability in the country's franchised fast food sector. Consistent with the study findings, it is evident that the parental position within the family has a significant influence in determining the vulnerability of teenage consumers. Thus, conscientious parents ought to determine the causes of their children's excessive exposure to fast food and take the appropriate steps to stop it.

5.3 Directions for Future researches

Subsequent investigators in this field can extend their findings in several pertinent areas. In order to properly address the issue of teenage socialization, it is first necessary to broaden the scope of the research by incorporating more intricate models that incorporate the government and schools as additional socialization agents. Second, it would be more advantageous for future researchers to test the model of the current study through a longitudinal investigation in order to more clearly identify the causal relationships that are already in place. Thirdly, the scope of this study is restricted to discussing a single outcome variable that socialization agents produce. Thus, other consumer consequences of socialization effect, like materialism, pester power, and impulsive buying behavior, should be the subject of future research.

References

Aruppillai, T., & Phillip, G. (2015). An Analysis of Consumers' Buying Behavoiur and Its Determinants of Fast Food in Sri Lanka. *International Journal of Economics and Finance*. 7(9), 112-119. https://doi.org/10.5539/ijef.v7n9p112.

Baker, S.M., Gentry, J.W., & Rittenburg, T.L. (2005). Building understanding of the domain of consumer vulnerability. *Journal of Micromarketing*, 25(2), 128-139. https://doi.org/10.1177/0276146705280622.

Brakkeli, N.Z. (2021). Income inequality and health in China: A panel data analysis. *Social Science and Medicine*, 157, 39-47. https://doi.org/10.1016/j.socscimed.2016.03.041.

Barber, N.A. (2013). Investigating the Potential Influence of the Internet as a New Socialization Agent in Context with Other Traditional Socialization Agents. *The Journal of Marketing Theory and Practice*, 21(2), 179–194. https://doi.org/10.2753/mtp1069-6679210204.

Batat, W. (2012). How Do Adolescents Define Consumer Vulnerability? Toward a Youth-Centric Approach, *Association for Consumer Research*, 40, 751-752. https://doi.org/10.1016/j.jretconser.2020.102255.

Batat, W. & Tanner, J.F. Jr. (2019). Unveiling (In)Vulnerability in an Adolescent's Consumption Subculture: A Framework to Understand Adolescents' Experienced (In) Vulnerability and Ethical Implications, *Journal of Business Ethics*. 169(4), 713-730. https://doi.org/10.1007/s10551-019-04309-2.

Barber, N.A. (2013). Investigating the Potential Influence of the Internet as a New Socialization Agent in Context with Other Traditional Socialization Agents. *The Journal of Marketing Theory and Practice*, 21(2), 179-193. https://doi.org/10.2307/23461946.

Bauer, K.W. & Hearst, M.O. Escoto, K. Berge, J.M. and Sztainer, D.N. (2012). Parental employment and work-family stress: Associations with family food environments. *Soc Sci Med*, 75(3), 496-504. https://doi.org/10.1016/j.socscimed.2012.03.026.

Bowman, S.A. Gort Maker, S.L. Ebbeling, C.B. Perara, M. A. & Ludwig, D. S. (2004). Effects of fast food consumption on energy intake and diet quality among children in a national house hold. *Pediatrics*, 113 (1),112-118. https://doi.org/10.1542/peds.113.1.112.

Broderick, A.J., Demangeot, C., Adkins, N.R., Ferguson, N.S., & Henderson, G.R. (2011). Consumer Empowerment in Multicultural Marketplaces: Navigating Multicultural Identities to Reduce Consumer Vulnerability, *Journal of Research for Consumers*, 19(1), 1-13.

Bruening, M. Eisenberg, M. MacLehose, R. Nanney, MS. Story, M. & Neumark-Sztainer, D. (2012). Relationship between adolescents' and their friends' eating behaviors: breakfast, fruit, vegetable, whole-grain, and dairy intake. *J Acad Nutr Diet*. 112, 1608-1613. https://doi.org/10.1016/j.jand.2012.07.008.

Chan, C., Prendergast, G., Grønhøj, A., & Larsen, T.B. (2010). The Role Of Socializing Agents In Communicating Healthy Eating To Adolescents: A Cross Cultural Study, *Journal of International Consumer Marketing*, 26(1), 59-74. https://doi.org/10.1080/08961530.2011.524578.

Chaudhary, M., (2016). Involvement of Children in the Family Buying: A Review, *Journal of Pacific Business Review*, 8(11), 54-62.

Cheah, J.H., Thurasamy, R., Memon, M.A., Chuah, F., & Ting, H. (2020). Multi-group Analysis using SmartPLS: Step-by-Step Guidelines for Business Research, *Asian Journal of Business Research*, 10(3), 01-19. https://doi.org/10.14707/ajbr.200087

Department of Census and Statistics, (2020). *Annual School Census of Sri Lanka.* Final Report. Published by Ministry of Higher Education.

Fox, A. K. & Hoy, M.G. (2019). Smart Devices, Smart Decisions? Implications of Parents' Sharenting for Children's Online Privacy: An Investigation of Mothers, *Journal of Public Policy & Marketing*, 38(4), 414-432. https://doi.org/10.1177/0743915619858290.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis: *A global perspective (7th ed.)*. London: Pearson.

Harari, A.T. & Eyal, K (2020). The Role of Food Advertising in Adolescents' Nutritional Health Socialization, *Health Communication*, 35(7), 882-893. https://doi.org/10.1080/10410236.2019.1598737.

Hastings, G., Stead, M., McDermott, L., Forsyth, A., MacKintosh, A.M., Rayner, Godfrey,C., Caraher, M. & Angus, K (2003). Review of research on the effects of food promotion to children, Children? A Systematic Review Of The Evidence. *Report submitted to University of Strathclyde.*

Henseler, J., Hubona, G. & Ray, P.A. (2016), Using PLS path modeling in new technology research: updated guidelines, *Industrial Management & Data Systems*, 116(1), 2-20. https://doi.org/10.1108/IMDS-09-2015-0382.

Huzar, T. (2019). How Fast Food Affects the Body, Medicalnewstoday.com, Available at https://www.medicalnewstoday.com/articles/324847 (Accessed May, 2022).

Chaudhary, M., (2016). Involvement of Children in the Family Buying: A Review, *Journal of Pacific Business Review*, 8(11), 54-62. https://doi.org/https://doi.org/10.1108/IMDS-09-2015-0382.

Henseler, J., Ringle, C. M., & Sarstedt, M., (2016). Testing measurement invariance of composites using partial least squares. *International Marketing Review*, 33(3), 405-431. https://doi.org/10.1108/IMR-09-2014-0304.

Jayasundara, S.K., Siriwardhana, S. & Jayawickrama, W.D.C. (2020). Enabling vulnerable populations: insights from the experiences of functionality illiterate consumers, *Journal of Social Marketing.* 10(4), 451-470. https://doi.org/10.1108/JSOCM-03-2019-0041.

Jayasinghe, J.M.J.K. & De Silva, L.P.U. (2014). Fast Food Consumption and Health Status of Students of a University in Sri Lanka. *Journal of Food and Agriculture*, 7(2), 38–50. http://doi.org/10.4038/jfa.v7i1-2.5192.

Jayawardena, P. (2014). Can People in Sri Lanka's Estate Sector Break Away from Poor Nutrition: What Causes Malnutrition and How It Can Be Tackled. *Health Economic Se-ries*, No. 1, Institute of Policy Studies of Sri Lanka.

Jovanovic, M. (2016). Empirical analysis of income changes impact on food consumption expenditure. *Agriculture & Forestry*, 62(3), 47-54. https://doi.org/10.17707/AgricultForest.62.3.04.

Powell, L.M. & Bao, Y.J. (2009). Food prices, access to food outlets and child weight. *Econ Hum Biol.* 7, 64–72. https://doi.org/10.1016/j.ehb.2009.01.004.

Kazami, E., Moradi, M.T., Amini, S., & Yari, K. (2016). Association between Helicobacter pylori hop QI genotypes and human gastric cancer risk, *Cellular and Molecular Biology*, 62(1),06-09.

Kennedy, A.M., Jones, K. & Williams, J. (2019). Children as Vulnerable Consumers in Online Environments, *The Journal of Consumer Affairs*. 53(4). 1478-1506. https://doi.org/10.1111/joca.12253.

Kent, P.V., & Pauze, E. (2018). The Frequency and Healthfulness of Food and Beverages Advertised on Adolescents' Preferred Web Sites in Canada, *Journal of Adolescent Health*, 63(1), 102-107. https://doi.org/10.1016/j.jadohealth.2018.01.007.

Khan, G., & Naila, K., (2008). Gender Differences in Susceptibility to Normative Social Influence on the Purchase Decisions of Designer Label Apparel, *International Business & Economics Research Journal*, 7(8), 11–57. https://doi.org/https://doi.org/10.19030/iber.v7i8.3279.

Krishnasoban, M., Niroshi, M., & Indralavaniya, M. (2021). Fast food consumption among the advanced level school students in Hatton in the district of Nuwara Eliya, *Proceeding of the Open University Research Sessions*.

Kuss, D.J. & Griffiths, M.D. (2012). Online gaming addiction in children and adolescents: A review of empirical research, *Journal of Behavioral Addictions*, 1(1), 3-22. https://doi.org/10.1556/JBA.1.2012.1.1

Lacoba, M. R., Garcia, P. Saus, A.E., & Sotos, E.F (2020). Social determinants of food group consumption based on Mediterranean diet pyramid: A cross-sectional study of university students. *PLoS One,* 15(1), 22-45. https://doi.org/10.1371/journal.pone.0227620.

Lapierre, M.A., Milici, F.F., Rozendaal, E., McAlister, A. R., & Castonguay, J. (2017). The Effect of Advertising on Children and Adolescents. *Pediatrics,* 140(2), 152-156. https://doi.org/10.1542/peds.2016-1758V

Lenka & Vandana (2015). Direct and Indirect Influence of Interpersonal and Environmental Agents on Materialism in Children. *Psychological Studies,* 61(1), 55-66. https://doi.org/10.1007/s12646-015-0343-5.

Lenka & Vandana (2015). A Review on Impact of Socialization Agents in Breeding Consumerism among Children. *Global Business Review*, 16(5), 867–878. https://doi.org/10.1177/0972150915591654.

Li, L., Sun,N., Zhang, L., Xu, G., Liu, J., Hu, J., Zhang, Z., Lou, J., Deng, H., Shen, Z., & Han, H. (2020). Fast food consumption among young adolescents aged 12–15 years in 54 low- and middle-income countries, *Global Health Action*, 13(1), 01-09. https://doi.org/10.1080/16549716.2020.1795438.

Majabadi, H.A., Solhi, .Montazeri, A., Shojaeizadeh, D., Nejat, S., Farahani, F.K., & Djazayeri, A. (2016). Factors Influencing Fast-Food Consumption Among Adolescents in Tehran: A Qualitative Study. *Iranian Red Crescent Medial Journal*, 19(1), 01-09. https://doi.org/10.5812/ircmj.23890.

Man, C.S., Hock, L.K., & Ying, C.Y. (2021). Is fast-food consumption a problem among adolescents in Malaysia? An analysis of the National School-Based Nutrition Survey, 2012. *J Health Popul Nutr* 40(31), 01-09. https://doi.org/10.1186/s41043-021-00254-x.

Mason, M. J., Tanner, J. F., Piacentini, M., Freeman, D., Anastasia, T., & Batat, W., et al. (2013). Advancing a participatory approach for youth risk behavior: Foundations, distinctions, and research. *Journal of Business Research,* 66, 1235–1241. https://doi.org/10.1016/j.jbusres.2012.08.017.

Mccoy, S.S., Dimler, L.M., Samuels, D.V., & Natsuaki, M.N. (2019). Adolescent Susceptibility to Deviant Peer Pressure: Does Gender Matter? *Adolescent Res Rev*, 4(1), 59-71. https://doi.org/10.1007/s40894-017-0071-2.

Medicine Net. (2021). Medical definition of obese. Retrieved from: https://www.medicinenet.com › obese › definition.

Melnikas, B. & Smaliukiene, R. (2007), Consumer Vulnerability in Pharmaceutical Market: Case of Baltic Countries, *Journal of Business Economics and Management*, 8(1), 51-62. https://doi.org/10.3846/16111699.2007.9636152.

Mistry, S.K., & Puthussery, S., (2015). Risk factors of overweight and obesity in childhood and adolescence in South Asian countries: a systematic review of the evidence. *Public Health*. 129, 200–209. https://doi.org/10.1016/j.puhe.2014.12.004.

Mohammad-Beigi, H., Aliakbari, F., Sahin, ., Lomax, ., Tawfike, A., Schafer N.P., Nowdijeh, A.A..EskandariIan, H., Møller, I.M., Mazinani, M.H., Christiansen, J., Ward. J.L., Morshedi, D., & Otze, D.E. (2019), Oleuropein derivatives from olive fruit extracts reduce α-synuclein fibrillation and oligomer toxicityOleuropein derivatives reduce αSN fibrillation and toxicity. *Journal of Biological Chemistry,* 294(11), 4215-4232. https://doi.org/10.1074/jbc.RA118.005723.

Moschis, G.P. (2011). Religiosity and consumer behavior of older adults: a study of subcultural influences in Malaysia. *Journal of Consumer Behaviour,* 10(1), 8–17. https://doi.org/10.1002/cb.342.

Nairn, A. & Berthon, P. (2005). Affecting Adolescence: Scrutinizing the Link Between Advertising and Segmentation, *Business & Society*, 44(3), 318-345. https://doi.org/10.1177/0007650305278088.

Nestle, M. (2013). Introduction: The Food Industry and "Eat More". In *Food Politics: How the Food Industry Influences Nutrition and Health*, 1-28. https://doi.org/10.1525/9780520955066-004.

Niankara, I., Al adwan, M.N., & Niankara, A. (2020). The Role of Digital Media in Shaping Youth Planetary Health Interests in the Global Economy. *Journal of Open Innovation*, 6(3), 01-26. https://doi.org/10.3390/joitmc6030049.

Nirmani, H., Gayathree, P.K., & Kumara, S.U. (2017). Fast Food Consumption Behaviour of Sri Lankans: With Special Reference to Gampaha and Colombo Districts. *Sri Lanka Journal of Marketing*, 3(1), 1-25.

Nishadi, T. (2020). Financial Consumer Protection is not a Destination, it's a Journey, *Daily FT Sri Lanka.* Retrieved from https://www.ft.lk/Columnists/Financial-consumer-protection-is-not-a-destination-it-s-a-journey/4-695110.

Ostbye, T., Malhothra, R., Stroo, M., Lovelady, C., Brouwer, R., Zucker, N., & Fuemmeler, B. (2013). The effect of the home environment on physical activity and dietary intake in preschool children. *International Journal of Obesity*, 37(10), 1314–1321. https://doi.org/10.1038/ijo.2013.76.

Padeniya, A., Kumarathunga,R.A., Dissanayake, W.W., Jayawardhana,P.C., Nuwandika,N., Rathnayeka,T.M., Weerakoon, C.N., & Delpagoda, D.W. (2019). Patterns of television viewing and associated factors among adolescent school children in the Anuradhapura Educational Zone, Sri Lanka. *Sri Lanka Journal of Child Health*. 48(4). 292-299. http://dx.doi.org/10.4038/sljch.v48i4.8820.

Patabandige, G. & Yapa, S. (2016). Consumer satisfaction of multinational fast-food outlets with the service quality and other influencing factors in the western province of Sri lanka, *The 11th International Research Conference on Management & Finance.* 299-314.

Pechmann, C., Moore, E. S., Andreasen, A. R., Connell, P. M., Freeman, D., Gardner, M. P., Heisley, D., Lefebvre, R. C., Pirouz, D. M., & Soster, R. L. (2011). Navigating the central tensions in research on consumers who are at risk: challenges and opportunities, *Journal of Public Policy and Marketing*. 30(1), 23–30. https://doi.org/10.1509/jppm.30.1.23.

Piumali, P. L. W. G. S.D. & Rathnayake D.T. (2017). Factors affecting consumer conformity behavior in virtual communities; with special reference to generation "Y" in Sri Lanka, *SEUSL Journal of Marketing*. 2(2), 01-09.

Priyanath, H. M., & Dasanayaka , P. (2022). Impact of Fast-Food Consumption on Overweight Among Young Adults in Sri Lanka. *International Journal of Education, Teaching and Social Sciences*, *2*(3), 10-21. https://doi.org/10.47747/ijets.v2i3.728.

Ranjith, N., Wilkinson, A.V., Lytle, L.M., Evans, A.E., Saxton, D., & Hoelscher, D.M. (2015). Socio-economic inequalities in Children's diet: the role of home food environment, *International Journal of Behavioral Nutrition and Physical Activity*, 12(1), 01-09. https://doi.org/10.1186/1479-5868-12-S1-S4.

Rasanthika, R.S.B. & Gunawardana, T.S.L.W. (2013). Fast food consumption: Identifying working women's attitudes towards consumption of fast food, *2nd International Conference on Management & Economics.* 1-10.

Rathnayaka, K.M., Roopasinham, T., & Wickramasingha, V.P. (2014). Nutritional and Behavioral Determinants of Adolescent Obesity: A case control study in Sri Lanka. *BMC Public Health*, 14(1), 1291. 01-06. https://doi.org/10.1186/1471-2458-14-1291.

Ren, Y., Li, H., & Wang, X. (2019). Family income and nutrition-related health: Evidence from food consumption in China, *Social Science and Medicine*, 232. 58-76. https://doi.org/10.1016/j.socscimed.2019.04.016.

Ringold, D.J. (2005). Vulnerability in the Marketplace: Concepts, Caveats, and Possible Solutions, *Journal of Macromarketing*, 25(2), 202-214. https://doi.org/10.1177/0276146705281094.

Saraniya, D. & Thewarajan, D. (2015). Personal factors and fast-food consumption in colombo divisional secretariat division. *Journal of Business Management Science.* 1(12), 66-75. https://doi.org/10.5281/zenodo.54587.

Saranya, P.V, Shanifa, N., Shilpa Susan, Simy Thomas, Umarani, J. & Dr. Asha P. Shetty (2016). Adolescents' Knowledge Regarding the Effects of fast food on Health, *International Journal of Current Medical Research*, 5(3), 406-409.

Sarstedt, M., Hair, J.F., Ringle, C.M., Thiele, K.O., & Gudergan, S.P. (2016). Estimation issues with PLS and CBSEM: Where the bias lies! *Journal of Business Research,* 69(10), 3998-4010. https://doi.org/10.1016/j.jbusres.2016.06.007.

Silvera, D.H., Meyer, T., & Laufer, D. (2012). Age related reactions to a product harm crisis. *Journal of Consumer Marketing*, 29(4), 302-309. https://doi.org/10.1108/07363761211237371.

Skaradal, M., Western, I.M., Ask., & Øverby, N.C. (2014), Socioeconomic differences in selected dietary habits among Norwegian 13–14-year-olds: a cross-sectional study. *Food and Nutrition Research*, 58(1). 01-08. https://doi.org/10.3402/fnr.v58.23590.

Somasiri, S., & Chandralal, L. (2018). Theorizing Deviant Consumer Socialization: With Special Reference to Compulsive Buying Behavior. A Review of Literature, *European Academic Research.* 6(1), 405-432. http://repository.kln.ac.lk/handle/123456789/17551.

Song, C., Goto, K., Hu, M. & Wollf, C. (2015). Impact of Social and Cultural factors on the consumption of Western fast food among Chinese children. *Oxford University Press and Community Development Journal*, 50(4), 709-723. https://doi.org/10.1093/cdj/bsu067.

Stewart, R., & Yap, S.F. (2020). Low literacy, policy and consumer vulnerability: Are we really doing enough? *International Journal of Consumer Studies*, 44(2). 1–10. https://doi.org/10.1111/ijcs.12569.

Svensson, R. (2003). Gender differences in adolescent drug use: The impact of parental monitoring and peer deviance. *Youth and Society*, 34(3), 300–329. https://doi.org/10.1177/0044118X02250095.

Svastisalee, C.M., Holstein, B.E., & Due, P. (2012). Fruit and Vegetable Intake in Adolescents: Association with Socioeconomic Status and Exposure to Supermarkets and Fast-Food Outlets. *Journal of Nutrition and Metabolism* 2012(2), 1-10. 185484. https://doi.org/10.1155/2012/185484.

Tafreschi, D. (2015). The income body weight gradients in the developing economy of China. *Economics and Human Biology*, 16. 115-134. https://doi.org/10.1016/j.ehb.2014.02.001.

Thyne, M., Robertson, K., Watkins, L., & Casey, O. (2019). Retailers targeting children with set collection promotions: the child's perspective. *International Journal of Retail & Distribution Management,* 47(6). 643-658. https://doi.org/10.1108/ijrdm-08-2017-0180.

Truman, E. & Elliott, C. (2019). Identifying food marketing to teenagers: a scoping review, *Int J Behav Nutr Phys Act* 16(67), 01-10. https://doi.org/10.1186/s12966-019-0833-2.

Weerasekara, P.C., Withanachchi, C.R., Gingaddara, C.S.A., & Ploeger, A. (2018), Nutrition Transition and Traditional Food Cultural Changes in Sri Lanka during Colonization and Post-Colonization, *Foods*, *7* (7), 1-18. https://doi.org/10.3390/foods7070111.

Weerasekara, W.A.P.C. (2013). Impact on Policy Responses to Food Price Crisis and Rural Food Security in Sri Lanka. *Journal of Food, Agriculture and Society,* 1(2). 79–92.

Wills, W., Backett-Milburn, K., Lawton, J., & Roberts, ML. (2009). Consuming Fast Food: The Perceptions and Practices of Middle-Class Young Teenagers. In: James, A., Kjørholt, A.T., Tingstad, V. (eds) Children, Food and Identity in Everyday Life. Studies in Childhood and Youth. Palgrave Macmillan, London. 52-68. https://doi.org/10.1057/9780230244979_4

Wu, Y., Wang, L., Zhu, J., Gao, L., & Wang, Y. (2021). Growing fast food consumption and obesity in Asia: Challenges and implications, *Journal of Social Science and Medicine*. 269. 1-4. https://doi.org/10.1016/j.socscimed.2020.113601.