A Qualitative Comparative Analysis of The Antecedents of Adolescents Materialism

Jasmine Mohsen,

University of Leeds

Hassan Mohamed Hussein Mohamed

University of Hull

Ahmed Zaky

University of Hull

Abeer Mahrous

Cairo University

For further information, please contact Jasmine Mohsen, Mrs, University of Leeds
(bnjmya@leeds.ac.uk)

While previous literature is rich with many potential antecedents for adolescents' materialism antecedents, we sought to figure out the combination of attributes/circumstances have to be concurrently existent to produce a high level of materialism.

ABSTRACT

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This paper employs a mixed approach that combines between Partial Least Squares-Structural Equation Modelling (PLS-SEM) and the Fuzzy-set Qualitative Comparative Analysis (*fs*-QCA) to discover which materialism factors have to be concurrently existent to produce a high level of materialism, and if those combinations of factors would differ based on adolescents' demographics.

INTRODUCTION

Previous research has investigated several possible antecedents of materialism; specifically, the family influence (i.e., parent's consumption habits, and practices, material parenting, and parent's support) (Chaplin & John, 2010; Richins & Chaplin, 2015), peer influence (Isaksen & Roper, 2012), self-esteem (Jiang et al., 2015; Park & John, 2011), personal/social insecurity (Ching & Wu, 2018; Rindfleisch et al., 2009), media platforms (Ismail et al., 2018; Thoumrungroje, 2018), and fashion innovativeness (Lee et al., 2013; Zhang & Kim, 2013). However, existent research examined these factors' impact on materialism in isolation from one another. Consequently, little is known about whether all of these factors have to be existent to influence one's materialistic tendencies, or only a combination of these factors will be sufficient to instigate this influence. We thus employ a mixed approach that combines between Partial Least Squares-Structural Equation Modelling (PLS-SEM) and the Fuzzy-set Qualitative Comparative Analysis (*fs*-QCA) to discover which of these factors have to be concurrently existent to produce a high level of materialism and if those combinations of factors would differ based on adolescents' demographics.

For the academic marketing discipline, we provide an unprecedented investigation of the combinations of factors that can induce a high level of materialism in adolescents. we also offer a combination, and a comparison, between Partial Least Squares-Structural Equation Modelling (PLS-SEM) and the Fuzzy-set Qualitative Comparative

Analysis (*fs*-QCA). Indeed, each of the best solutions generated using *fs*-QCA implies the presence of only five drivers of the nine key determinants of Adolescents' Materialism mentioned in previous research. This indicates that the combination between some of the antecedents can elevate Adolescents' Materialism, rather than the existence of each exogenous variable individually, as in the PLS-SEM.

Regarding discrepancies between PLS-SEM and fs-QCA results, our results also suggest that PLS-SEM can guide us in the direction of each antecedent. However, relying on its results alone, without using the fs-QCA, can generate some limitations. For example, the direction of the path reported in PLS-SEM has only two conditions, for it to get the highest outcome. If the path is positive, then it should be present and vice versa. On the contrary, as table 5 shows, the Parent Support must be present with its counterparts in the four best solutions for the four subsamples; yet, tables 2 and 3 reported its negative effect on the Adolescent's Materialism in all subsamples. Furthermore, the PLS-SEM guides us to the exogenous variable conditions via the significance. However, in table 5, Fashion innovativeness is absent in 23 out of 25 possible solutions; yet, tables 2 and 3 report its significance in all subsamples.

For non-academic stakeholder, the comprehensive view on materialism that the results of this study provide can serve as a guideline in formulating a more focused marketing campaign to reduce the spreading of this phenomenon. Instead of pursuing all the factors that could lead, individually, to materialism, the campaign can target the factors that must be present/absent from inducing high/low levels of materialism.

PROPOSITIONS FORMULATION

Complexity theory emphasizes that "relationships between variables can be non-linear, with abrupt switches occurring, so the same 'cause' can, in specific circumstances, produce different effects" (Urry, 2005, p.4). For example, the relationship between adolescents' materialism and any other variable should not necessarily always be linear and in the same direction. Meaning

that in the presence of Z, X could have a positive impact on Y. While, in the presence of V, X could have a negative impact on Y, and in the presence of W, X could have no significant impact on Y. Consequently, complexity theory considers causality to be very complex and dynamic to capture; therefore, for accuracy purposes, it would be better to start by stating that "X occurs in the presence of Y" instead of "X leads to Y" (Gligor et al., 2019).

In line with complexity theory, the different elements of the same 'recipe' can impact the resultant variable either positively or negatively based on whether certain other elements are existent or non-existent (Ordanini et al., 2014; Kraus et al., 2018). More specifically, a very low level of self-esteem, for example, could lessen the impact of the high levels of personal security or parents' support and result in high materialistic tendencies notwithstanding the high levels of those other two factors. Accordingly:

Proposition 1. Parent's Consumption Habits and Practices, Material Parenting, Parent's Support, Peer Influence, Self-Esteem, Personal Insecurity, Social Insecurity, Media Platforms, and Fashion Innovativeness can contribute positively or negatively to Adolescents' Materialism, depending on the presence or absence of either one of these factors.

According to the complexity theory, any variable can be necessary but not alone enough to predict the end variable, as it needs to be accompanied by other variables (Wu, Yeh, & Woodside, 2014). Therefore:

Proposition 2. Either one Parent's Consumption Habits and Practices, Material Parenting, Parent's Support, Peer Influence, Self-Esteem, Personal Insecurity, Social Insecurity, Media Platforms, and Fashion Innovativeness can be necessary but insufficient for high Adolescents' Materialism to occur.

Complexity theory also reveals that multiple paths (or different recipes of several elements) can result in the same outcome (Russo et al., 2016; Woodside, 2015). Indeed, different combinations of variables can lead to a high level of materialism. Accordingly:

Proposition 3. Distinct combinations of Parent's Consumption Habits and Practices, Material Parenting, Parent's Support, Peer Influence, Self-Esteem, Personal Insecurity, Social Insecurity, Media Platforms, and Fashion Innovativeness are equifinal in leading to high Adolescents' Materialism.

Accordingly, figure 1 proposes the PLS-SEM and QCA conceptual model

Insert figure 1 here

METHODOLOGY

Measures

Parent consumption habits, practices, and Self-esteem were adapted from Chan (2013)*,* maternal parenting, parent support, and Personal Insecurity from Richins and Chaplin (2015), peer influence from d'Astous *et al.,* (1990), Social Insecurity from Oleson *et al.,* (2000), Media Platforms from Adib and El-Bassiouny (2012), Fashion Innovativeness from Park et al., (2007) and Szczepaniak (2015), and Adolescents' Materialism from Richins and Dawson (1992). A 5-point Likert-type scale was used, where one is "strongly disagree" and 5 to "strongly agree."; the items of Material parenting and parent support ranged between 1 "always never" and 5 "always."

Data collection

After a pilot study of 12 respondents, a total of 399 questionnaires were collected, in a single cross-sectional study, from students in middle and high schools (45.9%) as well as from freshmen enrolled in various universities (54.1%) in Cairo and Giza, Egypt. The sample consisted of 55.9% females and 44.1% males. The respondents' family income level was

varied; 42% had income less than EGP 10 thousand, while 58% had income that is equal to or higher than EGP 10 thousand.

DATA ANALYSIS AND RESULTS:

To analyse the proposed model and the propositions, we first run the Exploratory Factor Analysis (EFA) using SPSS v. 25 to figure out the common method bias. After that, we also run the Partial Least Squares- Structure Equation Modeling (PLS-SEM) using Smart PLS v.3.2.8 (Ringle et al., 2015) to test the proposed conceptual model. Finally, we run the fuzzy-set Qualitative Comparative Analysis (*fs*-QCA) using fsQCA v.3.0 (Ragin & Davey, 2016) to figure out the optimal combination of the independent factors that leads to the Adolescent's Materialism highest coverage.

Common Method Bias:

According to Harman's one-factor test, common method bias was not an issue (the first factor variance is 13.442% out of 60.543% total variance) (Podsakoff et al., 2003).

PLS-SEM

We follow SEM two-stage approach in implementing PLS-SEM. The first approach represents the measurement model evaluation, while structural model evaluation will be the second stage (Hair et al., 2017; 2020).

To build the measurement model, a confirmatory composite analysis was adopted (Hair et al., 2020). In this regard, all latent variables (multi-item constructs) should be valid and reliable; therefore, we excluded Gender and Income from the measurement model as they are observed variables (single-item constructs), and their moderation effect will be tested via Multi-Group Analysis (MGA). Accordingly, each item's reliability should be higher than 0.708. Also, each construct's Average Variance Extracted (AVE) should be ≥ 0.5, Composite Reliability (CR) should be> 0.7. Afterward, Fornell-Larcker criterion was applied to test the

discriminant validity. Since each construct's AVE is higher than its squared correlation with another construct at the current research model, discriminant validity was established (Hair et al., 2017; 2020). The nine exogenous variables were measured reflectively in the low order measurement level. However, the Adolescent's Materialism is measured by Reflective-Reflective high order measurement level, and it was assessed using the disjoint two-stage approach (Sarstedt et al., 2019). As the measurement model results reveals, since each construct's AVE is higher than 0.5, convergent validity has also been established. Likewise, as the AVE for each construct is higher than the squared correlation between the same variable and each other variable at the same model, the discriminant validity has been established as well. Finally, the lowest CR value is 0.713, which indicates that all variables are reliable. Therefore, the measurement model has been correctly assessed, and we can proceed to the structural model.

We assess the structural model according to the direct and indirect effects. For the direct effects structural model, we first tested the Variance Inflation Factor (VIF) to check the multicollinearity issue among the independent variables. Hence, the VIF that is between 0.2 and 5 would indicate the absence of multicollinearity issue. Then, we assessed the predictive power of the model using R^2; values of 0.25, 0.5, and 0.75 would represent the weak, moderate, and strong predictive power, respectively. After that, we assessed the effect size of the omitted exogenous variable using F^2; values of 0.02, 0.15, and 0.35would represent the small, medium, and large effect sizes, respectively. Following that, we assessed the model's predictive relevance using the Blindfolding to obtain cross-validated redundancy measures for the endogenous variable using Q^2. Values of 0.02, 0.15, and 0.35would mean that the exogenous variables have small, medium, or large predictive relevance for the dependent variable (Hair et al., 2017; Hair et al., 2020). Later on, the predictive ability has to be assessed based on the out-of-sample validation approach (Assaf & Tsionas, 2019). If the $Q^2_{predict}$for each of the manifest

variables is positive, then a model would confirm its predictive relevance. By comparing the Root Means Square Error (RMSE), or Mean Absolute Error (MAE), between the PLS-SEM and the Linear regression Model (LM), the researcher can conclude various levels of the predictive power (Shmueli et al., 2019). Finally, we assessed the path coefficient significance based on a 90% confidence level and the results of bootstrapping 5000 subsamples with 300 iterations (Hair et al., 2017, 2020). The structural model results reveals that the VIF values range between 1.064 and 1.682, which is below 3, this implies that there is no multicollinearity issue between the exogenous variables (Hair et al., 2020). The predictive power of the model is also moderate, as the Adolescents' Materialism $R^2 = 0.253$. Moreover, the effect size F^2 of an exogenous variable omission on the endogenous variable ranges between 0.00 and 0.06, which implies the weak to moderate effect size. The Adolescents' Materialism $Q^2 = 0.222$ indicates moderate predictive relevance. Moreover, as the $Q^2_{predict}$ for the Adolescents' Materialism predictors, we confirm the predictive relevance. Accordingly, since the histograms of the prediction errors of all Adolescents' Materialism predictors are not highly non-symmetric, the RMSE is incorporated.

Additionally, the model has a high predictive power since the PLS-SEM is less than the LM in all RMSE predictors (Shmueli et al., 2019). Lastly, all proposed antecedents were found to have significant positive effects on the Adolescents' Materialism at a confidence level of 90%. However, only the Parent's consumption habits & practices have a non-significant positive effect, and the Parent's Support has a significant negative effect. To this end, we can proceed to test the indirect effect structural model via Multi-Group Analysis (MGA).

The indirect effect structural models were tested using MGA based on a 90% confidence level and the results of bootstrapping 5000 subsamples with 300 iterations. We first tested the moderation effect of gender; then, we tested the moderation effect of income. To run the MGA, we first split the data into subsamples based on each category of gender and income.

Thus, for the minimum sample size considerations, we now have four groups (two gender groups and two-income categories). Then, we assessed the measurement invariance between the measurement items across subsamples. After that, we assessed the significant difference between each of the structural paths across the subsamples (Hair et al., 2017; Vlajčić et al., 2019).

According to the MGA results, based on the gender and income groups, Gender is found to have a significant effect on the relationship between Peer Influence and Adolescents' Materialism. Where the Peer influences significantly increase the Adolescents' Materialism by 14.3% in males' groups, the same path has a 28.7% positive effect in the females' group, which is double the effect it has on the males' group. This implies that female adolescents are more vulnerable to their peers than males when developing materialistic tendencies. Similarly, two paths have significant differences across the income groups. Where, the Self-esteem has an insignificant negative effect, by 10.4%, on the Adolescents' Materialism in the group with family monthly income less than 10.000 LE, the same path has a significant positive effect, by 28.3%, on the Adolescents' Materialism in the group with family monthly income equal to or higher than 10.000 LE. Also, the media platforms have a significant positive effect on the Adolescents' Materialism by 21.1% in the group with family monthly income less than 10.000 LE. In contrast, the same path has an insignificant positive effect in the group with family monthly income equal to or higher than 10.000 LE. Therefore, we support the effect of Gender and Income as moderators between the Adolescents' Materialism and some of its antecedents.

At the moment, we now have sufficient knowledge about the effect of each of the antecedents on Adolescents' Materialism. However, Regression-Based Models (RBM), such as Multiple Regression Models (MRM) and Structural Equation Modelling (SEM), which are based on the variance theory, are impaired by the symmetry assumption of the data set. According to this assumption, all the cases in the data set should have the exact

RBM/MRM/SEM resultant effect of the independent variable on the dependent variable. Yet, a one-way relationship between two variables can be positive, negative, and non-existent within the same dataset irrespective of the significance and magnitude of this relationship. Therefore, we conduct the Contrarian Case Analysis (CCA) to figure out if we have such perplexing cases in each proposed relationship in the conceptual model (Pappas et al., 2016; Woodside, 2014).

Contrarian Case Analysis (CCA):

We conducted the CCA to test the first proposition by verifying the occurrence of contrarian cases. Using cross-tabulation to build the contingency table, we report the contrarian cases that have contradicted results on the Adolescent's Materialism. First, we composed the latent variables by calculating the average of their items. Then, we created quantiles by dividing the sample from the lowest to the highest values into five equal groups. After that, we analysed the contrarian cases and introduced Phi squared as the two variables are nominally measured (Pappas et al., 2016; Russo & Confente, 2017; Woodside, 2014). The contingency tables of the contrarian case analysis results show that Media Platforms, Social Insecurity, Personal Insecurity, and Peer Influence have asymmetric data, which indicates the existence of contrarian cases. As well as, even though the Phi squared in not significant in all other variables, we found the existence of contrarian cases. Therefore, we support the **first proposition.** This, by turn, advocates carrying out a Fuzzy-set Qualitative Comparative Analysis (*fs*-QCA) for the sake of identifying the possible combinations of determinants, and their configurations, that can result in a high level of adolescents' materialism.

By so doing, we do not seek to find one possible solution, but instead to extend the PLS-SEM results. This can be attained by not only figuring out the different configurations but also by comparing all possible configurations of the causal asymmetry occurrence, such as the

presence or the absence, to identify the solution that has the highest outcome coverage (Crespo et al., 2019; Duarte & Pinho, 2019).

3.4. Fuzzy-set Qualitative Comparative Analysis:

We used the *fs*-QCA v.3 to find out the possible combinations between the antecedents of the outcome and select the highest coverage solution with a high consistency level, rather than testing each individual exogenous variable (Ragin, 2008). This mainly should test our second and third research propositions. The *fs*-QCA has been recently reported in many research studies in the field of business and marketing management (Gligor et al., 2019). It also helps in testing the equifinality by uncovering how the possible combinations of the causal attributes (Parent's Consumption Habits and Practices, Material Parenting, Parent's Support, Peer Influence, Self-Esteem, Personal Insecurity, Social Insecurity, Media Platforms, and Fashion Innovativeness) lead to the same outcome (Adolescent's Materialism). Therefore, we use *fs*-QCA as a complementary analysis to the PLS-SEM.

Before running the *fs*-QCA with an indirect moderation effect, studies tested the categorical moderation test in two ways. On one side, some studies followed a traditional way in testing the moderation by testing the direct relationship without the moderator(s) and then testing them after adding the moderator(s) (e.g., Duarte & Pinho, 2019). However, testing the categorical moderators using without and with moderator(s) inclusion method can be applied with the continuous moderators in particular, but not with the categorical ones; especially when comparing the change in R^2 (e.g., Goodale et al., 2011). On the other side, a more rigorous approach is to test the categorical moderators using Multi-Group Analysis (MGA), especially that MGA allows the researcher to determine the difference in the direct effects, the direction and the significance of the difference across groups (Hair et al., 2017). Therefore, since the MGA results confirmed the observed heterogeneity in our sample according to the gender and the income level (Hair et al., 2018), our data set has been divided into four subsamples in the

fs-QCA. As a result, based on the respondent gender, we now have males group and females group, while based on the income level, we now have a group with family monthly income less than 10.000 LE and a group with a higher family income than 10.000 LE.

A four-stage approach has been adopted to run the *fs*-QCA (Oeij et al., 2019). We first calibrated the data of each variable in the conceptual model into the fuzzy set and used the three anchors of membership scores. Following the guidelines of Ragin (2008), the threshold for full membership is 95% (4.75 on 5 points Likert scale), for the cross over point is 50% (3 on 5-point Likert scale), and for the non-membership is 5% (0.25 on 5-point Likert scale). In doing so, interval data from Likert type scale for the composed latent variables should be transformed into dichotomous to use the fuzzy set membership scores, which specify the membership of each case on an interval between 0 and 1. As we also performed the main descriptive statistics of the calibrated data for the Adolescent's Materialism and its antecedents across subsamples along with the necessary conditions analysis.

Second, we analysed the necessary causal conditions to verify the variables that should always be present/ absent for the outcome to occur/ not occur in each subsample. To find out if the Adolescent's Materialism has necessary conditions, we included all the exogenous variables of the PLS-SEM in the causal conditions. To ensure which exogenous variable(s) conditions are necessary to achieve the outcome, we used a conservative consistency threshold of 0.9 to reduce the likelihood of the true logical contradictions (Schneider &Wagemann, 2012). The calibrated data descriptive statistics and necessary conditions analysis show that there is no causal condition (or the absence thereof) necessary for the Adolescent's Materialism except for the Self Esteem in all subsamples since its consistency score is higher than 0.9. Consequently, Self Esteem will be present in all the solutions.

Third, we introduced the truth table that consists of all logically possible configurations of the causal conditions ($2^9 = 512$ combinations) for each subsample. The *fs*-QCA uses the set

membership scores to allocate each case in a specific combination. To refine the combinations and get consistent and parsimonious solutions, each combination should have at least 2 cases, since each subsample exceeds 50 observations (Kraus et al., 2018), and the consistency score should be higher than 0.75 (Ragin, 2017). Table 1 presents the truth table for each subsample.

Insert table 1 here

Forth, we turn to the interpretation stage of each solution. As can be seen from the truth table (table 1), the Self Esteem presence is essential in 23 out of 25 solutions, which verifies its necessity. However, in all combinations, Self Esteem on its own is insufficient to produce high levels of Adolescent's Materialism, but rather, it should be combined with other factors in any recipe. Accordingly, the second proposition is supported. Moreover, each sub-sample has several combinations. More specifically, the males, females, low-income, and high-income subsamples have 4, 8, 6, and 7 possible combinations, respectively. This implies that there are many combinations that can produce the same outcome, which then supports proposition 3.

In the 'calibrated data descriptive statistics and necessary conditions analysis', the solution coverage illustrates the proportion of the outcome covered by the entire solution with its all configurations. However, the row coverage explains how much of the membership in the outcome is covered by the membership in a single configuration (Schneider & Wagemann, 2012). Therefore, the highest row coverage indicates the solution that best represents Adolescent' materialism. For example, in Males subsample, the overall solution coverage is 0.501, and the overall consistency is 0.883, which suggests that a substantial proportion of the Males' Materialism is covered by the four configurations. Furthermore, solution 1 is the best representative of the Adolescent's Materialism as it has the highest row coverage among the other solutions (0.392). This solution indicates the presence of Social Insecurity, Self Esteem, Parent Consumption Habits, Parent Materialism, and Parent Support, as well as the absence of

the Fashion Innovativeness and Peer Influence, regardless of the influence of Media platforms or Personal Insecurity.

In Females subsample, on the other hand, the overall solution coverage is 0.538, and the overall consistency is 0.815, which suggests that a substantial proportion of the Females' Adolescent's Materialism is covered by the eight configurations. Moreover, the third solution is the best representative of the Adolescent's Materialism as it has the highest row coverage among the other solutions (0.329). This solution indicates the presence of Social Insecurity, Self Esteem, Peer Influence, Parent Materialism, and Parent support. However, it implies the absence of the influence of media platforms, the Personal Insecurity, and the Fashion Innovativeness, regardless of the Parent Consumption Habits. To this point, the gender subsamples have different solutions, and the best solutions for both of them (the males and females) are sharing in only five configurations out of 9, or 15 out of 27 conditions (9 present, nine absent, and nine ambiguous). This indicates that gender affects the Adolescent's Materialism and the relationships of its drivers, which supports the moderating role of the gender in our study.

Similarly, in the Low-Income subsample (Less than 10.000 family monthly income), the overall solution coverage is 0.545, and the overall consistency is 0.834, which suggests that the six configurations cover a substantial proportion of the Adolescent' Materialism in such cluster. Moreover, the third solution is the best representative of the Adolescent's Materialism as it has the highest row coverage among the other solutions (0.332). This solution indicates the presence of Social Insecurity, Personal Insecurity, Self Esteem, Parent Consumption habits, and Parent support. However, it suggests the absence of the influence of Media platforms, Fashion Innovativeness, and Peer Influence, irrespective of the Parent Materialism.

Likewise, in the High-Income subsample (at least 10.000 family monthly income), the overall solution coverage is 0.554, and the overall consistency is 0.844, which suggests that

the seven configurations cover a substantial proportion of the Adolescent's Materialism in such cluster. Moreover, the second solution is the best representative of the Adolescent's Materialism as it has the highest row coverage among the other solutions (0.399). This solution indicates the presence of Social Insecurity, Self Esteem, Parent Consumption habits, Parent Materialism, and Parent support. However, it suggests the absence of Fashion Innovativeness and Peer Influence, irrespective of the influence of Media platforms and Personal Insecurity. Accordingly, the family income subsamples have different solutions, and the best solutions for both of them (low income and high income) are sharing in only6 configurations out of 9, or 18 out of 27 conditions (9 present, nine absent, and nine ambiguous). This indicates that family income affects the Adolescent's Materialism and the relationships of its drivers, which supports the moderating role of the family income in our study.
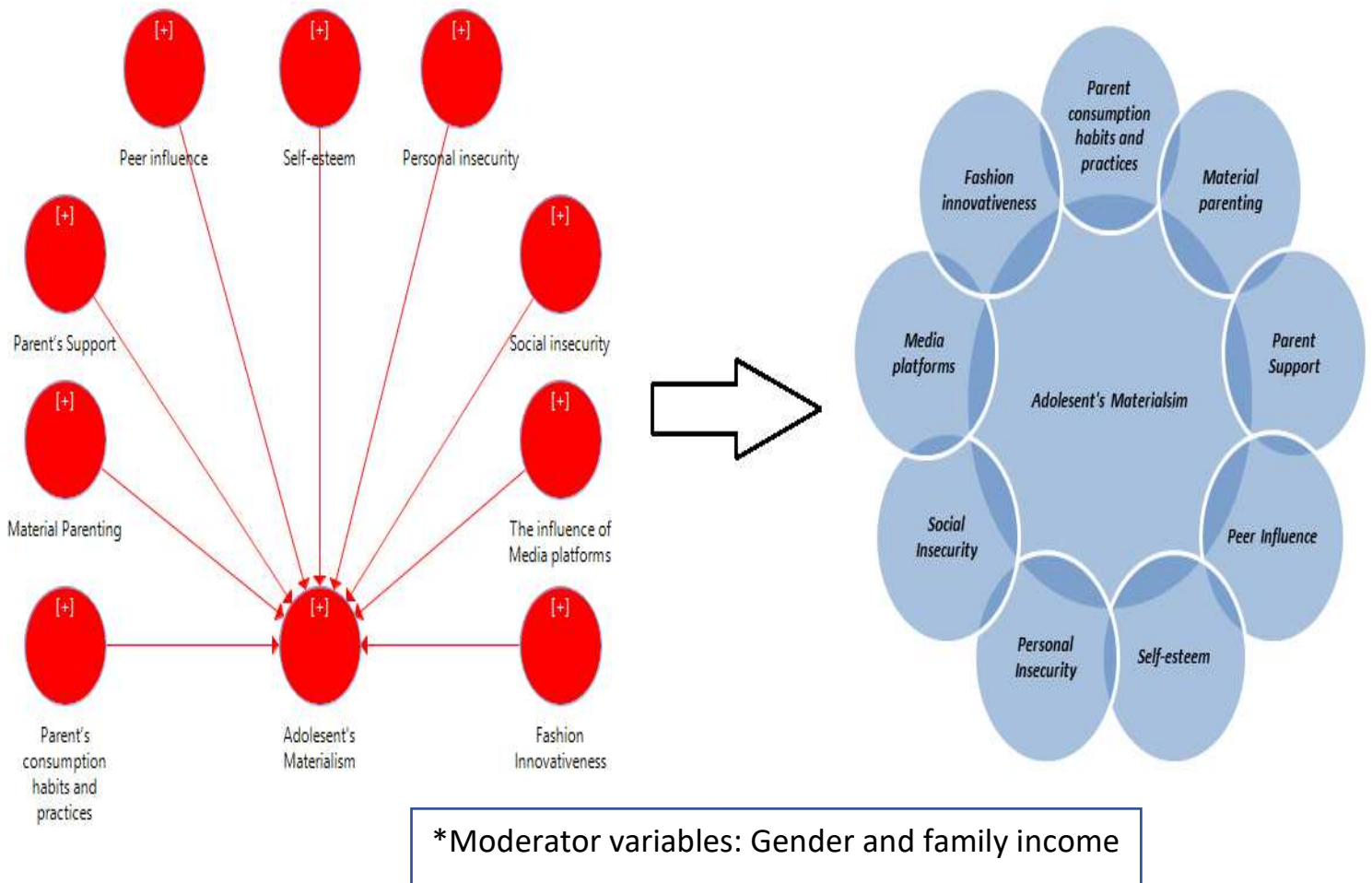
*Moderator variables: Gender and family income

Figure 1 Conceptual model (PLS-SEM) and (QCA)

Table 1 truth table for all subsamples

Sample	Solution*	Prt_cons	Prt_mat	Prt_sup	Per_inf	Slf_estm	Per_ins	Soc_ins	Med	Fash_inno	Raw coverage	consistency	Solution coverage
Males	1	●	●	●	○	●		●		○	0.392	0.901	0.501
	2	●	●	●	○	●	○		○	○	0.299	0.907	
	3	●	○	●	●	●	●	●		○	0.289	0.964	
	4	●	●	●	○	●	○	●	●		0.321	0.960	
Females	1	○	○	○	○		●	●	○	○	0.222	0.922	0.538
	2	●		●	○	●	○	○	○	○	0.301	0.835	
	3		●	●	●	●	○	●	○	○	0.329	0.931	
	4	○	○	○	○	●	○	○	○	○	0.164	0.908	
	5	●	●	●	○	●	●	●	○	○	0.308	0.916	
	6	●	○	●	●	●	●	●	●	○	0.294	0.962	
	7	●	●	●		●	○	○	○	○	0.297	0.846	
	8	●	●	●	●	●	○		○	○	0.328	0.923	
Less than 10.000 LE	1	○	○	○	○		●	●	○	○	0.211	0.932	0.545
	2	●		●	○	●	○	○	○	○	0.298	0.843	
	3	●		●	○	●	●	●	○	○	0.332	0.880	
	4	●	●	●	●	●	○		○	○	0.328	0.931	
	5	●	○	○	○	●	○	●	●	○	0.179	0.967	
	6	●	●	●	○	●	○	●	●	●	0.279	0.978	
Equal to or higher than 10.000 LE	1	●	●	●	○	●			○	○	0.370	0.868	0.554
	2	●	●	●	○	●		●		○	0.399	0.898	
	3		●	●	○	●	○	○	○	○	0.277	0.873	
	4	●	●	●		●	○	●	○	○	0.312	0.929	
	5	○	○	○	○	●	○	○	○	○	0.164	0.908	
	6	○	○	○	●	●	●	●	●	○	0.201	0.974	
	7	●	○	●	●	●	●	●	●	○	0.277	0.972	

* Parent's Consumption Habits and Practices = (Prt_cons), Material Parenting = (Prt_mat), Parent's Support = (Prt_sup), Peer Influence = (Per_inf), Self-Esteem = (Slf_estm), Personal Insecurity = (Per_ins), Social Insecurity = (Soc_ins), Media Platforms = (Med), and Fashion Innovativeness = (Fash_inno)

Model: Adolescent's Materialism = f(Med, Soc_ins, Per_ins, Slf_estm, Fash_inno, Per_inf, Prt_cons, Prt_mat, Prt_sup)

Cell: ● = must be present, ○ = must be absent, and no sign = does not matter whether it is absent or present in the configuration

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