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RESEARCH PAPER

Social Networking Sites Use and Relationship Satisfaction among Married Adults: The Mediating Effect of Materialism

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ABSTRACT

The main objective of the current study was to examine the association between materialism, social networking sites use, and relationship satisfaction among married adults. While extensive research exists on social networking sites use and relationship satisfaction, materialism's mediating role among married adults in Pakistan is unclear and this study addresses this gap. Through convenient sampling, 390 married adults were approached in a cross-sectional study from various districts of AJK and KPK. The researchers utilized the Material Value Scale (MVS), Modified Facebook Intrusion Questionnaire (MFIQ), and Relationship Assessment Scale (RAS) to evaluate the variables. Results showed significant positive correlation between materialism, social networking sites use, and relationship satisfaction. Mediation analysis confirmed that materialism partially mediates the relationship between social networking sites use and relationship satisfaction.

Keywords:

Married Adults, Materialism, Relationship Satisfaction, Social Networking Sites

Use

Introduction

Materialism among couples refers to the emphasis on material possessions and financial wealth in a relationship. It is characterized by a strong focus on acquiring and displaying material goods and prioritizing financial success and status. Materialism in relationships can manifest in various ways, impacting the couple's dynamics, values, and overall satisfaction. (Muzaffar, et. al., 2018). Material possessions often play a central role in defining success and happiness in a materialistic relationship. Couples may place a high value on acquiring expensive items such as luxury cars, designer clothing, or a lavish home.

The accumulation of wealth and possessions becomes a measure of their worth and achievement, leading to a preoccupation with materialistic pursuits. Materialistic couples may prioritize financial success above other aspects of their relationship. The pursuit of wealth and career advancement may take precedence over quality time spent together, emotional connection, or personal well-being. Long working hours, extensive business travel, and a persistent drive for financial gain can lead to neglecting the emotional needs of both partners.

Social networking sites platforms are often populated with influencers and celebrities who promote products and consumerism (Muzaffar, et. al., 2019)Couples who are influenced by such content may be more inclined to pursue materialistic desires and engage in conspicuous consumption to match perceived social standards. Couples may feel compelled to exchange expensive gifts or showcase their material possessions to demonstrate love or success, potentially fostering materialistic values.

Users can share various types of content, including photos, videos, articles, and links to exciting websites. Social networking sites facilitate the distribution of information, allowing users to discover and consume content shared by others. Social media platforms have become deeply ingrained in our contemporary society, exerting a significant impact on various facets of our lives, such as interpersonal connections and marital relationships. Married adults are no exception to this trend, as they actively engage with SNS to link, communicate, as well as share experiences with others. Social networking sites offer a platform designed for married individuals to maintain connections with family and friends, whether they are nearby or distant.

Communication, shared values, and a mutual understanding of priorities can help couples navigate the potential challenges associated with materialism and find a healthy equilibrium in their relationship. Ultimately, materialism among couples can have both positive and negative impacts. While the desire for financial security and material wellbeing is natural. Finding a balance between material aspirations and other relationship values is essential for fostering a healthy and fulfilling partnership.

The relationship between materialism and social networking sites used in married couples can vary depending on individual circumstances and behaviors. While social networking sites use can provide a platform for sharing experiences, connecting with others, and accessing information, they can also contribute to materialistic tendencies in some cases (Muzaffar, et. al., 2020). Social networking sites use often present an idealized version of people's lives, highlighting material possessions and experiences. Couples who frequently engage in social comparison on social networking sites may feel pressured to keep up with others and acquire similar material goods, leading to increased materialistic tendencies.

Relationship satisfaction among married couples refers to the overall contentment and fulfillment experienced by individuals within their marital relationships. It is a multidimensional construct that encompasses various aspects of a couple's partnership, including emotional intimacy, communication, trust, shared values, and mutual support. Marriage is a significant commitment, and the quality of the relationship plays a vital role in the well-being of both spouses.

Several factors contribute to relationship satisfaction among married couples. Effective communication is essential, as it fosters understanding, empathy, and the ability to resolve conflicts. Trust and respect form the foundation of a healthy relationship, enabling partners to feel secure and valued. Emotional intimacy, including emotional support, affection, and shared experiences, strengthens the bond between spouses. Shared goals, values, and interests provide a sense of common purpose and alignment, fostering a deeper connection.

Materialism and relationship satisfaction among couples can have an interesting, interconnected relationship. Materialistic tendencies often lead to a desire to acquire expensive possessions and maintain a certain lifestyle. It helps a financial strain within the relationship, creating conflict and dissatisfaction. Couples who share similar values and prioritize experiences, emotional connections, and shared goals can maintain relationship satisfaction even if they have materialistic tendencies.

When individuals center their lives on materialism, they prioritize wealth above meaning, financial gain over interpersonal connections, fame over ethical values, a relentless work ethic over family bonds, and personal ego over serving others. This materialistic set of values can result in a situation where many lose touch with their authentic selves, living in a world driven by external markers of success. While many people naturally aspire to happiness and view material possessions as the fruit of their labor, our

pursuit of tangible goods and wealth often arises not from adversity but from inner discontentment.

The term materialism refers to a set of ideals and principles that place a premium on status, goods, wealth, and image. Materialism, broadly speaking, is the emphasis that someone places on having money, getting money, and the things that money can purchase. More specifically, materialism is frequently described as the value people place on acquiring material items and owning them (Kasser, 2016).

There is a growing concern that modern generations are increasingly placing higher value on material possessions (Butler, 2018). Materialism can be defined as the degree to which individuals shape their self-identity through the acquisition and utilization of goods and possessions. It represents a collection of core convictions concerning the significance of possessions in a person's existence (Parashar, 2017). The individuals who are susceptible to the impact of social media are transforming, exhibiting an increased inclination towards materialism and engaging in more conspicuous consumption. In common usage materialism is associated with material possessions and comfort in life (Manchiraju, 2013).

Literature Review

Materialism and Social Networking Sites Use

Studies explored that advertising, television viewing, and social media are more powerful in shaping materialistic attitudes (Lenka, 2016). Previous literature indicated that the use of social networking sites is positively correlated with materialism (Wang et al., 2020). A previous study examined the relationship between social networking site use and materialism in adults (Sharif & Khanekharab, 2017).

A study investigated the correlation between the use of social networking sites and materialism (Hu et al., 2020). Recent studies started to focus on the association between materialistic behaviors and social networking sites use (Pang, 2018). Social networking sites use increase exposure towards materialistic information that leads to materialism (Song & Stening, 2016).

Materialism and Relationship Satisfaction

Materialistic tendencies within the couples negatively influence their relational satisfaction (Michelle & Eman, 2021). According to the study, materialism and satisfaction have a negative relationship (Thyroff & Kilbourne, 2018). According to previous literature, there is a negative association between materialistic attitudes and relationship satisfaction (LeBaron et al., 2017). According to a previous study by Hui & Tsang (2017), relationships were found to be interfered with by materialism.

Hence, when individuals prioritize wealth, possessions, and their image over their relationships, they could experience decreased happiness within those relationships. Research exploring the connection between materialism and relationships has identified a link between stronger materialistic beliefs and reduced levels of relationship satisfaction (Li et al., 2015).

Social Networking Sites Use and Relationship Satisfaction

McDaniel et al. (2017) found a significant association between social media use and decreased relationship satisfaction. The literature suggests that social media usage negatively affects relationship satisfaction between married couples (Abbasi, 2019). Previous studies found negative associations between social networking sites use and relationship satisfaction (Northrup & Smith, 2016). Valenzuela et al. (2014) discovered a

negative correlation between the use of social networking sites and relationship satisfaction. Hina et al. (2019) carried out a study that implies social media use is the major cause of the negative impact relationship satisfaction of couples.

Extensive research has been conducted on the use of social networking sites and their impact on relationship satisfaction, the results vary depending on how these sites are used and the quality of the relationships involved but there is a notable gap in understanding how materialism functions as a mediator in this relationship, particularly within the context of married adults in Pakistan. This study will contribute significantly to establishing the relationships among the research variables and understanding the mediating role of materialism. The findings will contribute to the broader discussion on spousal relationships in the digital era, offering insights for relationship therapists, counselors, and policymakers.

Hypotheses

1. Social networking sites use will be positively associated with materialism whereas materialism and social networking sites use will be negatively associated with relationship satisfaction.

2.Materialism will mediate the relationship between social networking sites use and relationship satisfaction.

Conceptual Model

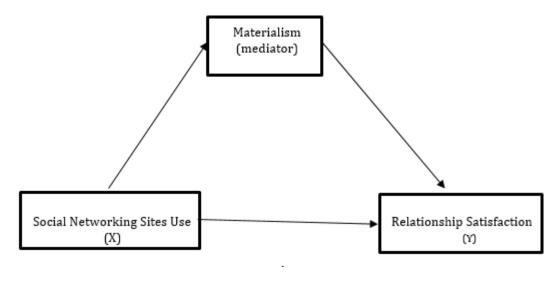


Figure. 1

Material and Methodology

Nature

In the current study, the correlational survey research method was employed, utilizing a quantitative research design. Correlational research is valuable for identifying associations between variables by using cross-sectional studies and this can make the results more applicable to everyday life.

Population

A study was conducted on married individuals.

Sample Size

The study comprised a sample of 390 married adults.

Sample Technique

Participants were chosen using a convenient sampling technique, where individuals are selected based on their accessibility and availability.

Instruments

Material Value Scale

The Material Value Scale, devised by Richins & Dawson in 1992, serves to gauge levels of materialism and comprises 15 items. Among these, items 3, 8, 9, 13, 14, and 15 are reverse scored. Participants provided ratings on a scale of 1 to 5 (1 = strongly disagree to 5 = strongly agree), yielding scores between 15 and 75. Higher scores indicate greater materialistic tendencies. Scale was available in open access. The scale demonstrates a reliability coefficient (α) of .87 (Richins & Dawson, 1992). In our current investigation, the alpha reliability for the Material Value Scale stood at .857.

Modified Facebook Intrusion Questionnaire

Elphinston and Noller developed the Modified Facebook Intrusion Questionnaire in 2011 as a tool for assessing social networking site use. Eight items questionnaire with response categories from 1 to 7. The researcher substituted Social Networking Sites for Facebook in each item to expand the scope of the Facebook intrusion questionnaire to include social networking sites and Facebook. Scores range from 8 to 56. Scoring higher on the Modified Facebook Intrusion Questionnaire signifies a greater degree of social networking site use. Availability of questionnaire was in public domain. The alpha reliability of the Modified Facebook Intrusion Questionnaire stands at α = .90 (Elphinston & Noller, 2011). In the study's current context, the alpha reliability for the Modified Facebook Intrusion Questionnaire was α = .786.

Relationship Assessment Scale

The Relationship Assessment Scale was developed by Funk and Rogge in 2007 and was designed to measure overall relationship satisfaction. The survey comprises seven items aimed at gauging respondents' satisfaction, with each question rated on a 5-point Likert scale ranging from 1 (low) to 5 (high). Among these items, four and seven are reverse scored. Scores range from 7 to 35. A higher score indicates the respondent's level of relationship satisfaction. The Relationship Assessment scale has alpha reliability α = .86 (Funk & Rogge, 2007). This scale was available in open access. In this current study, the alpha reliability for the Relationship Assessment scale was α = .763.

Procedure of the Study

The researcher collected sample from different districts of Azad Kashmir and Khyber Pakhtunkhwa. Researcher approached 390 married individuals before collecting data, they were informed about the study, and they were provided with answers to all questions related to the research study.

The data was collected voluntarily from individuals who willingly chose to participate in the study. Those who declined to participate were not forced into becoming part of the study and only their complete questionnaires were incorporated into the study, while incomplete ones were excluded.

The data collection was conducted both via Google Forms and through manually administered questionnaires. Participants were kindly requested to fill out the questionnaires with utmost honesty and integrity.

Data analysis technique

The analyses were conducted using the SPSS-25 (Statistical Package for the Social Sciences) software. Reliability coefficient analysis was employed to assess the internal consistency of the data. Pearson correlation was utilized to study the relationships between variables. The Process Macro 4 was applied to evaluate the mediating impact of variables.

Ethical consideration

Participants provided informed consent and were thanked for their contributions. They were assured that their data would be used solely for research purposes, emphasizing the ethical commitment to confidentiality and respect for their participation.

Results and Discussion

Table 1
Psychometric Characteristics of Social Networking Sites Use, Materialism and Relationship Satisfaction

| Tiolationomp battoraction | | | | | | | |
|---------------------------|-------|-------|-------|--------------|--|--|--|
| Scale | M | SD | Range | Cronbach's α | | | |
| SNS | 28.82 | 8.727 | 8-56 | .786 | | | |
| MAT | 46.27 | 9.265 | 15-75 | .857 | | | |
| RS | 23.13 | 4.926 | 7-35 | .763 | | | |

Note. M = Mean, *SD* = Standard Deviation, SNS = Social Networking Sites Use; MAT = Materialism; RS = Relationship Satisfaction.

The results indicated that the Social Networking Sites Use, Materialism and Relationship Satisfaction have reliability .786, .875, and .763 respectively.

Table 2
Descriptive Statistics of Correlation among Social Networking Sites Use, Materialism,
Relationship Satisfaction

| Scales | N | M | SD | I | II | III | |
|--------|-----|-------|-------|---|--------|--------|--|
| SNS | 390 | 46.27 | 9.265 | - | .567** | .581** | |
| MAT | 390 | 28.82 | 8.727 | - | - | .655** | |
| RS | 390 | 23.13 | 4.926 | - | - | - | |

Note. M = mean, SD = standard deviation, N = number of participants, SNS = Social Networking Sites Use, MAT = Materialism, RS = Relationship Satisfaction.

Table 2 revealed a significant positive association between social networking sites use and materialism (MAT) (r = .567, p < .01, N = 390). While, social networking sites use (SNS) (r = .581, p < .01, N = 390) and materialism (MAT) (r = .655, p < .01, N = 390) showed a significant positive association with relationship satisfaction.

Table 3
Summary of Mediation Results for Materialism in Married Adults

| | | | | | | | _ |
|----|-----|-----------|-----------|---------|----------|----------|---|
| | | Effect of | Effect of | Direct | Indirect | Total | - |
| DV | M | IV on M | M on DV | Effects | Effect | Effects | |
| RS | MAT | .601*** | .254*** | .174*** | .153** | .3281*** | - |

Note. SNS = Social Networking Sites Use; MAT = Materialism; RS = Relationship Satisfaction; SE = Standard Error; CI = Confidence Interval. **p < .01, ***p < .001.

Table 3 illustrates significant findings concerning the mediating role of materialism between social networking sites use and relationship satisfaction. Simultaneously, the path coefficient indicated a significant correlation between social networking sites use and

relationship satisfaction. A correlation represents the statistical relationship between two variables, indicating how they vary together. In this case, the significant path coefficient between social networking sites use and relationship satisfaction suggests that these two constructs are correlated.

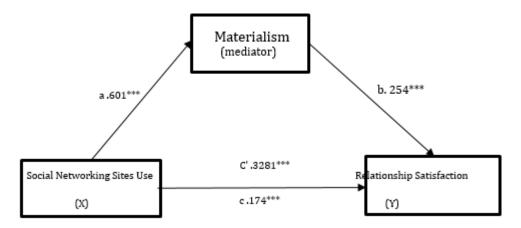


Figure 2. Mediation Analysis

The findings from a simple mediation analysis, as depicted in Figure 2, showed that materialism partially mediates the relationship between social networking sites use and relationship satisfaction. The analysis indicated a significant positive association between social networking sites use and relationship satisfaction (a = .601***, p = .000), along with a significant positive correlation between materialism and relationship satisfaction (b = .254***, p = .000). The indirect effect, calculated using 10,000 bootstrap samples and a 95% bias-corrected confidence interval, revealed that the indirect effect (ab = .174***) significantly differed from 0, with a confidence interval of .0973 to .2139. Furthermore, even after considering the indirect effect of materialism on social networking sites use, a significant direct effect on relationship satisfaction persisted (C' = .3281****, p = .000).

Discussion

In the current study it was hypothesized that social networking sites use will be positively associated with materialism. The present study's findings in the first part showed that social networking sites use is positively associated with materialism. Previous research suggested that social networking sites use positively impacted materialistic behaviors (Van et al., 2023). Prior research showed use of social networking sites was positively associated with materialistic values (Ho et al., 2019). Results of the current study concluded that there exists positive association between social networking sites use and materialism aligned with previous literature among married adults.

Second part of the first hypothesis stated that materialism and social networking sites will be negatively associated with relationship satisfaction. However according to findings of current research materialism and social networking sites use are also positively associated with relationship satisfaction. The results of the present study did not support the hypothesis. Among married adults, valuing material possessions appears to contribute positively to relationship satisfaction.

According to previous research people who spend more of their money on activities or shopping that contribute to happiness would increase relationship satisfaction (Howell et al., 2012). According to previous literature findings there was positive association between social networking sites use and relationship satisfaction (Grieve et al., 2013). Another research study found a positive association between social networking sites and relationship satisfaction (Goodman-Deane et al., 2016). A positive correlation was found between social media and relationship satisfaction, suggesting that effective use of social

media enhanced familial ties among family members (Bisen, 2023). Prior literature supported the findings of the current study that social networking sites and relationship satisfaction positively correlated with each other.

In the present study, macro analysis was used to examine the mediating role of materialism between social networking sites use and relationship satisfaction among married adults. The results in the table showed that materialism mediates the social networking sites use with relationship satisfaction, which supports the hypothesis of the current study that materialism will mediate the social networking sites use and relationship satisfaction among married adults. Previous study found that using social media and having a strong consumer materialistic orientation predict a greater acceptance of product placement within these sites.

Additionally, materialism was shown to partially explain the relationship between how often social networking sites are used and the acceptance of product placement within them (Wijesundara & Kumara, 2023). Materialism played a significant role in partially mediating the relationship between social media use and product placement acceptance. In the current study, materialism is also found to partially mediate the relationship between social networking site use and relationship satisfaction. There is a direct effect of social networking site use on relationship satisfaction, and materialism explains only part of that relationship.

Conclusion

Study examined the connection between materialism, social networking site use, and relationship satisfaction among married adults. It found that materialistic values can influence relationships, while social media use can both enhance and challenge satisfaction. Couples often prioritize quality time, trust, and communication over social media engagement. Interestingly, a desire for possessions and social media use correlated with higher relationship satisfaction. However, individual experiences vary, highlighting the need for further research to understand these dynamics.

Recommendatins

- Therapists and marriage counselors can also benefit from these findings by incorporating discussions into their counseling sessions. By addressing these topics, counselors can help couples navigate potential conflicts and challenges related to materialistic values and online behavior, ultimately promoting healthier and more fulfilling relationships.
- The government should conduct awareness programs so that couples can understand the difference between the realities of life. By recognizing the associations between materialism, social networking site use, and relationship satisfaction, couples can gain valuable insights into their dynamics.
- Implement educational programs aimed at empowering individuals to navigate societal pressures, prioritize meaningful connections over material pursuits, and foster healthier perspectives on relationships and fulfillment.

References

- Abbasi, I. S. (2019). Social media addiction in romantic relationships: Does user's age influence vulnerability to social media infidelity? *Personality and Individual Differences*, 139, 277-280. https://doi.org/10.1016/j.paid.2018.10.038.
- Bisen, A. (2023, June). Relationship between social media, relationship satisfaction, and family cohesion. doi:10.13140/RG.2.2.14559.84640/1.
- Butler, S. (2018). The Impact of Advanced Capitalism on Well-being: *an Evidence-Informed Model. Human Arenas*, https://doi.org/10.1007/s42087-018-0034-6.
- Elphinston, R. A., & Noller, P. (2011). Time to face it! Facebook intrusion and the implications for romantic jealousy and relationship satisfaction. *Cyberpsychology, Behavior, and Social Networking, 14, 631-635.* https://doi.org/10.1089/cyber.2010.0318
- Funk, J. L., & Rogge, R. D. (2007). Testing the ruler with item response theory: Increasing precision of measurement for relationship satisfaction with the couples satisfaction index. *Journal of Family Psychology*, *21*(4), *572–583* https://doi.org/10.1037/0893-3200.21.4.572.
- Goodman-Deane, Joy; Mieczakowski, Anna; Johnson, Daniel; Goldhaber, Tanya; Clarkson, P. John (2016). The impact of communication technologies on life and relationship satisfaction. *Computers in Human Behavior*, *57*, *21229*. doi:10.1016/j.chb.2015.11.053.
- Grieve, R., Indian, M., Witteveen, K., Tolan, G. A., & Marrington, J. (2013). Face-to-face or facebook: can social connectedness be derived online? *Computers in Human Behavior*, *29*, *604e609*.https://doi.org/10.1016/j.chb.2012.11.017.
- Hina Gull, Sardar Zafar Iqbal, Saeed Hussein Al-Qahtani, Reem A. Alassaf, Mahi M. Kamaleldin (2019). "Impact of Social Media Usage on Married Couple Behavior a Pilot Study in Middle East, *International Journal of Applied Engineering Research"*. Volume 14, Number 6 (2019). 1368-1378.
- Ho, H., Shin, W., & Lwin, M. O. (2019). Social Networking Site Use and Materialistic Values Among Youth: The Safeguarding Role of the Parent-Child Relationship and Self-Regulation. *Communication Research*, 46(8), 1119–1144.
- Howell, R. T., Pchelin, P., & Iyer, R. (2012). The preference for experiences over possessions: Measurement and construct validation of the experiential buying tendency scale. *Journal of Positive Psychology*, *7*(1), *57–71*. https://doi-org/10.1080/17439760.2011.626791.
- Hu, Y. T., & Liu, Q. Q. (2020). Passive social network site use and adolescent materialism: Upward social comparison as a mediator. *Social Behavior and Personality: an international journal*, 48(1), 1-8. https://doi.org/10.2224/sbp.7898.
- Hui, C., & Tsang, O. (2017). The role of materialism in self-disclosure within close relationships. *Personality and Individual Differences*, 111, 174-177.
- Kasser, T. (2016). The psychology of materialism. Annual Review of Psychology, 67, 489-514.
- LeBaron, A. B., Allsop, D. B., Hill, E. J., Willoughby, B. J., & Britt-Lutter, S. L. (2017). Marriage and materialism: Actor and partner effects between materialism, importance of marriage, and marital satisfaction. *Journal of Financial Therapy*. https://doi.org/10.4148/1944-9771.1145.

- Lenka, U. (2016). 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.
- Li, H. H., Hyduke, D. R., Chen, R., Heard, P., Yauk, C. L., Aubrecht, J., & Fornace Jr, A. J. (2015). Development of a toxicogenomics signature for genotoxicity using a dose-optimization and informatics strategy in human cells. *Environmental and Molecular Mutagenesis*, 56(6), 505-519. https://doi.org/10.1002/em.21941.
- Manchiraju, S. (2013) Materialism in Consumer Behavior and Marketing: A Review. *Management & Marketing*, 8, 329-351.
- McDaniel, B. T., Drouin, M., & Cravens, J. D. (2017). Do you have anything to hide? Infidelity-related behaviors on social media sites and marital satisfaction. *Computers in human behavior*, 66, 88-95. https://doi.org/10.1016/j.chb.2016.09.031.
- Michelle Cappetto & Eman Tadros (2021). The impact of materialism on relational satisfaction, *International Journal of Systemic Therapy*, 32:4, 314-333, doi:10.1080/2692398X.2021.1987116.
- Muzaffar, M., Chohdhry, S., & Afzal, N. (2019). Social Media and Political Awareness in Pakistan: A Case Study of Youth, *Pakistan Social Sciences Review*, 3 (II), 1-13
- Muzaffar, M., Yaseen, Z., & Ahmad, A. (2018). Child Marriages in Pakistan: Causes and Consequences. *Journal of Indian Studies*, 4 (2), 195-207
- Muzaffar, M., Yaseen. Z., Safdar, S. (2020). Role of Social Media in Political Campaigns in Pakistan: A Case of Study of 2018 Elections, *Journal of Political Studies*, *27* (2), 141-151
- Northrup, J., & Smith, J. (2016). Effects of Facebook maintenance behaviors on Partners' experience of love. *Contemporary Family Therapy*, 38(2), 245-253.
- Pang H. Microblogging, friendship maintenance, and life satisfaction among university students: The mediatory role of online self-disclosure. *Telemat Inform. 2018;* 35(8):2232–41. https://doi.org/10.1016/j. tele.2018.08.009.
- Parashar, S., & Jain, S. (2017). Effect of demographics on materialism: An empirical study. *Pacific Business Review International*, 10(2), 124-132.
- Richins, M. L., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research*, 19, 303-316. doi:10.1086/209304.
- Sharif, S. P., & Khanekharab, J. (2017). Identity confusion and materialism mediate the relationship between excessive social network site usage and online compulsive buying. *Cyberpsychology, Behavior, and Social Networking, 20(8), 494-500.* https://doi.org/10.1111/j.1468-2958.2010.01392.x
- Song Y, Stening BW. Antecedents of materialism in China—an intergenerational analysis. *Int J Consum Stud. 2016; 40(6):701–11.* https://doi.org/10.1111/ijcs.12284.
- Thyroff, A., & Kilbourne, W. E. (2018). Self-enhancement and individual competitiveness as mediators in the materialism/consumer satisfaction relationship. *Journal of Business Research*, *92*, *189-196*. https://doi.org/10.1016/j.jbusres.2018.07.023.

- Valenzuela, S., Halpern, D., & Katz, J. E. (2014). Social network sites, marriage well-being and divorce: Survey and state-level evidence from the United States. *Computers in Human Behavior*, *36*, 94–101. https://doi.org/10.1016/j.chb.2014.03.034.
- Van Tran, D., Nguyen, T., & Nguyen, D. M. (2023). Understanding how upward social comparison stimulates impulse buying on image-sharing social commerce platforms: A moderated mediation model of benign envy and self-esteem. *Current Psychology*, *42*(22), 18777-18792.https://doi.org/10.1007/s12144-022-03042-w.
- Wang, P., Lei, L., Yu, G., & Li, B. (2020). Social networking sites addiction and materialism among Chinese adolescents: A moderated mediation model involving depression and need to belong. *Frontiers in psychology*, *11*, 581274.
- Wijesundara, T. and Kumara, S. (2023), "Acceptance of product placement in social networking sites: the mediating role of materialism", *Global Knowledge, Memory and Communication*, 72 (6/7), 612-627. https://doi.org/10.1108/GKMC-04-2021-0073.