

A Comparative Study Of Hedonistic-Consumerism Values Between Dink And Non-Dink Couple In Mumbai.

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Abstract:

Research on the hedonistic-consumerism values of couples has the potential to provide useful insights into a variety of aspects of consumer behavior, relationship dynamics, and societal trends. In the context of decisions regarding purchasing and lifestyle, the values of hedonism and consumerism refer to the priorities of pleasure, enjoyment, and self-indulgence over other considerations. The examination of these principles within the context of married couples has the potential to shed light on several crucial aspects. The present study is based on four parameters of hedonistic-consumerism values. These four parameters are Self-Enhancement, Entertainment and fun, Curiosity and Change, and Consumption Style. Research is based on primary data collected through the survey method. The stratified random sampling method is used for collection of data. A sample of 175 respondents is obtained. For analysis of data, SPSS is used. In the process of analysis of data, descriptive and inferential statistics are obtained. To check the reliability of the scale, Cronbach Apha test is applied.

Keywords: hedonistic-consumerism, DINK, Non-DINK couples

Introduction:

"Dual Income, No Kids" is the full meaning of the acronym "DINK," which stands for that phrase. It is a term used to describe a typically married pair with no children. Both partners in the couple have jobs but do not live together. That is frequently used to describe couples who consciously decide not to have children or have postponed having children to concentrate on their professions, personal activities, or other lifestyle choices. Because they do not have the financial burdens of raising children, DINK couples frequently have more financial flexibility and independence than other couples. They might have more discretionary income, which they can put towards things like saving for the future, going on vacation, engaging in personal hobbies, or engaging in leisure activities. In addition, they often have more time to devote to one another and their separate activities and passions. It is important to remember that "DINK" is merely descriptive and does not inherently convey any value judgment. It reflects a specific way of life that some couples choose for themselves. The notion of DINK couples has gained attention and recognition as society's conventions and attitudes towards family planning continue to shift. DINK stands for "do it yourself" couples.

2. Self-Enhancement:

Individuals have a psychological propensity known as self-enhancement, defined as the desire to seek out and accentuate positive elements while downplaying or minimizing unfavorable aspects of themselves. It entails the wish to perceive oneself favorably and to increase one's sense of self-worth and self-esteem. People working on improving themselves tend to concentrate on their capabilities, accomplishments, and positive qualities while minimizing or ignoring their character's inadequacies, failures, and negative aspects.

This idea is intimately connected to the more general subject of self-esteem, which is shorthand for an individual's overall assessment of how much they value themselves. Self-enhancement can show itself in various ways, including selective attention to positive feedback, using self-serving biases to explain triumphs and failures, and presenting a more positive image to others that might be factual. All of these are examples of ways that self-enhancement can take place.

Excessive or unrealistic self-enhancement can lead to issues such as narcissism, an inability to acknowledge and work on personal weaknesses, and difficulties forming genuine relationships due to the

discrepancy between self-presentation and reality. While a certain degree of self-enhancement is normal and can contribute to healthy self-esteem, excessive or unrealistic self-enhancement can lead to problems such as these.

3. Entertainment and fun:

Fun and Entertainment are two closely connected ideas defined as pursuits, encounters, or forms of information that provide individuals or communities with feelings of happiness, pleasure, and satisfaction. There are several small distinctions between the two, even though they are frequently used interchangeably:

Entertainment:

The act of participating in activities, having experiences, or consuming content that is intended to capture, amuse, or engage the attention of an audience is what is referred to as Entertainment. Watching movies, going to concerts, reading books, playing video games, visiting amusement parks, and various other activities can fall under this category. To give a form of distraction or diversion from the routines of daily life, which enables people to relax, unwind, and momentarily escape from their regular responsibilities and problems, the primary function of Entertainment is to provide this form of distraction or diversion.

Fun:

People can derive pleasure, satisfaction, or amusement from various activities or situations. It is what we mean when we talk about having fun. It frequently entails adopting a carefree and upbeat demeanor, which one can experience in deliberate or unanticipated circumstances. The pursuit of amusement can be found in various settings, including social interactions, games, hobbies, creative endeavors, and even mundane endeavors such as spending time with friends and family. Fun is people's emotional response when they are involved in amusing activities.

In contrast, Entertainment is a broader range of activities and experiences purposely created to be enjoyable. In summary, Entertainment comprises a wider range of activities and experiences intentionally designed to be enjoyable. Entertainment and fun contribute positively to an individual's well-being by generating enjoyment and contentment, reducing tension, fostering social relationships, promoting relaxation, and reducing overall stress levels.

4. Curiosity and change:

Curiosity can be developed over time. The urge to discover new things is not a set quality that only a

select few of us are born with; rather, it must be developed and, at times, trained. Despite this, not everyone fully uses the power at their disposal. And yet, inexplicably, there comes a time in each of our lives when we all have a significant amount of it. When we are young, we naturally need to be curious because it allows us to learn about the world.

On the other hand, just like with any other routine, there is a way to get back into it. And the first thing we need to do to get there is to remind ourselves of the benefits of curiosity. We must remind ourselves why we should investigate, discover the world, and go into whatever is beyond the door that looks so odd.

5. Consumption Style:

The term "consumption style" refers to how individuals or groups approach and participate in consuming goods and services. It considers various aspects that play a role in the decision-making process that people go through when deciding what to buy, how to use items, and what those decisions reveal about their identity, beliefs, and preferences. People's consumption of goods and services is strongly influenced by their culture, lifestyle, personal views, and socioeconomic standing. Because people frequently use their purchasing decisions to convey to others aspects of their identity and the values they hold, it is possible to interpret it as a form of self-expression.

Review of Literature

1. Wenfeng, C., & Bingkun, L (2019), In the research titled "Thinking of DINK family support for the aged," DINK debuted in Europe and America in the 1960s and China in the 1980s. Over 40 years later, the original DINK is middle-aged. The "DINK group" in China is increasing to about 600000 persons. With monetary wealth, spiritual fulfillment, and freedom, the modern young accept the DINK family more. It indicates more DINK family seniors in the future. In the face of "emerging" senior groups, institutional and community services should be professional and personalized. DINK family seniors need to understand insurance and finance to live a rich and happy life.

2. Shu, B (2022), In the research titled "The Dink, Public Judgement, and Stigma: The Childbearing Issue in the Chinese Context," People who don't have children face family, cyber, and social discrimination. Some dinks find it easy to drop the designation of "childless" and return to a traditionally and secularly promoting life of having children in the face of out-group aggression. The dink population's cause for having children is concluded.. Dink people worry about loneliness in old age, especially after their spouses die, so they want their offspring to join them. Finally, stigma puts

an enormous strain on the entire population before and after childlessness.

3. Bernal Vélez, I. C. (2019), In the research titled "Consumer Society, Hedonism And Healthy Selfishness On Dink -Double Income No Kids- Couples In The City Of Medellin, Colombia," Consumer society affects DINK couples through structural changes in the family as an institution for procreation, women's employment, and the consensual division of tasks at home. These couples are also known for their academic dedication, which usually leads to a high purchasing capacity and creates spaces for healthy selfishness, hedonic consumption, constant trips, and "buying time" for other activities. All these things derive from recent social and cultural changes. The couples interviewed described healthy selfishness as a daily practice in which they seek their integral well-being (physical, interpersonal, cognitive, and spiritual). Self-recognition and freedom define these partnerships. The desire to avoid sacrificing their desires, projects, or dreams to suit the needs of others is a sign of individualism. This movement seeks personal happiness through self-sufficiency.

4. Bernardo, C. (2012), In the research titled "An Empirical Investigation into the Time-Use and Activity Patterns of Dual-Earner Couples With and Without Young Children," This study examined the time usage habits of employed individuals in dual-earner homes with and without children, adjusted for other socio-demographic factors. The study used a disaggregate activity purpose classification to examine time-use in in-home and out-of-home activities to contribute to time-use analysis, transportation studies, and social science literature on time poverty and social exclusion.. The analysis's multiple discrete-continuous nested extreme value (MDCNEV) model provides insights into dual-earner households' activity time-use decisions. These findings emphasize the need to move beyond descriptive time-use analyses of one or two factors to multivariate model systems that simultaneously investigate numerous variables.

5. Yang, S., & Rosenblatt, P. C. (2008), In the research titled "Confucian Family Values and Childless Couples in South Korea," The college-aged study participants had Confucian family views. Most planned to have children and disliked childless families. The young people's customs show that Confucian ideals will continue to dominate South Korea, despite the rise in childless couples. Confucian principles influenced how participants viewed childless couples, families, parental duties, and children. A sample of young adults from one university answering one set of questions does not reflect South Korean youth. Their in-depth insight illuminates the context for South Korean decisions

about having children and the social prejudices that childless South Korean couples may face.

6. Bali, A. et al. (2010), In the research titled "Marital Adjustment of Childless Couples," The results showed that childlessness had a good and negative impact on respondents' marital adjustment. Most of them have ordinary marital adjustment scores. These findings supported Mann (1996), who found husbands with no children likelier to divorce or remarry. The finding supported Sharma (1991) 's conclusions that childless couples are unhappy and depressed due to environmental variables. Solanki (1997) also found that childless couples had lower marital adjustment than fertile women. Marital adjustment and respondents' marital duration were positively but weakly correlated, and the period of marriage also increased marital adjustment. Childlessness influenced childless couples' marital adjustment.

7. Lee, K. H., & Zvonkovic, A. M. (2014), In the research titled "Journeys to remain childless: A grounded theory examination of decision-making processes among voluntarily childless couples" The current study shows that staying childless on purpose as a couple needs to be seen as a process that involves both partners and goes through different stages. Voluntary childlessness happens when the importance of the connection and the strength of the desire to stay childless are balanced so that the scale stays tipped towards childlessness. The trips also moved at different speeds and took different routes because of these balancing acts. If more study is done in the future, it might show how couples make different fertility-related decisions.

8. Copur, Z., & Koropecjy-Cox, T. (2010), In the research titled "University Students' Perceptions of Childless Couples and Parents in Ankara, Turkey," Turkish university students have assumptions and biases about parents and childless couples, according to our findings. Parenting is expectedly warmer (kinder, more likable) and has better marital relationships than childlessness. Parenthood helps young Turks maintain a man's family name and boosts women's status in the family and society (Hortacsu, 2007).. Construction worker fathers and their wives are warmer than stockbroker fathers and childless couples. It may reflect a common view of professional work as stressful and competitive. Parenthood softens this image for lawyers' mothers but not stockbrokers' fathers. Secretaries may also be disfavored since their office work may not be gratifying or compatible with marriage and motherhood.

Data Analysis: The information related to demographic factors is classified and presented in the following table.

	Category	Frequency	Percentage
Gender	Male	82	46.9
	Female	93	53.1
Category of Couple	Dink	85	48.6
	Non-Dink	90	51.4
Educational Qualification	Undergraduate	20	11.4
	Graduate	90	51.4
	Postgraduate	50	28.6
	Professional Degree	15	8.6
Age Group	Below 25 years	6	3.4
	26 to 35 years	56	32.0
	36 to 45 years	83	47.4
	More than 45 years	30	17.1

Question expresses the hedonic consumerism value for self-enhancement.

Sr No.	Questions	Never	Rarely	Sometimes	Mostly	Always
11.1	I care more for myself than others.	2	18	43	52	60
11.2	I strive to achieve success in my professional life.	1	1	48	59	66
11.3	I like when I am praised and admired	2	3	41	59	70
11.4	I make choices in my life for my own	0	2	43	62	68
11.5	I like when I am praised and admired	5	13	44	56	57

Responses are rated as follows:

Never	=	0
Rarely	=	1
Sometimes	=	2
Mostly	=	3
Always	=	4

Using the above responses mean score of Self-Enhancement is obtained using the formula given below.

The sum of rating of FIVE questions

$$\text{Self-Enhancement} = \frac{\text{The sum of rating of FIVE questions}}{\text{Maximum rating (20)}} \times 100$$

Using the above formula, mean scores are obtained for each respondent and all 175 respondents. Descriptive statistics are as follows:

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Mean Score of Self-Enhancement	175	10.00	100.00	74.9429	15.65
Valid N (listwise)	175				

Above table indicate that the mean score of Self-Enhancement is 74.94 percent with a standard deviation of 15.65, suggesting high variation in the responses.

The Question expresses the hedonic consumerism value of Entertainment and fun.

Sr No.	Questions	Never	Rarely	Sometimes	Mostly	Always
11.6	I spend my time nicely and happily	0	8	32	33	102
11.7	I search for an adventurous and exciting life.	0	19	70	32	54

Responses are rated as follows:

Never	=	0
Rarely	=	1
Sometimes	=	2
Mostly	=	3
Always	=	4

Using above responses mean score of Entertainment and fun is obtained using formula given below.

$$\text{Entertainment and fun} = \frac{\text{The sum of the rating of the two questions}}{\text{Maximum rating (8)}} \times 100$$

Using above formula mean scores are obtained for each respondent and also for all 175 respondents. Descriptive statistics is as follows:

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Mean Score of Entertainment and fun	175	25.00	100.00	75.0000	20.36837
Valid N (listwise)	175				

Above table indicate that the mean score of Entertainment and fun is 75.00 percent with a standard deviation of 20.36, suggesting high variation in the responses.

Question express the hedonic consumerism value for Curiosity and Change

Sr No.	Questions	Never	Rarely	Sometimes	Mostly	Always
11.8	I always strive for new experiences and	12	12	64	44	43
11.9	I want to be creative and act with imagination.	1	12	62	63	37
11.10	I explore new things and aspects of life;	2	10	82	63	18
11.11	I constantly learn something new.	1	12	83	47	32

Responses are rated as follows:

Never	=	0
Rarely	=	1
Sometimes	=	2
Mostly	=	3
Always	=	4

Using the above responses mean score of Curiosity and Change is obtained using the formula given below.

$$\text{Curiosity and Change} = \frac{\text{The sum of rating of four questions}}{\text{Maximum rating (16)}} \times 100$$

Using above formula mean scores are obtained for each respondent and also for all 175 respondents. Descriptive statistics is as follows:

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Mean Score of Curiosity and Change	175	25.00	100.00	64.2500	14.08168
Valid N (listwise)	175				

Above table indicate that mean score of Curiosity and Change is 64.25 per cent with standard deviation 14.08, suggesting moderate variation in the responses.

The below Question express the hedonic consumerism value for Consumption Style.

Sr No.	Questions	Never	Rarely	Sometimes	Mostly	Always
11.12	I like to earn more and spend more for consumption to enjoy myself.	12	12	60	34	57
11.13	Consumption itself is an enjoyable experience in my life.	7	12	69	33	54

Responses are rated as follows:

Never	=	0
Rarely	=	1
Sometimes	=	2
Mostly	=	3
Always	=	4

Using the above responses mean score of Consumption Style is obtained using the formula given below.

$$\text{Consumption Style} = \frac{\text{Sum of rating of two questions}}{\text{Maximum rating (8)}} \times 100$$

Using above formula mean scores are obtained for each respondent and also for all 175 respondents. Descriptive statistics is as follows:

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Consumption Style	175	.00	100.00	66.2143	23.26116
Valid N (listwise)	175				

Above table indicate that mean score of Consumption Style is 66.21 per cent with standard deviation 23.26, suggesting high variation in the responses.

Reliability & Validity: The questionnaire has a 5-point Likert scale. Cronbach Alpha test is applied to check the validity of the scale. The test applied for 13 questions and a complete sample of 175 respondents. The Cronbach Alpha value is 0.814. It is greater than 0.7. Therefore test of reliability is satisfied, and the scale is valid.

Objective-1: To study and compare hedonistic-consumerism values between DINK and Non-DINK couples.

To study the above objective following hypothesis is designed.

Null Hypothesis H_{01} : There is no significant difference between hedonistic-consumerism values between DINK and Non-DINK couple.

Alternate Hypothesis H_{11} : There is a significant difference between hedonistic-consumerism values between DINK and Non-DINK couples.

To test the above null hypothesis T-test is applied, results are as follows.

Independent Samples Test				
	t-test for Equality of Means			
	t	df	Sig. (2-tailed)	Mean Difference
Self-Enhancement	10.663	173	.000	19.66
Entertainment and fun	13.836	173	.000	29.45
Curiosity and Change	11.021	173	.000	18.04
Consumption Style	5.514	173	.000	17.94

Interpretation: Above results indicate that all p-values are less than the standard p-value of 0.05. Therefore T-test is rejected and hence null hypothesis is rejected, and the alternate hypothesis is accepted.

Conclusions: There is a significant difference between hedonistic-consumerism values between DINK and Non-DINK couples.

Finding: To understand the finding of the hypothesis mean score of each of the four parameters of hedonistic-consumerism values are obtained and presented in the following table.

Group Statistics

	Categories of couple	N	Mean	Std. Deviation
Self-Enhancement	Dink couple	85	85.05	7.92
	Non-Dink Couple	90	65.38	15.162

Entertainment and fun	Dink couple	85	90.14	10.92
	Non-Dink Couple	90	60.69	16.50
Curiosity and Change	Dink couple	85	73.52	11.02
	Non-Dink Couple	90	55.48	10.63
of Consumption Style	Dink couple	85	75.44	19.80
	Non-Dink Couple	90	57.50	23.01

For the "Self-Enhancement" Dink Couple category, there are 85 couples in this category, and their mean score is 85.05. For the Non-Dink Couple category, there are 90 couples, and their mean score is 65.38. For the "Entertainment and Fun" Dink Couple category, there are 85 couples, and their mean score is 90.14. Non-Dink Couple category: There are 90 couples in this category, and their mean score is 60.69. For the "Curiosity and Change" Dink Couple category, there are 85 couples in this category, and their mean score is 73.52. Non-Dink Couple category: There are 90 couples in this category, and their mean score is 55.48. For the "Consumption Style" Dink Couple category, there are 85 couples in this category, and their mean score is 75.44. Non-Dink Couple category: There are 90 couples in this category, and their mean score is 57.50.

The overall finding of the hypothesis is hedonistic-consumerism values of DINK couples are significantly higher than non-DINK couples. Objective-2 To identify the most prominent Hedonistic-consumerism values among the DINK and Non-DINK couples.

To study the above objective following null hypothesis are designed.

Null Hypothesis H_{02A} : There is no prominent Hedonistic-consumerism values among the DINK couples.

Alternate Hypothesis H_{12A} : There is a prominent Hedonistic-consumerism value among the DINK couples.

To study the above objective Friedman chi-square test is applied results are as follows.

Test Statistics

N	85
Chi-Square	60.875
df	3
Asymp. Sig.	.000

a. Friedman Test

Interpretation: Above results indicate that the p-value is 0.000. It is less than the standard p-value of 0.05. Therefore Friedman test is rejected. Hence null hypothesis is rejected, and the alternate hypothesis is accepted.

Conclusion: There is a prominent Hedonistic-consumerism values among the DINK couples. To understand the findings of the hypothesis following report is generated.

Ranks

	Mean Rank
Self-Enhancement	2.73
Entertainment and fun	3.23
Curiosity and Change	1.82
Consumption Style	2.22

Above table indicate that the mean rank for 'Entertainment and fun' is 3.23. Therefore most prominent Hedonistic-consumerism among the DINK couple is 'Entertainment and fun'. The lowest rank is 1.82. It is for 'Curiosity and Change'.

Null Hypothesis H_{02B} : There is no prominent Hedonistic-consumerism values among the non-DINK couples.

Alternate Hypothesis H_{12B} : There is a prominent Hedonistic-consumerism value among non-DINK couples.

To study the above objective Friedman chi-square test is applied results are as follows.

Test Statistics^a

N	90
Chi-Square	17.001
df	3
Asymp. Sig.	.001

a. Friedman Test

Interpretation: Above results indicate that p-value is 0.000. It is less than standard p-value 0.05. Therefore Friedman test is rejected. Hence null hypothesis is rejected and alternate hypothesis is accepted.

Conclusion: There is a prominent Hedonistic-consumerism values among the non-DINK couples. To understand the findings of the hypothesis following report is generated.

Ranks

	Mean Rank
Self-Enhancement	2.88
Entertainment and fun	2.58
Curiosity and Change	2.15
Consumption Style	2.38

Above table indicate that mean rank for 'Entertainment and fun' is 2.88. Therefore most prominent Hedonistic-consumerism among the non-DINK couple is 'Self-Enhancement'. The lowest rank is 2.15. It is for 'Curiosity and Change.'

Findings & Conclusions: The research concluded that there is a significant difference in hedonistic-consumerism values between DINK and Non-DINK couples in Mumbai. The study consists of four parameters of hedonistic-consumerism values. These four parameters are Self-Enhancement, Entertainment and fun, Curiosity and Change, and Consumption Style. In all four parameters, the hedonistic-consumerism values of DINK couples are significantly higher than non-DINK couples in the study of the DINK couples category. It is observed that the most prominent hedonistic-consumerism is 'Entertainment and fun.' While the study among the non-DINK couple most prominent hedonistic consumerism is 'Self-Enhancement'.

References:

1. Wenfeng, C., & Bingkun, L. (2021). I was thinking of DINK family support for older people. Proceedings of the 2021 5th International Seminar on Education, Management and Social Sciences (ISEMSS 2021), 571(Isemss), 500–503. <https://doi.org/10.2991/assehr.k.210806.092>
2. Shu, B. (2022). The Dink, Public Judgement and Stigma: The Childbearing Issue in the Chinese Context. Proceedings of the 2021 4th International Conference on Humanities Education and Social Sciences (ICHESS 2021), 615(Inches), 1091–1095. <https://doi.org/10.2991/assehr.k.211220.186>
3. Bernal Vélez, I. C., García Villa, S., Tabares David, A., & David Salas, J. (2019). Consumer society, hedonism, and healthy selfishness on dink - double income, no kids - couples in Medellin, Colombia. Latinoamericana de Estudios de Familia, 11(2), 157–170. <https://doi.org/10.17151/rlef.2019.11.2.8>
4. Bernardo, C. (2012). Copyright by Christina Bernardo 2012.
5. Yang, S., & Rosenblatt, P. C. (2008). Confucian family values and childless couples in South Korea. Journal of Family Issues, 29(5), 571–591. <https://doi.org/10.1177/0192513X07309462>
6. Bali, A., Dhingra, R., & Baru, A. (2010). Marital Adjustment of Childless Couples. Journal of Social Sciences, 24(1), 73–76. <https://doi.org/10.1080/09718923.2010.11892839>
7. Lee, K. H., & Zvonkovic, A. M. (2014). Journeys to remain childless: A grounded theory examination of decision-making processes among voluntarily childless couples. Journal of Social and Personal Relationships, 31(4), 535–553. <https://doi.org/10.1177/0265407514522891>

8. Çopur, Z., & Koropecj-Cox, T. (2010). University students' perceptions of childless couples and parents in Ankara, Turkey. *Journal of Family Issues*, 31(11), 1481–1506. <https://doi.org/10.1177/0192513X10361577>
9. Henz, U. (2008). Gender roles and values of children: Childless Couples in East and West Germany. *Demographic Research*, 19, 1451–1500.
<https://doi.org/10.4054/demres.2008.19.39>
10. Norfolk, N. K., Mason, B. R., & Smith, B. W. M. (2002). "Dinks" Have Double Incomes WARNING Is It Scriptural for Women to Preach? The Conflict of Power at the End of this Age The Church in the Wilderness "thou hast given a banner to them that fear thee, that it may be displayed because of the truth" (psalms 60 : 4). Xxii(277).
11. Sociales, E. (n.d.). Estudios Sociales.
12. Arboleda-baena, J. F. (2020). Estudios Sociales. 57.
13. Digital, B. (n.d.). Niversidad de.
14. Gold, J. M. (2012). The Experiences of Childfree and Childless Couples in a Pronatalistic Society : Implications for Family Counselors. 21(2), 223–229.
<https://doi.org/10.1177/1066480712468264>
15. Haseeb, K. N., Ghazi, S. M., Ansha, P., Poonam, K., & Bhushan, S. C. (2023). Resilience among involuntarily childless couples and individuals undergoing infertility treatment: a systematic review Resilience among involuntarily childless couples and individuals undergoing infertility treatment: a systematic review Neda Haseeb Khan, Mohammad Ghazi Shahnawaz, Ansha Patel, Poonam. *Human Fertility*, 0(0), 1–22.
<https://doi.org/10.1080/14647273.2023.2219400>