

# Innovations

## An observational study to determine the impact of discordant drinking pattern of alcohol dependence in male on marital satisfaction and their spouse marital satisfaction

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### Abstract

**Problem:** A stronger foundation for a happy marriage can be found in a couple who share similar values, beliefs and ways of behaving. This study aims to determine the discordant drinking pattern's impact on marital satisfaction of patients and their spouse. **Methodology:** This is a type of cross-sectional study on 100 participants (50 husbands and 50 wives) from psychiatric OPD treatment seeking patients. Nonprobability sampling (convenient sampling) was used. Married alcohol dependence patients and their spouse, patient age between 21 to 50 years, educated till 8<sup>th</sup> standard and above, alcohol dependence for 1 year and years of marriage at least to be 2 years were included. Psychoactive substance uses disorders other than alcohol dependence and nicotine dependence, diagnosed primary psychiatric disorders, patients with intellectual disability, factors other than substance use were excluded. Determination of alcohol dependence was done using ICD 10 Criteria. Determination of marital satisfaction was done using marital adjustment test. **Findings:** Mean marital satisfaction scores of the study participants were  $114.36 \pm 3.50$  and spouse satisfaction scores were about  $90.92 \pm 8.82$ . The correlation between marital satisfaction scores and spouse marital satisfaction scores are about 0.10,  $p=0.49$ . This study found that spouses had statistically significantly lower marital satisfaction scores ( $90.92 \pm 8.82$ ) compared to study subjects ( $114.36 \pm 3.50$ ),  $t(98)=17.46$ ,  $p < 0.001$ . Higher scores indicate greater satisfaction. Among study subjects almost all were having higher marital satisfaction scores which above 100. Among their spouses only 10% ( $n=5$ ) had higher marital satisfaction scores and remaining 90% ( $n=45$ ) had lower marital satisfaction scores inferring distress. **Conclusion:** Discordant drinking patterns and alcohol dependence are associated with lower levels of marital satisfaction for partners.

**Keywords:** 1. Spouse, 2. Marital satisfaction, 3. alcohol, 4. discrepancies, 5. marital stress

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### Introduction

A stronger foundation for a happy marriage can be found in a couple who share similar values, beliefs, and ways of behaving. There may be shared histories between those with affective disorders and those with antisocial personalities. Assortative mating is a term used to describe the phenomenon of highly compatible couples (Smith *et al.*, 2012). According to compatibility theories, major dissimilarities between partners can put a strain on a relationship (Kurdek, 1981). This is also true for tobacco and alcohol use.

Recent studies have expanded the study of spouse similarity to the domain of substance use. Similarities in substance use have been observed among married couples, as have similarities in a variety of traits and behaviours (Yamaguchi and Kandel, 1993). The study looked at drug use in 545 couples and discovered significant drug use concordance. A high concordance of marijuana use was found among couples from the year before marriage to the couple's second anniversary in another longitudinal study of substance use during the

transition to marriage (Homish and Leonard, 2005; Homish and Leonard, 2007; Leonard and Roberts, 1998) examined spousal similarity for alcohol use in married couples and discovered significant correlations for average daily volume of alcohol, frequency of heavy drinking and frequency of intoxication among couples in the year before and after marriage.

According to compatibility theory, husbands and wives who use similar substances may have better overall marital functioning than couples who use dissimilar substances (Leonard and Roberts, 1998) examined the relationship between different types of "drinking partnerships" and marital functioning. The similarity, or lack thereof, of drinking patterns between husbands and wives was defined as a drinking partnership. Discordant drinking patterns were associated with lower marital functioning (Mudaret *et al.*, 2001) marital functioning was assessed in a community sample of newlyweds to see if the configuration of partners' drinking patterns was related to marital functioning. There were four groups of drinking patterns: one concordant for use, one concordant for nonuse, and two discordant groups (husband or wife only use).

Furthermore, different levels of consumption were considered (any alcohol use, regular drinking, heavier drinking, and frequent intoxication). There were no significant differences in marital quality between the two concordant groups (neither engage in behaviour vs. both do) and no differences between the two discordant groups for heavier drinking and frequent intoxication (husband or wife only). However, discordant couples had significantly lower marital quality than couples in which neither partner used alcohol at these levels or couples in which both partners consumed at these levels. The latter finding implies that mutual patterning of drinking (i.e., concordance of drinking behaviours vs. discordance of drinking behaviours) is a key factor in the relationship between alcohol consumption and marital functioning, and may be more important than either partner's level of drinking (Leadley *et al.*, 2000). Using data from the Ninth National Alcohol Survey, researchers discovered that inconsistent alcohol use was related to relationship distress and the occurrence of violence. Both of these studies, however, relied on cross-sectional analyses and did not investigate longitudinal effects.

According to compatibility theory, husband and wife substance use similarities may be associated with better overall marital functioning. The drinking patterns are divided into four groups: one for use, one for nonuse, and two discordant groups (husband only use, wife only use). An erratic drinking pattern would be associated with lower marital satisfaction. When compared to couples where both partners consumed at equal levels, discordant couples had significantly lower marital quality (Homish and Leonard, 2007). The marital adjustment test is used to determine marital satisfaction (Locke and Wallace, 1959). This study aims to determine the discordant drinking pattern's impact on marital satisfaction of patients and their spouse.

## Material and Methods

**Type of Study:** Cross-sectional study

**Study Settings:** Department of psychiatry in tertiary care hospital.

**Study Population:** Alcohol dependence patients and their spouse.

**Period of study:** The study was conducted for the period of 6 months (March to September 2022)

**Sample Size:** Hundred 100 participants (50 husbands and 50 wives) from psychiatric OPD treatment seeking alcohol dependence patients and their spouse

**Ethical Consideration:** The study was approved by the Institutional ethical Committee (Ref.No:211/TSRMMCH&RC/ME-1/2022-IEC No:079 dated 10.03.2022) and details of the alcohol dependence patients and their spouse were collected only after obtaining informed consent.

**Procedure:** Nonprobability sampling (convenient sampling) was used. Married alcohol dependence patients and their spouse, patient age between 21 to 50 years, educated till 8<sup>th</sup> standard and above, alcohol dependence for 1 year and years of marriage at least to be 2 years were included. Psychoactive substance uses disorders other than alcohol dependence and nicotine dependence, diagnosed primary psychiatric disorders, patients with intellectual disability, factors other than substance use were excluded.

The methodology adopted for the present study is dealt as the following: selection of patients according to inclusion and exclusion criteria were done, recording of data in preformed and pretested semi-structured proforma for sociodemographic profile, marriage profile and substance use profile were done. Determination of alcohol dependence was done using ICD 10 Criteria. Determination of marital satisfaction was done using marital adjustment test.

The Marital Adjustment Inventory was utilised to analyse couple dynamics (Locke and Wallace, 1959). There are a total of 15 questions on the MAT. The extent to which one is happy can be gauged from just one question (7 response choices from very happy to perfectly happy). In eight more questions, respondents are asked to rate the extent to which they agree with their partners on various issues (e.g., family finances, ways of dealing with in-laws, matters of recreation, etc.). A 6-point scale ranging from 100% agreement to 100% disagreement was used to rate these statements. Clinically significant marital distress is typically defined as a score of less than or equal to 100.

**Statistical analysis:** For continuous variables, descriptive statistics were reported as mean SD and for categorical variables, frequencies percentage. Statistical significance was determined using Chi-Square at the 5% level. As long as the expected cell count is less than 5, Fischer's exact test applies. Independent t test was used to compare the marital satisfaction scores between patients and their spouses. IBM SPSS Statistics for Windows, Version 26.0., IBM Corp., Chicago, IL was used to statistically analyse the data.

## Results

The normality test was applied using Kolmogorov–Smirnov test and test result shows statistically insignificant with test statistics 0.118,  $p=0.079$  and 0.091,  $p=2.00$  for spouse and patients respectively. Table 1 shows the descriptive statistics of marital satisfaction scores of the patients and their spouses. Mean marital satisfaction scores of the study participants were  $114.36\pm 3.50$  and spouse satisfaction scores were about  $90.92\pm 8.82$ .

The correlation between marital satisfaction scores and spouse marital satisfaction scores are about 0.10,  $p=0.49$ . This study found that spouses had statistically significantly lower marital satisfaction scores ( $90.92\pm 8.82$ ) compared to study subjects ( $114.36\pm 3.50$ ),  $t(98)=17.46$ ,  $p<0.001$  (Table 2).

Higher scores indicate greater satisfaction. Among study subjects almost all were having higher marital satisfaction scores which above 100 (Figure 1). Among their spouses only 10% ( $n=5$ ) had higher marital satisfaction scores and remaining 90% ( $n=45$ ) had lower marital satisfaction scores inferring distress (Figure 2).

## Discussion

Previous cross-sectional research has found that couples reporting a disparate pattern of alcohol use at the time of marriage have lower levels of marital satisfaction compared to couples reporting either both partners using or neither partners using (Mudar *et al.*, 2001). This held true for both chronic heavy drinking and frequent drug use. This study provides longitudinal evidence that drinking patterns that differ from one another are associated with a lower level of marital happiness. Discordant drinking was found to significantly correlate with lower levels of marital satisfaction for both men and women. It's also noteworthy that heavy drinking frequency wasn't a factor in this effect after being accounted for statistically.

Latent growth modelling was also used by (Kearns and Leonard, 2005) to investigate the association between one spouse's drinking and marital satisfaction over time. There was some evidence that changes in partner drinking were related to changes in marital satisfaction, but there was no evidence that partner drinking predicted subsequent changes in marital satisfaction for husbands or wives. Overall, these findings suggest that, within a representative sample of the population at large, marital satisfaction is most strongly and persistently associated with asymmetry in drinking patterns between partners, rather than with heavy drinking by either partner.

There may be a number of causes for the observed effects. Heavy drinking on the part of one spouse but not the other has been linked to lower marital satisfaction, which may be a result of underlying differences between the partners. However, when differences were modelled as a quadratic factor, they were found to be associated with marital satisfaction. Indeed, the disparities in alcohol consumption between husband and wife were found to be the most significant predictor of marital contentment, rather than the heavy drinking habits of either partner (Weisfeld, 1993).

In the current report, the linear term was not significant, but if it had been, it would have suggested that the relationship between alcohol consumption gaps and marital satisfaction varied depending on which spouse consumed more alcohol. According to compatibility theorists, happy marriages are most common amongst people who are very similar to one another (Roach *et al.*, 1981; Weisfeld, 1993) tested the hypothesis that

couples who are more similar to one another will be happier in their marriages and found support for this finding across a wide range of characteristics in both partners. This suggests that husbands' and wives' divergent patterns of heavy drinking may reflect fundamental differences in their worldviews or their conceptions of what constitutes acceptable conduct within the context of marriage.

Disagreements in drinking habits could be a symptom of less communication and affection between spouses, which could explain the link between alcohol differences and marriage health. Couples who have different habits of using substances may spend less time together, which can negatively impact the health of their marriage. Couples who spend time apart on their own tend to be less happy in their marriage, according to studies examining the correlation between marital satisfaction and leisure activities (Holman and Jacquart, 1988).

There are a few caveats that should be taken into account before drawing any conclusions from this report. Although we discovered that a disparity in heavy drinking between the husband and wife was a predictor of lower marital satisfaction, it is possible that other factors were also responsible for the decreases we observed. For example, depression (Fincham et al., 1997), the birth of a first child (Hackel and Ruble, 1992), the number of children (Twenge et al., 2003), and expectations about marriage (McNulty and Karney, 2004) are just a few factors that have been found to be associated with changes in marital satisfaction. Duration of marriage wasn't assessed. Hence our results may not apply to longer-married or subsequent-marriage pairs.

### Conclusion

Discordant drinking patterns and alcohol dependence are associated with lower levels of marital satisfaction for partners.

### References

1. Fincham, F.D., Beach, S.R., Harold, G.T. and Osborne, L.N. (1997). *Marital satisfaction and depression: Different causal relationships for men and women?*. *Psychological Science* 8:351-6. ([www.journals.sagepub.com](http://www.journals.sagepub.com))
2. Hackel, L.S. and Ruble, D.N. (1992). *Changes in the marital relationship after the first baby is born: predicting the impact of expectancy disconfirmation*. *Journal of Personality and Social Psychology* 62:944. ([www.pubmed.ncbi.nlm.nih.gov/1619550](http://www.pubmed.ncbi.nlm.nih.gov/1619550))
3. Holman, T.B. and Jacquart, M. (1988). *Leisure-activity patterns and marital satisfaction: A further test*. *Journal of Marriage and the Family* 50:69-77. ([www.jstor.org/stable/352428](http://www.jstor.org/stable/352428))
4. Homish, G.G. and Leonard, K.E. (2005). *Spousal influence on smoking behaviors in a US community sample of newly married couples*. *Social Science and Medicine* 61:2557-67. ([www.pubmed.ncbi.nlm.nih.gov/15978712](http://www.pubmed.ncbi.nlm.nih.gov/15978712))
5. Homish, G.G. and Leonard, K.E. (2007). *The drinking partnership and marital satisfaction: The longitudinal influence of discrepant drinking*. *Journal of Consulting and Clinical Psychology* 75:43-51. ([www.pubmed.ncbi.nlm.nih.gov/17295562](http://www.pubmed.ncbi.nlm.nih.gov/17295562))
6. Leonard, K.E. and Roberts, L.J. (1998). *The effects of alcohol on the marital interactions of aggressive and nonaggressive husbands and their wives*. *Journal of Abnormal Psychology* 107:602-15. ([www.pubmed.ncbi.nlm.nih.gov/9830248](http://www.pubmed.ncbi.nlm.nih.gov/9830248))
7. Kearns B.J.N. and Leonard K.E. (2005). *Alcohol involvement and marital quality in the early years of marriage: A longitudinal growth curve analysis*. *Alcoholism: Clinical and Experimental Research* 29: 2123-34. ([www.pubmed.ncbi.nlm.nih.gov/16385182](http://www.pubmed.ncbi.nlm.nih.gov/16385182))
8. Kurdek, L.A. (1981). *An integrative perspective on children's divorce adjustment*. *American Psychologist* 36: 856-66. ([www.pubmed.ncbi.nlm.nih.gov/7294493](http://www.pubmed.ncbi.nlm.nih.gov/7294493))

9. Leadley, K., Clark, C.L. and Caetano, R. (2000). *Couples' drinking patterns, intimate partner violence, and alcohol-related partnership problems. Journal of Substance Abuse* 11: 253-63. ([www.pubmed.ncbi.nlm.nih.gov/11026124](http://www.pubmed.ncbi.nlm.nih.gov/11026124))
10. Locke, H.J. and Wallace, K.M. (1959). *Short marital-adjustment and prediction tests: Their reliability and validity. Marriage and Family Living* 21: 251-5. ([www.psycnet.apa.org/record/1962-03282-001](http://www.psycnet.apa.org/record/1962-03282-001))
11. McNulty, J. K. and Karney, B.R. (2004). *Positive expectations in the early years of marriage: Should couples expect the best or brace for the worst?. Journal of Personality and Social Psychology* 86: 729-43. ([www.pubmed.ncbi.nlm.nih.gov/15161397](http://www.pubmed.ncbi.nlm.nih.gov/15161397))
12. Mudar, P., Leonard, K.E. and Soltysinski, K. (2001). *Discrepant substance use and marital functioning in newlywed couples. Journal of Consulting and Clinical Psychology* 69: 130-4. ([www.pubmed.ncbi.nlm.nih.gov/11302271](http://www.pubmed.ncbi.nlm.nih.gov/11302271))
13. Roach, A.J., Frazier, L.P., and Bowden, S.R. (1981). *The marital satisfaction scale: Development of a measure for intervention research. Journal of Marriage and the Family*43:537-546. ([www.jstor.org/stable/351755](http://www.jstor.org/stable/351755))
14. Smith, P.H., Homish, G.G., Leonard, K.E. and Cornelius, J.R. (2012). *Intimate partner violence and specific substance use disorders: findings from the National Epidemiologic Survey on Alcohol and Related Conditions. Psychology of Addictive Behaviors* 26: 236-45. ([www.pubmed.ncbi.nlm.nih.gov/21823768](http://www.pubmed.ncbi.nlm.nih.gov/21823768))
15. Twenge, J.M., Campbell, W.K. and Foster, C.A. (2003). *Parenthood and marital satisfaction: a meta-analytic review. Journal of Marriage and Family* 65: 574-83. ([www.onlinelibrary.wiley.com](http://www.onlinelibrary.wiley.com))
16. Yamaguchi, K. and Kandel, D. (1993). *Marital homophily on illicit drug use among young adults: Assortative mating or marital influence? Social Forces* 72: 505-28. ([www.jstor.org/stable/2579859](http://www.jstor.org/stable/2579859))
17. Weisfeld, G.E. (1993). *The adaptive value of humor and laughter. Ethology and Sociobiology* 14: 141-69. ([www.sciencedirect.com](http://www.sciencedirect.com))

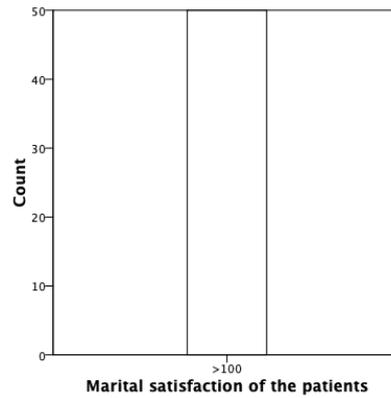
**Table 1: Descriptive statistics of marital satisfaction (MS) scores of patients and their spouses (N=100)**

Description	Mean	N	Standard Deviation	Standard Error Mean
MS SCORE	114.36	50	3.50	0.49
Spouse	90.92	50	8.82	1.24

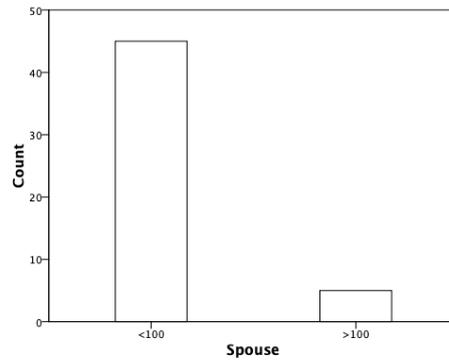
**Table 2: Association of marital satisfaction scores of patients with their spouses (N=100)**

Independent Samples Test									
Levene's Test for Equality of Variances			t-test for Equality of Means						
Marital satisfaction scores	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
	45.556	0.000	17.46	98	0.000	23.440	1.342	20.776	26.104

**Figure 1: Marital Satisfaction scores of the study participants (n=100)**



**Figure 2: Spouse Marital Satisfaction Score (n=100)**



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