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RESEARCH PAPER

The Effect of Perceived Social Support on Recovery Success among Drug Addicts in Rehabilitation Centers in Pakistan

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ABSTRACT

The aim of this study was to examine perceived social support's relationship to recovery outcomes (both in terms of frequency of relapse and in the context of ongoing treatment for substance use disorders). In order to survey the recovery, a structured questionnaire was applied to 300 participants from rehabilitation centers in major cities of Pakistan. It was found that perceived social support was highly positively correlated to the recovery success (r = 0.65, p = 0.001) and negatively with the frequency of relapse (r = -0.45, p = 0.01). Results of regression analysis indicated that perceived social support was a significant predictor of recovery success (β = 0.58, p = 0.001) and that gender and level of education also were significant predictors. Recovery success was also found to be gender differentiated, males having a lower recovery success rate than females. It further comes out that recovery success and relapse rates varied with recovery dependent on substance (type) used and the duration of addiction where heroin users fared worst with longer addiction duration being associated with higher relapse frequency. This work gives insight into social support optimized for successful recovery from addiction and rehabilitation strategies improved in Pakistan and other low resource settings.

| **Keywords:** | Drug Addiction, Pakistan, Perceived Social Support, Recovery Success, Rehabilitation Centers, Substance Use Disorders |

Introduction

There is a global public health problem of substance use disorders (SUDs) and Pakistan is one affected country. There are an estimated 6.7 million drug users in the country and 4 million who meet criteria for substance dependence (Ali et al., 2020). Addiction recovery is multi-dimensional; it takes a toll on the biological, psychological and social realms (Ahmed et al., 2023). Of these, perceived social support—the subjective evaluation of the support one thinks he or she is receiving from family, friends, and significant others—has been named a critical factor in outcomes of recovery. People going for addiction treatment with high levels of perceived social support tend to have improved quality of life and less relapse (Ali et al., 2019).

Research into the role of social support in addiction recovery has taken place in Pakistan. Results of the study in Rawalpindi and Islamabad suggest a positive correlation between perceived social support and quality of life in adolescents, non-addicted individuals reporting both higher than their addicted counterparts (Saleem et al., 2021). There is also another factor in family dynamics, commonly known as expressed emotion (Fang & Mushtaque, 2024), that comes to play in recovery. Family expressed emotion has been found to exist at high levels, defined as critical, hostile, or emotionally over-involved attitudes, and these attitudes have been shown to be associated with high relapse rates.

Conversely, the supportive family environments are instrumental to continued recovery (Khan & Akhtar, 2022).

Exploration of the interplay between social support and resilience in the context of Pakistan has been undertaken. Social competencies and resilience were positively correlated with recovery rates in recovering addicts in Islamabad and Rawalpindi, indicating that interventions enhancing social competencies would improve resilience and recovery outcomes (Hussain et al., 2023). Although these insights exist, however, little research focuses on the impact of perceived social support on successful recovery of drug addicts from rehabilitation centers in various regions of Pakistan. This is the key to developing culturally sensitive and effective intervention strategies to promote recovery for patients whose culture differs from the dominant culture of the majority of clinicians (Mushtaque et al., 2021).

This paper attempts to close this gap with a study to assess the effect of perceived social support on recovery success at rehabilitation centers in Pakistan. The research aims to inform the nature and extent of the relationship and use this to inform the policymakers, healthcare providers and support networks of the need to encourage positive environments to allow those with substance use disorders to recover successfully.

Literature Review

Substance Use Disorders (SUDs) are complex health conditions which affect millions worldwide, Pakistan included. Addiction recovery is a complex process involving a variety of individual, biological, psychological, and social factors. Among those, the one that received sharp attention, due its profound influence on recovery success, is the perceived social support. This literature review looks into the relationship between perceived social support and recovery outcomes in SUD and selectively focuses on those findings in rehabilitation centers of Pakistan.

Effect of Perceived Social Support on Quality of Life

The perception of social support, as the individual's subjective assessment of the availability and adequacy of support from the social network, has been demonstrated consistently to positively influence the quality of life in persons recovering from substance use disorder. Literature shows that those with high perceived levels of social support have better psychological wellbeing (Ali et al., 2018), have better physical health, and have better satisfaction with life (Ali et al., 2018). A study in the Rawalpindi and Islamabad assessed perceived social support in adolescents with and without substance use problems. Saleem et al. (2021) found that adolescents with higher levels of social support had also better quality of life outcomes. Beyond this, perceived social support played an important, protective role in reducing the probability of engaging in substance use behavior. This is consistent with international research which has found that perceived social support serves as buffering against stress and promotes psychological resilience in high risk populations (Berkman et al., 2014).

The Effect of Family Dynamics on Recovery Outcomes

A family's dynamics, and specifically expressed emotion, are key components in addiction recovery. Emotional attitudes towards the individual on the part of family members are represented by expressed emotion, which means criticism, hostility, or emotional over involvement (Khan & Akhtar, 2022). Negative expressed emotion at high levels is associated with higher relapse rates (Sansakorn et al., 2024), whereas an environment of supportiveness in the family is associated with long term abstinence and enhanced recovery outcomes. In Ardabil, Iran, a study examined family expressed emotion and perceived social support in relation to relapse prediction among those in addiction

treatment. The results suggest that higher perceived social support decreased the frequency of relapse, while a critical or hostile family situation was negatively related to better outcomes during recovery (Hosseini et al., 2020). The key finding was that family is very important for treatment of addicts and should take place in a supportive home with family present.

Relapse prevention is supported by social support

One of the most difficult parts of addiction recovery is relapse, and there's a lot of literature showing that social support can prevent a relapse. Three principles of social support – emotional comfort, providing tangible aid, and making a person feel that he or she belongs to a group – strengthen a person's commitment to sobriety (Lakhan et al., 2019). Those with strong social support systems are less likely to feel isolated and hopeless, conditions that often lead to relapse. In Pakistan, a study was undertaken about the scale of support networks found in peer rehabilitation centers; the results showed that participants receiving active support through a peer network were more likely to remain abstinent even after completing treatment (Hussain et al., 2023). Thus, structured support systems such as group counseling and peer mentoring might be effective in bringing down relapse rates.

Social Skills, Resilience, and Recovery Success

Another area of interest to addiction research is the interplay between social skills, resilience and recovery success. Social skills, including communication, conflict resolution, permit an individual to advance and maintain interpersonal relationship which further improves the perceived social support (Ahmed et al., 2022). Strong social networks are often a source of resilience, meaning the ability to adapt positively in the face of adversity (Sarfraz et al., 2022). A study on recovering addicts in Islamabad and Rawalpindi found that those with more resilience and better social skills generally did better at recovery (Farooq et al., 2022). The results indicated that interventions to increase social competencies and resilience would significantly improve treatment outcomes.

Cultural Context and Social Support in Pakistan

Social support especially acts as crucial part for the addiction recovery especially in the collectivist societies, e.g. Pakistan, where familial and community is strong connections. In contrast to Western cultures which focus on individualism, Pakistani culture tends to depend on family and community for emotional and practical support (Haque et al., 2020). Extant studies indicate that culturally sensitive interventions that build on existing support systems may improve recovery outcomes (Sawangchai et al., 2022). Community based rehabilitation models that incorporate family in treatment, such as involve families in the treatment process, and have been successful in reducing stigma and in cultivating long term sobriety (Shaikh et al., 2021)

Although there is ample research on social support and addiction recovery, there have been few studies concerning the very particular, Pakistani context of rehabilitation centers. While most existing research has focused on outpatient settings or general populations, there is little understanding about how social support operates in structured treatment environments. Further, the impact of cultural factors on the perception and effects of social support on recovery outcomes has been only sparsely examined.

Material and Methods

A quantitative cross sectional design was used for the study to assess the relationship between perceived social support and recovery success of the addicts in the

rehabilitation centers of Pakistan. With this design we could collect data at only a single point in time to see how different variables of interest correlated and were patterned.

Study Population and Sample

The selected rehabilitation centers for diagnosis were situated in major cities of Pakistan such as Islamabad, Lahore and Karachi. The inclusion criteria were: People of 18 years and over. Adult patients who are receiving treatment for a substance use disorder for at least one month. Participants who gave their informed consent to take part in the study. Participants were selected using a multi stage random sampling technique. In the first place, a random selection of rehabilitation centers from the list of the registered centers in those cities was performed. Second, randomly selected patients from within these centers were used. The study consisted of 300 participants ensuring proper gender, age, and substance use pattern representation.

Data Collection Tools

Data was collected using a structured questionnaire divided into three sections:

Demographic Information: Information may include Age, Gender, Education, Socioeconomic status, Substance used, Duration of addiction.

Perceived Social Support: A validated tool, the Multidimensional Scale of Perceived Social Support (MSPSS) measured perceived support from family, friends, and significant others. The 12 items are Likert scale rated on a 7 point scale (1 = Very strongly disagree to 7 = Very strongly agree).

Recovery Success: Using self-reported measures of relapse episodes, progress in therapy, and psychological well-being as well as clinical evaluations made by the staff of the rehabilitation centers.

In order to ensure clarity and accuracy of responses, particularly regarding those participants with limited literacy, the questionnaires were administered in face to face interviews. The interviews were conducted in Urdu or in local languages according to participant's preference.

Data Analysis

SPSS (Statistical Package for the Social Science) Version 26 was, thus, utilized to analyze the data collected from the participants. Demographic and baseline characteristics were summarized through descriptive statistics including means and standard deviation. Pearson Correlation Analysis was applied to study the relationship between perceived social support and recovery success; Multiple Regression Analysis was used to assess the predictive value of social support controlling for demographic variables; and Independent t-tests and ANOVA was applied to test differences in recovery success across subgroups by gender and the type of substance they used.

Ethical Approval

The work was conducted ethically ensuring that the rights and well-being of the participants were guarded throughout the research process. The Institutional Review Board (IRB) of the researcher's affiliated university was obtained approval. and, informed written consent was provided. To ensure privacy for all participants, we strictly maintained their anonymity and confidentiality of all participant data. Furthermore,

psychological support was provided to any participant who experienced either distress or discomfort in the interview process.

Results and Discussion

Table 1
Demographic Characteristics of participants (N=300)

Characteristic	Category	Frequency (%)
Age (years)	18-25	30 (10%)
	26-35	120 (40%)
	36-45	90 (30%)
	46+	60 (20%)
Gender	Male	240 (80%)
	Female	60 (20%)
Education Level	No Education	50 (16.7%)
	Primary	70 (23.3%)
	Secondary	100 (33.3%)
	Higher	80 (26.7%)
Marital Status	Single	150 (50%)
	Married	100 (33.3%)
	Divorced	30 (10%)
	Widowed	20 (6.7%)
Type of Substance Used	Heroin	150 (50%)
	Alcohol	60 (20%)
	Cannabis	70 (23.3%)
	Others	20 (6.7%)
Duration of Addiction (years)	<1	40 (13.3%)
	1-5	130 (43.3%)
	6-10	90 (30%)
	11+	40 (13.3%)

The demographic characteristics of the participants (N=300) are presented in Table 1. Participant's age ranged 18 to 45 years, the biggest group (40%) had 26 to 35 years age range, second largest group (30%) was 36 to 45 year age range, and 20% was 46+, while 10% belonged to 18 to 25 year age group. The majority of our subjects were male (80%) and only 20% were female. In educational terms 33.3% had completed secondary, 26.7% higher education. 23.3% primary education, and 16.7% no formal education. The marital status of participants showed 50 percent single, 33.3 percent married, 10 percent divorced and 6.7 percent widowed. When considering the type of substance used by participants, 50% were on heroin, 20% used alcohol, 23.3% used cannabis and 6.7% used other substances. Finally, according to duration of addiction, 43.3% had range of addiction 1-5 years, 30% range of addiction 6-10 years, and 13.3% less than a year and 13.3% more than 11 years.

Table 2
Correlation Analysis

Variable 1	Variable 2	Correlation	p-value
Perceived Social Support	Recovery Success	0.65	.001
Perceived Social Support	Relapse Frequency	-0.45	.01

The results of the correlation analysis, testing the correlation between perceived social support and recovery success, as well as the relapse frequency are presented in Table 2. Perceived social support and recovery success were found to be strongly positively correlated ($r = 0.65$, $p = 0.001$), higher levels of perceived social support being associated with greater recovery success. In contrast, perceived social support and frequency of relapse were found to correlate at a moderate negative level ($r = -0.45$, $p = 0.01$), meaning that individuals that perceived higher levels of social support also reported lower levels of relapse frequency. Both correlations being at the 0.01 level statistically significant.

Table 3
Regression Analysis

Predictor	Beta Coefficient	Standard Error	p-value
Perceived Social Support	0.58	0.05	.001
Gender	-0.12	0.03	.015
Age	0.05	0.04	0.27
Educational Level	0.18	0.06	0.003

The results of the regression analysis predicting recovery success using various predictors appear in Table 3. Results from the analysis demonstrate that perceived social support is a strong predictor of recovery success with beta = 0.58 (p = 0.001), implying that the higher the perceived social support, the better the recovery outcomes. Gender was another significant predictor, although with a negative (beta = -0.12, p = 0.015) coefficient indicating a potential gender difference related to recovery success. We found that age had no statistically significant effect on the success of recovery ($\beta = 0.05$, p = 0.27). On the other hand, education level ($\beta = 0.18$, p = 0.003) was a significant positive predictor for recovery success, and higher education levels were associated with higher recovery success rates.

Table 4
Group Comparison

Group Comparison	t-value	p-value	Conclusion
Male vs. Female (Recovery Success)	2.45	.015	Significant difference
Type of Substance (Recovery Success)	4.33	.01	Significant difference
Duration of Addiction (Relapse Frequency)	6.12	.001	Significant difference

In treatment, the comparison among the groups yielded significant differences in the recovery success and the relapse frequency (Table 4). Male and female subjects were also found to be significantly different (t =2.45, p<0.015) in their ability to recover to pretest levels. Also, the comparison of success in recovery and type of drug used was significantly different (F = 4.33, p = 0.01), meaning that the drug that a person uses affects how successful recovery will be. The last analysis of duration of addiction versus relapse frequency showed a significant difference (F = 6.12, p = 0.001); in that more addiction makes someone more prone to relapse than otherwise.

Discussion

This research was undertaken to examine how impaired social support affects recovery success and relapse rates of drug addicts undergoing rehabilitation in Pakistan. Findings provide strong evidence for the prominent role that social support has in the addiction recovery process. In line with earlier studies that underscored the role of emotional and instrumental support provided by family, peers, and significant others in promotion of recovery and prevention of relapse (Ali et al 2018; Hussain et al. 2023), the results are consistent. In section, we interpret the key findings of our study by contrasting them to what we find in the literature, and then discuss the implications of these findings for rehabilitation programs in Pakistan.

It must be pointed out that the results indicated a significant positive correlation between these two variables, perceived social support and recovery success; correlation coefficient of 0.65 (p = 0.001). So this suggests that those who perceive more social support are more likely to do well in their effort to recover. This finding corresponds with the larger literature, which supports the notion that a robust social support system helps people better manage the stresses of recovery, like emotional distress, cravings and other stressors that in other cases could trigger a relapse (Lakhan et al., 2019). Social support, emotional comfort, practical assistance, and validation have been shown to enhance psychological wellbeing, which is essential for long term recovery (Farooq et al., 2022).

In Pakistan, collectivist cultural values mean high regard for family and community connection, making the perceived social support very important. In Pakistan, family and peer support systems usually play an important role as individuals recovering from substance use disorder seek help from the professional sources because normally, the situations like these are met with stigmatization and discrimination (Haque et al., 2020). Treatment adherence and the relapse rate can be improved by the use of rehabilitation programs that encourage strong familial and peer networks (Shaikh et al., 2021). As such, these findings carry strong implications for the design and implementation of rehabilitation interventions in Pakistan and advocate practicing more social support integrated interventions for enhanced recovery outcomes.

There was a significant negative correlation for perceived social support with relapse frequency ($r = -0.45$, $p = 0.01$), and those with higher levels of social support have fewer relapses. This result is in line with earlier research which has outlined that social support can serve to reduce the stress and emotional burden that often prompts relapse (Hussain et al., 2023). Social support acts as a buffer against stress and it promotes the acquisition of coping skills, which are necessary in the prevention of relapse (Lakhan et al., 2019). In Pakistan, these findings are particularly relevant as this context of meaning also lacks adequate mental health resources, forcing reliance on family and peer networks to provide the emotional support on recovery. Possible ways to decrease relapse rates and increase long term sobriety are rehabilitation centers that include peer support group and family therapy.

Perceived social support was the strongest predictor of recovery success with a beta coefficient of 0.58 ($p = 0.001$). It highlights the leading role of social support in the recovery process and reinforces the importance of it not only in therapeutic, but also in non-therapeutic environment. This finding is consistent with (indirect) investigations conducted throughout the globe that have repeatedly shown social support as one of the strongest predictors of recovery outcomes (Ahmed et al., 2022). However, age did not predict recovery success, which means that recovery may be more dependent on social factors than on demographic variables, such as age. We found that gender and education level significantly affected recovery success, with males reporting a lower recovery success, and persons with higher education recovering better overall. These findings are consistent with the thesis that males and females may have different expectations in society and access to resources, such as knowledge of recovery strategies (Shaikh et al. 2021).

In the group comparison analyses, significant differences in success of recovery were found with respect to gender and type of substances used, and in relapse frequency with respect to duration of addition. Lower recovery success was found in males than in females ($t = 2.45$, $p = 0.015$), which could be attributed to gender specific socio cultural dynamics in Pakistan. Different pressures, including traditional societal expectations that men should be the providers, or stigma around getting treatment, may pose problems along a man's road to recovery. The results imply that rehabilitation centers should take into account gender-sensitive interventions in rehabilitating male and female participants differently (Hosseini et al., 2020).

Moreover, the sort of substance consumed affected recovery success with people consuming heroin experiencing weaker healing results, as compared to individuals consuming alcohol or cannabis. It adds momentum to the body of research suggesting that heroin addiction is perhaps coupled with more severe physical and psychological withdrawal symptoms than for other forms of drug, meaning it's 'tougher' to get clean. Finally, duration of addiction was significantly associated with relapse frequency; the longer addicts had been addicted the higher the relapse rate. Longer term addiction may create greater psychological and physiological dependence, and therefore, may need more rigorous and long term rehabilitation interventions (Lakhan et al., 2019).

Implications for Rehabilitation Program

This study holds important implications for rehabilitation program design and implementation in Pakistan. First, utilization of tools that consolidate social group and work social support networks, e.g. family therapy and peer support groups, may be crucial to improving recovery outcomes or decreasing relapse rates. Second, treatment plans tailored to groups can provide better results: gender and substance specific factors must be taken into account because each group may have its own set of difficulties. Lastly, creating options for long term care around the duration of addiction could aid in prevention of relapse and overall recovery for people with a more severe addiction profile.

Limitation

Some limitations apply to this study due to its provision of useful insights. Cross sectional design prevents determining whether perceived social support influences recovery success and self-reported data about recovery progression and relapse are open for bias. Future studies could use longitudinal designs to follow how perceived social support relates to recovery over time. Qualitative research could also explore which types of social support are the most helpful for individuals in rehabilitation centers.

Conclusion

It is revealed in this study that perceived social support plays an immense part in affecting these drug addicts' recovery success as well as relapse frequency in rehabilitation centers in Pakistan. Findings suggest that there is high positive correlation between perceived social support and recovery success and high significant negative correlation between perceived social support and relapse frequency. These data also reinforce the relevance of family, peer, and staff emotional, practical, and social support to recovery outcomes and decrease the chances of relapse. Furthermore, it was discovered that recovery success varied significantly depending on gender, education level and type of substance abused. Females recovered better than males, and those with higher levels of education tended to recover better. Recovery success also depended on the type of substance used; heroin users did worse than those using alcohol or cannabis. Furthermore, longer addiction history was strongly correlated with relapse frequency, meaning that addiction to opioids for more than 2 years required much more extensive rehabilitation than addiction for shorter periods. The findings are of importance to rehabilitation programs in Pakistan. Outcomes of rehabilitation could be significantly enhanced by developing social support networks within rehabilitation settings through involvement of family, peer support groups and community based initiatives.

Recommendations

Finally, this study highlights perceived social support as a very imperative factor in improving the recovery success and decreasing relapse of drug addicts staying in the rehabilitation centers of Pakistan. Rehabilitation programs that highlight the value of social support networks on addiction recovery equip individuals in better ways to deal with addiction challenges as well as find long – term addiction recovery.

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